EXPLORING VALUE CO-CREATION AT MICRO LEVEL IN MATERNAL HEALTHCARE SETTING: A CASE OF TERTIARY HOSPITALS, LAHORE, PAKISTAN

Thesis submitted to

The Superior College, Lahore,

in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy in Business Administration

by

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Roll No. PDBA 15111

Session: 2014–2017

THE SUPERIOR COLLEGE (SCHOOL OF MANAGEMENT SCIENCES)

LAHORE

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Dedication

This work is dedicated to my beloved parents, loving husband and handsome son and certainly my sisters who always encouraged me when I stopped and thought not anymore! Because of their prayers, encouragement and love I am successful in my life. May God give them a long and healthy life, Ameen.

Acknowledgment

All praise is for Almighty Allah (The Most Merciful, The Most Beneficial), who enabled me to complete this research thesis. I express my gratitude to Him from the core of my heart. All respect to the Holy Prophet (SAW) who enabled us to recognize our Creator and whose spiritual teachings guide us in every matter of our lives.

It is a great pleasure for me to give my sincere thanks to my supervisor Dr. Sikandar Khan and co-supervisor Dr. Abdul Rehman whose kind and meticulous guidance paved the way for me to complete my research work. I might not have been able to finish this dissertation without their help, guidance and encouragement.

I want to express my great indebtedness to my parents and family members for their endless prayers for my success. Also I want to forward my special gratitude to my sisters and brother and certainly the one who deserves to be acknowledged the most for guiding and encouraging me. I thank my workplace fellows who supported and guided me to keep on working because they facilitated me a lot in this tenure.

Hummaira Qudsia Yousaf

Abstract

Actors' (service provider and service user) satisfaction in service delivery is a big issue especially in the maternal healthcare setting of Pakistan due to high rate of illiteracy and unavailability of basic resources. Adding value to service can enhance the quality of service delivery, which could lead to the satisfaction of actors (service user and service provider). Service-dominant logic has highlighted value co-creation in enhancing service delivery in which the service provider creates value in collaboration with the service user. The key purpose of this study is to explore the factors influencing value creation at a micro level in a maternal healthcare setting.

This study adopts an exploratory approach (semi-structured interview and observations) to investigate value. A total of 40 hours of observation and 92 semi-structured interviews with doctors, staff, patients and family were conducted to find understandings of value during a service encounter. Study findings show that value is a temporal concept which is experienced on the basis of context and this experience varies over time. The study also found that sometimes value can be co-destroyed instead of co-created due to organizational factors, such as access and use of resources and quality of interaction. Value can be created and destroyed within single or multiple health service encounters. Six main themes that influence value co-creation and two main themes that influence value co-destruction emerged from data analysis and are explored in maternal healthcare settings. The main themes for value co-creation are: access to resources, quality of interaction, usage of resources, organizational factors, spiritual belief and trust. The main themes for value co-destruction are: quality of interaction and misuse of resources.

This research makes theoretical and policy contributions to the field of public/hospital administration, services marketing and medical services. The theoretical contribution of this research is to find trajectories of value in single and multiple service encounters in a maternal healthcare context. This is the first study to explore value co-creation and co-destruction during single or multiple micro-level encounters. This study has policy implications such as ensuring the quality of interactions in maternal healthcare settings; training and development programs can be arranged for staff and doctors (service providers) to develop their interest in collaborating with patients during micro-level service encounter.

Keywords: maternal healthcare, tertiary hospital, service marketing, service-dominant logic (SDL), value co-creation, value co-destruction

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CHAPTER ONE: INTRODUCTION

1. Introduction

1.1. Study Background

Value is referred to as the benefits which customers get relative to the cost they pay or sacrifices they make. The value is subjectively referred to as product (goods or services) creation by a firm which offers value to customers for the purpose of sale. This product (goods or services) creation is based on the attributes of: configuration (product design); valuation (product price); symbolization (product promotion); and facilitation (product placing or accessibility). Service is the application of competences (knowledge and skills) by one entity for the benefit of another (Lusch & Vargo, 2006; Lusch, Vargo, & Tanniru, 2010; Vargo & Lusch, 2004a, 2004b, 2008, 2016; H. Wieland, F. Polese, S. L. Vargo, & R. F. Lusch, 2012b).

Recent advances in service research presented an interactive framework of value creation in service delivery (Grönroos, 2011; Iglesias, Ind, & Alfaro, 2017; Larivière et al., 2017; Ng et al., 2012; A. F. Payne, Storbacka, & Frow, 2008; Ramaswamy & Ozcan, 2018). Vargo and Lusch (2004a) stated a new paradigm of marketing which is named as service-dominant logic (SDL) and has wide-scale implications beyond the bounds of marketing. SDL talks about the deficiencies of good-oriented or goods-dominant logic (G-D logic) by which firms design value for customers. The central connection of SDL is value co-creation through the joint processes of firms and customers to create value (He, Akaka, Lusch, & Vargo, 2017; Hidayanti, Herman, & Farida, 2018; Line, Runyan, & Gonzalez-Padron, 2018). Using this aspect, a firm creates value by playing the role of facilitator for their customers who determine the value creation (Grönroos, 2011; Grönroos & Voima, 2013; He et al., 2017). Value lies in the customer's sphere and can be created through actor's (service user and service provider) resource integration (FitzPatrick, Varey, Grönroos, & Davey, 2015; Letaifa, Edvardsson, & Tronvoll, 2016; Lusch & Vargo, 2014). However, it is hard to characterize, estimate and comprehend the concept of value as it depends on an actor's perception (Martinez, 2014; Osei-Frimpong & Wilson, 2015). Therefore, the need to analyze the actor's (service user and service provider) value consideration is vital in value co-creation (La Rocca & Snehota, 2014).

Value co-creation has received much credence in the recent research agenda by scholars in all sectors such as arts, philosophy and creative industries (Roser, DeFillippi, & Samson, 2013; Schaffarczyk et al., 2018), and design thinking/service design (Chen & Vargo, 2010), ecosystem services (Matthies et al., 2016), education (Jarvis, Halvorson, Sadeque, & Johnston, 2014), health (Hardyman, Daunt, & Kitchener, 2015) and customer engagement (Rehman, Dean, & Pires, 2012). According to studies in the service delivery industry literature, including the healthcare sector, value creation activities and active involvement of users have received notable attention. Empirical studies are often conducted in the healthcare sector because it is a high contact service (Osei-Frimpong, Wilson, & Lemke, 2018; Vogus & McClelland, 2016). Considering that healthcare is described by dynamic joint efforts of doctors and patients, co-creation has been specifically directly linked to healthcare (Frow, McColl-Kennedy, & Payne, 2016; Hardyman et al., 2015; Jaakkola & Alexander, 2014). It has transformed the service into a patient-centered approach in which patients' values, needs and preferences are used in service delivery.

Despite an increase in healthcare expenses worldwide and old age populations, getting 'value' in healthcare procedures is increasingly emphasized. To collect 'patient value' in the healthcare industry, three aspects are mainly used: 'patient-based care', 'patient activation' and 'patient involvement' (Joiner & Lusch, 2016). In spite of the fact that these three aspects are frequently utilized as synonyms, they are not similar. Patient-based care is a vast-scale objective in which healthcare is perceived as a supporting fellowship, where patients are important and choices lay at the foundation of clinical resolutions, and patients have availed themselves of education and aid to empower them to take suitable steps and play an active role in their personal care (Joiner & Lusch, 2016; Navarro, Llinares, & Garzon, 2016). Patient activation is connected to the level at which patients have an idea about their needs to play a dynamic role in dealing with their personal health and it mainly concerns their mental understanding, working performance and self-determination to tackle self-adjustment. One form of this aspect is the stress placed on motivating patients to stick to healthcare prescriptions (Goodworth et al., 2016; Hibbard, Collins, Mahoney, & Baker, 2010; Hibbard & Mahoney, 2010). The objective of patient involvement is to increase patient activation to improve the efficiency, response and effectiveness of the healthcare system (Hibbard & Mahoney, 2010). Another view of patient involvement relates to patients and health providers (professionals) functioning in active collaboration across different parts of the healthcare system, such as direct care, institutional governance and design, and policy to increase health and healthcare services (Carman et al., 2013). Patient involvement in healthcare is progressively illustrated as a tool for developing the effectiveness, positive reaction and efficiency of the healthcare system (Berwick, 2009; Sahlsten, Larsson, Sjöström, & Plos, 2008; Silal, Penn-Kekana, Harris, Birch, & McIntyre, 2012; Van de Bovenkamp & Trappenburg, 2009). The literature stressed exploration of patient involvement in parental health administration that normally covers medical aspects, such as the involvement of the patients in decision making regarding medication and delivery process (normal or caesarean section). Therefore, it is recommended that patient participation could play a significant role in the outcome of valued practice, especially in the process of maternal healthcare (Marston et al., 2016).

Pakistan is a developing country with a population of 204 million people; it is ranked as the sixth most populous country in the world (DESA, 2017). The female percentage of the total population is estimated to be 48.63%; the maternal mortality rate (MMR) is 178/100,000 live births, according to the statistics of World Bank (WHO, 2016). Maternal mortality is explained as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and size of the pregnancy" (Chou et al., 2012, p. 4). The causes of maternal mortality are classified into two types: direct and indirect causes. Indirect causes are death from diseases before and after the pregnancy, such as anemia, malaria, diabetes mellitus, tuberculosis, cardiac diseases, hepatitis and HIV/AIDS (WHO, 2016) . Whereas, direct causes are those that occur only during pregnancy and the immediate post-delivery period, for example, obstetric hemorrhage, sepsis, hypertensive disorder of pregnancy (eclampsia), obstructed labor and unsafe abortion (Oyston, Rueda-Clausen, & Baker, 2017; WIJERATNE & FIANDER, 2015). Direct causes contribute to approximately 73% of all maternal deaths in the world (Kassebaum et al., 2014; Say et al., 2014). The direct causes are preventable given proper utilization and timely access to skilled obstetric care, patient-centered care, patient activation, patient involvement and improvements in maternal healthcare services (EWEC, 2015). However, in most developing countries, the low utilization of skilled maternal health services has continued to be a major contributing factor to the high MMR from direct causes (WHO, 2015; EWEC, 2015) . These maternal health issues are difficult to treat because of lack of finances and economic conditions, lack of supporting infrastructure for skilled birth attendants, lack of round-the-clock services at healthcare center or basic healthcare units (BHUs), and the poor involvement of patients with the health service during and after giving birth (Pasha et al., 2018). Pakistan is currently ranked 122 out of 190 countries in terms of healthcare according to the World Health Organization (WHO) (EWEC,2015) . According to UNICEF Annual Report 2018, despite significant improvements over the past decades, Pakistan has the worst rate in the world when it comes to infant mortality. Improving maternal health and reducing maternal mortality is the goal of a healthy Pakistan (Manzi et al., 2018; Rizvi, Bhatti, Das, & Bhutta, 2015).

More than 60 million people are living below the poverty line in Pakistan (Hussain, 2018). These people cannot even meet their basic needs due to limited finance. The connection between service user and provider in this case is one in which the service provider is skilled, well-informed and creates value, and the service user is inexpert and inactive and uses the value. A prospective result of this condition is to draw on service dominant/S-D logic; service dominant/S-D logic is a developing framework in the literature of services and marketing, which stresses that value is essentially co-created but separately determined and perceived by the service users (patients and family) on the basis of its usage (Hardyman et al., 2015).

Lifestyle, society and cultural values are different in every country, and most family systems depend on them. In Pakistan, the family system is inherited and is followed strictly. It also has religious implications. Family is considered a single unit containing parents, children and grandparents and it is also called a decision-making unit (Lackman & Lanasa, 1993). Moreover, the person who earns in the family is considered to play the most important role in making financial decisions and nourishing the family. To achieve a sustainable health system requires partnership approaches between ‘users’ (patient and family) as co-creators and co-participants of the health system (Batalden et al., 2015).

The focus of this study is to investigate the role and involvement of family, staff and patient in value co-creation in the setting of maternal healthcare centers in Pakistan. Sometimes, maternity service encounters can lead to negative consequences, such as anxiety and stress in service user, because of the asymmetry in expertise between the maternity healthcare user (pregnant woman and family) and the service provider (healthcare staff) in routine care or specialized services.

Value co-creation is a system which needs a resource integrator, so that service users (patients and family), allies and service providers can jointly attempt to co-produce value (A. F. Payne et al., 2008). Value is co-created with the help of connections and actions of the actors (service users and providers) while resources (information and skills) are exchanged and finally combined and used by the beneficiaries (McColl-Kennedy, Vargo, Dagger, Sweeney, & Kasteren, 2012; Vargo, 2011a; Vargo & Lusch, 2008). This suggests that various actors can be engaged in value co-creation (McColl-Kennedy et al., 2012).

Recently, co-creation has been analyzed similarly to ecosystem frameworks that acclimatize to changing settings and enhance the system’s abilities to respond to new possibilities (He et al., 2017; Ramaswamy & Gouillart, 2010; Romero & Molina, 2011; Vargo & Lusch, 2008). Wieland et al. (2012b), drawing on Vargo (2011a), described a service ecosystem as a “relatively self-contained, self-adjusting system of resource-integrating actors connected by shared institutional logics and mutual value creation through service exchange” (p. 15). These ecosystems are constantly adapting while simultaneously creating the changing context of the ecosystem (e.g. Giddens (1984).

S-D logic and service ecosystems provide a conceptual foundation for value co-creation through the integration of resources and networking between different actors. Co-creation has been discussed in ecosystems that adapt and change to enhance the system’s capabilities to improve current processes and respond to new capabilities (Frow et al., 2016). There are three levels of ecosystem: micro, meso and macro. An ecosystem can be analyzed completely through these levels as they overlap with the fundamental processes of value co-creation (Frow & Payne, 2018). Each level of context frames service-for-service exchange in a way that informs value co-creation uniquely at that level (Alexander, Jaakkola, & Hollebeek, 2018; Wetter-Edman et al., 2014). At micro or individual level context, exchange occurs among individual actors. The process of exchange at this level is direct service-to-service exchange. Each actor serves another actor through operand/operant resources and competencies. Hardyman (2017b) highlighted the problems in getting value co-creation in the healthcare industry on a small scale as an outcome of scarce experimental research supporting the involvement of patients. This lack reveals a need for more scientific development to get the maximum advantages by analyzing the impacting elements of the connecting procedures which can encourage value creation between healthcare professionals and patients in a healthcare setup at micro level. To discuss this point of view, the study considers a patient-based view of value by analyzing patient and doctor interaction at micro level.

The terms ‘co-creation’ and ‘co-production’ are used interchangeably in the service management literature (Voorberg, Bekkers, & Tummers, 2015). These terms are used to show the level of involvement and participation of patients and family in the design, delivery and review of services (Voorberg et al., 2015). They shift the responsibilities of the healthcare provider to healthcare users to manage their own health (Greenhalgh, Jackson, Shaw, & Janamian, 2016; Jackson, Janamian, Booth, & Watson, 2016).

The S-D logic framework revolves around the idea that value is co-created from the collaboration between users and the service providers (Archpru Akaka, Vargo, & Lusch, 2012; Grönroos, 2008; Lusch & Vargo, 2011; Vargo & Lusch, 2016). The service-centered view proposed that market exchange is the procedure of the parties who use their specific information for the mutual benefit of each other. S-D logic is based on 11 foundational premises (FPs) for value co-creation (Vargo & Lusch, 2008). These FPs are presented in Table 1 and are concisely explained below as they are linked to service systems and science. The S-D logic framework has undergone revisions and is still in the process of evolving. S-D logic has 11 FPs; five of these have been recently assigned the status of axiom (axioms are discussed in detail in Chapter Two).

The emphasis in S-D logic is on value co-creation instead of the co-creation of health results or service (Joiner & Lusch, 2016; Lusch & Vargo, 2014; Vargo & Lusch, 2016). It was suggested that the ‘logic’ of S-D logic in the analysis of health service management using business management theories should be replaced with analysis based on public management theories (Osborne, Radnor, Kinder, & Vidal, 2015; Osborne, Radnor, Vidal, & Kinder, 2014). According to the perspective of S-D logic, value is always individually determined and perceived on the basis of usage (Lusch & Vargo, 2006; Vargo & Lusch, 2008, 2016).

Table 1: Foundational Premises of Service-Dominant Logic

	Foundational Premises (FP)	AXIOM Status
FP1	Service is the fundamental basis of exchange.	AXIOM 1
FP2	Indirect exchange masks the fundamental basis of exchange.	
FP3	Goods are distribution mechanisms for service provision.	
FP4	Operant resources are the fundamental source of strategic benefit	
FP5	All economies are service economies.	
FP6	Value is co-created by multiple actors, always including the beneficiary	AXIOM 2
FP7	Actors cannot deliver value but can participate in the creation and offering of value propositions.	
FP8	A service-centered view is inherently beneficiary oriented and relational.	
FP9	All economic and social actors are resource integrators.	AXIOM 3
FP10	Value is always uniquely and phenomenological determined by the beneficiary.	AXIOM 4
FP11	Value cocreation is coordinated through actor-generated institutions and institutional arrangements	AXIOM 5

Adapted from (Vargo & Lusch, 2016)

In S-D logic, ‘value’ is only realized through the use of service (value-in-use) (Lusch & Vargo, 2014). The underlying idea of value-in-use is that it is understood and determined by the service user contextually and separately according to their service experiences. As (Grönroos, 2011; Lusch & Vargo, 2014; MEDBERG, 2016) indicated, service users or customers are the ‘arbiters of value’ in service delivery. If these arbiters of value face failure of service, then this failure is known as value destruction. Value destruction is organizational performance that does not match the expectations of a customer (Hess, Ganesan, & Klein, 2003). A vital goal of this study is to understand value and how service users and providers conceptualize the value in a maternal healthcare setting. Sometimes during an interaction, a process decreases the system’s functions and it destroys value either on an individual or organizational basis. A main reason for service failure can be the bad or rude behavior of an employee towards a customer which shows that the quality of service is very low and lies below the expectation line of a customer (Hess Jr, Ganesan, & Klein, 2007). L. Atkinson et al. (2016) stated that value destruction can badly affect organizational performance which leads to several disadvantages, such as dissatisfaction of a customer, defection of a customer and, moreover, increased costs of the product at the end. All of these disadvantages of service failure are based upon the behavior of an employee towards a customer and it has a directly proportional relationship; that is, with an increase in dissatisfaction of a customer there is an increase in service failures and with a decrease in customer dissatisfaction there will be decrease in value destruction (Järvi, Kähkönen, & Torvinen, 2018; Smits, 2018). If any customer feels there is service failure, then it indicates that value destruction is present. Moreover, if the customer reacted by complaining about the service failure and rude behavior of an employee, then this will not only devalue the company's name but also show the presence of value co-destruction (Plé, 2017). Value co-destruction is a collaboration between the firm and the customers (Prior & Marcos-Cuevas, 2016). Value co-destruction forces the customer to behave in a manner that has a negative impact on the brand's name (Järvi et al., 2018; Jmour & Hmida, 2017). Every employee plays their part of the job positively in order to avoid service failures and customer dissatisfaction (Skålén, Gummerus, von Koskull, & Magnusson, 2015).

There is an interrelation between value co-creation and value co-destruction, which highlights the relation between employee and a customer (Jaakkola, Helkkula, & Aarikka-Stenroos, 2015). There are several forms of failed resource process, for example, if an organization defines the application of a product in a form of resource for customer convenience but the customer does not perceive this piece of information and does not handle the product properly, then both the customer and employee experience a clash which results in value co-destruction and a loss of both time and money (Vafeas, Hughes, & Hilton, 2016). This intentional or unintentional lack of information can lead to a loss in resources and the loss of these resources leaves a negative impact on customer prosperity. The presence of value co-destruction indicates a poor level of interaction between the customer and employees (Prior & Marcos-Cuevas, 2016). This loss gives rise to two different feelings: one, the customer has an intangible feeling which includes negative thoughts; two, the customer has a tangible feeling which includes the loss of time and money. Therefore, the focus of this thesis is also to explore value co-destruction as defined by Plé (2017) and Makkonen and Olkkonen (2017). Makkonen & Olkkonen (2017) defined value co-destruction as a failed communication process that leads to a loss of any one actor either employee or a customer. Thus the idea of value co-destruction defines both the process and the result that leads to the end of the process. In the competitive marketplace, a process of value co-destruction occurs when a customer starts to behave rudely to an employee (Prior & Marcos-Cuevas, 2016). This rude behavior of a customer not only affects the brand's name but also produces mental stress in the employees (Kashif & Zarkada, 2015). Thus, value co-destruction has a negative impact on organizational performance and system's outcome.

Although there are various drawbacks and losses of value co-destruction, awareness of the concept is still very limited in definition and use. Many researchers are currently trying to understand the perspective of customers and employees on value co-destruction and what factors lead to value co-destruction. Vafeas et al. (2016) stated that both the employee and the customer have different points of view about value co-destruction which may result in either a positive manner or negative manner. It is important to consider employees' and customers' perceptions of value destruction so that the failure in the process can be detected by comparing with existing results. Most previous research was conducted in private organizations, limited research has been undertaken to find out the factors of value co-destruction in the public sector (HARDYMAN, 2017a; Osborne, Radnor, & Strokosch, 2016).

1.2. Research Gap, Research Purpose and Objectives

1.2.1. Research Gap

Value is conceptualized by actors as the perceived benefits they gain minus the sacrifices they make within an encounter (Flint, Blocker, & Boutin Jr, 2011). Organizations usually create value by offering services and goods to meet the needs and demands of their customers (Archpru Akaka et al., 2012). Numerous scholars have discussed value in relation to co-creation processes (Grönroos & Voima, 2013; Helkkula, Kelleher, & Pihlström, 2012a; Ng et al., 2012). Value creation and co-creation are key concepts of service marketing; despite its importance, value is perhaps a vague and abstract concept (Chandler & Vargo, 2011; Grönroos & Voima, 2013). There is a lot of debate about the role of service provider and service user (customers) in the value co-creation process.

Grönroos and Voima (2013) proposed that there are three dynamic spheres (customer sphere, provider sphere, and joint customer and provider sphere) in which to categorize firms' and customers' actions. This concept is contrast to the SDL because it suggests that the customer can independently create value and others can join in the process of co-creation (Hardyman et al., 2015). In the view of SDL, an actor can uniquely access or evaluate value but value cannot be created by the actor independently (Vargo, 2011b).

McColl-Kennedy et al. (2012) explored value co-creation in healthcare and stated that benefits emerge through integration of resources. In a study with oncology patients in Pakistan, Rehman (2014) merged marketing and health theories, and discussed customer participation which was overlooked by the service logic (SL) theory presented by (Grönroos, 2008). New innovative work in public SDL reinforced analysis in public service delivery (Osborne, Radnor, & Nasi, 2013).

This empirical work draws upon services marketing literature and public management theory, it founds a gap in conceptualization of value in public service. . Osborne et al. (2015, 2016) conducted further work on service research in which they investigated the use transformative service to improve service for human well-being and understanding of value in public management service. This study linked the work of Hardyman, who used the public value concept of Osborne and colleagues in the public management field, who argued that S-D logic emphasized public service analysis and delivery (HARDYMAN, 2017a; Osborne et al., 2013; Osborne et al., 2016; Radnor, Strokosch, & Osborne, 2018). This study also explores the conceptualization of value in public service and discusses the limitation of public service-dominant approach. Moreover, a majority of studies focused on meso and macro perspective of value creation instead of micro level of service encounter (Hardyman, 2017b). This study applies S-D logic to an analysis of public service in a healthcare context and explores trajectories and conceptualizations of value through micro-level service encounters.

There is also a lack of research that studies direct level interaction between 'provider' and 'customers' (Neghina, Caniëls, Bloemer, & van Birgelen, 2015). Many researchers consider that micro-level analysis of value co-creation is a basis for understanding meso-level and macro-level value co-creation (Chandler & Vargo, 2011; Neghina et al., 2015; Vargo, 2011a).

Extensive literature is available to study maternity healthcare in Pakistani context. The researcher studied the main available services, quality of service (Safdar, Inam, Omair, & Ahmed, 2002), signaling, inequalities in services (Mumtaz, Levay, Bhatti, & Salway, 2013) and the challenges faced in delivery of skilled maternity care (Sarfraz & Hamid, 2014) in rural and urban cities of Pakistan (Safdar et al., 2002). The value in healthcare service, which is recognized by many healthcare researchers, has been ignored (Hardyman et al., 2015; McColl-Kennedy et al., 2012; Rehman et al., 2012; Wheeler, Spencer, & Rotter, 2018).

1.2.2. Purpose Statement

As indicated by Ocloo and Matthews (2016), the principal concern of actors' involvement/engagement activity in healthcare should be to improve the health and experiences of service provider and service users (patients, carers and family members) and the wider public. Understanding value is one way to improve the health and service experience of service users. Therefore, the primary objective of this study is to gain a deep insight into how value (on the basis of use) is determined, perceived and conceptualized by service provider (healthcare staff) and service user (customers of the service such as patients and family) during micro-level service encounters in a maternity healthcare service setting. The second objective is to use S-D logic to understand the term 'value' in a maternity healthcare context.

1.2.3. Research Objectives

In this research we will address following five deliberated *objectives:*

1. To explore trajectories of value in a Pakistani public maternal healthcare setting in the context of service providers (healthcare staff) and service users (patients or patients/family members) and conceptualize value at micro level (according to S-D logic perspective).
2. To investigate how service users and providers describe their involvement in care and treatment process and during the exchange of knowledge and skills.
3. To explore the relevance of SDL for value co-creation and how the selected axioms/FPs have relevance to the selected study context.

4. To explore the relationship between customer satisfaction and value co-creation and how value co-creation interacts with customer satisfaction.
5. To explore when value co-destruction occurs during a micro-level encounter.

1.2.4. Research Questions

Q1: How do service users and service providers conceptualize value according to the framework of SDL in public maternal healthcare centers?

Q2: What are the key factors that drive value co-creation between service users (patients and family) and service providers (doctors and staff) at micro level during service encounter?

Q3: How can the current research output be mapped onto axioms/FPs of S-D logic?

Q4: How can value co-creation increase customer satisfaction?

Q5: What are the factors that lead to value co-destruction during a micro-level service encounter?

1.3. Significance of the Study

This research provides theoretical, exploratory and policy inputs for public hospital administration, services marketing as well as medical services studies.

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- The exploring of value means to understand how it is created at micro-level service encounter (i.e. interactions between patients and healthcare staff during individual/direct/micro-level service encounters). There is limited healthcare research concerning the ways in which ‘service user’ (patients and family) and ‘service providers’ (doctor and staff) are involved in value co-creation at micro level (HARDYMAN, 2017a; Neghina et al., 2015; Osei-Frimpong et al., 2018). This study explores the key factors that drive value co-creation and value destruction at micro-level (direct) service encounters.

- Previous studies in maternal healthcare used a macro-level approach. Unlike other research, the main focus of this research is to explore the key factors that affect value co-creation during micro-level clinical encounters. The Government of Punjab has a budget for the health sector to improve health services but, despite effort, patients are still dissatisfied (Jalil, Zakar, Zakar, & Fischer, 2017; Naseer, Zahidie, & Shaikh, 2012). This study makes a practical contribution that focuses on increasing the satisfaction of service users in direct encounters.

1.4.Methodology

The explanatory case studies method is used for theory testing and mainly characterized to find the answers of how and why research questions (Yin, 2009a, 2009b). A qualitative collective case study approach was used in this study to investigate the research questions. Data were collected from three tertiary hospitals of Lahore: Lady Willingdon Hospital, Jinnah Hospital and Lahore General Hospital (LGH). This exploratory study investigated how 'value' and 'value-in-use' are conceptualized, constituted and experienced by service user and service providers within a maternity service context in Pakistan. A total of 40 hours of observations were used along with semi-structured interviews. The methodology included semi-structured in-depth interviews with staff (n = 23; 7 nursing; 3 gynecologists; 4 obstetricians; 2 undergraduate trainees; 4 postgraduate trainees and 3 management), semi-structured face-to-face in-depth interviews with maternal health patients (n = 56), and semi-structured face-to-face in-depth interviews with family members of patients (n = 13) about their perceptions regarding value. This phase allowed an in-depth exploration of the research area by identifying key themes from the literature and the interview findings.

1.5. Delimitations of the Study

According to Isaac and Michael (1971), the delimitations describe the circumstances and situations that may restrict or affect selection and analysis of data for research. Delimitations are the boundaries to control the range of the study by the researcher before conducting the research. This study has the following delimitations.

- This study adopts a collective case study design, which supports multiple data sources. Multiple data sources is appropriate where the research aim is to explore multivariate and complex conditions (Yin, 2011). Collective case study design offers deep insight into the issues of interest because it allows comparison of the similarities and differences between cases (Stake, 1995).
- Since this research was piloted in the context of public-sponsored maternal healthcare centers in Pakistan, it can be reasoned that the outcomes of the analysis are subject to the type of healthcare arrangement and the traditional perspective of where the research was piloted. Moreover, because of the probing nature of the research, attention was paid to the burden on contributors to the analysis, and the time limitations of a doctoral investigation; these factors led to the use of a random sampling technique. The random sampling technique specifies that each research participant (bar one) be interrogated at a single point in time. Though there in difference in the medical-patient mockup about the time span, which medical-patients had been getting in the Center, the research statistics is built on the evoke and professed practices of medical-patients on a certain point of time in which they were considered revising.
- Apart from above, several patients employed for the survey were primary recognized by a healthcare's professionals in the center, instead of the scholar. This method was adapted to reduce the biasness and their willingness to share their experiences.. It conveys about the kind of qualitative research scheme, in which the scholar is a tool as well within the study practice (Yin, 2009b).

1.6. Outline of the Study

Chapter Two: Chapter two outlines related literature that explains this work and illustrates the relevancy of the main idea regarding 'value co-creation' and 'value-in-use' to increase comprehension of patient involvement in healthcare at micro-level/direct service encounters. This chapter further explains perceptions in healthcare and SDL to draw and prove the main research questions addressed in this research work.

Chapter Three: Chapter three clarifies the methodology of this study, which is a systematic research methodology, and the rationale for taking an interpretive approach to investigate the central phenomena. Qualitative research and the main structures of the case study are elaborated before the details of data collection, which is of a triangulated nature. The important procedures for gaining access to the research work, participants of the study, observations and interviews are conveyed, and a short summary is provided according to the nature of the data. Ethical considerations were kept in mind while conducting the study. Before reflection on the process of research, methods of data analysis are illustrated and other issues such as transferability, reactivity and credibility were dealt with while conducting this work. ***Chapter Four:*** The main findings of this study are introduced in Chapter four. There are two main sections of this section. In first section the conceptualization of value in maternal healthcare setting is discussed. In second section it is discussed how value is determined during individual and multiple service encounters.

Chapter Five: Chapter five of this study discusses the research findings, clarifies the key contributions, points out limitations and illustrates areas where further research can be conducted.

CHAPTER TWO: LITERATURE REVIEW

2. Literature Review

The literature review chapter has nine sections. Section 2.1. deals with the theoretical framework of the thesis. This section explains services marketing, public management and development of S-D logic. Section 2.2. defines and explains our understanding of value and value proposition from the marketing and healthcare literature. It also discusses the shift of 'value' from good/object to a commodity (value-in-exchange) to 'value' as an experiential concept and related to 'value-in-use'. Attention is then drawn to the conceptualization of value co-creation, co-creation process and theoretical perspective of value co-creation in the marketing literature. Section 2.3. discusses customer participation, level of customer participation, the role of firms in value co-creation process and customer participation in value co-creation with the lens of SDL.

This study is mainly focused on patients' and staff's engagement in direct care; it is necessary to look for initiatives at this stage in terms of the broader actors and public activation literature. Exploration of the concepts of value-in-use and value co-creation with respect to healthcare and its enhancement are discussed in this section.

In Section 2.4., the focus is on quality care domains for pregnant women, value in maternal healthcare, and value and quality in healthcare. In section 2.5.the effect of encounter process in value co-creation is discussed which followed the section 2.6. in which value co-destruction is discussed with respect to maternal healthcare settings. Finally, this chapter describes contributions from the literature and highlights research gaps where the undertaken study can be applied to extant knowledge. The research questions identified in the study are then highlighted regarding the mapping of S-D logic framework in the context of the maternal health service in Pakistan.

2.1. Theoretical Framework

Theory is termed as a set of concepts, propositions and definitions that are interrelated in order to infer and explain situations or events by specifying association among different variables (K. E. Glanz, Lewis, & Rimer, 1990). The selection of models and theories appropriate for a particular research mainly depends on the nature of the research problem and its specified goals and objectives (Thomas, Sussman, & Henderson, 2001; Van Ryn & Heaney, 1992). Theories are employed in research to assist and guide the researcher to determine what needs to be explored and how it can be explored (K. Glanz, Rimer, & Viswanath, 2008); they give the researcher an idea about the reasons for the existence of a problem and the associated factors of that problem. However, these theories vary from research to research and are different for varying health behaviors (Redding, Rossi, Rossi, Velicer, & Prochaska, 2000). Therefore, the key for success of a research study mainly depends on the selection of a theory that is appropriate according to the goals and objectives of the research.

2.1.1. Services Marketing

Services marketing has been established since the late twentieth century and its scope has expanded with the development of the service industry, such as healthcare (Zeithaml, Berry, & Parasuraman, 1993). Lovelock and Wright (2002) in their book *Principles of Service Marketing and Management* stated that marketing services are: “Service products [that have] intangible performances” (p. 215). The word ‘products’ in that statement is showing G-D logic. Wilson, Zeithaml, Bitner, and Gremler (2012) published *Services Marketing*: *Integrating Customer Focus across the Firm*” where they stated that services have both intangible and tangible elements; this means that services marketing is for service and products. Gummesson (1987) also supported this viewpoint, “Companies are seldom clearly just consumer or industrial or goods or service companies. Their output is both goods and services but in varying proportions” (p. 22). The customer experience is key to services marketing. The concept of customer experience has evolved with the passage of time; for instance, in the 1990s the concept of consumption was treated as a holistic experience (Gentile, Spiller, & Noci, 2007). According to the holistic approach, a customer is regarded as an actor and the focus is on the interaction between the actor and company. Coimbatore K Prahalad and Venkat Ramaswamy (2004b) stated that a company’s control over customer experience was shifted to a unique experience that the customer can co-create with the company.

The scope of services and services marketing has expanded with the growth of service industries. Its development is divided into four stages (Baron, Warnaby, & Hunter-Jones, 2014).

***Stage 1 (before 1988)*:** In this stage, services created an impact on the economy with the idea that services are different from goods. A new concept is proposed in marketing that leads to the next phase.

***Stage 2 (1988–1997)*:** In the second stage, services marketing emerged and researchers started conducting exploratory research and developed valid and reliable measurement in services marketing.

***Stage 3 (1998–2003)*:** This stage coincided with the growth of World Wide Web; it is the development of self-service systems that increased consumer-customer access to technology. It advocated the importance of consumer-customer engagements. It shifted the aim from increasing customers' experiences to engaging customers to improve customers' experiences.

***Stage 4 (2004)*:** This stage is the beginning of S-D logic (SDL). SDL (S-D logic) is the application of knowledge and skills for the benefit of another actor (Vargo & Lusch, 2008), whereas services used G-D logic, which focuses on goods (tangible) and services (intangible) outputs.

2.1.1.1. G-D Logic

The basic conventional principles of marketing focused on the quality of goods and their adequate distribution to consumers, with services regarded as intangible (Lusch & Vargo, 2006; Vargo & Lusch, 2004a, 2008). In recent years, Lusch and Vargo (2014) presented G-D logic in three centricities: goods, their exchange value, and firm. It was also observed by Vargo and Lusch (2014) that the centricity of goods was probably the main problem of G-D logic. The centricity of goods allows firms to focus on the goods' quality. The consumer was, therefore, always at the end of receiving (Teno, Casey, Welch, & Edgman-Levitan, 2001). Lusch and Vargo (2014) observed a marketing myopia in businesses. Michel, Brown, and Gallan (2008) observed that contemporary thoughts regarding businesses were pervaded by the G-D logic that went back to the goods' production and export era for generating worth. Marketing, as explained by Kotler (1972), is a "descriptive science which involves studying creation, stimulation, facilitation, and value creation of transactions". From this perspective, a firm is viewed as "a proactive actor" and it has an important role in "innovation, production, distribution, and marketing of services/goods" (Lusch & Vargo, 2014). This implies that the marketing in G-D logic employed a firm-centric perception, which had its exclusive focus on the products' quality (Edvardsson, Tronvoll, & Gruber, 2011; Vargo & Lusch, 2008) with very limited customer involvement. To address this issue, a profit-based system for service delivery was adopted by firms; it included the idea of experience and value provision for consumers (Edvardsson, Tronvoll, et al., 2011; Lusch & Vargo, 2014). Lusch and Vargo (2014), however, argued that just as goods do not serve the central purpose of exchange, firms were not considered central actors. They further stated that humans are the most important factors in the co-creation of their well-being with the help of resource integration across the actors' network. According to Edvardsson, Tronvoll, et al. (2011), marketing tends to identify and then meet the requirements of customers, which is proved by the evolution of concepts, for instance, customer relationship management (CRM); Berry (1995); Grönroos (2008); Grönroos and Voima (2013) suggested that these concepts are used for enticing consumers. In G-D logic, marketing theory is mostly regarded as management incorporating the marketing mix for which Jerome McCarthy (1960) provided a framework including the 4Ps: the product, its price, place of its occurrence and its promotion (Grönroos, 2008). The 4Ps emerged as the central concept of marketing management. In the conventional theory of marketing, there is a separation between producers and participants, with participants perceived as economic entities with diverse expectations. Consequently, in G-D logic, the centricity of exchange value is enhanced (Lusch & Nambisan, 2015) and embodied in the output unit. Companies developed their marketing practices based on the framework of 4Ps to achieve competitive advantage. However, with the evolution of the economic environment, participants of the business community (firms, consumers, stakeholders, etc.) also changed. Value according to G-D logic is briefly described in the next section.

2.1.1.1.1. Value Creation in the G-D Logic of Marketing

G-D logic has its main focus on value-in-exchange, where firms are involved in value creation (Vargo & Lusch, 2008). Alternatively, it can be said that firms developed value propositions that consumers could accept or reject (Lusch & Vargo, 2006; Ng et al., 2012; Plé & Chumpitaz Cáceres, 2010). Ng et al. (2012) observed that G-D logic requires systems where an assigned or transcendent value is given to resources, which is not associated with their contextual setting.

Bruhn and Georgi (2006); Hadwich, Georgi, Tuzovic, Büttner, and Bruhn (2010) explained that instead of determining the desires of customers, companies/firms just considered things they could make and ways to distribute their product without considering the value generated through the concept of value-in-use. Consequently, tangible goods became the focus of exchange and services were regarded as goods with residual value (Lusch & Vargo, 2006). This perception is unsustainable as it deviates from service's real role and exchange's center. G-D logic is generally derived from the process of transaction that provides the value-in-exchange platform. Value is defined by the transactions associated with products exchange. Value-in-exchange is, therefore, primarily the firm's value creation concept (Grönroos, 2008; Grönroos & Voima, 2013; Zeithaml, 2000). Grönroos (2008); Wilson et al. (2012) comprehensively explained the concept of value-in-exchange process. It has been noted by the authors that customers buy a firm's offerings from the firm, and consider these offerings (goods/services) as service provision. This causes the firm to emphasize a product's quality and quantity. In this context, value is regarded as collection of the company's discounted income streams of the future (Bruhn & Georgi, 2006). Consequently, the value creation actions of firms are attributed to the concept of value addition (Porter, 2010; Porter & Teisberg, 2006), which differs from Gummesson (2008) stance that customers' needs are the best value creators. In context of marketing, value is regarded as a critical concept (Edvardsson, Tronvoll, et al., 2011). In G-D logic, value has been attributed to a firm's economic gains, by producing and distributing goods. Therefore, firms emphasized the production processes and elements for gaining maximum profits. In parallel to G-D logic, Ng et al. (2012) suggested that a firm's operand resources drive value-in-exchange. It is said that in G-D logic, value creation is carried in the output unit, which is decided by the firm (Lusch & Vargo, 2006).

The goods-centered perspective of marketing includes the following:

- The main drive behind an economic activity is making and distributing items that can be sold.
- To be able to get sold, these items must incorporate some utility and value within them and must offer the customer some superior value as compared to the competitors.
- All the decision variables should be set in a way to gain maximized profit.

- For maximized production control as well as efficiency, there should be standardized goods manufactured away from the market.
- Then, the goods can be in inventory before being demanded and delivered at maximum profit. Complex and elevated demands from customers, however, require understanding of the firm's service processes and the customers' positions while creating value.

As a consequence, a new marketing-dominant logic was required as explained in the next section.

2.1.1.2. The S-D Logic of Marketing

The S-D logic of marketing does not have its basis in novel theory; instead, it defines various dominant marketing thought movements (Akaka et al., 2014; Lusch & Vargo, 2006, 2011, 2014; Vargo & Lusch, 2008, 2014, 2016). It takes 'service' as a basic entity for value creation and for economic exchange, and includes the mandatory participation of all involved parties, at different stages and in different amounts (Maglio, Kieliszewski, & Spohrer, 2010; Spohrer & Maglio, 2010). S-D logic takes into consideration the association between services and goods (Lusch & Vargo, 2006) along with a way of grouping them into a service. Lusch and Vargo (2006) observed that according to S-D logic, the provision of service is the main purpose behind marketing and economic exchange; that is, it is the service for which service is exchanged. In S-D logic context, the customer is given a prominent role and is the focal point while creating and co-creating value (Edvardsson, Tronvoll, et al., 2011; Vargo & Lusch, 2008).

S-D logic can, however, be perceived as patching together the loose ends from marketing fragmentation, since the goods-centric approach was largely employed by firms (Grönroos & Voima, 2013). Because of this inference in the literature, S-D logic has received a lot of criticism (O'Shaughnessy & Jackson O'Shaughnessy, 2011).

Vargo and Lusch (2014) put forward the four central concepts of S-D logic lexicon: service, its resources, the involved actors and value generated; these concepts can be employed in S-D logic premises and axioms. From the new perspective, service is explained as employing resources for another actor's benefit or oneself. This view of service was affirmed by (Gummesson, 2008); (Gummesson, 2008) stated that from the perspective of consumption and that of value creation, there are no significant differences between goods and services. Since service is viewed as 'application of capabilities' (Gummesson, 1995; Vargo & Lusch, 2004a), a shift in thought emerged regarding value with respect to operand and operant resources (Akaka et al., 2014; Lusch & Vargo, 2014; Neghina et al., 2015). In this situation, service is no longer perceived as units of output, but is perceived as value creation for the involved actors during the exchange process (Vargo & Lusch, 2016). For example, a farmer merges his or her knowledge and expertise about farming in the form of competencies with a fisher's competencies derived from his or her knowledge and expertise about fishing for value creation (such that a balanced diet is realized resulting in improved health) for both involved parties (Elizabeth Esain, Williams, Gakhal, Caley, & Cooke, 2012) .As a result, a firm emphasizes customers' assistance in the process of value creation by offering a service (goods or a direct service) (Mars, Bronstein, & Lusch, 2012).

Lusch and Vargo (2006) proposed that 'service' should be used in a singular perspective, instead of a plural one, because it is a process, along with some other entity, for achieving something beneficial. Also, as suggested by Grönroos (2008), the term 'service-logic' is more appropriate than 'S-D logic' because it indicates a new logic, instead of an approach adding load to the service perspective of another logic. S-D logic is a growing framework also termed as open source or a 'work in progress' and it needs other scholars' support for co-creating, refining, advancing and elaborating its related concepts (Lusch & Vargo, 2014).

2.1.1.2.1. FPs of SDL

The FPs supporting S-D logic have gone through a series of modifications/alterations. Initially, eight premises were introduced in 2004 and then extended to ten in 2008 (see Table 2). FP9 recognized not only resource application but also resource integration in trajectories of value (Vargo & Lusch, 2008). FP9 points out that value is always created through integration of resources which includes customers' own resources with organizations' and other actors' provided resources. Vargo (2011a) introduced the concept of shared system of exchange in which all the actors are resource integrators, which leads to the viewpoint of value co-creation. In implementing this view, service users and service providers (actors) are in themselves an 'operant resource'. FP10 (not explicit in the basic framework of S-D logic) was additional and it revealed the nature of value which was phenomenological and experimental. These premises were combined into four axioms in 2014 (see Table 2) and at a later stage six other FPs were derived from these four (Vargo & Lusch, 2016). The framework of S-D logic was updated recently, and a new axiom called 5/FP11 was added related to institutions and their arrangements (see Table 3). The extended version of this framework stresses a zooming out in terms of stages (macro and meso stages) and outlook of analysis to combine a broader alignment of actors (service ecosystems) than that at the micro stage (customer and firm). FP11 deals with a wider perspective of value co-creation which enables institutions and institutional arrangements which may not be apparent at a micro level (Vargo & Lusch, 2016).

Table 2: Foundational Premises transition from 2004 to 2014

Foundational Premises (FPs)	Vargo and Lusch (2004a)	2006 and 2008	2014
FP1	The application of specialized skill(s) and knowledge is the fundamental unit of exchange	Service is the fundamental basis of exchange	Service is the fundamental basis of exchange (Axiom 1)
FP2	Indirect exchange masks the fundamental unit if exchange	Indirect exchange masks the fundamental basis of exchange	Indirect exchange masks the fundamental basis of exchange
FP3	Goods are a distribution mechanism for service provision	Goods are a distribution mechanism for service provision	Goods are a distribution mechanism for service provision
FP4	Knowledge is the fundamental source of competitive advantage	Operant resources are the fundamental source of competitive advantage	Operant resources are the fundamental source of competitive advantage
FP5	All economies are services economies	All economies are service economies	All economies are service economies
FP6	The customer is always co-producer	The customer is always co-creator of value	The customer is always co-creator of value (Axiom 2)
FP7	The enterprise can only make value propositions	The enterprise cannot deliver value, but can only offer value proposition	The enterprise cannot deliver value, but can only offer value proposition
FP8	A service-centered view is customer oriented and relational	The service-centered view is inherently customer oriented and relational	The service-centered view is inherently customer oriented and relational
FP9	Organizations exist to integrate and transform micro specialized competences into complex services that are demanded in the marketplace	All social and economics actors are resource integrators.	All social and economics actors are resource integrators (Axiom 3)
FP10		Value is always uniquely and phenomenologically determined by the beneficiaries	Value is always uniquely and phenomenologically determined by the beneficiaries (Axiom 4)

Source: Adapted from Vargo and Lusch (2016)

Table 3: Foundational Premises in 2016

Foundational Premises (FPs)		Explanation/Justification	AXIOM Status
FP1	Service is the fundamental basis of exchange	The application of operant resources (knowledge and skills), 'service', is the basis for all exchange. Service is exchanged for service	AXIOM 1
FP2	Indirect exchange masks the fundamental basis of exchange	Goods, money and institutions mask the service-for-service nature of exchange	
FP3	Goods are distribution mechanisms for service provision	Goods (both durable and non-durable) derive their value through use – the service they provide	
FP4	Operant resources are the fundamental source of strategic benefit	The comparative ability to cause desired change drives competition	
FP5	All economies are service economies	Service (singular) is only now becoming more apparent with increased specialization and outsourcing	
FP6	Value is co-created by multiple actors, always including the beneficiary	Implies value creation is interactional	AXIOM 2
FP7	Actors cannot deliver value but can participate in the creation and offering of value propositions	The firm can offer its applied resources and collaboratively (interactively) create value following acceptance but cannot create/deliver value alone	
FP8	A service-centered view is inherently beneficiary oriented and relational	Service is customer-determined and co-created; thus, it is inherently customer oriented and relational	
FP9	All economic and social actors are resource integrators	Implies the context of value creation is networks of networks (resource-integrators)	AXIOM 3
FP10	Value is always uniquely and phenomenologically determined by the beneficiary	Value is idiosyncratic, experiential, contextual and meaning laden.	AXIOM 4
FP11	Value co-creation is coordinated through actor-generated institutions and institutional arrangements		AXIOM 5

Source: Adapted from Vargo and Lusch (2016)

2.1.1.2.2. FPs Used in this Study

This study used the first four axioms which consist of FP1, FP6, FP9 and FP10 (see Table 4). These premises are important factors in the S-D logic framework, which directly concern 'value' or underpin the process of value co-creation (Gummesson and Mele, 2010; Vargo and Lusch, 2012; Kryvinska et al., 2013; Lusch and Vargo, 2014).

Table 4: Foundational Premises Used in this Study

Foundational Premises	
FP1 (Axiom 1)	Service is the fundamental basis of exchange.
FP6 (Axiom 2)	Value is co-created by multiple actors, always including the beneficiary
FP9 (Axiom 3)	All economic and social actors are resource integrators
FP10 (Axiom 4)	Value is always uniquely and phenomenologically determined by the beneficiary

It has been explained by Breidbach and Maglio (2015) that value involves co-creation instead of being created by a single actor. Along with all 'new' ideas, none of these was completely new. In the framework of S-D logic, the primary activity of co-creating value – the integration of resources – is followed by explication of value's experiential and idiosyncratic nature (Lusch & Vargo, 2006; Vargo & Lusch, 2008).

S-D logic provides value's ongoing dynamic narrative with the help of resource integration and exchange of services; it is being developed by a variety of academics from several disciplines. Observations revealed that service identification lies at the heart of S-D logic – resources application for others' benefit – it is the general denominator of both economic and non-economic exchange. The primary role of operant resources was particularly observed; these operant resources, for example knowledge skills, are able to act on other resources to create benefit as compared to operand resources which are usually static and are frequently considered. Along with exchange of service for service, all the actors showed several foundational commonalities during resource integration. The resources deployed in service provision included the source and the combined result of exchange of service for service. Consequently, this resulted in the formulation of FP9, later to be an Axiom, by Vargo and Lusch (2008); this Axiom resonated specifically among scholars and authors of S-D logic. They emphasized that the benefit/value achieved by a beneficiary/customer does not happen in an isolated setting, but instead occurs via resource integration from several sources, so they are best regarded as the 'holistic experiences' (FP9/Axiom 3 and FP10/Axiom 4).

2.1.1.2.3. Resource Integration

An antecedent to integration of resources is interaction among the partners, which consequently results in the shaping of value and experience. To understand their possessions and capabilities, an evaluation of possible, available resources is carried out by the involved actors (Vargo & Lusch, 2008). The role of resource integrators is played by firms as their specialization requires them to access skills, knowledge, money, people and their competences, and products. Therefore, resource integration can be taken as a process of incorporating the resources of one actor into other actors' processes. This implies a socio-cultural process, which enables an actor to become a network member. The co-creation of value is done by integration of actors' resources in compliance with their requirements, expectations and abilities. The supposition of the exchange and integration of resources inside the S-D logic framework is contained within FP1 and FP9 (Kleinaltenkamp et al., 2012; Peters et al., 2014). It is implied by S-D logic that it is not possible to accomplish value until the integration of resources. This suggests that it is not always the point of 'service use' at which 'value' is essentially realized. On the other hand, this resource integration viewpoint also suggests that resource integration may lead to value creation absence (McColl-Kennedy et al., 2012; Peters et al., 2014).

The integration of resources can be viewed as a fit among resources, procedures and activities: consonance (Grönroos, 2011; Medberg, Gummerus, & Tregua, 2016). Andreu, Sánchez, and Mele (2010) explained that the more precise the possible matching of resources, activities and aims inside resource integration procedures, the more enhanced will be the perceived value. The value of resources is enhanced if their matching and positioning is done via a network that has value creation based on resources. The main principle according to which this matching takes place is the combined value creation for the integrators of resources as a shared purpose. It does not simply take place like propositions and co-production of value but, like co-creation, is done for the benefit of other actors along with themselves (terms such as 'value-in-use', 'value-in-experience' or with another inclusive terminology called 'value-in-use context') in a common networked context. Research by Nenonen and Storbacka (2010) showed that matching can be regarded as a fit or consonance activity among a range of resources and procedures that combine because their interdependence causes them to change into different patterns. This perception characterizes the effective integration of resources through ‘configurational fit’ of procedures, actions and resources, that view the matching in both internal (inside an actor) and external configurations all over the network or a sub-network. Therefore, resource integration can be viewed as value creation’s key mechanism (Gummesson & Mele, 2010; Mele, Pels, & Polese, 2010). Every involved actor plays a critical role in the creation of value through the integration of the available resources in order to achieve benefits (Gummesson & Mele, 2010). In a conceptualization of the network, which is many-to-many in nature, it is not just the customer sphere where value lies, but also it is related to each actor having or playing a role in the network.

2.1.1.2.4. Value Proposition, Resources Usage

SDL suggests that co-creation of value is done by customers and its assessment is based on ‘value-in-context’ (Merz, He, & Vargo, 2009; Vargo & Lusch, 2008). Value is not possessed by the resources, rather value is derived from skills and knowledge integration and utilization of the process’s outcome (Lusch & Vargo, 2011; Merz et al., 2009). Therefore, service providers should design resource explanations/constellations and service settings that support consumers of the service and incorporates their resources in co-creating value (Lusch, Vargo, & Wessels, 2008; Merz et al., 2009). These constellations of resources comprise both tangible resources (operand resources including the physical products, their web sites, machines, etc.) and intangible resources (operant resources like skills and knowledge of consumers) (Edvardsson, Ng, Zhi Min, Firth, & Yi, 2011; Lusch et al., 2008). According to Maglio, Vargo, Caswell, and Spohrer (2009); Vargo and Akaka (2009), one human being (which comes under operant resources category) must be there at least, to constitute a service system which is dynamic in nature. (Lusch et al., 2010; Vargo & Lusch, 2008) emphasized the dynamic nature of service systems by introducing the concept of the ‘service ecosystem’.

Moreover, Pfisterer and Roth (2015) recommended that in order to reflect the varying types of customer, consumer resource utilization and the extent of customers’ active or passive involvement in resource usage, the propositions of value must be adapted accordingly. The provider's role in these procedures and activities and the level of guidance needed by the customers for resource utilization must be considered. An additional tool, to differentiate methodologies for the participation of patients during interactions related to healthcare, can be perceived from the framework provided by (Pfisterer & Roth, 2015).

Chandler and Lusch (2015) also regarded the role of value propositions in their conceptual research paper, where they explored the associations among engagement, the propositions for value and service experience. This exploratory research paper discussed the alteration of value propositions with time during the period of a service encounter, which may be considered 'many-to-many encounters'. They were of the view that the development of service experience is done according to the intensity of value proposition (i.e., the closeness by which propositions provide information about the dispositions and connections of actors involved) and the engagement (placings of these connections and the dispositions) and suggested that their occurrence takes place in four stages: repeat, then stimulation, after that replication, and finally their synchronization and dissipation. The 'dissipation' stage is the period when it is not possible to attain engagement (because of inadequate alignment among the connections and dispositions), and where other propositions of value are considered by the actors, rather than a step that involves some misuse or depletion. Similarly, according to Skålén et al. (2015) and Chandler and Vargo (2011), the service encounter can be subject to disruption if the propositions of value do not have adequate alignment or there exists some conflict among the actors because of resources deficiency or due to divergence of meaning. In the context of healthcare centers, assessing other resources or seeking out other value propositions might be impossible for patients. Consideration of this issue is important in this study's context.

2.1.1.3. Transition from G-D logic to S-D logic

In the marketing context, the terms services and service have different meaning. The term 'services' is linked with G-D logic; G-D logic focuses on goods which include both intangible (services) and tangible (goods) as units of output (Vargo & Lusch, 2008). Economic exchange is the unit production and distribution of output in which producers create value (Vargo & Lusch, 2008). Whereas the term 'service' is used in S-D logic (SDL); service is the application of knowledge and skills for the benefit of another actor (Vargo & Lusch, 2004a). Lusch and Nambisan (2015, P.156) explained it as “views what a firm does, not primarily as the production and offering of tangible goods or, for that matter, any output but rather as the exchange of service that occurs by one actor using its skills and capabilities for the benefit of another actor” The transition from G-D logic to S-D logic can view in Figure 1.

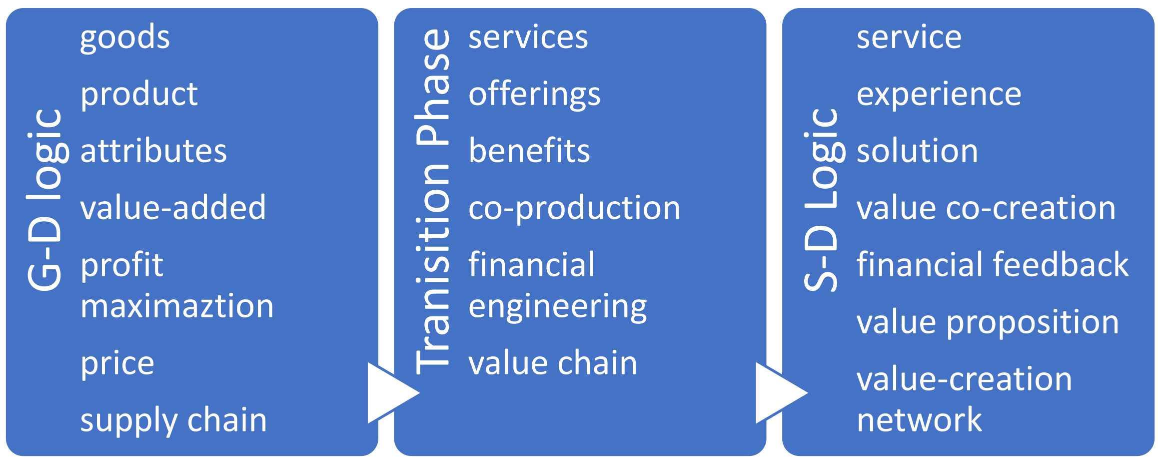

Figure 1: Conceptual Transitions from G-D Logic to S-D Logic

2.1.1.4. G-D Logic Resources versus S-D Logic Resources

The main difference between G-D logic and S-D logic is their perception of services and view on resources. Resources are mainly tangible goods that mostly consist of natural resources and are for the support of people. The G-D logic view of resources is operand resources (Vargo & Lusch, 2004a). Operand resources are usually the primary source of a firm’s competitive advantage. For example, in the maternal hospital context, operand resources are location, medicine, surgical instruments and so on. The S-D logic view of resources is operant resources, such as knowledge, skill and technology. People use knowledge, skills and technology to introduce new things or improve efficiency, productivity and operations. S-D logic has theorized/conceptualized the definition of ‘resources’ and ‘value exchange’. ‘Value’ is not created or determined by the firm, but only co-created with customer (Lusch & Nambisan, 2015). Customers can co-create value through experience with a firm or an organization. Value cannot create through firm's embedding offering with value (value-in-exchange); it's a firm's offering helpful to the customer (value-in-use). For value creation each actor relates with other actors and resources. Each actor experiences value in their own context in a value-creating process. Value co-creation is a foundational key of S-D logic.

2.1.1.5. SL Approach

The concept of SL (Grönroos, 2006) gives more explanation of S-D logic along with related resemblances and differences. Grönroos (2006) explained that SL stems from the Nordic school of thought regarding services in the context of marketing, whereas from the S-D logic perspective, extensive analysis of service is carried out based on the theory of classical economics. The main purpose of both of these Logics is, however, the same: they take into account the interface between consumers and providers of service while providing service (Grönroos & Voima, 2013). A solid distinction is being made between the SLs as perceived by consumers and providers by presentation of the activities in the sphere of each involved actor (Grönroos, 2011). Grönroos (2011) noted that the interactions between consumers and firm, based on SL for co-creation of value, are impacted by various activities and elements. It has been further argued that conventional marketing practices (including advertisements, price efforts, promotions, etc.) will be continually applied, along with the firm's capabilities (including knowledge, skills, technology, etc.), to extend the marketing scope. Although, it is arguable that the procedures and interactions that co-create value are paramount (Grönroos & Voima, 2013), an important part is still played by the marketing mix factors in the procedures of value proposition, but this role is played in a more refined way. (Grönroos, 2008) explained that services and goods are bought by consumers because they want value creation for themselves. Grönroos further argued that "while creating value, the role of supplier is only of a facilitator", so, subsequently, takes the role of value co-creator along with the customer (Grönroos, 2006; Grönroos & Voima, 2013). This suggestion is in accordance with what is represented by Lusch and Vargo (2006) in FP7, since 'proposition' and 'facilitator' of value delivers the same meaning for the consumer. However, the difference occurs when SL regards a customer as value creator while SDL regards a customer as value co-creator. Grönroos (2011), however, asserted that by interacting with the customer, the firm gets an enhanced role for creating value, thus, the supplier assists the customer in value co-creation. Consequently, consumers combine the firm's resources available to them with their own resources in the daily routine of value-creation (de Bruin et al., 2014; Grönroos & Gummerus, 2014). This implies that it is the consumer by whom value is determined, which confirms the logic employed in the consumer-dominant phenomenon (Grönroos & Gummerus, 2014; Heinonen et al., 2010). Therefore, the consumers, according to SL, are considered value creators instead of value co-creators as considered in SDL. SL forces firms to show innovation by formulating consumer touch points to participate in the consumption process. (Grönroos, 2008, 2011) suggested for this backdrop that employing SL allows firms to be actively involved in the value-creating procedures of consumers and, therefore, also actively participate in consumers' value fulfillment process. Nowadays, firms depend on their skills and competences (e.g. knowledge, technology integration, innovations) for the creation of advantages on a competitive basis in business (Maglio et al., 2010).

The construct of SL 'value-in-exchange' is overlooked by marketing's SL; while the 'value-in-use' construct is highly focused; also SL considers all firms to be service firms (Grönroos, 2011; Grönroos & Gummerus, 2014). The conception that consumers use goods/services as a service, however, does not imply that everything is bought by them in service form (Grönroos, 2008). It was further observed that, although some consumers still thought of goods as goods, in these conditions value propositions should be developed by the firms and value fulfilment processes should be influenced by the firms via interactions between firms and customers. O'Hern and Rindfleisch (2010) suggested that mutual interactions among the actors affect the value actualization procedures, which implies that consumers actively participate (Grönroos, 2011), in the value co-creation process (see Table 5).

Table 5: Difference between Service Logic and Service-Dominant Logic

	Service logic	**Service-dominant logic**
Level of perspective	Managerial; defined concepts	Systemic; abstract; metaphoric
Goal of the service perspective	Value creation, where service functions as a facilitator; through service, the user's value creation gets facilitated, which enables the provider to capture value by providing service	Service is exchanged for service

Value	Defined as value-in-use	Value used with different meanings in different contexts
Value generation process	A process including all actions by all actors involved, which ultimately leads to value for a user (as exemplified by the customer)	Not explicitly discussed; implicitly, an all-encompassing value creation process including all actors (e.g. provider, customer, others) involved
Locus of value creation	Customer's creation of value-in-use	Not explicitly defined; implicitly, an all-encompassing process including actions by providers, customers, and other actors
The nature of value as value-in-use	Evolving as value-in-use in a cumulative process, with favorable and unfavorable phases throughout the customer's value creation	
Value in use: contextual influence	The qualifying dimension of a utility-based value concept evolving during use; when social, physical, mental or other contextual factors are altered, the level of value-in-use changes	Sometimes replaced by the expression value-in-context, which disguises the qualifying aspect of value-in-use as being created during the many forms of use
Value spheres	Three distinctly different value spheres: a provider sphere closed to the customer, a customer sphere closed to the provider, and a joint sphere where customers and providers directly interact and may co-create value	Not explicitly included; implicitly, one value sphere for an all-encompassing value creation process, in which all actors involved co-create value
Interaction	Explicitly defined with a clear, conceptual distinction between direct and indirect interactions; direct interactions with intelligent resources (people, intelligent systems) enable co-creation; indirect interaction with non-intelligent resources (most products and systems) do not	Not explicitly defined, only implicitly addressed through foundational premises
Co-creation	A joint directly interactive process in which the actors' (e.g. provider's and customer's) processes merge into one collaborative, dialogical process, such that a co-creation platform forms	Actions taken by all actors involved in a process (e.g. providers, customers), regardless of how they relate to each other
Value co-creation	Actions taken by the actors on a co-	Actions contributing to value

	creation platform, where the actors may directly and actively influence each other's processes (e.g. supplier service process and customer consumption and value creation processes)	for customers during an all-encompassing value creation process by all actors involved (e.g. providers, customers, others), regardless of how they relate to one another or the process
Driver of value creation	The customer drives value creation and is in charge of it	The provider drives value creation and is in charge of it
Division of roles in value co-creation	The provider may engage with the customer's value creation and co-create value with the customer	The customer may engage with the provider's process and co-create value with the provider
Value creation: customer's role	The customer both creates and determines value (as value-in-use)	The customer only determines value (as value-in-use)
Value creation: provider's role	The provider compiles resources embedded with potential value-in-use through which the customer's value creation is facilitated	The provider co-creates value
Value co-creation: customer ecosystem's role	During interactions with persons in the social ecosystem, the customer may socially co-create value with them	Abstract; not explicitly discussed
Marketing: making promises through value propositions	The provider can go beyond making promises by offering value propositions and undertake direct, interactive actions on a co-creation platform to actively and directly influence the customer's value creation and value fulfilment	The provider can only offer value propositions
Marketing: keeping promises	By co-creating value with its customers, the provider may extend the keeping of promises beyond product performance; from passive to active promise	Not explicitly discussed
Reinventing marketing	Marketing extends beyond the a single function, one-department process of making promises and creating brand awareness; it may become an organization-wide promise management process	Not explicitly discussed

Source: Table adopted from Grönroos and Gummerus (2014, pp. 213–214)

2.1.2. Public Management

The public management model was developed by James Conway for healthcare improvement through improving patient engagement at the micro level (direct care) in a health service setting. Pomey, Ghadiri, Karazivan, Fernandez, and Clavel (2015) stated that patient engagement was "actions people take for their health and to benefit from health care" (p. 3).

Shared decisions between patient and service provider (healthcare staff) can improve services. Gaining insight into factors that help in 'value' creation (trajectories) can enhance understanding of how value is perceived and conceptualized by service users. Mark Harrison Moore (1995) introduced the concept of public value in his book *Creating Public Value*. He proposed that public sector organizations can create 'value' through organizing and developing an organization to meet the need of citizens and their representatives (family or friends etc.). It is the responsibility of a public manager to produce something which benefits the citizens or public and their representatives and assure them that some 'value' is produced. Further work was done on this idea, and strategies and tools for recognizing and measuring key assumptions of public value were developed (Benington & Moore, 2010; De Jong et al., 2017). Mark H Moore (2014) stated, "use their imagination and skills to produce public value for citizens using the public assets held by democratic governments" (p. 465).

Due to limitations of healthcare resources and elevating expenditure on health, it is not a surprise that, typically, healthcare 'value' has an economic perception with consideration of costs and outcomes of services being provided (Care, 2011; Porter, 2010; Porter & Teisberg, 2006). However, it has been discussed in recent years that articulations of 'value' in economic terms show a perception of a centered 'payer' that might not completely provide the views of users purchasing the health services, in terms of the most valuable service for them (Ottenberg et al., 2011). In terms of conceptions and metrics of value, these considerations are worthy because it is not necessary for the views of the people who use, provide and fund the healthcare services to be shared. Related to these concerns, mapping value from a perspective or view in the literature of services marketing is called SDL, which is also called S-D logic; S-D logic may provide more insights into how value is viewed by the users of health services (Lusch & Vargo, 2014; Vargo, Wieland, & Akaka, 2015). The framework of S-D logic is based on the idea that 'value' is a concept that is subjective and experiential and is determined as a phenomenon. S-D logic suggests that value is realized only in use (value-in-use) and it is often unique for a given context (Chandler & Vargo, 2011; Lusch & Vargo, 2014; Rihova, Buhalis, Moital, & Beth Gouthro, 2013; H. Wieland, F. Polese, S. Vargo, & R. Lusch, 2012a). Value is co-created by the activities and interactions of different ‘actors’ (such as the customer or the service provider), which involve the exchange and subsequent utilization and integration of resources; so, determination of value is ultimately done by the beneficiary of the service based on the service experience (Archpru Akaka et al., 2012; Vargo & Lusch, 2008).

This is the first study to investigate the conceptualization and value creation (trajectories) process according to S-D logic framework within the setting of Pakistan’s maternal healthcare. The main focus of this study is the actors’ engagement (service provider and service user) in micro-level service encounters (direct care) rather than involvement in policy making, governance and organizational design. It also identifies the facilitators, potential barriers and support for value co-creation.

2.1.3. Public Healthcare Sector in Pakistan

In Pakistan, the healthcare system consists of public and private sector. As per the constitution of Pakistan, the provisional government is responsible for the provision of health except in federally administrated areas. Under the ordinance of 1962, Pakistan Medical & Dental Council (PM&DC) is a regulatory authority to ensure the delivery of quality of healthcare services to the people of Pakistan (Farooq, 2019). Healthcare services are divided into three levels: primary, secondary and tertiary; these levels reflect WHO’s identification that people require healthcare at different levels (Callen et al., 2013). Primary healthcare represents the first level of contact of individuals with the health system. It includes mother and child care, immunization, local endemic disease preventions, family planning, treatment of common injuries or diseases, and the provision of nutrition, food and essential facilities. In Pakistan, BHUs and Rural Health Centers (RHCs) are the core of primary healthcare. BHUs are situated at Union Council level and are responsible for and serve a population of up to 25,000 approximately. RHCs serve a population of up to approximately 100,000. Secondary healthcare is the second tier of the health system in which patients are referred from primary healthcare for specialist treatment in a hospital.

Community health centers and district hospitals are part of secondary healthcare. Tertiary healthcare denotes the third level tier of the health system which provides specialized consultative care based on a referral from primary and secondary medical care. The key features of tertiary healthcare are advanced diagnostic support services, specialized Intensive Care Units (ICUs) and specialized medical personnel. In Pakistan, medical colleges and medical research institutes provide the tertiary healthcare system.

The healthcare system of Pakistan has been challenged with problems, such as shortage of resources, insufficient and untrained medical and non-medical staff, and structural mismanagement. The healthcare system is implemented by medical staff while designed by politicians (Shaikh & Rabbani, 2004). In rural areas, the affordability and accessibility of healthcare services and reliable health information management system to evaluate and improve services is a big issue because of inadequate resource allocations for the primary healthcare sector (Punjani, Shams, & Bhanji, 2014). Unwholesome health policies and poor implementation are the main source of dissatisfaction among healthcare professionals and the public. Lack of latest technology and medical research are the main reasons for poor/substandard healthcare services.

In Punjab, the powers of the public health system are transferred to the districts and a minimal administrative role is given to the province's central government in Lahore. However, the public healthcare system in Punjab is complex and consists of three substructures: first, it deals with the hospitals and service delivery side; second, the administration side consists of bureaucrats working at district, divisional and provincial levels; third, a monitoring system to ensure the quality of services. In Punjab, public healthcare facilities are divided into five types: BHUs, RHCs, Tehsil Headquarters Hospitals, District Headquarter Hospital and teaching hospitals (Callen et al., 2013). Teaching hospitals are located in divisional headquarters. There are 49 teaching hospitals in the Punjab, of which 19 are in Lahore. These hospitals provide advanced healthcare services and prepare competent paramedics and doctors to fulfill future needs.

2.2. What is Value?

The concept of value is considered notoriously elusive and it has been talked about for about 2000 years (Angood et al., 2010; Karababa & Kjeldgaard, 2014; T. Young et al., 2004). It is not a surprise that the literature related to 'value' is vast and extensive with value being defined in many disciplines including philosophy, anthropology, economics, psychology, sociology, management, marketing and many more. According to Kotler (1972), on a subjective basis, value can be considered a service-product creation by an organization that offers it to customers for the purpose of sales. This service-product concept is focused on the following attributes: configuration (the service-product design), the valuation (the price of service-product), symbolization (the promotion of service-product) and facilitation (the placing or accessibility of service-product). J. B. Smith and Colgate (2007) proposed that value can be considered to be the benefits gained by customers against the costs paid or sacrifices made by them. The importance of particular attributes may, however, differ with respect to the individual's or organization's perspective (Boztepe, 2007a, 2007b).

'Customer value' refers to the purpose of every firm's existence which is to satisfy its customers (Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Ravald & Grönroos, 1996). Customer value can be determined through 'perceived value' and 'expected value'. Customer perceived value refers to the benefits which a consumer gets from purchasing and consuming a service against the paid price. Expected value is the benefit the customer expected from purchased offer (Salem Khalifa, 2004). Perceived value is subjective and varies from customer to customer based on individual needs, values, financial resources and preferences (Pura, 2005; Zeithaml, 1988). The perceived value to a customer is measured on the basis of quality or benefits of a service and sacrifices or costs made for that service. The value of service is calculated as the sum of all the gross values (perceived benefits) less the sum of all the perceived costs (Zeithaml, 1988).

2.2.1. Experiential Perspective of Value

As discussed in the earlier section, from the economic view, the discourse about value has been largely learnt. However, the complex and dynamic nature of consumers varies (Ackerberg, Caves, & Frazer, 2006) with time, and it requires the broadening of our comprehension of value from an economic-centric perspective (Sweeney & Soutar, 2001) in order to include value's experiential perspective. Taking into account the demand of consumers for deriving value via service exchange, the value perceptions of consumers, being understood by the customers, could assist in creating competitive advantage (Ackerberg et al., 2006; Sweeney & Soutar, 2001). (Holbrook & Hirschman, 1982) explained that from the experiences of consumers, value can emerge through diverse consumer experiences. According to Mathwick (2002), when the experience of consuming a service has rich value, the relativistic priorities of the involved actors are influenced by it. This means that extrinsic as well as intrinsic benefits are offered to the actors as value during a service encounter (Mathwick, Malhotra, & Rigdon, 2001). It has been further explained by Mathwick (2002) that the extrinsic advantages, as gained through the service exchange, have a utilitarian nature. Customer involvement in providing a service can lead to the creation of a relational bond among the actors that is intrinsic in nature. In view of this, (Vargo & Lusch, 2004a) formulated a conception of value as phenomenological encounters if consumers are viewed while interacting with supplier and service usage. Lusch and Vargo (2006) explained that value is idiosyncratic, contextual and experiential and is believed to have a definite meaning; it is the beneficiary who always determines this value on some phenomenological and unique basis. Also, this shows the subjectivity, multidimensionality and specificity of the context (Chandler & Vargo, 2011; Cova, Dalli, & Zwick, 2011; Helkkula et al., 2012a). In this case, value's subjectivity broadens the complications and difficulties to ascertain if value is achieved or not. Understanding the kind and manner of value being created is, therefore, important while co-creating value, which is also distinguished on a contextual basis (Chandler & Vargo, 2011; Vargo & Lusch, 2008). While co-creating value, it is argued that it is the customer's sphere from where the value emerges (Cova et al., 2011; Grönroos, 2011), which is also explained by the assertion that the value perceived by a consumer is inherent in nature and is regarded as the benefits realized from service usage (Spiteri & Dion, 2004). (Holbrook, 2006) stated that a consumer's value complexity has some interlinked terms. Consumer value has an interactive nature because it incorporates a relationship among related subjects (a customer) or objects (a product). Value has no existence until some interactions occur among some subjects and objects. There are three senses on the basis of which consumer value is considered relativistic (Gallarza, Gil‐Saura, & Holbrook, 2011; Oliver, 2002):

(I) It is comparative, as it depends on the comparative merits of one object relative to another one;

(II) It is situational, because it contextually changes from one evaluative setting to another; and

(III) It is personal, as the experiences, involving benefits, vary from individual to individual.

Consumer value is regarded as a preference judgment, where the consumer is the most appropriate person for judging whether things satisfy his or her requirements for a given service and consequently creates value. Consumer value mainly depends on the experience of service consumption; what is desired by customers in real terms is not any service or product but the experience of satisfaction. Taking these interlinked terminologies into account, value is formulated by Holbrook (2006) as a judgment regarding the relationship and Holbrook (2006) further emphasized the relativity of value for customers, which brings forward the views of consumers about value-in-use. It also puts emphasis on the critical role of qualities of attributes and performances while exchanging service which influence the consumption experience of customers (Holbrook, 2006; Holloway & Galvin, 2016). Similarly, (Gummesson, 2008) reported that the consumer has a large amount of power because the consumer is the most critical determinant of service value. (Gummesson, 2008) argued that if marketing's focal point is the consumer, then the creation of value is possible only when a good or a service is consumed. A service/good which is unsold has no perceived value; consequently, a service provider cannot create anything without consumers (Gummesson, 2008; Gummesson & Mele, 2010). Gummesson and Mele (2010) affirmed this by arguing that the emphasis is not placed on the goods/products but is placed on the value-creation procedures carried out by the consumers, where value emerges for the consumers and is also viewed by them. Consequently, value is achieved via 'value-in-use', arising from service consumption (Holbrook, 2006). This study, therefore, employs an experiential perspective of value as a consumer's comparative and perceptual preference regarding services emerging from the user's interaction during service consumption which facilitates or obstructs the realization of objectives or goals (Roski, Bo-Linn, & Andrews, 2014). The nature of value proposition is further explained in the next section.

2.2.2. Value Proposition

A comprehensive review of the literature revealed that there is something missing in the definition of the term ‘value proposition’ in the marketing context, although this term was used repeatedly. TAN and WANG (2008) proposed that value proposition can also be termed ‘value conception’. There are several definitions of ‘value proposition’, such as to be explicit about what the product does for the customer (and occasionally what it does not do) and it normally also comprises pricing information in relation to competitors (Kozlowska, Walker, McLean, & Carrive, 2015). Piercy, Cravens, Lane, and Vorhies (2006) stated that value proposition is used to support the profits that any particular brand offers. Hughes and Dann (2009) considered it to be the addition of features that institutes deliver to their users, a compilation of the product’s attributes, and the opinion of customers related to the value of the link with a specific image of any organization.

Firms create value propositions that include the set of benefits intended (by the organization) for value addition to customers (Grönroos, 2008; Vargo, Maglio, & Akaka, 2008) and these value propositions are appraised and valued by the customers alone. The reason behind is that informed customers, having a bounded rationality, will choose for their consumption, the proposition that they think superior in terms of the value being delivered to them (Christopher, 2016). This means that the attributes of propositions are, more appropriately, according to the customers’ requirements as they are viewed only by the customers (J. C. Anderson, Narus, & Van Rossum, 2006; Lengnick-Hall, 1996; Zeithaml, Rust, & Lemon, 2001). The sacrifices that the customers think they have made in order to take benefit from the value propositions are also considered in the choice decisions of the customers.

2.2.2.1. Value-Exchange and Value-in-Use

Debates related to value are based on two main issues. The first issue is concerned with whether the value of objects is extrinsic or intrinsic. This is associated with the question of whether there is subjective assignment of value by the user that is not dependent on the physical qualities of the products, or if value is viewed as embedded within the object (Boztepe, 2007b). The second issue is concerned with the ‘goodness’ of an offering’s or product’s use, commonly called ‘value-in-use’ as compared to ‘value-exchange’ which is regarded as the worth of an offering in exchange. Although both concepts indicate 'goodness of something', the first is considered to be the 'goodness of use', and the second is considered to be 'the goodness of exchange for something else'.

In the literature related to economics and marketing, the emphasis has traditionally been on value-exchange; however, in the field of marketing services, there has been more focus on value-in-use (Sandström, Edvardsson, Kristensson, & Magnusson, 2008). Value-in-use is not a new concept; its origin is in classical works like those of Aristotle and Plato and it also exists in Adam Smith's early work (Grönroos, 2011; L. A. Smith & Ng, 2012; Vargo et al., 2008). Lusch and Vargo (2014) stated that although Adam Smith, the 'father of economics', perceived 'real value' to be value-in-use in the early years of the Industrial Revolution, this perspective of value must necessarily be reversed. Instead, the main focus was on the production of goods and their export since these were considered the key means for national wealth by Smith. Subsequently, Smith used the term 'value-exchange' as a surrogate for the term 'value-in-use'. Value-exchange was considered easy to understand and offered a systematic or consistent wealth measurement (Lusch & Vargo, 2014).

Lusch and Vargo (2014) indicated that the change in economic thought from philosophy to science in the nineteenth century continued to evolve and institutionalized the true significance of the term 'exchange-value'. Advancement in Newtonian mechanics (according to which matter can be viewed as a mass embodied with some properties) helped to easily map the idea of a product or good being embedded with some utilities (the concept of exchange-value). By the first half of the nineteenth century, the concept of utility as a usefulness measure became prominent as the primary factor in economic science analysis (Lusch & Vargo, 2014). This emphasis became an important consideration for neoclassical economics and it made a solid basis for the theory known as marginal utility (Lusch & Vargo, 2014; L. A. Smith & Ng, 2012). Grönroos (2011) stated that value for customers is created either on the customer's side by the user as 'value-in-use' or it is created by both the user and the provider in a process of value creation. The creation of 'value-in-use' by the user and 'value creation' (a collaborative process involving value creation by both the provider and the user) cannot be contained in a single analysis, as carried out in S-D logic. On the basis of theory, using the two approaches together for value creation is not achievable and is not rational. One of the two approaches for value creation can be used separately but they cannot be used concurrently.

The relationship between the two concepts (i.e., value-in-exchange and value-in-use) can be discussed further on the basis of integrating an organization's resources with the resources of the customer in a customizing procedure. There are arguments that this customization helps firms to adapt their standardized value offer by considering a customer's particular requirements in order to make more value of their offers in the view of customers (Franke, Keinz, & Steger, 2009). This may result in a decline in product demand by other customers, and it would probably lower the market value or value-in-exchange of the product/offer and raise the value-in-use (Grenci & Watts, 2007; Layne-Farrar & Salinger, 2016).

This approach, therefore, suggests consideration of the customer as an active participant in the value creation process (L. A. Smith & Ng, 2012). This view of Smith and Ng (2012) is mapped to S-D logic regarding the discussions relating to value's economic, managerial and philosophical foundations. To employ this aspect on value, L. A. Smith and Ng (2012) further stated that S-D logic also covered the early notion of Adam Smith on the concept of 'value-in-use' by "re-proposing that value goes beyond simply the utility of an offering to value as a co-created phenomenological experience and derived with the participation of, and determined by, the beneficiary" (L. A. Smith & Ng, 2012).

The mapping of the 'value in-use' concept according to the view discussed earlier is not novel to the S-D logic authors. Sandström et al. (2008) stated that 'value-in-use' is the cognitive assessment of a service experience. Moreover, the concept of value co-creation, which incorporates the value in the personal experiences of customers, is more focused in the research studies of other authors, including Grönroos (2011),A. Payne, Storbacka, Frow, and Knox (2009) and A. F. Payne et al. (2008); they further discussed the concept of value-in-use and termed it as the extent to which a customer has a better-off feeling (positive value) or a worse-off feeling (negative value). Luca, Hibbert, and McDonald (2016) proposed that the literature of S-D logic, despite emphasizing the significance of 'customer perceived value-in-use', has not defined ways of assessing value-in-use in a clear manner. This view of 'value' is related to that of A. F. Payne et al. (2008) on the process of value creation which is carried out when a group of activities is done by a customer to get some desired results. From these assertions, it can be concluded that the mapping ‘value’ can also be considered to be associated with the method for defining value co-creation.

2.2.3. Value Co-Creation

Value creation comprises the activities carried out by customers that lead to creating products/services which are eventually consumed by them, and thus their consumption experiences are formed. Alternatively, co-creation of value is defined as a value-creating process which needs different economic actors, considered to be resource integrators, to combine in a joint effort for the co-production of value (Callaway & Dobrzykowski, 2009). Saarijärvi, Kannan, and Kuusela (2013) stated that value co-creation approaches are categorized broadly into many camps: first is the S-D logic approach; second is the service science approach, which is related to interaction of different participants, procedures and resources; third is the SL approach which differentiates customer SL from provider SL; and others such as many-to-many, new product development and social constructionist. The section below explores the first of these four types of approaches because it is considered the most important for value co-creation (Grönroos, 2008, 2011; Grönroos & Ravald, 2011; Grönroos & Strandvik, 2008; Grönroos & Voima, 2013).

Table 6: Definitions of Value Co-Creation

Author(s)	**Conceptualization**	**Conceptual Domain**	**Perspective**
Normann and Ramirez (1998)	Actors come together to co-produce value	Co-production: delivering value to the customer	Successful companies do not just add value, they reinvent it
Wikstrom (1996)	When the customer is conceived as a co-producer, the interaction between the parties should generate more value than a traditional transaction process	Co-production: creating value with the customer	The consumer is positioned as a resource in the company’s value-creating (profit generating) systems
Ramirez (1999)	Co-production is a framework for understanding value creation processes that exist within interactions between producers and consumers	Co-production: joint value creation through dyadic interaction	Value co-produced by two or more actors, with and for each other, with and yet for other actors

Grönroos (2000)	Value for the customer is created throughout the relationship by the customer, partly in interactions between the customer and the supplier or service provider	Customer value creation: value is created by the customer	Relationship marketing Value is created by the Customer
Prahalad and Ramaswamy (2000)	Co-create personalized experiences with customers. Customers want to shape these experiences themselves, both individually or with experts or other customers	Value co-creation	Value co-created through experience with others outside the service provider dyad—other customers, other experts
Prahalad and Ramaswamy (2004a)	The co-creation experience, not the offering becomes the basis of unique value creation	Value co-creation	A firm cannot create anything of unique value without the engagement of individuals
Vargo and Lusch (2004a)	Customers are active participants in relational exchanges and co-production	Customer co-production	The enterprise can only offer value propositions; the consumer must determine value and participate in creating it through the process of co-production
Lusch and Vargo (2006)	The service-dominant logic notion of value co-creation suggests that there is no value until an offering is used; experience and perception are essential to value determination	Co-creation of value	Value is only assessed when the value offering is used
Vargo, Lusch and Morgan (2006)	Value is always uniquely and phenomenologically determined by the beneficiary	Co-creation of value	Customers are the sole arbiters of value (value is determined by the beneficiary)
Grönroos (2008)	Adopting a service logic makes it possible for firms to get involved with their customers' value-generating processes, and the market offering is expanded to include firm–customer interactions	Value co-creation	Customers are always the value creators. The supplier can only be a co-creator of value with its customers
Payne, Storbacka and Frow (2008)	The value co-creation process involves the supplier creating superior value propositions, with customers determining value when a good or service is Consumed	Value co-creation	Providers offer superior value propositions and customers select from these based on judgments of value

Vargo, Maglio and Akaka (2008)	Co-creation of value inherently requires participation of more than one service system, and it is through integration and application of resources made available through exchange that value is created	Co-creation of value	Value is created through resource integration in service systems, networks and constellations through exchange
Tynan, McKechnie and Chhuon (2010)	Co-creation of value of luxury brands is conceptualized to involve dialogue and complex interactions between parties including the customer brand communities	Value co-creation	Inputs and influence of customers co-create value in terms of exclusivity, recognition, access to privileged information and prestige
Heinonen et al. (2010)	Firm provides service co-creation of value opportunities; consumers only engage in value creation as part of how consumption activities become a part of their life goals	Customer value creation	Influence of social structures on value co-creation
Grönroos and Ravald (2011)	Value co-creation requires supplier's process of making available resources for customer's use and the customer's process of turning a service into value	Value co-creation	Only the existence of supplier–customer interaction can lead to value co-creation
Fuller, Hutter and Faullant (2011)	Consumer or participant contribution in the service process positively impacts on the co-creation experience	Co-creation of value	Customer creative outputs enhance the co-creation experience
Zhang, Ye, Chena and Wang (2011)	Value co-creation becomes operational with customers through firm's capability development	Value co-creation with customers	Corporate strategies are not determined by customers, but their values and expectations influence such strategies
Eichentopf, Kleinaltenkamp and Stiphout (2011)	Value creation is influenced by customer processes. Value co-creation is the integration of companies into formally autonomous customer processes	Interactive value creation through customer script	Customer script has positive effect on interactive value co-creation
Edvardsson, Tronvoll and Gruber (2011)	Value co-creation is shaped by social forces, is reproduced in social structures, and can be asymmetric for the actors involved	Value co-creation: as a social phenomenon	Influence of social structures on value co-creation

McColl-Kennedy et al. (2012)	Benefit realized from integration of resources through activities and interactions with collaborators in the customer's service network; that is, a multiparty all-encompassing process including the focal firm and potentially other market-facing and public sources and private sources as well as customer activities (personal sources)	Customer's value co-creation	The customer plays a critical role in integrating resources beyond the firm customer dyad, includes customer's self-generated activities
Hillebrand, Driessen, and Koll (2015)	"Despite the growing attention to stakeholder marketing, mainstream marketing literature to date has not gone much further than observing that firms have multiple stakeholders"	Value co-creation: role of multi-stakeholder	Without understanding the stakeholders' motives to co-create in the ecosystem, it is difficult to integrate the resources that lead to value co-creation
Vargo and Lusch (2016)	"It has become evident that the recognition of the central role of institutions and institutional arrangements and the resultant heuristics that emerge that foster cooperative and coordinated behavior among actors in an evolving service ecosystem is central to a more complete and realistic portrayal of markets"	Service eco-system	Value co-creation is difficult without getting institutions and institutional arrangements to coordinate and cooperative behavior among actors
Voorberg (2017)	Citizens and public organizations work together to deal with societal issues. It is increasingly considered a fertile solution for various public service delivery problems	Public value co-creation	During co-creation, citizens are not mere consumers, but are actively engaged in building resilient societies

Source: Table adapted from McColl-Kennedy et al. (2012, pp. 3–5) with modifications

The processes which enable providers to collaboratively engage with their customers in order to create value, while considering basic S-D logic principles, are referred to as value co-creation (Coimbatore K Prahalad & Venkat Ramaswamy, 2004b). These basic S-D logic principles include service, respective actors, resources and the expected value. In this context, it is not the product where the value is embedded but it is the usage of the product; therefore, there occurs a conversion from ‘value-in-exchange’ towards the ‘value-in-use’. So, the experiences of customers while using the service provide the created value (Grönroos, 2011; Roski et al., 2014). In the delivery of service, the customer is an active entity having an emotional participation in the service consumption (Heinonen et al., 2010). A great emphasis has been placed by Roski et al. (2014) and (Grönroos, 2011) on value co-creation's collaborative nature. Prahalad and Ramaswamy (2000, 2004a) formulated a platform to co-create value, from their work, which tends to shift the process of creating value from a firm-centric nature to a dyadic customer–provider perspective. Additionally, this method indicates the importance of the customer’s experience while exchanging service (Schmitt, 1999; Payne et al., 2008). This is important while taking into account the service encounter's social context (Edvardsson et al., 2011) by which the exchange's interactive nature is derived for value co-creation (Grönroos & Voima, 2013; Vargo & Lusch, 2004).

The value co-creation carried out by the consumer is defined as the experiential advantages realized by the consumer while using the service by integrating resources via actors' interactive involvement(Rantala,2018). It can, therefore, be concluded that co-creation of value occurs as a consumer uses the service (Grönroos, 2008; Gummesson, 1998) while the co-creation of experience takes place between the firm and the customer (Russo-Spena & Mele, 2012) This is the case where value co-creation considers the multi-dimensional procedures for focal firm inclusion and possibly other public, private and market-related sources, along with the consumer activities (Tynan et al., 2010; McColl-Kennedy et al., 2012). There is a difference between the concept of value co-creation and that of value chain; the concept of value chain tends to consider the consumer to be exogenous in the value creation activities of the firm (Porter, 1985). This concept, however, needs the cooperative involvement of the associated actors and asks for a more comprehensive and integrated understanding regarding value (Ng & Smith, 2012; Normann & Ramirez, 1993), since value is embodied in an individual’s experiences (Coimbatore Krishnarao Prahalad, 2004) Coimbatore Krishnarao Prahalad, (2004, P.172) emphasized that the co-creation of value depends on a varying group of internally relevant assumptions as discussed in Table 5.Coimbatore Krishnarao Prahalad (2004) further suggested that co-creating value on the basis of experience needs enhanced sensitivity.

Table 7: Traditional View versus Experience-Based Value Creation

Traditional View of 'value' creation	Experience-Based Value creation
The firm creates value and is exchanged b/w firm and customer.	Point of exchange is source of value creation.
Value is drive in services and products (as a result innovation is about products and services).	Actors (service user and service provider) co-create the value.
Value creation process is represented by Value chain.	Service and products are carriers and value is embedded in experiences.
Innovation is about products, process and technologies.	Experience realization is not in sequence and in linear process.
Managers persuade the customer to make buying decisions.	Innovation in experience is goal rather than innovation in product/process and technologies.
Customers have passive role in value creation	Customers are key decision maker in transaction phase.

Source: Table adapted from Coimbatore Krishnarao Prahalad(2004, p. 173)

As perceived from the above discussion, the customer's conceptualization for co-creating is different from the co-production conception. Lengnick-Hall, Claycomb and Inks (2000, p. 359) stated: "Co-production is the active participation of customers in the firm's activities". Ng et al. (2012) argued that although consumers are always thought of as the co-creators of value, it might be possible that they are not always the co-producers of the offerings of the firm. Further, it is argued that the customer's intention to participate in the offerings of firm by co-producing in a way to co-create value is on the basis of varied propositions as perceived by the firm, probably the proposition for community and engagement, and generate a varying value from that proposition's realization (Ng et al., 2012). Therefore, co-creation of value is considered intrinsic for intersecting actors and resources integration (Lusch & Vargo, 2014).

According to S-D logic axioms 2 and 4 by Lusch and Vargo (2014), value is always generated through co-creation and is determined on a unique phenomenological basis by its beneficiaries. This results from the varying participations of the consumers. Now, the consumer has become active and informed because of the availability of related knowledge. Therefore, the experience of co-creating value among different customers is unique as they have varying expectations for value (Biggemann, Williams, & Kro, 2014; Cova et al., 2011). According to Prahalad and Ramaswamy (2004b, p. 5): "nothing can be created of value by the firm without individuals' participation".

The customer's participation is, therefore, critical for value co-creation and this value co-creation is necessarily influenced by the consumer's utilization of service. Thus, the individual participation of service customers and service provider cannot be ignored (Grönroos, 2011). Actively participating in co-creation of value helps customers to have mutual and simultaneous advantages from user–provider relationship. Value, against this background, is generated only during the service consumption via value-in-use (McColl-Kennedy et al., 2012; A. Payne et al., 2009; A. F. Payne et al., 2008). From the concept of value co-creation, it is observed that realizing the perceived service value depends on its usage and context.

2.2.4. Difference between Co-Creation and Co-Production

The perspective of S-D logic defines 'co-production' as creating a value proposition, which is essentially design, definition and production, and 'value co-creation' as the operations of various actors, sometimes unaware of each other, which contribute to the well-being of each other (Lusch & Vargo, 2006). On the other hand, Lusch and Vargo (2011) and McColl-Kennedy et al. (2012) thought that co-production in this framework referred to involvement in the actions of direct service provision, such as self-service, service design and new service improvement. Co-creation and co-production are considered two methods that can be assumed by institutes in their efforts to answer to their users' demands. The difference between these two is unclear and shows "a continuum rather than a dichotomy" (Chathoth, Altinay, Harrington, Okumus, & Chan, 2013) p.11. The misperception related to the conceptions of value co-production and co-creation in the literature related to marketing expands beyond the modifications of this framework of S-D logic. Value co-creation is considered with two dimensions namely co-production and value-in-use while having underlying components. There are five components significant to value co-creation: personalization, information, interaction, experience and equity. The first five among these dimensions are revealed to some extent in the recent FPs in this framework (see Table 2). It is blurred, however, how the equity is combined in the framework. This framework emphasizes that 'actors themselves are operant resources' (Lusch & Vargo, 2014), and looks at all actors as integrators of resources. The nature and capability of operant resources to involve and replace may differ among actors. The title of the generic actor in this framework should not be misinterpreted with a situation in which all actors are matching (Chathoth et al., 2013; Lusch & Vargo, 2006). According to Joiner and Lusch (2016) and Vargo and Lusch (2016), the difference between co-creation and co-production in this framework is stressed in the different disciplines of public management and services marketing. Complications emerge when the information is synthesized in transdisciplinary research because of differences in conceptualization and terms, or diverse definitions are used for apparently the same phenomenon.

From the above, the conceptualization of the customer in value co-creation differs from that of co-production. Co-production refers to "engaging customers as active participants in the organization's work" (Lengnick-Hall et al., 2000, p. 359). In contrast, value co-creation takes into perspective the customer's active involvement in the firm's offerings to obtain value-in-use (McColl-Kennedy et al., 2012). Hence value co-creation is intrinsic to the intersection of the actors and resources integration from both direct and indirect exchanges (Lusch & Nambisan, 2015). Thus, the value co-creation encounter between individual clients is extraordinary and one of a kind in light of their diverse value desires (Jo Bitner, Faranda, Hubbert, & Zeithaml, 1997). It is argued by many scholars that the firm cannot create anything of value without the engagement of individuals (Biggemann et al., 2014). As a result of the commitment of clients to co-create value, it is contended that value creation is basically influenced by the consumer's utilization of the goods or services. Consequently, the individual roles of the consumer and the provider cannot be overlooked (Grönroos, 2011; Grönroos & Gummerus, 2014). In the value co-creation process the dynamic involvement of customers enables them to mutually and instantaneously benefit from customer–suppliers cooperation (Lengnick-Hall, Claycomb, & Inks, 2000). Against this background, value is possibly acknowledged/realized when the administration is expended through value being used (McColl-Kennedy et al., 2012; A. F. Payne et al., 2008). From the conceptualizations of significant worth co-creation, it is noticed that acknowledgment of the deceptive value is subject to the use and setting of the administration.

2.2.5. The Value Co-Creation Process

Value, in conventional goods marketing logic, was primarily adopted as a non-interactive exchange (Bagozzi, 1975a, 1975b; Houston & Gassenheimer, 1987). Consequently, the products or services, which were delivered to the passive customers, were embedded with value. However, with the emergence of active enlightened consumers, firms allowed for the co-creating of value along with considering consumers as firm's resources (Buurma, 2001; Cova et al., 2011).As a result of this, a change occurred in a firm's previously defined formal roles for consumers (Cova et al., 2011). Simultaneously, value-creating processes became more complicated, particularly because of varying consumer role (Saarijärvi, Karjaluoto, & Kuusela, 2013). These dynamic processes during a service encounter, however, need an increased comprehension of actors' roles (Närvänen, Saarijärvi, & Simanainen, 2013; Saarijärvi, Karjaluoto, et al., 2013). From this, the potential conflicts regarding roles can be prevented; these conflicts obstruct the opportunities of value creation for customers. Moreover, the traits of actors could also impact the process of creating value (J. C. Anderson, Narus, & Narayandas, 2009), particularly as Vargo and Lusch (2016) stated that actors belong to operant resources and they act as resource integrators. The service provider and consumer's unique roles are blurred by this process, resulting in simultaneous production and consumption of service by the consumers (Heinonen, Strandvik, & Voima, 2013; Ng et al., 2012). It can be said that firms adopt the role of facilitators' in value co-creation (Grönroos & Voima, 2013). While exchanging service, collaborative activities are required by the involved actors in value co-creation (Frow et al., 2016; M. Lewis, 2007; A. Payne et al., 2009). These activities depend on the competences and resources that are available to consumers and providers (Peters et al., 2014). For example, the resources of a firm may contain some professional expertise, technological equipment, relational competences and some defined processes. The capability of a firm to employ these resources for customer value co-creation is very important in the whole process (Storbacka, Brodie, Böhmann, Maglio, & Nenonen, 2016; Storbacka, Frow, Nenonen, & Payne, 2012). Moreover, in cases in which value is contained inside the sphere of the customers (Grönroos, 2011), then their views and experiences for assessing the created value are mandatory (A. Payne et al., 2009). From this, the importance of assessing and understanding the whole process of a service encounter and its related factors is realized; this importance has not been much discussed in the existing literature. Also, it is important to observe that the associated meanings are generated during service encounter experiences (A. Payne et al., 2009) that are translated into the assessment of value. Therefore, understanding the actors' perceptions about value and its kinds is considered appropriate (Närvänen et al., 2013; Saarijärvi, Kannan, et al., 2013).

The process of co-creating value is conceptualized by A. F. Payne et al. (2008) to include three basic components: (i) the processes for customer value creation, (ii) the processes for supplier value creation, and (iii) the process of encounter. The “inter-linked set of procedures" is presented in their framework which is engaged by the involved actors and the “co-creation's recursive nature” (A. F. Payne et al., 2008, p. 86). They further explained that processes “incorporate the activities, tasks, procedures, mechanisms, and interactions supporting the value co-creation" (A. F. Payne et al., 2008, p. 86). This perception of process puts emphasis on the requirement for understanding the relationship between provider and customer during service experience “as an interactively dynamic group of experiences and actions carried out by the customer and the provider by employing partly overt tools and approaches which are depending on the routine, unconscious attitudes ” (A. F. Payne et al., 2008, p. 85). From this, it is implied that one should comprehend the influencing elements that affect these processes, at micro level, during service encounters. The processes for co-creating value have been outlined within knowledge-intensive sectors of business through assessment of the roles, resources, and the collaborative practices that take place among the parties (Storbacka et al., 2012). A requirement for further assessment of exchanges, that take place among actors while co-creating value, has been suggested by many authors.

There are a various factors that influence these exchanges, at micro level, driving the process for co-creating value. The influence of actor relationship on value co-creation has been examined by Storbacka et al. (2012) on the basis of three basic components given by A. F. Payne et al. (2008). It has been argued that the cooperative activities' dyad capabilities exercised in the processes of service exchange have an important role in the processes of creating value. Despite comprehensive conceptualizations of value co-creation in past research, experimental applications for value creation's operationalization are, however, required for articulation of this domain and for identification of its important drivers. Therefore, a thorough comprehension of customer's engagement in co-creation of value needs further investigation (Hardyman, 2017a). The coming sections will explain the role of actors in the process of value co-creation along with ways of resource integration.

2.2.5.1. Theoretical Perspective of Role in Value Co-Creation

According to (Biddle, 1986), in any social system, the part played by particular people is influenced by their individual personalities and behaviors. Biddle (1979, p. 4) suggested the following definition of role theory: "the study which deals with characteristic behaviors of individuals related to a given context and with several procedures that are probably involved in producing, explaining, or being influenced by these behaviors”. The term "role" as explained by Solomon, Dahl, White, Zaichkowsky, and Polegato (2014), is a group of behavioral models being shown by the actors in social communications in order to realize their specified goals. Therefore, a role represents the expectations regarding the behavior of actors being defined at social level (Gummesson, 1987). While co-creating value, the customer experience is regarded as a combination of attitudes, emotions and cognition (A. F. Payne et al., 2008; Solomon, Dahl, White, Zaichkowsky, & Polegato, 2014). This view is in agreement with that presented by Holbrook (2006), according to which customer value is defined as the relative totality of a customer’s experience about a particular service or product. In the relationship between firm and customer, a theoretical perspective of role can improve the perceptions of marketing exchanges (Ivey & Robin, 1966), which is value co-creation's main point. Role theory refers to knowledge about several behaviors related to role; these behaviors include values, expectations and performance (Ivey & Robin, 1966). In circumstances in which service requires high contact, scholars put emphasis on the importance of this theoretical conception of role to provide continuous service at a level acceptable to all (Grove & Fisk, 1983). This theory has its basis in a dramaturgical analogy, bringing the diverse behaviors of involved actors to the fore (Solomon et al., 2014). Akaka and Vargo (2015) noted that these role episodes are influenced by the behaviors and expectations of actors during the exchange or encounter of services. As a result, the creation of roles takes place during social interactions among actors via cognitive procedures of attitudes, norms and behaviors with diverse expectations (Chandler & Lusch, 2015). Therefore, understanding the various roles and their respective attitudes, on the basis of which the characterization of the exchange processes among the actors is carried out (Guirguis & Chewning, 2005), has been imperative to formulate a framework based in theory for this research. It is believed that human encounters result in sociological issues because individuals select either formal or informal roles through drawing upon the other actors (Guirguis & Chewning, 2005). It has been identified by Hooley, Broderick and Möller (1998) that there exist some properties which are related to provider–customer interaction; these are: (i) the contact intensity degree, (ii) the level up to which reciprocity takes part in patterns exchange, and (iii) the cooperative attitude level being adopted. These properties provide the solid ground to understand the actors participating in these activities and sub-activities along with the attitudes they adopt during an exchange, which assists the improvement of the engagement procedures. While creating value, the role of customer and supplier is considered very critical, as role allows actors to have a complicated group of identities, thus providing them with solid sources to interpret social situations individually. Grönroos (2011b) argued that it is the domain of the customer where value is created with the help of their service experiences and practices. Both the service user and provider, therefore, have a responsibility to take their respective part in order to create value according to expectations.

2.3. What is Customer Participation?

Customer participation has been defined by many scholars but the definitions encompass the same concepts. Usually, participation is considered to be the active involvement of a customer in the production of a service and its delivery, either in physical terms or by providing some resources. Some favorable outcomes are expected from this involvement by both customers and the service providers. Goodwin and Radford (1993, p. 225) regarded participation as “The ability of consumer for exercising options which have an effect on the service's sequence and substance delivery during the whole experience”.

Customer participation is a behavioral concept; it can be referred to as the behaviors of customers associated with the service specification and its delivery (Cermak, File, & Prince, 1994). Additionally, it consists of not only the actions, but also the resources given by customers for production and delivery of a particular service (A. F. Payne et al., 2008). Jo Bitner et al.

(1997) proposed that the behavior of customer participation comprises many levels on the basis of customers' engagement with the production of their required service and its delivery.

2.3.1. Why do Customers Participate in Service?

It has been revealed by many studies that there are a lot of benefits to customer participation in a service for a given organization; for example, it is helpful in increasing productivity since the customers change to partial employees of the organization (Auh, Bell, McLeod, & Shih, 2007; Bettencourt, 1997; Jo Bitner et al., 1997). Customer participation improves the communications between companies and customers; thus, getting an increased feedback of customers (Berry, 1995; Arun Parasuraman, Berry, & Zeithaml, 1991; Vandermerwe, 2000). It may help to enhance perception of service quality as customers have active involvement from the very start of the process. In addition, an increased repurchase and more referrals, particularly through word-of-mouth, are achieved (E. W. Anderson, 1998; Maru File, Judd, & Prince, 1992; Wangenheim & Bayón, 2007). Furthermore, it can improve loyalty through an effective practice of customer participation management (CPM). CPM is regarded as a better step than CRM (Thakur & Workman, 2016). It can be employed as a standard for segmenting the customers, thus helping to achieve increased capability to implement the differentiation strategy for service in a given company (Dolmatova, 2012). Similarly, it is likely that the customers will regard their participation as effective as given below:

1. An increased customer satisfaction can be achieved through it. When customers have an active participation in the whole process, they have greater control over the results; studies indicated that this control will direct the outcomes according to the preferences of customers (Edvardsson & Olsson, 1996; Kelley, Donnelly Jr, & Skinner, 1990; Coimbatore K Prahalad & Venkat Ramaswamy, 2004c; Rodie & Kleine, 2000).

2. It may also improve customers’ abilities and skills for utilization of the service, resulting in a fast service process and thus an increased customer satisfaction (Dotzour & Lengnick-Hall, 1996; Lengnick-Hall, 1996).

3. The likelihood of meeting the customers' expectations is increased. Also, the desired benefits are also attained as the customers have a direct involvement in the input of

service offering, which includes service specificity, its production, and then its delivery (B. R. Lewis, 1991; Zeithaml, 2000).

4. It can also enhance the enjoyment of a customer due to active interaction during the whole process of service production and delivery (Bateson, 1985; Hwang & Kim, 2007; Lee, Son, & Lee, 2011).

5. It allows customers to gain several benefits including attractive discounts, enhanced convenience, and improved control regarding the outcomes of the services in return for their active involvement (Jo Bitner et al., 1997; Matthing, Sandén, & Edvardsson, 2004).

2.3.2. The Changing Nature of 'Value' and the Role of the Customer

O'Driscoll and Murray (1998) argued that value was firmly entrenched in the production process of value creation and value chain was value adding and essentially sequential. The customer was sometimes observed as a destroyer rather than being co-creator of value; the value which is created for them by the producer (Sullivan, 1999). According to a producer's point of view, the customer, far from being a co-creator, was viewed more as a destroyer of the value created for them by producers. Value minimized or equaled the price which is paid by the customer for the services or products. On the other hand, there is a view for a system where customers co-invent and co-create the value or more exactly co-create and even co-invent it both with their suppliers and their own customers. Normann and Ramirez (1998) suggested that vocabulary/terminology surrounding the customer has become progressively misinterpreted. Terms such as service (recast from vertical to connections considering more prominent co-creation) and value (which semantically cannot reside in a good) and customer consumption (which inconsistently can mean both to annihilate and to achieve/finish) are all examples of a role play by the various actors and faulty understanding of relationship and service interaction.

Role shift is now done in business-to-business and business-to-customer connections. It is a well-known principle that business disconnection, for example, mechanical, fast advancement of web and different applications, globalization, deregulation and service orientation, has obscured the job of the specialist in their managing administration of clients. In spite of broad discussion over the job of firms in the changing aggressive conditions (Coimbatore Krishna Prahalad & Venkat

Ramaswamy, 2004), the job of the client is most drastically changing in the modern framework ,which in great extent been overlooked. This perception is eye catching yet not entirely exact. Wikström (1996) saw that intrigue is progressively moving from items and manufacturing plants and is focused more on procedures encompassing the client. This movement is not actually new, for example, '’client introduction', 'near the client', 'client division' and 'specialty advertising' have been tried, as have similar terms such as 'coordinate showcasing', 'database promoting' and so forth. These ideas (whatever their hidden objectives) have one shared factor: an emphasis on the client. Esteem is never again made 'for' the client but 'with' the client and byconsolidating the client's esteem creation into the framework (Beirão, Patrício, & Fisk, 2017).

The comprehension of how 'esteem' is produced is integral to the comprehension of co-creation and the advancement of better approaches for understanding the role of customers during health procedures. Normann and Ramirez (1993) and Wikström (1996) discussed fruitful organizations moving to an esteem making framework, inside which distinctive monetary performing artists, providers, colleagues, partners, clients – cooperate to co-deliver esteem. The idea of an esteem-making framework perceives that items and administrations are the consequence of a perplexing arrangement of exercises, monetary exchanges and courses of action among partners alongside specialized and authoritative experts (Normann & Ramirez, 1993). As opposed to considering items and administrations in two-dimensional and unmistakable terms, Normann and Ramirez (1998) re-conceptualized them as solidified exercises, solid signs of the connections among on-screen characters in an esteem making framework. Esteem can never again be imagined as happening in consecutive chains but in complex groups of stars, the objective of business isn't such a great amount to make or accomplish something of significant worth for clients for what it's worth to prepare clients to exploit proffered thickness and make an incentive for themselves (Normann and Ramirez, 1993). The focal point of movement in this manner is moving from the thing traded to the procedure of trade. Rivalry is never again fixated on organizations but on the contributions that these organizations can 'co-make' with clients and as these contributions increment in a multifaceted nature, the connections that are required to create them do likewise (Normann and Ramirez, 1993). Clients presently have a significantly more unmistakable job in the last esteem acknowledgment and customary jobs of firm and clients are ending up progressively unpredictable and interlaced, and where the players must have the capacity to grow new community oriented capabilities (Möller, 2006). The move in understanding sketched out above is identified with a few related ideas that have risen in the course of the most recent 30 years, starting with the acknowledgment in the late 1970s that clients could assume an increasingly participative job, through the 1980s when clients thought about surrogate work, and the 1990s saw the development of innovation enabling clients to add to a firm's processes.

2.3.3. Level of Customer Participation

The levels of customer participation depend on the type of services given by companies. Services such as personal travel planning and counseling centers need active participation from their customers to produce and deliver their services in order to have the best outcomes. Since needs and problems vary from individual to individual, individuals need to inform the service providers of their problems on an individual basis in order that a particular service can be tailored according to the individual's needs. In some services, for instance, medical treatments, service providers require clients to perform some tasks even after the encounter with the services, in order to achieve the desired service outcomes. On the other hand, some services may require little or even no customer participation after the service has been ordered. These services are usually standardized; they are produced and delivered to all customers on an equal basis. Some of these services may not even require the presence of the customers at the service production site, for example, laundry and automobile repair services. According to Jo Bitner et al. (1997), customer participation can be categorized into three levels on the basis of type and nature of a business as shown in the given table (see Table 8).

Table 8: Level of Customer Participation

	Low	**Moderate**	**High**
Nature of service	Standardized	Customized	Customized
Provision of service	Purchase not required	Purchase required	Purchase required + active participation
Requirements	Payments	Payments + inputs	Payments + inputs + co-production

Source: Adapted from Jo Bitner et al. (1997)

These participation levels are described as low, moderate and high. The low level refers to customer participation where only the physical presence of the customer is required. Customers gives their only input in the form of payment. All services belonging to this category are normally standardized. Services of conventional motels and local transport companies belong to this level of customer participation. Moderate level refers to customer participation being needed by service providers, such as full-service restaurants and courier companies, for example, FedEx and UPS. The highest level of participation is needed by those services which demand complete participation of the customer, for instance, counseling and health maintenance service; without active customer involvement, desired outcomes cannot be delivered by the service providers.

Furthermore, levels of customer participation can be perceived as three points on a continuum (Valarie & Bitner, 2000; Wilson et al., 2012). At its one extreme is customer production, where the services are produced and delivered by the customers themselves, at the other extreme is firm production, where everything is done by the employees of companies. In between these extremes, is the area of joint production which involves co-production by both the customers and the service providers. The ratio of customer and employee involvement in this co-production depends on its position on the continuum. A research study conducted by Valarie and Bitner (2000) employed several types of services provided at a gas station to demonstrate the continuum as shown in Figure 2.

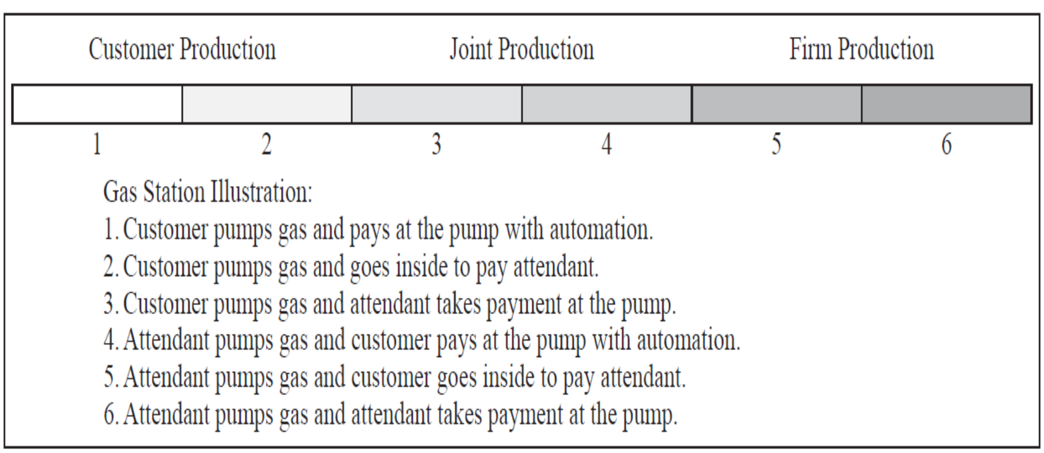

Figure 2: Customer Participation Level

Source: Valarie and Bitner (2000)

A study by J. H. Song and Adams (1993) proposed the two extremes of the continuum to be labeled as ‘self-service’ and ‘full-service’. Self-service is the case when most of the tasks are performed by the customers, if not all, in order to produce desired results. While full-service is an opposite case where the service tasks are mostly performed by employees of the service-providing organization.

According to Tynan, McKechnie, and Chhuon (2010), both the providers and customers can be involved in the production process at different points in time to co-create value through co-creation experiences, not only at the service exchange point. These participations can be continued throughout the service life, and may involve other parties, for instance, supplier's partners, shareholders and brand communities' members (Tanev, Thomsen, & Ma, 2010). At the exchange point, for instance, customers can take part in pricing the services online by participating online for hotel rooms booking and airline reservations or by making self-checkouts at gas stations, supermarkets checkouts, ATMs and so on, being a part of the value creation process (Tanev et al., 2010). Hoyer, Chandy, Dorotic, Krafft, and Singh (2010) proposed that customers may participate in value creation at the idea-generation point and during the development of product concept. Suppliers can conduct group discussions in an efficient an effective manner for the co-creation of value for their customers. Suppliers can also use social media platforms to acquire the input of customers at the product ideation level (Piller, Vossen, & Ihl, 2011); this input of customers can be obtained by sharing the concept with them at the concept development level. At these stages, the participation of customers helps to save time and cost along with reducing the possible risk of new product’s or service’s failure (Hoyer et al., 2010; Pleger Bebko, 2000). Moreover, customers can also participate in the value-in-use phase, also called usage phase, to discuss problems related to the quality of a product or service. These problems are not easy for suppliers to detect without communication with customers (Pleger Bebko, 2000). Many software products, which are available at a commercial scale, have been improved significantly by productive customer participation even after their launch (OHern & Rindfleisch, 2010). Also, several computer video games have been successfully modified and re-developed by the players themselves (Hoyer et al., 2010). This shows that the vigorous concern of customers helps to realize improvement in service quality and increase success probability and goal accomplishment for a particular firm. In the light of the above literature, a need has been identified to explore the factors and determinants which may affect the participation of customers in the production and delivery of a service.

2.3.4. The Role of the Firm in the Value Creation Process

According to the literature, the creation of value is carried out by the customer; the firm is only involved in delivering the propositions of value (Lusch & Vargo, 2006). A strong and healthy relationship among the customers and the firm is, however, of great importance (Nenonen & Storbacka, 2010; A. F. Payne et al., 2008). In order to achieve this strong relationship, high quality dialogue and interactions among the actors are required to enhance the nature of the engagement (Grönroos & Voima, 2013; Yi & Gong, 2006; Yin, 2009b). It is not possible for customers to create value without the firm's involvement. Value, therefore, is co-created by the customers as well as the firm. The firm, in this situation, adopts the part of a facilitator to assist and influence the co-creation process (Grönroos, 2011). Alternatively it can be said that the value created by the customers is on an independent basis, however, the firm supports this value co-creation process (Coimbatore K Prahalad & Venkat Ramaswamy, 2004a). It has been observed that a firm is responsible for assisting the customer in creating value with respect to service (A. F. Payne et al., 2008); emphasis is placed on the fundamental role of knowledge as an important source of competitive advantage for the firm. This also helps the firm to manage and provide the required resources for assisting customers in value creation (Grönroos, 2011). Firms should, therefore, develop an efficient interactive environment for the creation of value. During an analysis of the supplier's role, Grönroos (2011a) noted that value facilitation is different from value creation. It was further argued that the procedures gone through by a firm (which include the design, production and the delivery of service along with all the front-end and back-end processes) only provide facilitation while creation of value is provided by the customer. It requires consistent organizational knowledge and learning to deliver value proposition and to engage customers (A. Payne et al., 2009).

In the domain of a firm, there are various resources and departments that are involved in creating value, however, they appear as an integrated setting to the customer during their interaction. Contrary to the model of value chain, according to organization has greater participation while creating value, the co-creation of value considers the customer as the main analysis unit (Lusch & Vargo, 2006, 2014). Consequently, customer orientation is thought to be critical for co-creation (Coimbatore K Prahalad & Venkat Ramaswamy, 2004a). For a firm to be successful, to have influence and to facilitate the processes of value creation, it is necessary that it has adequate attitudes, performances and commitment from its employees (Grönroos, 2011). Grönroos (2011b) further recommended that a customer-oriented performance is critical in order to understand the customer, who is involved in influencing the process of interaction, which in turn is followed by the value creation process. Customer orientation can be used to characterize the behaviors, norms, values and objectives which indicate the commitment of a firm to deliver service in accordance to the customer's interest. There is diversity in the behaviors of individuals during service encounter; thus, customer orientation helps a firm to be in a better position to understand different individuals. Moreover, this will help firms use their capabilities effectively in order to positively influence the value creation process. Being a part of the actors' collaborative procedures, it was observed by Payne et al. (2009) that the creation of positive service encounters of customers and learning on an organizational level while co-creating value is of great importance. It was further noted that these procedures incorporate a comprehensive review of opportunities for value co-creation including: their planning, verification and prototyping; customers' solution implementation; management of customer service experiences; and formulation of matrices for assessment of value propositions made by firms. A strong relationship is built among the actors as a result of these processes; it also assists in encouraging and empowering consumers to actively participate in co-creating value (Nenonen & Storbacka, 2010).

2.3.5. Customer Participation in Value Co-Creation with the Lens of SDL

Within the framework of SDL, various studies related to measuring value co-creation issues have been gathered (Frow et al., 2016; Grönroos & Voima, 2013; Hardyman et al., 2015; McColl-Kennedy et al., 2012), which have given rise to debate about customer value co-creation measurement. Every research study showed appropriate directions, methodologies and the gaps in research, for in-depth analysis of this construct. The related literature lacks proper streamlining and it seems conceptually ambiguous because of the diverse use of the term 'value co-creation'. Lusch and Vargo (2006); Lusch, Vargo, and O'brien (2007) in their studies applied the concept to S-D logic while Vargo et al. (2008) and (Lusch et al., 2007) mixed it with Service Science in their research; this construct is usually used indiscriminately in different contexts such as strategic (Prahalad & Ramaswamy, 2000, 2003; Coimbatore K Prahalad & Venkat Ramaswamy, 2004a; Coimbatore Krishna Prahalad & Venkat Ramaswamy, 2004), industrial and the Nordic School (Grönroos, 2008, 2011; A. F. Payne et al., 2008; Sandström et al., 2008) and in the theory of Consumer Culture (Edvardsson, Tronvoll, et al., 2011; Tynan et al., 2010).

Grönroos and Gummerus (2014); Grönroos and Voima (2013) recently formulated their theory of SL which has some slight differences from S-D logic. Their theory aimed to try to clarify the value co-creation concept and they examined it from varying perspectives. They stated that value co-creation is basically an interaction function concerning the employees and the customers, while Lusch et al. (2008) were of the view that the customers are co-creators on a constant basis, focusing on the statement that co-creation cannot be ended in consumption of a single moment. However, there are studies are that examined the behavior of consumer value co-creation in terms of its nature and its varying dimensions; in this regard, the theoretical contribution of (Neghina et al., 2015) is of great significance. (Neghina et al., 2015), in this conceptual paper, categorized value co-creation into six dimensions or types of actions, which are performed by the service users and providers on a combined basis (communicative- interactive profile, knowledge-cognitive profile, relational-social profile); they also highlighted previous findings) of the concept. (Neghina et al., 2015), however, did not follow the propositions of Vargo and Lusch (2008); instead, they conformed to Grönroos & Voima (2013), suggesting that S-D logic is not wholly followed in their study. Also, it is noticeable that (Neghina et al., 2015), in their recent research study, formulated an exploratory invalidated theoretical model.

McColl-Kennedy et al. (2012), Yi and Gong (2006) and Yin (2009a) performed an empirical research which can be considered relevant in this context of S-D logic. Wittmann, Nowicki, Pohlen, and Randall (2014) suggested a measurement scale construction, which had three dimensions: (i) connection, (ii) trust, and (iii) commitment. The generalization of scale remains no easier when the construct of value co-creation is being merged with the connection. If the combination of both quantitative and qualitative research helps to achieve an added value for the work explained above, it forms a gradual shift from S-D logic towards CRM (Hong-kit Yim, Anderson, & Swaminathan, 2004). Whereas, Yi and Gong (2006) suggested that value co-creation is a factor of a third order, in the light of theories: (i) customer participation behavior which is related to concepts of in-role behaviors and (ii) customer citizenship behavior which is related to concepts of extra-role behavior. According to Piercy et al. (2006), in-role behaviors, initially considered for employees, are compulsory for work to be executed properly. While extra-role behaviors point towards activities which exclude a job's basic duties, which belong to the range outside the roles of workers, and which show that workers consider themselves a company's active members and, in order to acquire value, they cooperate with it. Moreover, in this case, customer value co-creation measures are not incorporated in the S-D logic stream, despite the fact that it is done on a quantitative standards basis. Lastly, a study conducted by McColl-Kennedy et al. (2012) categorized (see Figure 3) the construct of co-creation into the following eight tasks/activities: (i) cooperating, (ii) collation of information, (iii) merging complementary therapies, (iv) co-learning, (v) changing ways to do things, (vi) connecting, (vii) co-producing, and (viii) self-engagement in cerebral activities that lead to taking part in the value co-creation process. This activity-based categorization helps to highlight various practices in value co-creation process. These activities are usually performed by the users while interacting with the employees during the whole process.

Activity	Examples
Cooperating	■ *Accepting information from the service provider* (e.g., "They gave you a sheet that explains all the problems that you could possibly have.") ■ *Compliance with basics* (e.g., "just being, compliant with anything I have to do, with the chemo and things I had to sort of inject myself and I had to take the medication.")
Collating information	■ *Sorting and assorting information*, managing basic every day activities (e.g., "I have been really good in keeping that diary up to date with when my appointments are, everyone I have seen and where I am going . . . ")
Combining complementary therapies	■ *Use of supplementary medicine* (e.g., Chinese medicine), exercise, diet, yoga, meditation (e.g., "I include in my diet things that were good for me like drinking lemon juice and having linseed and eating ginger.")
Colearning	■ *Actively seeking and sharing information from other sources* (i.e., Internet, other doctors/other health professionals), e.g., ". . . I found books that different people had written, whether they had cancer experiences or not" and sharing information with the service provider, e.g. "I feed them back information"
Changing ways of doing things	■ Managing *long-term adaptive changes* such as changes in financial position (e.g., "the next goal is to work out whether to go back to work, full-time, part-time, not at all, so that means going and seeing the financial people and working out if I can afford not to work, and am I prepared to live on what that would mean.)" ■ Involvement in activities *deliberately targeted to take an individual's mind off* the situation e.g. holiday/overseas trip, hobbies, ". . . to be occupied here around the house in my spare time . . . learnt to put (cancer) at the back of my mind and not think about it."
Connecting	■ *Build and maintain relationships* (e.g., "a lot of texting, to keep me feeling connected to friends . . . that kept me alive. Because I just felt connected . . . ")
Coproduction	■ *Assisting with redesigning treatment programs and reconfiguring composition of medical team* (e.g., "I changed my (medical) team . . . I chose my hematologist, I checked around."
Cerebral Activities engaged in by the self that ultimately contribute to the cocreation of value	■ Actively hoping, talking to oneself, and having a *positive attitude* (e.g. "I have to start thinking to myself probably the week before I come in to the clinic . . . you really have to psyche yourself into it . . . " ■ *Emotional labor*—e.g., "I couldn't be honest with people about my fears or what was really in my head because they wouldn't be able to deal with it so I had better not tell them." ■ *Reframing and sense-making*—accepting one's actual situation (e.g., "I had a good cry and said well I had better get on with it [life]")

Figure 3: Customer Value Co-Creation Activities

Source: Adopted from Mc-Coll Kennedy et al. (2012)

Tomasetti and Vogelstein (2015) performed a qualitative research by using the results proposed by the study conducted by McColl-Kennedy et al. (2012), along with a comprehensive review of related literature of S-D logic and dimensions of co-creation. From their research they put forward a hierarchical-based structure for behavior of customer value co-creation as indicated in the Figure 4 (Tomasetti & Vogelstein, 2015). It can be seen from Figure 4 that the construct of co-creating value is formed from eight activities. These activities being complex are further divided into various dimensions as seen in Figure 4.

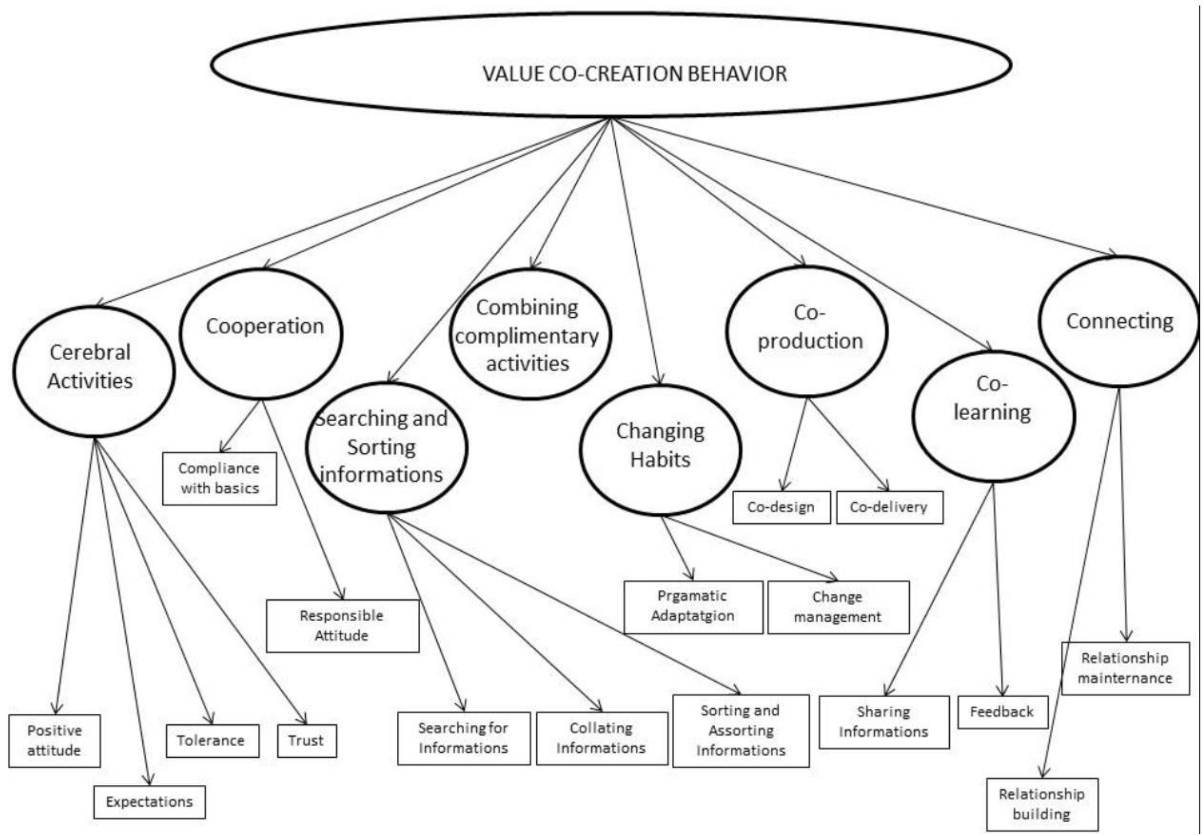

Figure 4: Value Co-Creation Behavior

Source: Adapted from Tomasetti & Vogelstein (2015)

Another model projects activities related to cognition and behavior that characterize user value co-creation behavior by evaluating and describing each activity related to the concept (Tommasetti, Troisi, & Vesci, 2017).

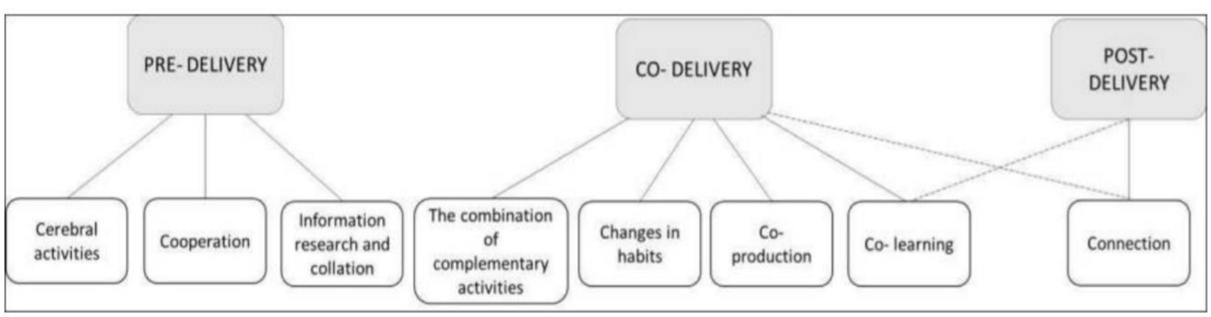

Figure 5: Division of Value Co-Creation Activities

Source: Adapted from Tommasetti et al. (2017)

The implications of formulating a measuring framework for the assessment of 'value' co-creation activities of consumers are twofold: (i) the work, theoretically, was derived by extending a conceptual framework by which the identification of value co-creation's dimensions and activities is done and is carried out by the service consumers during the procedures of service based on S-D logic; and (ii) the work, managerially, is related to the solid application of a decision-making model. As far as the first implication is considered, this framework plays an important role in the literature related to management in the following three ways: (i) this model not only formulates the collection of classifications done previously but also assists the research to extend the boundaries from identifying a series of operations,(ii) each one different from another, by having a holistic and, thus,(iii) a systemic perception and by having a foundation on SDL (Mele & Polese, 2011; Wieland et al., 2012b). The co-creation of value is a consistent association or link among the social, cerebral and emotional factors of both providers and consumers taking part in delivery of service. Thus, this introduced framework along with S-D logic is helpful in studying the needs of customers showing that the personal processes of customers (including cognitive, psychological and emotional processes) intersect with firms' service experience.

The exclusive emphasis on dimensions' theoretical description directly depending on SDL was given by Tommasetti et al. (2017). As a result, the assessment of value co-creation's dimensions provides a ground from which to empirically validate the measuring model. Additionally, the details regarding the fruitful activities carried out by the service consumers at every stage have been explained by accounting not just for the relation between the provider and consumer, but also for all the involved networks and associated resources. Assessing the activities of value co-creation as done by the customers (including co-learning, co-production and association) with the aim of clarifying things, implies that there exists a concurrent exchange of multi-directional knowledge which involves not only the providers and customers of the service but also the external as well as internal process participants involved in the network. This outcome is completely accords with the SDL assumptions that the consumers, in any circumstance, are always co-creators, that co-creation does not finish during consumption, and that the exchange of value is adjusted via exchange of resources among service providers, its users and other involved participants (Lusch & Vargo, 2014).

This outcome of the S-D logic literature implies that the user not only intervenes during delivery, in accordance to the all-encompassing nature of value co-creation, but also in the pre-delivery stage (including cerebral actions, cooperative activities and knowledge research), co-delivery stage (which is a combination of complementary actions, habits transformation, co-learning and co-production) and post-delivery stage (which involves linkage or connection). This consideration, according to service research, indicates that customers are the creative actors in developing and inventing service experiences of their own and they take part in the process from its initial phases (Chandler & Lusch, 2015; Chathoth et al., 2013). Consumers are not required to follow a sequence while carrying out co-creation activities; many of these activities can be performed on a concurrent basis, especially the services that do not finish until a transaction takes place once, like services related to education and healthcare sectors.

2.3.6. Challenges Faced by Patients

Patient involvement plays a vital role in healthcare services, including planning, evaluation and development of services (Bate & Robert, 2007; Crawford et al., 2002; HARDYMAN, 2017a). Patient engagement can be defined as a means of providing good healthcare services by maintaining the standard of stability and by promoting equity in accountability (Carman et al., 2013; Levy et al., 2017). It was observed that patients who actively participated in their healthcare program tended to experience good recovery from health and to experience comparatively lower costs (Born et al., 2017; Lindblad et al., 2017).

Gibson, Rohan, and Gillespie (2017) stated that the basic objective of patient involvement is to improve the healthcare services for patients, users of health services and for the wider range of the public so that they can experience the quality of healthcare services (Legido-Quigley et al., 2019). Rantala (2018) stated that although there are a variety of methods in producing patient and public involvement, there is a lack of awareness and knowledge of the effects of the production arena, use of power, organizational status and professional status on the results of involvement activities. The situation is complicated by other issues including the range of micro, meso and macro levels to which engagement activities apply. Légaré et al. (2018) stated that there exist a number of different concepts that oppose the nature of expert knowledge and the relation between the public service provider and professional service provider and different roles played by health users.

Lord and Gale (2014) stated that although the concept of patient involvement and patient care is increasing day by day, still there is a missing link in the literature about illustrations of these terms and activities to achieve patient-centered care in everyday practices. Rockville et al. (2015) stated that in the literature there is a wide range of variations in defining the concept of patient involvement and methods to improve patient care. Carman et al. (2013) stated that the important factors in patient involvement are to identify who is involved in this activity, which may include family, friends, patients and caregivers, and to identify the level of engagement, which may include direct care, policymaking or any organizational structure. Several variations in this process may exist in the form of involvement through consultation, involvement through a partnership or engagement through shared leadership with the ability of other participants to be involved in this activity.

Lack of definitions and many arising confusions are an important consideration because they have to be applied in analyses of involvement activities. Fredriksson, Eriksson, and Tritter (2018) elaborate this challenge to the role of users and issues of unit analysis. They stated that there is a lack of awareness of the important area of the public and patients involved in their respective decisions on healthcare. Patients are presented as proxies in front of the public, but there is a fine line of difference between the public and patients because patients show involvement as users of healthcare services whereas the public show social interest (Fredriksson & Tritter, 2017). These differences point out that there is a problem in achieving desired goals and desired advantages of involvement. Archer, Stevenson, Coulter, and Breen (2018) argued that there is a different requirement of patients as compared to the requirements of public therefore they should be viewed separately. They elaborated by stating that the requirement of both public and patients is based upon that to which they give priority: patients give more priority to the quality of healthcare services and good interaction with doctors through proper consultation, while public give priority to the system of provision which gives services. The emphasis of this thesis is to illustrate the role of patient involvement in micro-level services rather than discuss their engagement with organizational governance and policymaking. The thesis develops a concept of patient involvement which ensures the participation of patients in healthcare activities.

2.4. Quality Care Domains for Pregnant Women

The quality of care has been gaining increasing recognition at an international level as an important aspect of the health agenda of the maternal and newborn, especially regarding care during labor and delivery process and during the postnatal period (Ki-Moon, 2010). It has been found that just high coverage is not sufficient to lower the mortality rate. To reduce the mortality rate in mothers and newborns, there is a need to eliminate the preventable reasons behind the deaths of mothers and their newborns. An enhanced coverage must be combined with quality improvement throughout the whole care continuum (Campbell et al., 2006). A multi-country survey done on maternal and newborn health (Laopaiboon et al., 2014), of about 300,000 women from 29 countries from all over the world at 359 health centers, indicated the presence of a poor correlation among 'essential interventions' coverage and MMR in the health centers. Research also indicated that the provision of high-quality care requires adequate and optimized utilization of the available resources, infrastructure, services, staff and so on, to ensure an efficient management of a given case (Bohren et al., 2014). For the care to be of high quality, it needs optimized use of proven clinical and non-clinical practices, a strong health-related infrastructure, standardized knowledge and skills, along with a positive and cooperative attitude of health center staff (Raftery, 1996).

Both the published and the unpublished existing literature was reviewed by a central working group in Europe and Asia, from where adequate definitions of 'quality of care', 'models of care', 'frameworks for quality of care' and other maternal health-related strategic methodologies were extracted. The findings were put in front of a group for inter-departmental guidelines steering in order to be reviewed and discussed, and there was a consensus on a definition for quality of care, a conceptualized framework, along with its strategic implementation (Khowaja, 2009; Tunçalp et al., 2015). The benchmarks were represented by standards against which it is possible to make measurements; therefore, they must be measurable. A priority was to define care standards and benchmarks, as very little guidance was available, except proven clinical guidelines. In the initial stage, a definition along with its taxonomy and adequate structure were formulated, which were followed by a formulation of care standards. The framework of quality of care, standards of care, and the measures of quality may be employed for guiding the formulation of national care standards and steps to improve, assess, control and monitor the quality of care being given at health centers. Also the same framework can also be employed to formulate the basis of strategies for quality improvement, and for incorporation of quality into existing national health programs (Rukanuddin, Ali, & McManis, 2007). The aim is that the country's policymakers, the heath planners, and the program managers at national, provincial, district and center levels will utilize these standards and frameworks in order to have a standardized health facility for maternal and newborn care. These frameworks and standards can also be perceived as a resource for medical training centers.

Table 9: Healthcare Quality Standards

S/N	Measures	Description
1	Routine care practices and complication management	Routine assessment is done of the women who are admitted or who are in labor and are given proper care. Appropriate interventions are promptly given to the women with certain complications including eclampsia, postpartum hemorrhage and difficult labor.
2	Actionable and reliable information systems	Each woman and her newborn have medical record of labor, childbirth and postnatal period; this record must be accurate and standardized. The healthcare employs data collection, and analysis mechanism in order to monitor and improve performance during labor.
3	Properly functioning referral systems	The proper assessment of each woman and newborn is done on admitting time, during labor and during the postnatal period to find if referral is needed. If the mother or child needs referral, it is done at once by following an already established plan. In cases of a referral, there is a proper exchange of patient's information and feedback between the healthcare centers to avoid any consequences. Every woman along with her family gets

4	Effective communication	proper care information through effective communication and interaction with staff. Every woman receives coordinated care, with clear information exchange among the associated healthcare professionals.
5	Respect and preservation of dignity	Every woman's privacy and her baby's privacy and confidentiality are respected during the whole process. Any woman or newborn is not allowed to be physically or verbally mistreated. Also there is no discrimination, detainment and denial of services. Women can select any services they want to receive, and the interventions reasons or outcomes are clearly known.
6	Emotional support	Every woman gets the opportunity to select a companion for herself during her labor and childbirth. Proper support is provided to strengthen the capability of women during delivery.
7	Competent, motivated and responsible human resources	Every woman and child can have at least one skilled labor attendant to support staff for routine care and also for complications management. The attendants and support staff have competence and skills for meeting the labor and delivery requirements. Each facility includes managerial and clinical leaders who are responsible to make and implement policies and develop a quality-improving environment.
8	Availability of essential physical resources	There are reliable and properly functioning facilities of water, sanitation, hygiene, energy and waste disposal for satisfying needs of patients and staff. Areas for childbirth and postnatal care are designed and maintained properly, to satisfy the requirements of women and newborns for the continuation of care. Medicines and other related equipment are available in adequate stocks in order to have unstopped routine care and complication management. Medicines, supplies and equipment are available for routine care and management of complications.

Source: Adapted from UNICEF &WHO. (2015).

These domains in the healthcare framework enhance the probability that the general public as well as pregnant women will get the desired results UNICEF &WHO. (2015). The healthcare framework can also be employed in an assessment of characteristics of healthcare quality.

2.4.1. Introduction of Value in Healthcare

The well-being of individuals or the population is considered the key value of providing healthcare (EMEC,2015) . However, the healthcare system is faced with challenges associated with the provision of high quality affordable healthcare (Steinwachs & Hughes, 2008). Some of these challenges are the conflicting goals from both professional and patient perspectives (Porter, 2010). Considering these conflicting goals, the overarching goal of healthcare delivery must be achieving high value for patients, which is considered to be critical (Eichler, Kong, Gerth, Mavros, & Jönsson, 2004; Porter, 2010; Porter & Teisberg, 2006). Value in healthcare is defined as the health outcome achieved relative to cost; the consumer conceptualizes value as an evaluation of their perceived benefits and sacrifices (Porter, 2010). Porter's (2010) definition aligns with the economic dimension of value, which takes into account the relative importance of cost and outcomes in healthcare service delivery (Holbrook, 2006). As healthcare differs from traditional business sectors (T. P. Young & McClean, 2008), it may be more appropriate for value to be examined from the experiential perspective (Burgess & Radnor, 2013; T. Young & McClean, 2009). The experiential perspective may be considered appropriate due to the complexity of patient–doctor relationship, patient vulnerability and the asymmetry of knowledge (T. Young & McClean, 2009). Moreover, the subjectivity and complexity of value in healthcare is almost same as in different disciplines, especially in relation to the perception of respective stakeholders (Syme & Smedley, 2000).

For example, from the point of view of consumers, value should be concentrated on access, communication and quality of care, while price should be deemed an ancillary benefit of enhanced healthcare, whereas a view of value at the provider level depends on culture and result-oriented benefits (Syme & Smedley, 2000). The most effective approach to enhance the quality of care is providing clinical value to patients or consumers from service providers (McMahon & Chopra, 2012; Z. Song, Chopra, & McMahon Jr, 2015). This method is also used to potentially reduce the cost. In this era, however, it is difficult to achieve because healthcare procedures restrict providers in a number of ways, such as timing, cost, tests and so on. Porter and Teisberg (2006) presented three principles to improve the health: (1) value is the main goal for patients, (2) care in health delivery should plan around the care cycle and medical cycle, and (3) measure results from time to time for improvement.

In view of recent value conceptualizations, it is argued that consumers determine value through value-in-use (Lusch & Vargo, 2014). The current era needs to pay attention to collaborative value creation with the service user (patients) and service provider (doctors and staff) rather than creating value for service users (patients) (Porter, 2010). The structure and dynamics of value co-creation process regularly changed as outlined in conceptualizations. This change is based on individuals' preferences and need (Nenonen & Storbacka, 2010; A. F. Payne et al., 2008; Storbacka et al., 2012).

Porter (2010) contended that the complex nature of healthcare, because of conflicting goals of stakeholders, has led to divergent views as to how to improve value delivery in healthcare. Some healthcare professionals consider value a phenomenon of cost reduction, while others have a contrasting view and consider value a fundamental goal for improving health outcomes for the patient. Lee et al. (2011) argued that healthcare outcomes can be improved without any compromises by adding value in healthcare. Porter and Teisberg (2007b) proposed a patient-centered approach to improve the value of patient care. This approach is based on the principle that 'the goal is value for patients'. However, the current major concern is to deal with the complexities of delivery of value in healthcare, which is partly a quest to control consumers' health needs and fulfill the demand of the consumers.

2.4.2. Value and Quality in Healthcare

According to Gummesson (2008), in regard to the literature of marketing, the concept of 'value' has a close relation to two other concepts: (i) quality and (ii) customer satisfaction. However, these three related concepts have very blurred and indistinguishable overlapping boundaries between them (Gummesson, 2008). It is always the customer, around which the value in a healthcare system should be defined; the value creation for patients is the factor determining the system actors' rewards. Since value is dependent on results, not inputs, measurement of healthcare value is done by the achieved outcomes and not by services volume; the value shift of focus is a main challenge. Also, value is not measured by the employed care process, the measuring and improving of process are good tactics but do not serve as outcomes and costs measurement substitutes.

The quality of service in terms of the marketing literature is regarded as expected and perceived service gap (Cronin Jr & Taylor, 1992; Anantharanthan Parasuraman, Zeithaml, & Berry, 1985). The perceived value is usually subjective, different for each customer, and also varies over time, depending on values, requirements, priorities and resources (Zeithaml, 1988). Therefore, understanding the need and expected value of a customer is essential for the service provider in order to deliver an appropriate service by the firm (Arun Parasuraman et al., 1991). 'Gap theory' is usually employed in marketing, but it has been criticized because the measurement of expectations is considered an addition of limited information far from that earned from service perceptions measurement (Dagger, Sweeney, & Johnson, 2007; Ward & Dagger, 2007). Although in service literature there are disagreements over service quality measurement, the concept is increasingly regarded as having multiple dimensions, containing interpersonal, environmental, technical and administrative qualities (Ward & Dagger, 2007).

Porter (2010) defined value as the health outcomes delivered for spending per currency unit. He suggested that value in healthcare be always defined around the customer, and that creating value for patients can formulate rewards for all the system's actors. This means that value improvement benefits all concerned parties including patients, providers and suppliers. In the framework defined by Porter (2010), the combined efforts of providers for a full care series is used to create value for patients. It is concluded that value's measurement unit must incorporate all services or offerings that mutually define success to meet patient need (Porter, 2010).

Porter (2010) mainly focused on health outcomes measurement instead of focusing on process measures. The latter is viewed as beneficial for internal strategies but is not an outcome measures replacement. Porter (2010) argued that health outcomes measures serve as a means of feedback provision, thus facilitating innovation. Porter (2010) further added that if it is not done, any system trying to regulate performance without outcome measurement will restrict evolution to incremental development (Porter, 2010). While emphasizing exclusively health outcome measures, an important concern is the extent of incorporating the patients' important dimensions and issues in their service encounter. Recent work done in the maternal health service context in Pakistan showed that patients perceive 'value', regarding their maternal services encounters, in economic terms; Porter's findings seem relevant in this context.

2.4.3. Value Co-Creation in Healthcare

Traditionally, healthcare is the process in which a patient passively receives care from a service provider (doctors and nurses); however, there is growing evidence from a patient-centered approach to health solutions for improved healthcare outcomes (Osei-Frimpong et al., 2018; Porter, Larsson, & Lee, 2016). In a patient-centered approach, healthcare is designed around the requirements of a patient and treatment. This approach contributes improved health and cost efficiencies. Actors' collaboration activities based on a team-based approach in decision making between patient, staff, family and doctor inspire a holistic approach in healthcare (Michie, Miles, & Weinman, 2003). Family and friends are also an important source of support and advice, and their involvement in healthcare improved the health outcome (McColl-Kennedy et al., 2012; Michie et al., 2003). Co-creation in healthcare is a resource-integration process in which actors (service provider and service user) link together within the service system. Actors' relationships and resources are significantly changed and updated because of the involvement of health requirements of patients and patient care involvement. This view of co-creation in maternal health becomes more dynamic with nurses, clinicians and supportive health workers sharing their cognitive, emotional and physical resources in dealing with emergency surgery, delivery and other complications. During maternal treatment, the female is in a life-threatening phase which affects her mental, physical and emotional health. Once this life-threatening event has passed, the co-creation process in the recovery phase is focused on long-term care that involves healthcare professionals and families with resource sharing at different levels. There are significant benefits from co-creation especially in healthcare, such as active involvement of participants or customer engagement (Rehman et al., 2012), sharing knowledge (Lagrosen, 2005), resources integration (Beirão et al., 2017; Karpen & Kleinaltenkamp, 2018) and well-being of all actors involved in the service system.

2.5. Effects of Encounter Process in Value Co-Creation

Co-creation includes encounters and personal characteristics that give empowering conditions and inspiration for the actors to value creation (A. Payne et al., 2009). These encounters provide methods for commitment between the actors, which could be started by the supplier, consumer or both (K. Payne et al., 2008). K. Payne et al. (2008) stated that encounter forms include different utilitarian offices and are naturally cross-functional. This process takes into consideration the combination of assets and collaborative practices performed by the actors engaged in the service encounter (Storbacka & Nenonen, 2009). A. F. Payne et al. (2008) proposed that communication encounters, service encounters and use encounters are the three types of encounter that drive the value co-creation process.

Gummerus (2013) stated that co-creation takes into the procedures inside the system, which is shown the service encounter process. These activities and procedures during the encounter could impact the value co-creation process (Galvagno & Dalli, 2014; A. Payne et al., 2009). These interactions could be at the cognitive and subconscious level prompting learning development through encounter process (A. F. Payne et al., 2008). Hence, making customer experience superior during interaction is a key aim of the encounter process for the value co-creation process (Helkkula et al., 2012a; Helkkula, Kelleher, & Pihlström, 2012b; Russo-Spena & Mele, 2012). These encounters are impacted by the social context inside which the encounter happens (Edvardsson, Tronvoll, et al., 2011), and the actors' convictions, perceptions and observations (Gentile et al., 2007). The next sections will discuss these components because they will, in general, impact the encounter procedure and the general value co-creation process at the micro level.

SDL considers the coordination of operant assets fundamental in the value co-creation process (Vargo & Lusch, 2016); these assets are significant only inside specific social contexts, as these assets are inserted in socially constructed frameworks (Edvardsson, Ng, et al., 2011). This suggests that value creation is the actors' physical, mental, or possessive exercises, practices, and encounters in various individual and social contexts (Grönroos & Voima, 2013).

Thus Edvardsson, Ng, et al. (2011, p. 334) contended that it is basic to consider the "performing artists' positions, jobs and social connections inside social structures when planning asset constellations to acknowledge incentives". They further declared that the actors’ job in the service exchange, the nature of communications, their insight, competence and abilities are essential components of the social context of the encounter procedure to encourage the acknowledgment of the actors. These components might be in the social context, which likewise bears witness to the way in which values communicated in the encounter are impacted by the social context (A. R. Anderson & McAuley, 1999). The social context accordingly, gives a stage to on-screen characters to display their abilities and competencies. Saarni (1999) stated that these competencies help to harmonize their social abilities and the difficulties of their collaborations. These competencies (driven by information) are considered key assets in the value co-creation process (Gummesson, 2011; Gummesson & Mele, 2010; Möller, 2006). The social context has a significant impact on encounters and the co-creation process (Edvardsson, Ng, et al., 2011). For example, the performers' social aptitude components contribute to viable communications with one another and provide an empowering situation for the encounter process (Dabholkar, 2015). Moreover, this animates the nature of the associations and enables actors to share information, which would help particularly in dealing with a patient's condition, for example (Lusch & Nambisan, 2015). Lusch and Nambisan (2015) noted the criticality of information creation in the co-creation process and declared that the social discussion of actors’ communities drives new information creation through social cooperation, henceforth contextualizing the learning made.

2.6. Value Co-Destruction

Plé and Chumpitaz Cáceres (2010) ,P. 432 described the term value co-destruction as “an interaction process between service systems that results in a decline in at least one of the system’s well-being (which given the nature of the service system can be individual or organizational)”. Thus, value co-destruction has a negative impact on organizational performances and system’s outcome. M. Smith (2013) stated that there are low chances of survival from value co-destruction; it can emerge in different scenarios, such as when an employee deals with lack of several resources, for example, information. Plé and Chumpitaz Cáceres (2010) and Robertson, Polonsky, and McQuilken (2014) stated that value co-destruction can emerge if any employee or actor does not open up all the resources that they possess. Vafeas et al. (2016) identified that the main reasons which produce the emergent effect of value co-destruction are lack of useful information and poor communication skills. Prior and Marcos-Cuevas (2016) stated that due to bad communication, value co-destruction leads to a failure in well-being, which ultimately results in a loss of valuable resources and realizable and unrealizable losses such as time and money. Järvi (2018) concluded that frustration and the loss of well-being and tangible or intangible resources is due to the neglect of interaction or coordination with each other.

Several public services are trying to produce awareness of the concept of value co-destruction and make it widespread. However, Radnor et al. (2018) stated that general perceptiveness about the concept of value co-destruction is absent in the environment of the public sector. Järvi (2018) stated that earlier researches' concept of value co-destruction is obsolete with the change of time, and the nature of value co-destruction differs across industries.

In order to understand the concept of value co-destruction, it is necessary to review the literature's view of value co-creation. Grönroos and Gummerus (2014) stated that there are three basic processes of value co-creation: the first process is the customer process, the second process is the value creation process and the third process is the provider process. Morosan and DeFranco (2016) stated that it is essential for the provider to possess enough quantity of staff to provide the services, which indicates that both the provider and the customer should be ready for the reciprocal action of their processes. Prior and Marcos-Cuevas (2016) stated that it is the duty of customers to properly communicate their needs to the service provider so that the process of service encounter can run smoothly. Moreover, in order to specify the relation between pre-interaction with the actual interaction, it is necessary for the actor to perform post-interaction activities. Frow, Nenonen, Payne, and Storbacka (2015) explained it with an example: it is the duty of a customer to complain about any fault in the product to the service provider, while it is the duty of the service provider to ensure the quality of products delivered to customers during the process of service encounter. Grönroos and Voima (2013) stated that both the customers and the provider should coordinate with proper communication so that a good collaboration process can be executed at every interval of time. Hence, it can be concluded that time is a major factor of value co-destruction because it is necessary for both the provider and a customer to work with each other and they must participate actively in the tasks of collaboration. All of these activities and tasks should be run peacefully in order to decrease the chances of value co-destruction. Chowdhury, Gruber, and Zolkiewski (2016) explained that both value co-creation and value co-destruction occur at the same interval of time. Thus, viewing the situation (here it is value co-destruction) using a temporal lens will definitely help in understanding and broadening points of view about this concept, because this lens increases awareness by providing a new platform for better understanding (Kunisch, Bartunek, Mueller, & Huy, 2017).

2.7. Service Ecosystems

Service system is a combination of actors and resources connected together in a network through value propositions (Frow et al., 2014). Wieland et al. (2012b) distinguished a dynamic and evolving 'service ecosystem' from the more static 'network' approach that emphasizes the companies and the relationships between them (Ford, Gadde, Håkansson, & Snehota, 2002). Service ecosystem is different from the general term of ecosystem: the emphasis is on service, which is the systematic relationship of actors in a system for service provision (Wieland et al., 2012b). In a service ecosystem, actors are involved through their resources for value propositions that are offered in outcomes. An ecosystem is dynamic is nature due to shared resources between the actors; therefore, the attractiveness of offerings and availability of resources changes with time (see Figure 6). Value co-creation is also practiced in shaping the roles of connected actors during a service encounter in a service ecosystem.

The networks can be seen at different levels of aggregations such as micro, meso and macro. Dyadic interaction is also a part of this network and cannot take place in isolation. The structure of these networks reflects S-D logic Axiom 3 of resource integration, that is, value for customers cannot occur in isolation but through resource integration of multiple resources as discussed in Axiom 4. In S-D logic, different actors of the network are linked together by dynamic processes of service provision, which is not only based on service-for-service exchange. Actors are defined as resource integrators instead of being defined in terms of service provision. The network has a partial function of collective well-being rather than a sense of individual well-being.

Figure 6: The Narrative and Process of Value Co-Creation

Source: Adopt from Vargo and Lusch (2017)

Ecosystem studies help us to understand how entities respond to changes in the environment (Cadenasso & Pickett, 2018; Greer, Lusch, & Vargo, 2016; Mars et al., 2012). An ecosystem study in the management literature reflects the symbiotic relationship between the directly or indirectly connected entities of an organization. In an ecosystem, actors share their direct and indirect resources for the well-being of others. Ecosystem well-being in healthcare enables collaboration to improve efficiency and effectiveness (Corvalan, Hales, McMichael, Butler, & McMichael, 2005; Frow et al., 2016). Healthcare is an important service setting where all the actors of diverse experience and ages do collaborative works to benefit the health outcome (Holman & Lorig, 2004). Healthcare is a true representation of a service ecosystem due to the involvement of multiple actors. The healthcare sector still has unsatisfactory performance in terms of costs and quality (Porter & Teisberg, 2007a). Healthcare represents a service ecosystem of multiple actors that is more complex than a simplistic consideration of the doctor/patient model.

Traditionally, healthcare is a process with passive participation of service users from service providers such as doctors and other staff (Withers, Kharazmi, & Lim, 2018). Now, healthcare has shifted to a patient-centered approach, designed to fulfill the specific need of the patient. It provides improved healthcare facilities and cost effective solutions. A team-based approach with shared decision making between staff, doctors, patients and their families is encouraged: a holistic approach to healthcare (Barry & Edgman-Levitan, 2012; Withers et al., 2018). Family and friends are a source of support and advice and their active participation can improve the health outcome (Bentley, Cummings, Casey, & Kogut, 2018).

2.8. Gaps Identification

It is argued that attention was not paid to the part that patients themselves demanded to play or to the meaning of the conceptual nature of input and participation. Patients and their family members, in the context of maternal service, like to have contact with service providers in various service encounters over a wide range of time. It cannot be supposed that the perceptions of the patients regarding benefits and the value they comprehend from service use will be linked with service providers or other patients. Further, it cannot be assumed that the offered service will be understood as value by the user of the service. Perceptions in the current context regarding ‘value’ will probably change and grow according to the experiences of the maternal service. In the view of value co-creation in the context of maternal service, more understanding is needed to differentiate the perception of value which is offered with the help of value propositions that are co-formed by various service connections. Consideration is also needed of the factors that help or limit value co-formation.

The perspective from S-D logic relating to value co-formation suggests that value is not completed until resources are combined, which means the ‘value’ may not be understood in service usage. Further, the failure to combine resources can affect value formation (McColl-Kennedy et al., 2012). Within the context of healthcare, there are some significant ideas to understand, such as care and treatment are likely to increase way beyond interactions regarding ‘one off’ health service. It is suggested by Hibbert, Winklhofer, and Temerak (2012); Zhou and Goldman (2004) that a level of co-learning may be essential according to the users of the service who are capable to combine resources.

There are various gaps in the context of the Pakistani maternal service where the application of the S-D logic framework can be investigated. The following are the gaps:

Gap 1: How do service providers and users conceptualize value in this context?

Gap 2: Factors that help value co-creation in the context of maternal health service.

Gap 3: The nature of involvement regarding service perceptions and exchange.

Gap 4: How are resources combined, replaced and operated?

Gap 5: How can value be formed in the current context and who are the actors to be involved in it?

2.9. Chapter Summary

The relevance of value-in-use and value co-creation is discussed in this chapter to enhance understanding of patient engagement within micro-level or individual service encounters. This work was done through discussing the different concepts of value in service marketing and public engagement, SDL, and patient participation and engagement in healthcare.

It is argued in this chapter that economic enunciations lead healthcare, which do not reflect the perceptions of using the service. User-centric experiential and phenomenological perception of value is offered in SDL with the name of value-in-use. Further, it provides insight into 'how' value is experienced and conceptualized by service user and service provider to enhance strategies to promote engagement and value co-creation in healthcare. SDL highlights value co-creation and value-in-exchange (Akaka & Vargo, 2015; Grönroos & Voima, 2013). SDL treats the service user or customer as an 'operant resource' and active participant as compared to passive recipient of service. The service user or customer also has knowledge and skills to exchange rather than asymmetric approaches of engagement which are provider determinant (Bowden, 2009; Sirdeshmukh, Singh, & Sabol, 2002). SDL shifts the typical approaches of consultation, formal complaint system and satisfaction surveys to customer collaborative method.

It seems that exploratory and empirical work of value co-creation is still limited. The work on value co-creation is still at a conceptual level (Chandler & Lusch, 2015; Grönroos, 2011; Ostrom, Parasuraman, Bowen, Patricio, & Voss, 2015). There are a small number of works on the healthcare context, especially on maternal healthcare, to explore value co-creation; the application of SDL is still under-researched. I failed to find any published work to check how value is conceptualized by user in the frame of value-in-use and application of SDL framework in Pakistan maternal service context. On the basis of the gaps in exploratory knowledge this study seeks to address the following: What is the meaning of 'value' in maternal service setting?

To what extent does SDL enhance understanding of value in maternal healthcare context? How do service user and service provider conceptualize value according to SDL perspective (value-in-use)? What is the relevance of SDL framework premises to the selected study context? To investigate these gaps, attention is paid not only to the nature of service exchange and resource integration in maternal service context but also to the actors involved in the value formation process.

CHAPTER THREE: RESEARCH DESIGN & METHODS

3. Research and Methods

3.1. Introduction

The purpose of this chapter is to explain the systematic methodology employed in this research that is being used for investigating: (i) the 'value' trajectories within the maternal services experiences' context; (ii) the facilitators, supports and barriers towards value co-creation; and (iii) the value co-creation behavior of pregnant woman, gynecologist and family to improve the quality of care of pregnant woman. This study, in particular, tries to broaden knowledge about the relationship between the framework of S-D logic and healthcare field. The purpose of this exploratory study is to investigate the conceptualization, constitution and experience of 'value' within the context of the maternal service in Pakistan. For this purpose, it tries to expand knowledge on how S-D logic can be mapped across healthcare in Pakistan. Therefore, the reference frame mapped on this research is highly interpretative in nature and at the subjective end of a continuum. A qualitative approach is being adopted here to draw on case study research principles (Johnson & Onwuegbuzie, 2004; Stake, 2013; Yin, 2009b).

Qualitative methods are considered to be particularly related to the context of healthcare, as they allow complex and dynamic phenomena to be described effectively at a specific point of time and as they grow with time (Devers, Sofaer, & Rundall, 1999; DiCicco-Bloom & Crabtree, 2006; King, 1994; Rundall, Devers, & Sofaer, 1999). A detailed understanding of 'real-world' phenomena is facilitated by these methods and these methods help the generation and operationalization of conceptual frameworks and theories (Elo & Kyngäs, 2008; Shortell, 1999). Moreover, these methods also assist emphasis on understanding and portraying social action from social actors' view inside a natural setting (Berg, 2004; Schwandt & Schwandt, 2001). Qualitative methods also provide researchers with the flexibility and capability for modification of research designs during their projects (Ritchie, Lewis, Nicholls, & Ormston, 2013). This is critical in exploratory research because it might be essential to adjust the research design over time as the research continues to capture an important phenomenon.

For the judgment of qualitative research quality, an explicit data management and analysis reporting procedure is needed. These processes are expected to be transparent, allowing the reader to have confidence in and to verify the drawn conclusions. This transparency also helps to principally facilitate study replication and, therefore, enhances the early detection of any misbehavior or fraud (Greenbaum, 2009). Moreover, explicitly reporting the research context and assumptions on which research is based, helps to improve the relevance and ability to transfer the research findings to other contexts (Lincoln & Guba, 1985; Malterud, 2001; Schwandt & Schwandt, 2001). Briefly, the three interrelated but unique factors of enquiry which effect the credibility of the qualitative inquiry include: the rigorous techniques to gather and carefully analyze the data, the researcher's credibility and the philosophical trust in the qualitative enquiry value (Patton, 1999; Veal, 2017).

The chapter, in its remaining part, explains the three critical credibility elements of this research. This chapter is structured into seven main sections to explain the processes of data collection, preparation and analysis used in this study. Section 3.2. covers the research design to fulfil the study objectives. Section 3.2.3. The second part explains the qualitative research types and discusses why a case study is conducted for this specific research study. Sections 3.3. to 3.5. explain and elaborate the research experience and puts emphasis on: (i) the case study site's features, (ii) negotiating access, (iii) the sampling of participants, (iv) data collection and analysis methods, and (v) the ethical issues. Lastly, the research process and management of issues like credibility, reactivity and transferability are discussed in the chapter, which is followed by a chapter summary.

3.2. Research Design

The design of the study begins with a worldview. Worldview is a basic set of beliefs that guide action (Guba, 1990); it is also known as the general orientation about the nature and the world of research that researcher holds. Some researchers called it paradigms (Lincoln & Guba, 1990, 2000). The beliefs of the researcher will often lead towards qualitative, quantitative and mixed method approach in their research. Four worldviews are mostly discussed: constructivism, post-positivism, pragmatism and transformative (See Table 10).

Table 10: Types of Research Worldview

Postpositivism	Constructivism
• Determination • Reductionism • Empirical observation/measurement • Theory verification	• Understanding • Multiple participant meanings • Social and historical construction • Theory generation
Transformative	**Pragmatism**
• Political • Empowerment issue related • Collaborative • Change oriented	• Consequences of actions • Problem centered • Pluralistic • Real-world practice oriented

Source: Adopted from Creswell, Hanson, Plano Clark, and Morales (2007)

Post-positivism represents the traditional form of research; it was first introduced in the nineteenth century. In post-positivism, truth is discovered objectively as a concept of singular reality, because of this it is used in quantitative research than qualitative research. Post-positivist research is conceptualized within a theory or model, uses systematic observation and description of phenomena, and is executed and designed in a controlled environment; it uses a statistical method to test the hypothesis and, after testing, the result is presented and interpreted under the vectors of theory (Clark, 1998; Creswell, Klassen, Plano Clark, & Smith, 2011; Giddings, 2006; Groff, 2004).

Constructivism or social constructivism is typically used in qualitative research (Fosnot, 2013). Social constructivism believes that individuals develop subjective meaning and understanding in areas in which they live and work (Lincoln, 1992). These meanings and understandings vary from viewer to viewer; it leads the researcher to look for the complexity of views.

Pragmatism derives from the work of Kloppenberg (1996), Murphy (1990), Patton (1990), and Menand (1997). It arises out of situations, actions and consequences rather than antecedent conditions. In this method, the researcher focuses on the methods, on problem and the approaches used to understand the problem (Rossman & Wilson, 1985).

In a transformative worldview, the research inquiry is entangled with politics and political change to oppose social oppression at every level. The agenda of research is reform that may affect the lives of the participants, researcher's life and institutions in which individuals live or work.

Each of the four main worldviews is categorized on the basis of epistemology, axiology, ontology, rhetoric and methodology (see Table 11). Epistemology refers to the relationship between the researcher and that which is being researched (Bryman, 1984). Axiology relates the role of value in study (Guba & Lincoln, 1994). Ontology refers to the nature and structure of reality (Gruber, 1993). Rhetoric deals with the language of research (Kaplan & Baldauf, 1997). Methodology refers to the process of research (Moustakas, 1990).

Table 11: Differences between Types of Worldview

	Post-positivist Worldview	**Constructivist Worldview**	**Participatory Worldview**	**Pragmatist Worldview**
Ontology (What is the nature of reality?)	Singular reality (e.g., researchers reject or fail to reject hypotheses)	Multiple realities (e.g., researchers provide quotes to illustrate different perspectives)	Political reality (e.g., findings are negotiated with participants)	Singular and multiple realities (e.g., researchers test hypotheses and provide multiple perspectives)
Epistemology (What is the relationship between the researcher and that being researched?)	Distance and impartiality (e.g., researchers objectively collect data on instruments)	Closeness (e.g., researchers visit participants at their sites to collect data)	Collaboration (e.g., researchers actively involve participants as collaborators	Practicality (e.g., researchers collect data by "what works" to address research question)
Axiology (What is the role of values?)	Unbiased (e.g., researchers use checks to eliminate bias)	Biased (e.g., researchers actively talk about their biases and interpretations)	Negotiated (e.g., researchers negotiate their biases with participants)	Multiple stances (e.g., researchers include both biased and unbiased perspectives)
Methodology (What is the process of research?)	Deductive (e.g., researchers test an a priori theory)	Inductive (e.g., researchers start with participants' views and build "up" to patterns, theories, and generalizations)	Participatory (e.g., researchers involve participants in all stages of the research and engage in cyclical reviews of results)	Combining (e.g., researchers collect both quantitative and qualitative data and mix them)
Rhetoric (What is the language of research?)	Formal style (e.g., researchers use agreed-on definitions of variables)	Informal style (e.g., researchers write in a literary, informal style)	Advocacy and change (e.g., researchers use language that will help bring about change and advocate for participants)	Formal or informal (e.g., researchers may employ both formal and informal style of writing)

Source: Adopted from Creswell and Clark (2017)

Research design addresses paradigms and "logical problem, not a logistical one" (Sibindi, 2017; Yin, 1989): 29. Two fundamental research questions often asked by social researchers include: (i) "What is going on?" (this is termed as descriptive research); and, (ii) "Why is it going on?" (known as explanatory research). Descriptive research is often considered ‘mere description’; however, a comprehensive description plays a fundamental role in a research enterprise and knowledge of the nature and shape of a given society is considerably added to by it. Through the demonstration of the existence of social problems, accepted assumptions regarding things can be challenged by competent description and can stimulate action. Good description provokes the `why' questions of explanatory research; ‘why’ questions can be effectively provoked by good description. Thus, it helps in explanatory research whose main emphasis is on ‘why’ questions. The nature of research question (descriptive or exploratory), is the basic element which affects researchers in the development of research designs. Principally, any research design can employ any method to collect data. This method can either be quantitative, qualitative or a mixed approach.

The main difference between quantitative research and qualitative research is research methodologies. However, it is often stated that there is an absence of any simple distinction between the two of them and this concept is usually overstated. In a broader context, quantitative research is considered to have associations with a position which is usually positivist epistemological, with a main focus on quantifying/numerical phenomena (Ponterotto, 2005; Schwandt & Schwandt, 2001). On the other hand, qualitative research is naturalistic and interpretive. Different concepts are studied in qualitative research projects inside their natural settings to explore perspectives across the world and to form sense of the meanings used to define different behaviors, attitudes and experiences (Berg, 2004; Creswell & Miller, 2000). However, qualitative research is a group of approaches/methods, impossible to pigeon hole or limit to a set of simple principles (J. Mason, 2002; J. C. Mason & Handscomb, 2002). Common qualitative research elements include: (i) a largely interpretivist philosophical position, from which it mainly focuses on understanding and interpretation of the social world and on its production, constitution and experience; (ii) data generation approaches that offer flexibility and sensitivity towards the social context where the data production occurs; and (iii) approaches used to analyze, explain and discuss things which require detailed understanding of context. This study uses the qualitative research method as described above.

3.2.1. Rationale for Chosen Perspective

As appropriate for this study, a research design based on a qualitative case study is thought to be consistent and helpful to address the research questions of the study. Behind this choice, there are some important reasons. First, there is a dearth of exploratory studies in this area; the knowledge related to the framework of S-D logic (Hardyman, 2017b), value and its co-creation in Pakistani health context is very limited. Thus, the research carried out here is exploratory. It is considered that a qualitative research design is appropriate to explore areas which require thorough research, where a very little amount of data or statistics are available (Merriam, 2015; Shortell, 1999). As discussed before, often, the participant's inner experiences and the way these meanings are produced and transformed is part of the approach to selection (Gentles, Charles, Ploeg, & McKibbon, 2015; Johnson & Onwuegbuzie, 2004). Second, in the framework of focal S-D logic, value is regarded to be determined phenomenologically by individuals in a particular context (Lusch & Vargo, 2006, 2014; Vargo & Lusch, 2008). Therefore, the researcher considers that exploration through the eyes of the customers (service users and its providers) is critical for understanding this ‘reality’ (Olsson, Lagerstam, Kärkkäinen, & Väänänen-Vainio-Mattila, 2013). This provides a frame of reference which is interpretive and phenomenological. Third, a worldview where humans are considered different from other ‘universe entities’ is provided by the interpretivist perspective (Thomas, 2004); in this view, humans are aware and formulate meaning and the social reality. This view considers that behavior is not capable of being understood until the observer gets the meanings, which also require interpretation inside the context in which they occurred. However, adoption of this view also involves researchers’ beliefs because they are not passive observers and they engage in interpretation and construction of the world by observation (Easterby-Smith, Lyles, & Tsang, 2008; Schwandt, 1994). There is a need to recognize researchers in qualitative research as they are critical research instruments (Berg, 2004; Golafshani, 2003).

During the process of interpretive approaches and considering daily life's subjective experiences as the social constructs, researcher believes that these perceptions are associated with something in the outside world which is ‘real’ in the outside world. In this research the position of researcher is that the natural world has an objective reality, which is present outside the mind of researcher, but the way of experiencing and understanding this world is mainly defined on a social basis (Schwandt, 1994). Finally, a holistic approach and combined research methodologies (including semi-structured interviews, observations, etc.) usage is warranted by the investigation of focal phenomena of this study. A design based on a case study may best facilitate insights. This type of enquiry explores contemporary phenomenon inside the context of real-life. Specifically, it is useful in contexts like healthcare, where there are unclear boundaries among phenomena and context, and where the conditions of context are largely pertinent (Yin, 2009a, 2009b). As qualitative methods also provide comprehensive explanations of phenomena, and they improve understanding of both events and context andimprove the peripheral vision, the most reasonable methodology for conducting this study is a qualitative design (Sofaer, 1999).

3.2.2. Qualitative Research Methods

Creswell (2007) recognized ten types of research methods from authors in education, nursing, sociology, psychology, anthropology, and the general social sciences. Wolcott (1992) sketched a tree chart of 25 diverse types with the tree’s trunk and divisions demonstrating different styles based on data collection schemes. More recently, Denzin and Lincoln (2005) presented an advanced and smaller set of research methods in clinical, social and behavioral science, such as ethnography, interpretive practices, case studies, grounded theory, life history and narratives. The main five qualitative research methods are thematic analysis, grounded theory, interpretative/phenomenological analysis, discourse analysis and narrative analysis.

3.2.2.1. Narrative Analysis

Narrative analysis has numerous structures, utilizes different systematic practices, and is established in various social and humanities disciplines (Andrews, Squire, & Tamboukou, 2013). Narrative may be the term used to refer to any content or talk or it may be content utilized inside the setting of a method of request in qualitative research with a particular spotlight on the tales people tell (Green & Thorogood, 2018). It is a particular kind of qualitative plan in which narrative is comprehended as a talked or composed content giving a record of an occasion/activity or arrangement of occasions/activities, sequentially associated (Czarniawska, 2017). The methodology for actualizing this research comprises gathering information through gathering a couple of people's accounts, detailing singular encounters, and sequentially requesting the significance of those encounters. Though narrative research began from writing, history, human studies, humanism, sociolinguistics, and instruction, distinctive fields of study have embraced their very own methodologies (Marshall & Rossman, 2014). In narrative research, the researcher focuses on the life and stories of individuals and arranges them in chronological order. The narrative combines participant's life with researcher's life to form collaborative narratives.

3.2.2.2. Grounded Theory

Grounded theory is a process of inquiry in which a researcher derives an abstract and general theory of action, interaction, and process on the basis of participants' view. This process uses multiple data collection methods at multiple stages to refine and establish relationships of information. The practical application of theory is based on four interrelated properties (Glaser, Strauss, & Strutzel, 1968). The first property is theory fitness in the substantive area in which it will be used. The second property deals with the understandability of theory by layperson within the concerned area. Third, it must be applicable within the daily situations of the substantive area instead of specific or special situations. The last and fourth property is allowing user partial control over the structure and daily process of the situation. Kathleen Charmaz (2005) supported a 'constructivist' way to deal with grounded hypothesis, accordingly, bringing one more point of view into the discussion about systems. Grounded hypothesis has gained prevalence in sociology, nursing, instruction, brain science and other sociology fields.

3.2.2.3. Interpretative Phenomenological Analysis

Interpretative phenomenological analysis (IPA) is a qualitative methodology recently developed for psychology. IPA has the view that people have different perceptions that depend on their personalities, motivations and experiences. It attempts to understand/explore the subjective meanings of states/events/experiences of individuals themselves. In IPA, a researcher does interpretative works to make the sense of a participant's saying because of a full commitment to understand the world from the participant's perceptions. It is also known as idiographic approach, in which the researcher analyzes case studies in detail and cautiously moves to a general statement about a group of individuals. IPA is conducted with a small number of participants because of the focus on individual's experience.

In both phenomenology and grounded hypothesis the perspectives of various members are gathered. In any case, rather than speculating about those perspectives and creating a hypothetical model, phenomenologists portray what all members share for all intents and purposes as they encounter a wonder (e.g., sadness, outrage). Along these lines, phenomenologists work considerably more from the participants' specific explanations and encounters as opposed to abstracting from their announcements to build a model from the analyst's elucidations as in grounded hypothesis. The essential reason for phenomenology is to reduce the encounters of people with a wonder to a depiction that is an all-inclusive embodiment (Van Manen, 1990). The basic purpose of phenomenology is to reduce the experiences of persons with a phenomenon to a description of the universal essence (Van Manen, 2016). To this end, qualitative researchers identify a phenomenon (an 'object' of human experience). This human experience may be phenomena such as insomnia, exclusion, anger, or undergoing coronary artery bypass surgery. The inquirer then collects data from persons who have experienced the phenomenon and develops a composite description of the essence of the experience for all the individuals of what they experienced and how they experienced it (Moustakas, 1994). Phenomenology has a strong philosophical component to it, in addition to these procedures.

3.2.2.4. Participatory Action Research

Participatory action research (PAR) is a type of action research in which data collection and analysis on data are done for the purpose of making changes and taking action (MacDonald, 2012). Action research includes numerous terms such as participatory research, PAR, participative inquiry and community-based research, which sometimes creates ambiguity in a researcher's mind (Kidd & Kral, 2005; McNiff, 2017). The main purpose of action research is to impact social change with specific actions or action (Kidd & Kral, 2005; Rose, 2018). This type of research is novel because the scientist and the individuals from the network are locked in at all levels of the examination procedure (McIntyre, 2007; Whyte, Greenwood, & Lazes, 1991). The standard has been characterized in various ways by numerous scientists from various fields. The standard has been portrayed as: a radical kind of lobbyist investigation; a procedure of activity, research and instruction; a dynamic procedure; and basic inquiry steps (Kidd & Kral, 2002, 2005). PAR is categorized as a subjective research request in which the scientist and the members team up at all levels in the exploration procedure (cooperation) to help locate an appropriate answer for a social issue that altogether influences an underserved network (activity).

3.2.2.5. Case Study Approach

This approach is a type of exploratory investigation enabling rich phenomenal understanding in a real-life context from the view of involved individuals (Boblin, Ireland, Kirkpatrick, & Robertson, 2013; Creswell, Hanson, Clark Plano, & Morales, 2007). The case study approach is based on various data sources to gain comprehensive understanding of context (Baxter & Jack, 2008; Creswell et al., 2007). The approach selection is affected by the research questions' nature. This approach is considered appropriate when questions are required to discuss some current situations, such as “how” and “why” some social conceptions occur, or when comprehensive in-depth explanations of a social phenomenon are needed (Yin, 2009a, p. 5). This method is also beneficial for exploration of “contemporary events” and in circumstances “over which there is little or no control of the investigator” (Yin, 2009a, p. 13).

Three different types of case studies are identified: (i) intrinsic, (ii) instrumental, and (iii) multiple case/collective; these differ from one another on the basis of analysis purpose (Creswell et al., 2007; Stake, 2013). In intrinsic case study, the case is selected on the basis of the particular case's understanding, instead of on some particular construct. In contrast to this, an instrumental case study mainly employs cases for getting insight about a specific issue (Creswell et al., 2007). Collective case study chooses multiple cases for illustration of given issues, such as various programs from different research sites, or various programs from one single site (Stake, 2013).

3.2.3. Rationale to Choose Collective Case Study Approach

A case study of multiple sites is adopted in this study. This case study design is considered appropriate for several reasons related to the characteristics of this study's settings. Firstly, there are a number of researches available on maternal healthcare facilities researching the quality of these facilities and services, performance and quality of healthcare service providers in Pakistani context. Nevertheless, there is limited exploratory study and application of framework in the maternal healthcare field of Pakistan. Secondly, the application of the S-D logic concept to the health context is regarded as 'new' and little related knowledge exists (Joiner & Lusch, 2016; Nyende, 2018; Rantala, 2018). Finally, there is also a deficiency in published exploratory research that investigates the perceptions of both service user and its provider regarding maternal services in Pakistan (Ahmed, Alam, & Raynes-Greenow, 2018; Asghar, 2019; Saleem, Steadman, & Fejzic, 2018). This study has maternal care center as the organization site; it explores the S-D logic framework, exploratory application and the processes of value formation. Although the case's primary foundations are formed by the organization, the additional exploration of permeable boundaries is essential for considering the case history of an individual. For instance, a lot of patients presenting at a center have availed themselves of the facilities of diagnostics and treatment at other health centers before attending this health center. To interpret and understand the production, constitution and experience of 'value' in the context of maternal services in Pakistan, this study is based on various techniques (Bryman & Burgess, 2002; Van Manen, 2016).

In maternal care context, healthcare service provisions are usually complicated, not necessarily discrete and several service providers and multiple care episodes may be involved during the whole maternity process. As these service encounters have patient as their common feature, the case history's impact on creation (trajectories) of value are taken into additional account in this research (Grant, 2016; Silverman, 2013). In short, the focal study phenomena are regarded to belong to maternal service experiences' context (both within and permeating specialist center boundaries) from service users' and its providers' perspectives, who are getting treatment, attending or serving in the hospitals. The users and providers of the service are the main analysis units of this study. Patients, being the service's main beneficiaries, are this study's main point of interest.

3.2.4. Observation

Observation enables researchers to be present at the center of the process where they are able to see as well as hear every happening (Gentles et al., 2015; Trochim & Donnelly, 2001). This approach is considered critical as understanding of attitude and interaction cannot be merely earned from asking different questions. In fact, the actors' routines and activities must be observed and noted (Silverman, 2011; Whiting, Edwards, & Edwards, 1992). This is considered this is critical because usually people say they are doing one activity but, actually, they do other things too. Often observation is differentiated into participant observation and non-participant observation; in participant observation, the researcher plays a particular role, whereas in non-participant observation, the observer plays no specific role (P. Atkinson & Hammersley, 1994). The roles in participant observation as suggested by Gold (1958) include: (i) the complete participant, (ii) the participant as an observer, (iii) the observer as a participant, and (iv) complete observer. Some researchers refer to Coffey (1999) work, according to which researchers must have an active reflex regarding their ethnography instead of trying to manage themselves on the continuum of participant–observer. This research involves the dual role of researcher: observer as participant and participant as observer.

Observation gives a clear opportunity for getting insight about the physical as well as social fields where maternal care experiences occur. It would not be possible to gain in-depth insights merely using interview data specifically, because a great number of interviews would be carried out in a room far away from the clinical and treatment areas. The researcher has the perspective that the maternal care encounter cannot be appreciated fully without having context awareness, provided by the treatments received by patients in the labor room. The researcher was able to get context familiarity and make refinements to study design and consider practical and theoretical conceptions by making observations before conductance of semi-structured interviews.

3.2.5. Interviews

Qualitative interviews also termed as ‘in-depth’ interviews (usually unstructured or semi-structured in nature) are considered highly used methods for qualitative data collection (DiCicco‐Bloom & Crabtree, 2006; P. Gill, Stewart, Treasure, & Chadwick, 2008). The knowledge, perspectives, opinions and interpretations of people can be understood by conducting interviews, thus creating a social reality of things that are being studied (Berg, 2004; Holstein & Gubrium, 2004). In order to focus on the interviewee's active role and cooperation among both interviewee and interviewer during the whole interview process, the concept of ‘conversational partner’ is employed by researchers. This term is also employed for highlighting each individual's novelty and uniqueness regarding their knowledge and way of interaction. This point of individual's uniqueness is critical as it needs flexibility and customization of interview questions according to the conversational partner's knowledge and according to the research topics which the interviewee feels free to discuss (King, 1994). It can therefore be said that one interview approach would not be appropriate for all settings. The key factors in this study included flexibility and sensitivity, because of a broad range (in terms of service experience and emotions) of involved participants.

The semi-structured format is the most popular interview structure used for qualitative data collection (DiCicco ‐ Bloom & Crabtree, 2006). With semi-structured interviews, the researcher is able to give importance to the respondents' perspectives instead of directing them towards a specified direction as done in structured methods (Longhurst, 2003; Ormston, Spencer, Barnard, & Snape, 2014). In this method, an interview guide is used by the researcher; an interview guide is a list of topics, questions and other prompts that need to be talked about during the interview session. The flexible format of these interviews allows the interviewer to ask questions and to stray from the guide when it is appropriate. In particular, this interview style is beneficial when there is only one chance for researchers to interview a person (Cohen & Crabtree, 2006).

The approach used in this research is semi-structured, in-depth interviews. They are employed to encourage the participants to express comprehensive explanations of the study phenomena (DiCicco ‐ Bloom & Crabtree, 2006; Guest, Namey, & Mitchell, 2012). The reason behind this approach selection was improving the understanding of ‘value’ and its trajectories, on the basis of meanings and attributes given to these phenomena by users and providers of services in the context of maternal health (Bowling, 2014; Tong, Sainsbury, & Craig, 2007).

3.3. Selecting the Sites for Case Study

The Islamic Republic of Pakistan is a developing low-to-medium income range state; it has an annual 2.03% growth rate, with a population of more than 207,774,520 (Pakistan Bureau of Statistics, 2017). Healthcare organizations including private, public, and non-profit health centers, hospitals and clinics, provide healthcare services to the public (Zineldin, 2006). Pakistan has a per capita income of $1181.60; the latest report of the Pakistan Economic Survey showed that the per capita for health expenses in Pakistan is about $36.2, which is much lower than the low-income countries benchmark of the WHO which is $86 (PES, 2016-17). In WHO benchmark, Pakistan Economic Survey 2017, it was revealed that from the last decade, Pakistan spent only 0.5% to 0.8% of its budget on healthcare services, much lower than the benchmark set by WHO, which is at least 6% of budget (PES, 2016-17). Despite many steps taken by the Government of Pakistan, the development in health and care sector is very limited in comparison to its neighboring countries and other developing countries across the world (Javed & Amin, 2007).

Elevated maternity care cost can be a hindrance to access to healthcare units resulting in an elevation in maternal and newborn deaths (Skordis-Worrall et al., 2011). In both rural and urban areas of the country, the poverty gap and its severity has increased; one can say that poverty is a major challenge faced by people in Pakistan (Haq, Nazli, & Meilke, 2008). This study explores how financial problems can impact the services of maternal care in Pakistani rural areas and focuses on the requirement of health reforms that ensure efficient, on time, secure and free of cost maternal care facilities. It is observed that there is understaffing, overcrowding and provision of inappropriate facilities in government/public hospitals in developing states (SUDAN, 2014). Therefore, it is observed that patients usually prefer to shift from public sector hospitals to private clinics and hospitals, as private sector healthcare centers are believed to provide much better health services by employing a fee-for-service approach (Basu, Andrews, Kishore, Panjabi, & Stuckler, 2012). The main differences are found in health policies, organizations for financing priorities, healthcare services' quality and quantity, and medical training in organizations (WHO, 2015; Say & Raine, 2007).

There are 49 tertiary hospitals in Punjab and 19 belong to Lahore. Out of the 19, three main hospitals were selected: Jinnah Hospital and Lahore General Hospital were selected on the basis of average number of patients is more than 3800 per day and Lady Willingdon Hospital has less than 3000 patients in a day.

Lady Willingdon Hospital

This research was carried out in Pakistan at Lady Willingdon Hospital, a teaching hospital of King Edward Medical College, situated in Lahore, Punjab. It was founded in 1933, by Lt. Col. S. N. Hayes who named it after the wife of India's Viceroy. He became the first Medical Superintendent of the hospital and was also Principal of King Edward Medical College. In the same year, the Hospital got its affiliation with King Edward Medical College. Dr. Khawaja Mehboob Ahmed serves the hospital as Medical Superintendent. Since 1993, it has been a teaching institute attracting undergraduate, postgraduate and post-fellowship doctors. Its medical training is recognized by the Higher Education Commission (HEC), College of Physicians and Surgeons Pakistan (CPSP), PM&DC, and the Royal College of Obstetricians and Gynaecologists (RCOG, United Kingdom). With 235 bedded spaces, the hospital provides indoor and outdoor facilities; it addresses booked cases throughout the week and emergency cases 48 hours a week and every third Sunday. The unit also provides undergraduate and postgraduate trainee doctors with an appropriate educational environment. The hospital authorities claim to teach and train undergraduate, 4th and 5th year, Fellow of College of Physicians and Surgeons Pakistan/General Surgery (FCPS/MS) postgraduate in Obstetrics and Gynaecology. All the obstetrical/gynecological indoor and outdoor emergencies are dealt with in the hospital. The 2017–18 budget of the hospital is about Rs 5,145,824. As many as 40% of patients who visit here come from other cities. The objectives of the hospital are:

- Improvement of healthcare facilities for women through education of Obstetrics and Gynecology.
- To provide the postgraduate doctors with the training to work independently and efficiently in far off remote areas for provision of better health services.
- To effectively educate and train undergraduate postgraduate students.
- The main goal of hospital is to renovate the labor ward for better service provision and to lower the associated risks.

The hospital's environment is hygienically clean but has uncomfortable and congested waiting areas. The hospital is not equipped with air-conditioners and patients experience discomfort during extreme hot and cold seasons.

Jinnah Hospital

Jinnah Hospital is a teaching hospital attached with Allama Iqbal Medical College of Punjab, Pakistan. It was established in 1996 in Lahore and is spread over 105 acres. More than 1250 beds are available in the hospital for patients. Jinnah Hospital has almost all the specialties in the medical field. It provides all the medical treatments to all humanity regardless of status, nationality, cast and race. The 2017–18 budget of Jinnah Hospital is Rs 5,658,060. More than 70% of patients who visit the hospital are from urban areas of Punjab.

LGH

LGH was laid down in 1958 and declared as an autonomous hospital in 1988. It covers an area of 256 kanal on Ferozpur Road, Lahore. LGH is attached to the Postgraduate Medical Institute (PGMI)/Ameer-Ud-Din Medical Institute. LGH is known for its services in tertiary level care to the community. The mission of LGH is to improve coordination with allied departments and develop human skills to deal effectively and efficiently. The 2017–18 budget estimates is Rs 5,973,643.

3.3.1. Access Negotiation

The negotiation of accessing the sites and the subjects of study along with comprehensive knowledge of strategies used for sampling are considered a crucial part of the whole research process (Frankel & Devers, 2000). This negotiation process can, however, result in time consumption and the researcher needs to demonstrate credibility along with trustworthiness to a ‘gatekeeper’s’ team to obtain permission to conduct research (Frankel & Devers, 2000).

In this research the process of access negotiation was a two-stepped ongoing procedure. It is notable that these access negotiation stages, although distinguished from one another in discussion sections for convenience, had overlapping periods (e.g., while setting up the opportunities for observation and shadowing). The access negotiation's first stage was to get permission for entry to the site and gain appropriate ethical permission to carry out research inside the organization. The Government of the Punjab, Specialized Healthcare and Medical Education Department gave permission after three meetings (approval is attached in Appendix 5). The negotiation's second phase was more time consuming as compared to the first one.

After getting departmental head and managerial approval, the researcher had to get permission for accessing the subjects of the study from the staff who operate within the range of the clinical setting (Appendix 4 is a participation consent form). This multiple level access negotiation process was an ongoing one. The changing faces of staff were part of the reason behind this ongoing process: many staff worked in shifts, therefore, the researcher needed to introduce herself again and again in the same settings on a continuous basis. The ongoing nature of the negotiation process was also based on how 'well' the patients were and the staff's workload in terms of the number of staff ratio to number of patients who needed monitoring or treatment.

3.3.2. Participant Sampling

It is often stated that all qualitative research's sampling can be categorized as forms of purposive sampling, where selection of the sample is intentionally dependent on the study requirements (Devers & Frankel, 2000; Ormston et al., 2014). Ritchie, Lewis, and Elam (2013) and Teddlie and Yu (2007) suggested that the techniques of purposive sampling are usually employed when the researcher needs to select a purposive sample which represents an expanded cases group or to draw comparisons among different case types on a specific direction of interest. This approach allows the researchers to choose a case because it explains an attribute or process of interest (Patton, 2005; Silverman, 2015). This sampling type is employed to conduct this study. Establishing the appropriate size of sample is not easy, it must reside on the 'theoretical saturation' concept. Creswell (1998) made suggestions about the sufficiency of 5–20 reasonable individuals in order to understand any particular experience. Flanagan (1954) contended that 50–100 critical incidents recorded and collected are sufficient. Butterfield, Borgen, Amundson, and Maglio (2005) stated that the researcher must ensure to capture and describe all the relevant issues of the activity. When a comprehensive understanding of research phenomena is achieved, only then should the sampling process be stopped (Palinkas et al., 2015). Recent research (Osei-Frimpong, 2015; Hardyman, 2017b) used 90–100 sample size to collect data.

On the basis of this guidance, 96 individuals participated in the study: 56 of which were patients, 13 were their family members/friends (3 male and 10 female) and 23were staff members (6 male and 17 female). Appendix 2 of this study presents the participants' characteristics: (i) for patients – age, gender, number of visits during pregnancy at Hospital; (ii) for family members/friends –

age, gender, and relation with the patient; (iii) for staff – age, gender, roles, length of time worked at the center (length of duty hours). Appendix 3 contains a depersonalized profile of interviewees which shows type of participant, age and gender. For confidentiality purposes, the role of staff is not provided in Appendix 3. Sections 3.3.2.1 and 3.3.2.2. incorporate detailed information about the sample: patients, their family members or friends, and the staff.

3.3.2.1. Patient Participants

The sample of participants who took part in the research included surgical patients, labor patients and outdoor patients (also their family members and friends) who used the treatment facilities at the Hospital. Patients who had received previous treatment were also interviewed in order to gain a longer term view on the nature of the maternal journey. Through the first three months of the study (January to March 2016), the sampling method employed in this research was refined. The main focus was on the patients of pre-obstetrics, post-obstetrics, postnatal, antenatal and on the outdoor patients.

Accordingly, the selection of patients was based on the following: type of treatment and its setting; status of being outpatient or inpatient, and the time period for which they had been a patient at hospital. The reason behind selecting this approach was to achieve diversity in the experiences of patients in the hospital instead of trying to create a descriptive sample (Gray, 2013; Malterud, Siersma, & Guassora, 2016). The sample of patients contained approximately equal numbers of patients from each category (20 patients from labor ward, 20 from emergency, and 16 from outdoor patients of which 3 patients had already received treatment from the hospital) in order to gain diversity in opinions. Age was not an important criterion while selecting participants, however, most of the patients (82%) who participated in the study belong to 18 to 35 group and the others were older; Appendix 2 details patients' characteristics including age. The sampling of the relatives/family members (also friends) was not done on any basis. They were invited to participate in interviews if they were available with patients during their interview with the researcher (they were informed of the research) and in cases if a patient wanted their presence. Participation Template form is attached in Appendix 4. These family members were often the spouses of patients (including 3 male and 10 female). Appendix 2 summarizes the characteristics of these relatives/family members.

3.3.2.2. Staff Participants

The staff sample was taken from a range of staff groupings involved in the treatment of patients: 7 nurses; 4 obstetricians; 3 gynecologists; 4 postgraduate trainees; 2 undergraduate trainees; and 3 management personnel. Along with this approach, additionally the snowball technique was employed, and more staff was approached via staff informants' recommendations inside the Hospital. The template of staff consent form is attached in Appendix 4.

3.4. Data Collection

In this study, a wide range of data were gathered (including observational and interview data), and Table 12 summarizes these data.

3.4.1. Observation

During the six-month observation phase at the hospital a lot of correspondence was made with a variety of staff. Meetings were attended (at departmental, organizational and team levels) and observations were made about the treatments and their settings. The questionnaires about patient's experience were also administered (breakdown given in Table 13). These 'experiences' and correspondence helped to give a comprehensive understanding of both the settings and experiences of services, assisting in the generation of value formation which is not possible from interview data only. As explained above in Sections 3.3.2.4 and 2.2.2, gathering observational data was a broader and a deeper procedure as compared to initial anticipation about its collection. Overt and more covert observations were combined (while administrating the questionnaires of patient experience) in almost 40 hours of observations (Table 13 provides a detailed breakdown). Throughout the whole research, a research diary was kept to detail contextual information including settings, nature of activities and new ideas. The research diary documentation helped to record feelings, observations and judgments as soon as they occurred. This proved to be a useful tool which served as a reminder of events and occurrences for the researcher afterwards.

In this research, the process of undertaking observations was closely related to the negotiating access phase inside the Hospital. During observing, the researcher shifted from 'participant as observer' to 'observer as participant' and vice versa according to the nature of the activities (e.g., administering the questionnaires of patient experience and joining a meeting) and the settings. Section 2.2 discusses these issues in detail. However, it is notable that along with ‘role shifting’ during conductance of the observations, the researcher shifted from ‘temporary-insider’ role to an ‘outsider’ role once during the commencement of the study’s interview phase. This essential role shifting helped identify the researcher’s study-relevant work independently of the Hospital’s work. This possibly put the participants at ease while sharing their opinions and involvements during interview sessions.

Table 12: Summary of Data Collection

Data source	Data Type	Data Nature
	Total observation hours	**40 hours (see breakdown)**
	Overt observation:	**26 hours (see below)**
	Labor ward	9
Observations	C-sections	5
Jan. to September 2016	Consultancy with gynecologist	7
	Obstetrician consultancy	5
	Covert or Partial participant observation:	10
	Observations while administrating 30–35 questionnaires of patient experience	**4** **14 hours**
Questionnaires of patient experience (see the observations above)	**October 2016 to February 2017** The researcher on the behalf of the Hospital, while managing almost 35 questionnaires of patient experience, noted observations. Mainly there were structured questions in the questionnaire but also two open-ended queries. On average, it took 15–30 minutes to finish the process.	The questionnaires were administered in 5 settings: Observations noted during the session were written down in the diary or in the field notes for subsequent data analysis.
Interviews	**92 interviews in total (fully transcribed)** 56 patients only	

	13 family members only 23 Staff
Research diary/ Field notes	The researcher's notes concerning the observations, administering data of patient experiences questionnaire and of the semi-structured interviews.

3.4.2. Interviews

The study included 92 semi-structured interviews with participants: 56 of which were patients, 13were their family members/friends (including 3 male and 10 female) and 23were staff members (including 6 male and 17 female). Every person was interviewed two times, at the beginning, alone, and then in a follow-up meeting with a relative/family member. Table 13 summarizes all information related to type and length of these sessions. As indicated in the table, the length of most interviews was in the range of 20 to 40 minutes. Similarly, the staff interviews have the same attributes.

Table 13: Summary of Interviews

Interview Type	Interview Length	Numbers of Interviews
Only patient	Range 13 to77 minutes	10
	13 to20 minutes	12
	21 to30 minutes	15
	31 to 40 minutes	10
	41 to50 minutes	7
	51 to 60 minutes	2
Patient along with relative/friend	Range 17 to 87 minutes	1
	17 to 20 minutes	4
	21 to 30 minutes	4
	31 to 40 minutes	3
	41 to 50 minutes	1
Staff interviews	Range 17 to 76 minutes	1
	17 to 20 minutes	4
	21 to 30 minutes	13
	31 to 40 minutes	4
	41 to 50 minutes	1

3.4.2.1. Interview Conduct

In this research, a semi-structured interview methodology was adopted as the most reasonable choice. The reason behind this selection is explained in Section 3.3.2.5. This approach was used to elicit comprehensive descriptions of this study; this method was also chosen for some pragmatic reasons. Most of the patients participated in the interview soon after getting treatment or some time before their appointments; therefore, this time was of the great importance. Most staff members were available for 30 to 60 minutes for their interviews. The researcher was well aware not to burden the patients (and their relatives/family members) and not to disturb the staff very much during their working hours. The opportunities to discuss relevant issues of the study in a timely way were increased by the use of semi-structured interviews. Therefore, a guided but flexible interview approach was employed. The participants were allowed to discuss relevant issues with the help of open-ended questions; consequently, the focus was on the five axioms of S-D logic and on this study's five basic premises of interest. In order to pose questions neutrally, conscious attempts were made by the researcher to minimize the possibility of bias and to encourage deep reflection on participants' side related to their thoughts, opinions and views.

Despite limited space inside the Hospital, a manager, whose team was assisted by the researcher to administer the questionnaires of patient experience, managed a small non-clinical room for the researcher for the semi-structured interviews, which was available for only two days in the week. The room contained a desk with a chair, a small sofa and a chair. This favor was invaluable for providing a private, neutral space for the sharing of participants' thoughts and experiences. Most of the interviews were conducted in that room.

3.4.2.1.1. Inviting Patients

The recruitment of the patients to the study was done via face-to-face conversations regarding the research project. Patients were contacted after consulting with the associated nursing or medical staff in the inpatient or the outpatient facilities, regarding the appropriateness of asking the patients to participate. Initially, the patients were selected and contacted via nursing or medical staff to find if they were willing and to give further information about the study details and what contribution was required by them. The relatives or family members of patients were also asked or invited to participate if they were present at the time.

3.4.2.1.2. Inviting Staff

Several different approaches were employed to invite the staff to participate in the study which included: (i) various meetings with the managers and heads of units, departments, and teams for introducing the researcher and discussing the study; (ii) the researcher sending invitations through e-mail via managers or teams to the staff; (iii) the researcher's attendance at several departments or units, which involved the study's overview, along with invitations to participate in the study; (iv) different 'drop-in' sessions conducted openly, as close to staff's work areas as possible; (v) personal face-to-face invitations to participate or on the recommendations of some other staff members; and (vi) email invitations which were targeted in nature, for those staff members who were recommended by others inside the organization.

3.4.2.2. Consent

Leaflets containing information for participants were provided to all the participants. These leaflets contained information about what was needed from the participants regarding their contribution should they desire to participate in this research. The patients, their family members and other staff were clearly told that this participation would be voluntary. All the participants were made to provide their written consent. Also, all of them were informed that they could withdraw their consent of participation at any point, for any reason. Three people withdrew themselves from the study even after their initial willingness; the three who withdrew belonged to the patient's category. A template of the consent form is attached with Appendix 4.

3.4.2.3. Flexibility and Sensitivity

For conductance of research in a medical/clinical setting, it is essential for the researcher to sense staff's and patients' requirements. Because of patients' poor emotional health, it was critical to lessen the impact of participation on all the participants of the study. It was of importance that members of staff were able to reschedule or rearrange interviews in time if they were busy. A useful way to achieve this was to have 'drop-in' sessions for interviews, because the staff could join according to their work schedule. If required, the interviews were shortened and only important questions were asked for staff's time optimization and to achieve relevant interview data. The additional things that needed to be considered were related to feelings of staff towards the researcher: they should be at ease and they should be willing to openly share their opinions and experiences. Many staff members, before scheduling interviews, were provided with opportunities for informal conversation, resulting in much more relaxed interviews. Only a few staff members shared negative opinions regarding the service provision's ethos and nature inside the organization, which is the paternalistic nature of care, although protection of patients also generated organizational dependency.

Before the commencement of study's interview phase, an agreement was made that these interviews would be conducted in liaison with the Hospital's supportive care team. The purpose behind this was the availability of a staff member of this team in case participants of the study needed more support and information. Furthermore, it was also agreed that if the participants felt distressed or became upset while conducting the interviews, they would be allowed to stop and discontinue the session. Although it was known that patients and their relatives/family members had agreed that this conversation would be confidential, however, during the session if they felt distress, they would be allowed to talk to the hospital's supportive team, recognizing that patients and potentially family members could get their issues addressed. However, none of these safeguarding/safety methodologies needed implementation while conducting the study.

Those patients, who were coming to the hospital as outdoor patients were interviewed on the days they would have to attend the center, that is, their potential appointment slots.

For the inpatients, a different interview approach was employed. Due to labor pain, recovery from post-delivery phase, or other critical problems, the inpatients were considered not well. The researcher was aware of this situation and that their health status could change rapidly. In order to manage this, the ward staff approached the patients on behalf of the researcher before getting agreement on interview participation. This allowed the patients to leave or withdraw from the study. Additionally, while conducting the interviews, the way to handle the patients' concerns about the provision of healthcare facilities was also taken into consideration in a confidential manner. With the permission of the interviewees, all their responses were audio-recorded. There was an immediate recording of the observations or thoughts using a dictation machine. A recording device was used to help store comprehensive quality data and it also facilitated reflection on the style and technique of the interview (Bryman, 2017).

Pope and colleagues (2000) suggested that contrary to popular beliefs, in qualitative research a vast amount of data is generated. Certainly, this same concept was applicable to this case in terms of the recorded interviews having a length of almost 40 hours. After conducting the interviews, they were immediately transcribed fully. As the topic of interview was personal and was of a sensitive nature, it was very important to incorporate flexibility and responsiveness for the participants. About four patients started to feel distress and became upset while describing the difficulties they faced during their pregnancy period. During all such encounters, the participants were allowed to request the audio device to be turned off. According to the participants, it was very useful for them to be able to express and share their opinions and experience, as they thought that these issues were not much discussed openly in the family because of the unsupportive attitude of family members. Although most accounts of interviews expressed positive experiences of the service and, consequently, some positive aspects about ‘value’ were generated, many patients also expressed very personal and very difficult experiences of theirs.

3.4.2.4. Interview Content

The primary source for data collection in this study was semi-structured interviews. These interviews usually use open-ended questions and probes to record the opinions of respondents (Hsieh & Shannon, 2005). This study employed these two approaches while conducting the semi-structured interviews. At the start, patients and members of staff were asked to give detailed information about: (a) how they arrived and became a patient at the hospital and what were their experiences' during this journey of theirs; and (b) why and how they became a worker at the hospital, the length of time they had worked at the hospital and the nature of the hospital as a workplace. During the interview sessions, several questions were raised regarding S-D logic and basic premises of interest in regard to this research. The emphasis of these questions was on: participation in the processes of healthcare and in making decisions; identification of critical care and treatment aspects for the patients, their relatives and the staff members and the way they perceived and experienced ‘value’; the perception of the staff about the nature of the service they provided, past maternity services' experiences and the range of resources on which the whole journey of pregnancy was based upon.

Along with the open-ended questions, the study also employed probes (Allison, Okun, & Dutridge, 2002) for discussing topic areas on a further basis (i.e. “Can you tell me more about that?”) and for clarification of a participant's answers (i.e. “Could you explain what you mean by that?”). It is the nature of qualitative research to cause collisions between data collection and analysis of primary data (Liamputtong & Serry, 2013). This suggests that investigators can alter the questions by having subject knowledge from their respondents and, sometimes, leave the pre-planned itinerary and ask questions in accordance with the interests and background of interviewees. Questions which are considered ineffective for information elicitation can be changed and new questions can be added. Moreover, by comparison and contrast of data sources, the identification of data similarities and gaps is possible; it also assists in the exploration of emergent phenomena, whose anticipation at the beginning of the research would not be possible. All these points have relevancy to this research study.

Elicitation from the responses about ‘value’ conceptualizations from the patients (relatives/family members) needed flexibility on the researcher's part with respect to: (i) the question's framing, (ii) the style of interview being adopted, and (iii) meaning inference from the data. The abstract nature of ‘value’, being a concept, obliged that it be framed sometimes as perceived advantages or return of the service usage or, much more simplified, what the participants felt they had ‘got out’ or believed ‘to get out’ after using the service (Lusch & Vargo, 2014; Vargo & Lusch, 2014). Some cases did not overtly discuss the ‘value’ and the participants talked about the service aspects that were important to them or alternatively the elements that proved to be negative in past healthcare experiences. From a few interviews, it was also shown that participants desired to ‘share their stories’; in such instances, a much more open style of interview was held and in cases in which the interview topics were not discussed by the participants.

This research aimed to investigate value's conceptualization and the conceptualization of processes on which value co-creation is based (exchange of service and integration of resources) via service encounters. Section 3.5 elaborates these aims.

3.5. Data Analysis

In this research, the analysis of data was commenced at the data collection point, because the previously collected data affected and informed the ongoing process of gathering data. During this analysis, several analytical categories were formulated for description and explanation of study phenomenon (Merriam & Grenier, 2019). The derivation of these categories was inductive; they were acquired deductively and from the research data as well. Also, initially the researcher was aware of the framework of S-D logic along with important literature concepts about value co-creation (Grönroos, 2011).

All the recorded interviews were played many times during the research, field notes were read again and again and were broadened, and all transcripts were read completely and thoroughly. This helped in consideration of some tentative classes that could be confirmed or refuted during the study data analysis (Braun & Clarke, 2006). After this analysis, the methods suggested by Spiggle (1994) were applied. These methods involved classifying data on the basis of their meanings, which is general categorized abstraction, comparison of these categories and depersonalization of finalized categories. Spiggle (1994) suggested that these activities are not discrete, they do not follow a sequence and they are not the research process's stages. These activities are considered operations of data manipulation that can be employed in several analysis stages, with the help of which researchers can "[…] manage data, infer meaning, draw conclusions, and create or guarantee the data description schemes and theories" (Spiggle, 1994, p. 493).

3.5.1. Stages of Analysis

The analysis done in this research comprised three stages. For reference convenience, these stages are taken as discrete ones; however, actually this was a fairly fluid movement, as there was an iterative movement by the researcher, from the sources of data to collection and then analysis. As explained before, the interviews were scheduled for inquiry into important questions which were associated with the FPs of S-D logic related to 'value' and the processes on which value is based. The conceptualizations of value and experiences of value were explored by these interviews; this value is created during service experiences regarding maternity inside and outside the hospital. Some associated headings were placed inside the transcripts to note points during the interviews where narration started to take place and new topics emerged without the interviewer's prompt.

3.5.1.1. Thematic Analysis

For the analysis of the transcribed data, thematic analysis was employed. This approach has wide usage in the area of qualitative research. Braun and Clarke (2014) defined thematic analysis as an approach to identify, analyze and report different patterns or themes inside the qualitative data. It is argued by them that inside qualitative research there are limited consensuses about the way of conducting it, eventually causing it to have less recognition. During this analysis, the emerging themes found by the researcher became analysis categories. Contrary to the analysis of interpretive phenomenology (J. A. Smith & Osborn, 2007), grounded theory (Kathy Charmaz & Belgrave, 2007), discourse analysis (Brown & Yule, 1983) or narrative analysis (Riessman, 1993), this thematic analysis is not based or bounded on theory; it can have its implications inside an expanded range of theoretical frameworks. It is, therefore, a very flexible analysis tool which gives comprehensive and detailed but complicated data accounts. Although flexibility is the key benefit of employing thematic analysis, this flexibility can also be regarded as a possible drawback in cases of poor and inconsistent application of this analysis approach. All interview transcribed data were considered as co-constructions among the participants and researcher of the interview, were created within a particular place and period, and were gathered via face-to-face conversations and semi-structured interviews.

A thematic analysis hybrid approach was employed in the research, in which both an inductive (Boyatzis, 1998) as well as deductive approach were employed (Crabtree & Miller, 1999). These methods assisted the researcher to respond to the research questions via a deductive coding process, thus, allowing the emergence of themes from the data by employing inductive coding. This process of coding helped the researcher in the identification of critical key aspects in the raw data and converting it into useful information before interpreting anything from it. A code which is comprehensive enough to capture any phenomenon's qualitative richness is considered a good one (Boyatzis, 1998).

Stage 1. What is value according to FP (see Table14, Column 1)

Initially, the data were primarily categorized on a deductive basis which was informed by the literature of S-D logic (Lusch & Vargo, 2006, 2014; Vargo & Lusch, 2016). Important key questions associated with a particular S-D logic and with value generation were asked in the interview sessions. With the help of these interviews, value's conceptualization and experiences of value were explored inside the hospital. Some associated headings were placed inside the transcripts to note points during the interviews where narration started to take place and new topics emerged without the interviewer’s prompt.

Stage 2. Primary dimensions of value co-creation in FPs (see Table 14, Column 2)

An increasingly iterative approach was adopted in the second stage of data analysis. This iterative approach included the concept of ‘open coding’ inside the eight categories identified at Stage 1 (see also the first column of Table 14). The data included in all these eight categories underwent a review process, and identification of units and patterns was done. This analysis consequently generated several sub-dimensions inside the eight categories identified at Step 1. Column 2 of the Table 14 outlines these additional sub-dimensions.

Stage 3. Value co-creation by underpinning dimensions and themes (see Table 14, Column 3)

After exploring the initial data, as discussed earlier in Stage 2, the need for the competing themes and explanations became critical. This goal was achieved by finding data organizing ways that could generate various findings, and by finding data that proved the value of alternative explanations (Patton, 1999); this research undertook this concept via categories' development that recorded variation regarding experiences of maternal services with respect to value co-creation. A greater insight into the experiences gained inside the hospital was facilitated by exploring these categories.

This data analysis phase incorporated the development of general and encompassing categories by constantly comparing the data and the identified sub-dimensions. This eventually identified critical emergent themes: (I) access to resources, (II) interactions' quality, (III) integration of resources, (IV) organizational factors (V) Spiritual belief. This was followed by the refinement and classification of sub-dimensions as necessary elements for value co-creation. Column 3 of the table 14 details the emergent themes and their associated sub-dimensions. These sub-dimensions are discussed along with value co-creation to show if these two are related. Data comprehension and interpretation were not only limited to the interviews, the quality time spent in the field, as well as observations, notes and literature helped to achieve data understanding. These themes-related observational data were included in the analysis discussed in the next section to complement the findings drawn from the interview data analysis, and the context information about conducting the study is also presented in the next section.

Table 14: Summary of Data Analysis Stages

Stage 1	Stage 2	Stage 3
Value formation through foundational premises	**Preliminary dimensions by foundational premises**	**Value co-creation by emergent themes and dimensions**
Service is regarded as the main base for exchange	Operant resources (knowledge & skills) application Asymmetry of information Involvement types Ability for exchanging different resources	1. ACCESS TO RESOURCES Availability of ongoing access and also support Specialized competence and skills On time availability/responsiveness Information asymmetry control
Value is always co-created by customers (multiple actors)	Management of expectations Co-creating value from patient-to-patient Relationships Recovery of value	2. QUALITY OF INTERACTIONS Interpersonal abilities/care language The individual-focused care Time availability for patient
Institute/organization is not capable of value delivery but can take part in creation and provision of the propositions of value	The value propositions staff Resource availability Institute/organization behavior Features of institute/organization	3. RESOURCE USE INTEGRATION Nature of value propositions Expectations/Managing expectations
All the economic as well as social actors are considered integrators of resources	Resources' type and nature (e.g. personal, relative, friend, etc.) Past experiences	4. ORGANIZATIONAL FACTORS Organization features/extra mile 1. Spiritual Belief 2. Trust
It is always the beneficiary who has the right to determine value on unique and phenomenological basis	Several interpersonal skills Opportunities to access and support On-time access or availability Time available for the patient Faith Safety on emotional basis Treatment effectiveness Time for normal life Managing expectations	

3.6. Echoes upon Qualitative Data

In the area of health services research, the usage of qualitative research methods is becoming more common day by day; so, there is an increased need to scrutinize these qualitative studies (Holloway & Galvin, 2016). The need to raise the quality of these researches is contentious. The traits that guarantee a qualitative research to be a good one are not agreed upon. The appraisal approaches for qualitative research, discussed in the literature, indicate that qualitative research is homogeneous in nature (Dixon-Woods, Agarwal, Young, Jones, & Sutton, 2004; Walsh & Downe, 2005). Holloway and Galvin (2016) suggested that the problem of quality in this area is a large debate with respect to the nature of the knowledge generated from qualitative research, and questioned whether it is possible to judge the quality on a legitimate basis. Although this debate is acknowledged, these problems are not investigated in this study as they are beyond its scope.

3.6.1. Credibility of Research

Wang, Storey, and Firth (1995) stated that the quality and credibility assessment of qualitative research is dependent on three unique and interrelated factors: (i) the rigorous techniques for data collection and its analysis which handle the reliability, validity and triangulation requirements; (ii) the researcher's competence, credibility and trustworthiness, (iii) and the beliefs in qualitative enquiry's value. The methodologies employed in this study, for example respondent validation, pay attention to negative cases and so on, are ways to increase the enquiry's quality. The reasons for adopting the employed sampling strategy include: (i) improving the understanding of the association of S-D logic to the context of healthcare, and (ii) to investigate ways to conceptualize and experience ‘value’ via maternal care encounters. The patients selected in this study had a wide range of experience and the selected staff belonged to a variety of roles; thus, this helped to capture a wide spectrum of experiences related to service and its value. This method was additionally employed to understand and illuminate critical cases, instead of facilitating abstraction (Halinen & Törnroos, 2005). This helped to explore the commonalities and differences with respect to value of experiences. Along with this strategy, several interviews were also conducted in these settings. In order to facilitate a comprehensive understanding of the maternal context, qualitative data sources, including interviews, were employed in this research.

3.6.2. Reactivity and Confidentiality

The extent to which the process of research impacts the participant's responses is termed reactivity (Price, Tewksbury, & Powers, 1997). This can result in data reliability implications if not handled properly. Several strategies to reduce this bias have been employed in this research, as described earlier, including the role of researcher as outsider and insider, trust building and commencing interviews in an independent room. The confidentiality factor was given much importance while conducting these interviews. Members of staff were assured that their job titles and positions would be kept confidential and their personal information would not be misused. With these assurances, the participants were able to freely express their opinions and experiences regarding the maternal services.

3.6.3. Transferability

The extent to which the outcomes of qualitative research are able to be transferred to other contexts is referred to as transferability (Shenton, 2004). The single case study approach's limitation is that the generalization of findings from one study to another is impossible (Cavaye, 1996). In this research, the main aim was identification of linkages and patterns that may be valuable in other contexts, instead of inferring results from the participants' sampling to a larger population. To facilitate the possibility of transferability, Miles, Huberman, and Saldaña (2014) and Myers (1997) suggested that the research's write up is critical. In accordance with these suggestions, the following considerations, recommended by Hardyman (2017b), were taken into account by the researcher: (i) outlining the traits of the participants' sample and comprehensive study of context for easy comparisons; (ii) forming diverse sampling to facilitate the study phenomenon's extended coverage; (iii) provision of 'thick descriptions' in the analysis write up, and (iv) exploring the limit to which the outcomes are consistent with the literature.

3.7. Chapter Summary

A systematic methodology for exploring the following concepts has been described in this chapter: (i) value creation in the maternal service context, (ii) the facilitators, support and the barriers in co-creating value, and (iii) the statistical application of S-D logic to the healthcare context. Attention has been given to all the issues and challenges throughout this chapter and the amount of effort needed to carry out this study is also discussed. The critical features of interest are related to the nurturing of relationships with the organizational staff as an important step to establish trust and other permissions. The findings of this research study are presented in the next chapter.

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION

4. Introduction

This chapter presents the analysis based on the interview and the observational data for investigating: (I) conceptualizations of 'value' (that is value-in-use) in the context of maternal health service; (II) main supports, facilitators and barriers to co-creation of value; and (III) the application of the framework of S-D logic to maternal service settings in Pakistan. These main investigation areas serve as this research's main aim and objective. This 'value' investigation is related to micro-level service encounters between providers and users of maternal services.

Moreover, additional areas which are taken into account include: (I) the services' nature and involvement perceptions during encounters; (II) the offered range and type of resources that arise while using the service, and their exchange, integration and utilization by the patients; and (III) the actors' range (including patients, their families, other patients and hospital staff) and the organizations participating in the process of value formation. While undertaking this research, the ways in which the five axioms which underpin S-D logic are mapped to the health context is considered. The discussion about the level up to which the findings of this research can be mapped to the axioms of S-D logic and the current literature is included in Chapter five. In order to present the analysis, this chapter is divided into four sections. The users and providers' 'value' conceptualizations of service in the context of maternal services in Pakistan are provided in Section 4.1. Moreover, the processes which are viewed to facilitate the co-creation of value in S-D logic are also discussed in Section 4.1. Section 4.2 includes an analysis of value's positive nature regarding maternal service context and the way 'value' is accrued during encounters of services. In order to present this analysis' findings, S-D logic's particular terms are employed (including service, encounters of the service, resources, integration of resources, value proposition and value co-creation). These S-D logic terms are explained at first use and are also described in Appendix 1 glossary. In this chapter the term 'value' is used for 'value-in-use'.

4.1. Value Conceptualization and Value Co-Creation

Conceptualizations of value and the processes for the co-creation of value in the maternal context are described in this section. Although maternal service encounters and value perceptions could be different for every individual, this research shows that characterization of such encounters and perceptions is dependent on numerous concerns and themes. Six important value conceptualization themes have been identified from the analysis of data collected from interviews by employing both deductive and inductive approaches with the help of NVIVO 11. These themes are: (I) access to resources; (II) interactions quality; (III) integration of resources; (IV) the organizational elements; (V) spiritual belief; and (VI) trust.

The first of these themes, which is 'access to resources', is usually related to patients' ability for resource usage (skills and knowledge like operant resources) at a single practitioner's place or at an organizational level. This theme is primarily concerned with the resources which reside inside the hospital. 'Quality of the interactions', the second theme, considers the very nature of social connections among the actors via verbal and non-verbal communication. The actors involved in these interactions include patients, their friends and family members, hospital staff and, in some cases, other patients too. The third of these themes, called the 'integration of resources', refers to processes for exchange, integration and utilization of resources. It is related to the manner by which exchange of skills and knowledge takes place while using the service. This theme also incorporates the types of resources that are drawn upon during service encounters, involvement types in decision making, and the patients' capability for resource optimization, integration and utilization of resources. The 'organizational factors', the fourth of the themes, takes into account the service aspects, care and treatment being observed at health centers. The fifth of these themes, called ' Spiritual belief', is concerned with the patients who report 'feeling safe' or who report of 'being made to feel safe'. This theme also involves the participants who showed that they were reassured and that their anxieties and depressions increased or decreased. The sixth of these themes, known as 'Trust', is related to belief or trust in 'Allah' or 'God', since a majority of the involved patients belong to Islam and they have a very strong trust in Allah regarding their health. Moreover, this theme also takes into account the belief of patients in staff and service providers.

Table 15: Summary of Value Co-Creation Themes

Themes	Sub-Dimensions	Patients	Family Members	Staff
Access to resources	Ongoing access and support	21	5	9
	Knowledge and skills of staff	23	2	4
	Technical information	20	2	6
	Timely access/responsiveness	23	6	3
Quality of interaction	Reduction of information asymmetry	38	5	10
	Interpersonal and communication skill	42	8	10
	Patient-focused care	10	5	1
	Treatment time	11	3	5
Usage of resources	Operant and operand resources	46	7	9
	Nature of value proposition	–	–	7
	Meet expectations	21	3	3
Organizational factors		21	5	9
Spiritual belief		15	7	4
Trust		15	5	4

4.1.1. Access to Resources

One main ‘value’ aspect being emphasized here is access to resources. It features for a variety of data sources and takes into account the diagnosis, relevant treatment, and then the follow-up phases of service encounters regarding cancer. It is related to both ‘physical resources’ and staff skills and knowledge. Immediate diagnostics and treatments, both surgical and non-surgical, were considered critical by the participants of this research regarding future outcomes. To achieve complete lifesaving antenatal care, it is recommended that a pregnant woman make at least four follow-up visits (Chou et al., 2012). A critical aspect of the value emphasis in this theme is the transition between the role of a ‘generalist’ (where skills and knowledge are employed in one or more fields) and the provision of healthcare service in the context of maternal health.

While considering this theme, there emerged various sub-dimensions which are relevant: support and access on an ongoing basis, skills and knowledge of staff, technical information, timely access to resources, and the lowering of asymmetric of knowledge between staff and patients.

4.1.1.1. Ongoing Access and Support

This concept of support and access on an ongoing basis is concerned with possessing named contacts both onsite and offsite in order to contact the relevant person in case of any query or emergency at any time throughout the day.

"My doctor is very good to me. So, whatever the problem might be in different areas, I know I can just go to the phone and she will definitely guide me." (P15)

Dunn (2001); M. J. Gill and Harris (1991); Henderson and Vandenberg (1992) stated that the specific and most important need of the maternal woman is counselling and ongoing post-diagnostic support. Access to quality and appropriate care in antenatal[1] and postnatal period can improve the quality of service and outcomes (Rumbold et al., 2011).

"They get good care. They get support. They get confidence, you know, and there's always someone around. If we don't, if we aren't able to answer their query, there's always someone around to answer their question." (PT2)

Interpersonal communication is recommended as a part of maternal health education for staff to help in ongoing access and support (Hauck et al., 2013). By having timely availability of healthcare staff, and having their contact numbers, it has been reported by the patients and their attendants that they feel emotionally satisfied and reassured. This emotional satisfaction and safety has emerged as a critical value component in various encounters.

"We've got no end of contacts. So whatever the problem might be in different areas, I know I can just go to the phone and there's always someone there who will give you help. It's somebody to talk to, to alleviate those worries." (P3)

[1] Antenatal care provides appropriate screening, preventive or treatment interventions and health information to maximize the health of women and their infants.

Hauck et al. (2013) conducted qualitative research on pregnant women in Western Australia on their pregnancy experience and concluded that help in ongoing access and support from the staff helps the patients to overcome their fear and make their experience better. The importance of ongoing access and support is not just noted by patients but staff also commented on it, as illustrated below:

“I do agree the importance of ongoing access and support, but as I have many responsibilities at home it’s been difficult for me to give contact numbers. Somehow, I gave my number to some of my patients.” (Dr. A)

4.1.1.2. Knowledge and Skills of Staff

While considering the nature of value that emerged from usage of the service, various patients emphasized the health center. The staff's concentration inside one particular center was indicated by the accounts of patients, their family members and the involved staff. These types of accounts focused on the hospital's service overall. These accounts involved consideration of maternal health services as a central business which facilitates the provision of fast and flexible healthcare. Often, such accounts indicated the ‘emotional safety’ and belief in the staff’s capabilities inside the health center.

Women want safety for their babies and themselves, with care and reassurance throughout their pregnancy period, during birth and beyond. The life-saving capabilities of skilled healthcare depend on the timeliness of access to high-quality obstetric care during pregnancy and childbirth. The availability of healthcare staff is not sufficient if the equipment, infrastructure and the supplies for working are inadequate (WHO, 2015; Hulton et al., 2000).

“We try to provide health education every time they come to us. However, there are days when I’m alone and there are too many patients; I find it hard to get time to provide the required health information. But when they come in on the next visits we try to teach them.” (Nurse K)

According to Koblinsky et al. (2006), lack of skilled and trained personnel (service provider) is life-threatening for pregnant women and newborns. Koblinsky et al. (2006) also argued that a substantial barrier to progress in many developing countries, where maternal mortality high, is the sheer absence of facilities and staff.

“The important parts are that they have been dealing with females in a critical condition. I came from out of city and I was in a critical condition, all the doctors denied they would deal with my case but they did.” (P10)

The patients (including their friends or family members) considered the level of knowledge and technical skill (the operant resources) of the staff inside the health center to be better as compared to other centers. This showed that it is also associated with increased confidence in the provided care, as well as trust in the high standard of the care.

“This hospital and their services are good but sometimes due to many patients they don’t get time to talk to pregnant women.” (f6)

“The important parts are that they have been dealing for eighty-eight years. To me, this is the place to come. They are all specialists they know their jobs inside out and you can put plenty of trust in them because they know what they are doing.” (P5)

The participants including patients, their attendants and the center's staff mentioned that they ‘felt safe’ or were ‘made to feel safe’ by accessing the staff’s operant resources. This was because there were decreased concerns, as the ‘burden of worry’ was shared with the staff:

“I like how Dr. F takes care of me when I go there, she is very kind. I wish they could give her a competency certificate.” (P22)

“You feel as if you’re in good hands, so you haven’t got to worry yourself.” (P26)

The staff members perceived this as a way to develop a sense of friendship among their patients.

“I am satisfied with staff services, whenever I have any problem or pain I just go or call staff, she treats me well. She usually massages my stomach and the pain stops. I like her services.” (P11)

Technical information to resources is also a main and important aspect of value in addition to specialist knowledge and skills, ongoing access and support of the staff.

4.1.1.3. Technical Information

Technical information deals with technical devices, equipment, and the knowledge and skills of healthcare professionals to deal with the service user (patient and family). One of the patients illustrated it as:

"Doctor did not tell us the condition of my sister. As I asked her many times, suddenly she came to us and tells us about the C-section. I feel she is least interested about my sister." (F11)

Harris and Marks (2009) also emphasized the importance of technical knowledge of doctors, such as ultrasound to check the health of mother and child. Doctors have different points of view about this. They expressed it as:

"I know very well, when and how to treat the patients. They always interfere in every matter." (Dr. L)

The difference in the viewpoints of patients and staff about healthcare also affected their perceptions of knowledge validity. In some cases, the interactions were also perceived as negative when the knowledge provided by patients was viewed as invalid by the staff. The next account perceives this acknowledgment gap as a continuation for delaying the diagnosis process.

"Because I have a science background I also spent months trying to figure out what was wrong with me, I was trying to figure it out and in fact I actually came up with the diagnosis in the first week of January and the guy, my Consultant at the time, said you are way too young for that, don't be ridiculous. Well that's what it was you know." (P7)

Due to access and awareness through the use of technology some of the patients felt that their doctors did not have enough knowledge to deal with the patients:

"They came to see me and asked me to stand up. I had already told them that I couldn't use my legs." (P10)

HARDYMAN (2017a) stated that delay in diagnosis and technical failure in terms of staff skill and equipment contribute to dissatisfaction among patients and their families.

4.1.1.4. Timely Access/Responsiveness

Various participants of the study put emphasis on the need of quick and timely access to resources of healthcare. The issue of 'on-time access' emerged through the participants' conceptualizations about value, for example, a negligible waiting time was perceived as an important positive aspect in a service encounter. The dispensary's inadequate conditions resulted in the increased referrals of various pregnant women towards other dispensaries for some advanced diagnostics. The staff at healthcare reported that they were unable to carry out various critical diagnostic tests just because of the absence of adequate equipment.

"Due to large number of visitors, sometimes we face shortage of equipment. Otherwise we provide the basic maternal care service which includes expecting mother's health (checking mother's blood pressure, height and weight, blood and urine tests) and early identification and management of pregnancy-related issues or complications." (Dr. C)

A majority of the participants of the study reported fair and quick diagnosis of their cases, but, there were some exceptions. A few of these patients reported that they faced delays in diagnosis and access to adequate services. About five patients were of the view that their cases were delayed substantially (for about four or five working days) in order to get their diagnosis, which was viewed as having a negative impact on them.

"…… I went to see another doctor in my surgery, and he wasn't happy with the kidney chart on the computer and so he sent me to see a specialist Doctor Q. And she sent me for a scan thinking it was the kidneys but when the scan came back they'd seen it was ovarian cancer." (P12)

As the relevant treatment is started soon after the scans, the need for a quick transition between the provision of generalized and the specialized services arose in these patient encounters. In both cases, the 'value' seemed to have been co-created from the time when service provider access was gained, which consequently facilitated quick and faster treatment provision. From this it appears that it is possible for value to be diminished (because of delays) as well as to be accrued during service encounters. Reducing the time gap between reporting and diagnostics and getting appropriate treatment is considered a critical aspect of service experience. Various patients reported the waiting time as the most stressful time during the investigation and diagnosis of their cases. These considerations seemed to be associated with times when there were communication gaps between providers and users of the services, as described below:

"I was very confused and stressful because I experienced severe pain in lower abdomen. It was my first baby. The most stressful time was to wait for the doctor." (P8)

Therefore, it appears that the access to resources on time is concerned with the timely access to staff's operant resources. Perceptions regarding 'care' and ways to alleviate anxiety were observed inside the specialist center, where responsiveness is regarded as a timely response to various queries:

"Everything is instant here and you know you haven't got to be afraid of anything because you know they will deal with it straight away and that's what takes the fear out of it." (P5)

Maternal treatment needs speedy and accurate decisions. Delay in decisions may affect the patient and baby as well.

"They couldn't find anything on the scans so I was investigated three times. At last they told me that baby is fine." (P19)

The negative effects resulting from delayed diagnostics go beyond just the disease's physical impacts on patients they also have a large emotional toll. The validity issue of a patient's knowledge is related to the theme of 'quality of interactions'; however, is also directly related to the theme of 'reduction of information asymmetry'.

4.1.1.5. Reduction of Information Asymmetry

According to the study data, a knowledge imbalance among the patients and their healthcare care providers is evident and is referred to as information asymmetry. Also, there are substantial gaps among disease-specific expertise, the treatment processes and their results. Reducing this information asymmetry by having effective communication with healthcare staff is highly recommended in this research, considering that the ‘value’ of a service arises through its usage. For maternal service experiences, an essential part is the adequate sharing of knowledge and information. Getting important queries and concerns quickly addressed by the relevant staff seems to divide, off-load or significantly lower the ‘emotional burden’ of the disease. Reducing uncertainty and asymmetry in information related to treatment procedures and their outcomes is thought to be critical aspects of ‘value’, and so is facing the disease, as indicated in the following extract.

“I’m not satisfied; they don’t give us any health information. When I get there, the nurse tells me to stand on the weighing scale then she gives me malaria and tetanus injections, that’s it then I leave.” (P43)

Pregnant women’s dissatisfaction regarding the provision of health information is considered to have a negative impact on the feelings of pregnant women regarding health information. This lack of information provision at maternal health centers caused most of the pregnant women to have a negative view about health information.

“No, we are not given any health education. All they do is check pressure and weight and give us vitamins and tetanus injection. They do not even advise us on how to take care of the pregnancy. I am not satisfied.” (P11)

“As a doctor, I check more than fifty patients daily, how can I have time to listen to them and give them detailed information?” (Dr. K)

For the staff to customize the requirements of information according to the personal needs of the patients, the users of service are also required to participate in exchange of service and to share information about their disease and their particular needs for treatment and care. For the service encounter, the provision of information was perceived as a critical part. However, the requirements of service users varied with respect to the information level they desired to get and the manner for this information delivery. Some patients were of the view that they would like to gain the information in a stepwise process continued throughout the whole treatment period. Diversity in information requirements was also found in the comments of some family members and patients; sometimes the family members of the patients demanded to receive more information as compared to the patients themselves.

“[…] I think she’s had the hard bit of it really because she wants to know what is going on and I am quite happy to accept well they are going to do this or do that and that’s up to them you know. […] She says to me ‘Oh you’d let them cut your body if they wanted to,’ and I say ‘well it’s up to them’ (laughs).” (P15)

From these findings, it can be inferred that the nature of resources (i.e., information) shared while using the service and the delivery style differ from one patient to another. This diversity required the staff to consider a patient’s preferences regarding delivery manner and to be capable of adapting resources in accordance with the particular conditions. The staff's sensitivity to the emotional needs and requirements of patients while diagnosing and treating is a critical issue that arose in the study data, which was addressed in the ‘quality of interactions’ theme, the second theme of the main study.

4.1.2. Quality of Interactions

The type of interactions that take place among the patients and the relevant staff seemed to be a critical element for the formulation of healthcare encounters by the users of a particular service. In fact, as many as two thirds of this study's participants made comments about the nature of interactions while using the service and emphasized the treatment's relational aspects. The aspects emphasized here are: staff's interpersonal skills and the ‘language of care’, individual-focused care and the time devoted to the patient by staff.

4.1.2.1. Interpersonal and Communication Skill

While describing the value created by the usage of the service, the concept of ‘language of care’ was raised as an important field of focus for analyzing the interview data. Focus was not merely on ‘what treatment patients received’, but also on ‘how patients were treated’ (both on a verbal and non-verbal basis, along with listening the patients) during encounters of the service. The staff's interpersonal skills were considered a critical part of the service experience. The clinical results, although critical, did not alone serve as an area of concern for the patients, as explained in the following extract.

"Patients are free to inform us about any issue they have. There are comments cards available free of cost, at the help desk of every department in the hospital and there are drop boxes where these comment cards can be dropped, which are then collected by the hospital authorities and processed by the Quality Assurance Department." (Dr. F)

"It's a government hospital. A large number of people visit there daily; it's not possible for us to satisfy all." (Dr. L)

The personal and empathetic nature of communication and interaction was described by the patients. Also associated with this was a feeling of value and the provision of emotional support is described.

"We'll get you back up now'. 'We'll build you back up'. 'You are in good state'. 'You are great'. I heard these words daily around me. These words encourage me and help me to recover." (P17)

Some of the patients had a negative experience with staff, as illustrated in the extract below.

"There are a few persons in the nursing staff that do not behave and talk nicely with patients. This is really annoying … doctor's listen to us very patiently and talk to us very politely." (P26)

The significance of non-verbal communication as a means to interpret staff's approachability also emerged in the patients' accounts.

"When you walk along the corridor if you make eye contact with a doctor, he/she will smile and that makes a big difference to me." (P25)

"The expression of doctors and nurses are annoyed all the time. They didn't want to listen to us. That's why, sometimes, I prefer to go to a private hospital." (P6)

Criticisms of healthcare staff were not only about whether patients and their relatives were spoken to, but also whether the patients felt that they were being listened to. Mainly, it comprised staff inactions and a communication gap between the patients and the associated staff. There seemed some additional elements which affected the way staff's poor interpersonal skills influenced the whole service encounter. The effect of a negative encounter during service experience was considered to be increased manifold if these interactions were viewed by patients as a significant breach in the ‘expected behavior’ of staff (e.g. if the patients felt that they were being neglected, lack of empathy and regard for the patient, staff not providing the patients with valid information etc.). Furthermore, this impact was made complex if the outcomes of interactions or the lack of interaction led to a failure of access to resources (such as knowledge, advice and treatment).

“I just can’t believe it in this day and age how terrible it was on that ward. It was cruel. It created no amount of suffering, not just for me there were other patients there that were ignored. No point ringing the buzzer. I crawled on my hands and knees to the nurse’s station to ask for some painkillers to be told, ‘Oh I was going to come back and tell you but I forgot, you can’t have any more for two hours’.” (P17)

It was also observed by the researcher that restricted staff and patient communication and lack of interaction opportunities caused the interactions to be regarded as negative; two patients mentioned their concerns to the researcher while completing the study questionnaire.

“…………Well what do you want me to do with this? Now that you have told me this I will have to act on it. It is a really big thing to talk about! I am very busy trying to do more than one thing at once and I have already been told I have been spending too long with patients” (P2)

The participants also described their issues regarding being given their diagnosis and the value of treatment received by them. One of the staff members was also told of the diagnosis concerns felt by the patient. During this period, the unit was too busy because only two of their staff members were available since the others were on lunch break.

“My mother had fever and she was becoming unconscious and losing recognition at that time. We were really worried and we could not afford the unavailability of staff to handle this emergency.” (F5)

Absence of sensitivity within interactions may indicate that healthcare professionals and patients have different views about health and illness issues. It was important to observe that patients viewed that they were being treated as clinical objects instead of being perceived as individuals while making these interactions. Moreover, for various patients, the ability to communicate with non-maternal staff was an important aspect of service interactions. From these findings, it can be inferred that the staff's operant resources were viewed by patients in terms of their interpersonal skills as well as their disease and treatment knowledge.

4.1.2.2. Patient-Focused Care

The provision of ‘patient-focused care’ appeared as a critical aspect related to interactions, with various participants, on the basis of the importance of feeling that they were considered individuals and not numbers,

“[…] the whole system is geared to me or the patient or whatever it is and not just to producing, you know, facts and figures.” (P16)

A combination of these ‘care’ aspects and the ability to have ongoing access to resources gave the users of the service a feeling of reassurance and emotional safety. From this, it can be concluded that there might be an accumulation of value in service encounters as indicated in the following extract.

“I can’t really put it into words. I just feel safe. I think it’s everything. Doctors and staff are nice but they just treat me as a number.” (P45)

4.1.2.3. Treatment Time

Along with the focus on staff's interpersonal skills and availability of person-focused care, the participants’ accounts indicated that the ways in which the staff arranged and managed time for them as individuals affected their perceptions and emotions.

“Even when they are busy when you are having a pain they don’t make you feel like they are busy, they are there for you […] and they all seem to put you first.” (P41)

There are often contrasting experiences due to availability of less staff as compared to number of patients, as described in the following extract.

"I know patient wants more time. I wish to teach everything about pregnancy and issues related to it, but it couldn't happen due to time constraint." (Dr. S)

"I wish they could teach us about family planning and the side effects of birth controls. We heard people say that birth control pills cause infertility that's why some of us do not use them." (P33)

From this it can be implied that the nature of resources inside a center varies with respect to expertise, but also in terms of number of staff relative to patients (patient to staff ratio).

4.1.3. Usage of Resources

Customer resources are categorized as operand resources or operant resources (Arnould et al., 2006). Operand resources include tangible assets, such as economic resources, products and raw materials across which customers use allocation power. Operant resources are, however, invisible and intangible and are drawn from capacities and knowledge; these resources are held by every individual and they might be social or physical in nature (Arnould et al., 2006; Baron & Harris, 2008; Baron & Warnaby, 2011). Sensory-motor physical endowments, emotions, energy and strength belong to physical resources category. Skills and knowledge, cultural imagination and life expectancy are cultural resources. Although knowledge can be shared by professionals and patients regarding the patients' awareness of their situation and knowledge regarding the disease, the type of involvement in service experience seems highly dependent on the professionals who possess a dominant position in exchange of information. Probably, this is not surprising, provided the differences relate to medical knowledge and training; a point was made by a staff member of the Hospital:

"But yes, there is definitely an issue but, in the end, you have only got so long with the patient to treat, you cannot give them every bit of your medical schooling information." (S5)

The type of information to be given to enable patients to take part in processes of decision making, therefore, is not easily understood. The involvement type for exchange in the service as explained by the participants of the study has more alignment with ‘passive engagement’ forms. Participants reported that they were being informed and were included in the relevant discussions but largely to give ‘informed final consent’ instead of providing an active selection opportunity from among the treatment options.

“I tried to understand their terminology but failed. I asked them about my health condition and they gave me the same answer.” (P31)

“The maternal health information we provide helps the women to some extent but still there are challenges. As you know most of the women are uneducated and some do not even understand the basic terms.” (Dr. H)

From these conclusions it can be inferred that, regarding service exchange involvement, there is a wide range of meanings for both the patients as well as staff in a maternal context. It might be thought that patients wanted knowledge because of some personal priorities but also a desire to participate; in terms of the operant resources, patients and their family members need knowledge to participate, and staff members need to find a way to invite patients to participate. Regarding the nature of service exchange in the context of maternal services, it seems that a wide range of resources has been drawn on by patients during service encounters (personal resources like personality attitude, friends and relatives and their past experiences), excluding the resources of staff.

Most of the women felt that the pain and the various medical interventions were worth enduring because they had got what they wanted at the end – a healthy baby.

“I was frightened because the nurses kept coming back and forth and I get frightened, you know, in case I'm going to push or something. But I was in a positive attitude, that is half the battle and when you go for the treatment you are halfway there already.” (P49)

It was indicated by some participants they managed their emotions and also those of their family members on their own. In order to do so, they employed their coping mechanisms and friends or family support, as explained below.

“My family is very supportive, but I never told my pain to them because I never want them to be in tension.” (P23)

“No, I don’t know what a pregnancy danger sign is. But my mother-in-law knows it. She helps and guides me.” (P16)

Some participants indicated that they drew on the experiences of their friends and relatives to deal with their treatment. In fact, friends and relatives were the popular resources mentioned by the patients. In one case, a patient’s past encounter was used to advise a staff member about her treatment, as demonstrated in the following extract.

“I think she was a new member of staff, I was in pain, I said, ‘this is the time’ and she said, ‘No it’s not?’ and when I insisted she went and came with somebody and they said ‘Oh yes shift her in the labor room’ and I was just glad it wasn’t my first pregnancy.” (P28)

Along with their personal resources, patients and family members emphasized how they drew on the encounters of other patients, suggesting that there was a possibility for value co-creation from patient-to-patient aspect too. It is related to an increased understanding of treatment processes from a personal point of view and the provision of tips.

“[…] There was a female in the next bed to me and she already had two babies. So, I was a bit worried because it was my first pregnancy but she told me what it’s like, and what it was going to be like here and she told me the way; she explained it you know, then I didn’t mind coming here, you know, my worries had gone because she explained everything to me.” (P43)

Operand resources symbolize the assets which are tangible, such as economic resources and the products and raw materials for which customers use allocation power.

“The expenses are more but income is not high. I have four daughters and three sons. One of the sons has gone abroad but still not earning anything as he could not find a job. The one who has come with me runs a small convenience store … The travelling and accommodation expenses are totally covered by my sons. I don’t know how they pay.” (P32)

"Initially she was in a better condition, so we used to travel by public transport. Now she has got asthma as well, and does not feel comfortable travelling by bus; so we come by car ... That costs a lot of money ... At least the hospital should share 50% of the cost with my sister, because financial stress is an added problem for her besides the disease itself." (P2)

"It takes about 6 to 7 hours to reach here ... we rent a room nearby…the total expense comes out to be like Rs 7000 per visit...I can talk a little bit in Urdu, but I am not that fluent in speaking Urdu, so my brother helps me in communicating with the doctors and staff." (P10)

"It is really difficult to bear the cost of living, though the hospital is paying fully for my treatment, but still to pay for accommodation, transport, etc. we have to take loans, sell off a few of our households." (P16)

This would appear to suggest that when the users of a particular service do not feel that they possess the operant resources for assessing the quality and nature of the information they are provided with, the advantage they can get from these resources can be restricted and, in some cases, can result in negative consequences.

4.1.3.1. Nature of Value Propositions

Because of the patients' dependency on the staff as a resource, the nature of service as viewed by the staff to be offered to the patients was a critical part of the exchange and the integration procedures of a service. The viewpoints of staff about the nature of service seemed to have a close alignment with the key aspects of value that were highlighted by users of the service. Accessing their knowledge and skills, information provision, adequate care and so on, is reported in many staff reports, as described below:

"*So, I think just the values would be that it is patient centered and it's what the patient wanted and to be most comfortable, whether it be you're putting the cannula in or whether it be somebody dying. The patient is foremost […]*" *(Dr. F)*

"I think basically what I consider value is seeing the patient getting well." (Dr. G)

"For me, I expect that all relevant units within the hospital are working, then the right diagnosis is made, right drugs prescribed. I expect the patient to comply and when the patient gets well, then I will say I have achieved value for the time spent with the patient." (Dr. TD)

One of the staff expressed value as:

"My objective is that the patient gets well or receives the best care. So, if at the end of the day the patient gets well then I'm happy, and if the patient has received the best care they have to, then I'm happy including those who have to be referred, they need to get to the appropriate specialist, and when all this is done and the patient gets well, then I have achieved my goal and that is what I will consider value." (S11)

From this it can be concluded that staff at hospital were thoroughly aware of the service aspects valued by the patients.

4.1.3.2. Meet Expectations

Though access to expertise was identified by staff accounts, emotional assistance and person-focused care also serve as critical service provision elements; staff defined 'value' with respect to management of patient expectations.

"If they are not getting the service they want at the time they want, they are not going to be happy, so they are not going to get value." (S3)

Moreover, it has also been indicated by the staff accounts that value may be viewed in different ways by the patients as compared to the staff who might be involved in shaping expectations, as discussed below.

"Don't forget we are health professionals who've had training and we are taught to think that way. Think in a wider way. Who knows patients' value might just be that they want to get through the treatment, that's all it means to them." (Dr. G)

"Sometimes you meet patients who after the consultation tell you they are fine, and that how you handled their case had given them a reason to believe they are healed. So that also gives me as a

doctor some positive feedback right there in the consulting room, which is a good experience for me." (Dr. K)

While considering the role of expectations in influencing value perceptions, a few patients and their relatives told of having extraordinary expectations of the health center either because of previous experiences, or because of their knowledge about the center's reputation. However, for many participants, their service expectations were somewhat low or unknown as they had not inexperienced it in the past.

"No, I just didn't know. I didn't know whether labor pain was going to be painful." (P2)

"Also, the doctor's approaches made me feel very comfortable, which had a positive effect on my experience of the service. I'm emotionally and mentally satisfied when it happens like that, and I believe it helps me in the healing process ... for me it's not all about the drugs I receive, but the emotional aspect, I feel myself comfortable ..." (P33)

"I wish when I go there they could tell me about my pregnancy progress if it's doing fine or not. In the last pregnancy I had miscarriage one week after I attended the Hospital, may be if they told me something was wrong with my pregnancy I wouldn't have lost my baby." (P48)

4.1.4. Organizational Factors

The exploration of participants' conceptualizations of value indicates that families and the staff recognized features inside the Hospital as novel to the center, and which simplify value's positive conceptualizations. Predominantly, this is associated with the nature of staff resources inside the center, but it also takes into account geographical characteristics like organizational size and layout. The availability of an increased number of undergraduate and postgraduate trainees was also taken as a novel characteristic of the center, contributing substantially to the organizational operation.

"[…] But I think that there are so many other things with so many different parts to the Hospital that you don't get in other organizations. Like the quality of service provided in the hospital." (P25)

In fact, on the very first day of the researcher's visit to the Hospital, increased numbers of undergraduates and postgraduates meeting and greeting patients were observed by her, inside the department. This aspect of service was also observed by the patients,

"*But here, from when you walk in through the door, there's the trainee, somebody smiling …*" (P46)

Most of the staff who participated in this research described the center as a place possessing a positive work environment which can foster a sense of belonging to a community. Moreover, it was found that, about nine members of the staff who took part in this research had served the center for about six or more years. The hospital was a popular one among other hospitals of the area; the staff thought that this may result in a certain mutual sharing of values, as one member of the staff informally said that their role was just a 'pleaser' and possibly of the other people working at the organization.

"You know very well, that Pakistan is a developing country and no matter what we do, we are currently not in a position to attain the level of quality services which are being provided in the developing countries ... We need resources, not only in monetary terms, but also like, more skilled and learned staff which is well trained to help the patients in improving their life." (Dr. T)

Many patients and their relatives viewed the staff resource inside the Hospital as different from other hospitals with respect to the staff's approach towards their patients and possessing a shared valued set.

"In comparison to other hospitals, this hospital is providing very good services. The main problem arises when we have to come from other cities and we have to stay overnight. Then there is accommodation problem. There is Bahawalpur for patients, but the procedure to get a bed there is too hectic ... When I come for the chemo, then the hospital provides free meals, otherwise, not when I come for my short appointments ... The environment is clean and tidy and the atmosphere is hygienic ... It is more crowded here because it's a famous tertiary hospital with so many facilities." (P19)

The study data indicate that the organization's size and layout also add to the community sense inside the Hospital.

"I used to get free on time before but today its happening for the second time that I am kept waiting for long hours, just because a bed is not available." (P24)

"I have never had a problem here regarding any matter … Wheelchairs are very easily available … Toilet access is easy, and environment is very hygienic." (P6)

The building of the center has a long corridor, which connects many units and departments. The corridor enables significant traffic of both staff and patients inside the center. Many staff reported that how this space was utilized as a place for 'business dealings' or a place for service provision,

"*[…] you sort of stop on the corridor have a chat to someone and have an action point from that chat*" (S12)

as did patients,

"*When you stop a nurse in the corridor, you've got a query, the next thing you know she's dealing with it.*" (P17)

Although most of the staff perceived these organizational aspects as positive traits, a few of them also reported that it is not easy to inquire the prevailing working views and methods. It was considered to have long-term consequences for patients and their relatives if the dominant care philosophy continued to nurture and protect the patients.

"There's a way of doing things and it's a bit like, if it hasn't broken why fix it, why change, and in any system, change is quite challenging, and in Hospital, I think, there's been big changes over the last two or three years that have encouraged a different way, a different philosophy of looking at care, but the Hospital way is doing for, nurturing, looking after much more than working with empowering patients which works beautifully in the short term. In the long term it disables and disempowers the patients." (S13)

Findings related to organizational factors suggest that, overall, the nature of the staff resource inside the center added to the patients' service experience. This is useful with respect to skills and knowledge, and in terms of their commitment towards the participants and the organization too.

4.1.5. Spiritual Belief

Being an individual experience, the recovery of individuals who face different health issues is a process that reflects a journey of transformation and recognition. It is concerned with the formulation of a sense regarding these issues and accomplishing abilities to manage them (Hutchinson, 2011). Some have endured stress concerning the improvement of their disorder and timely recovery only by keeping a strong spiritual trust in Allah and His will. Some reported the inside thinking and dialogue that assisted them to face their health-related issues.

One of the female participants talked about how she gained energy to deal with the pain. Primarily, she believed it was Allah's will that she did so.

"I keep reciting my prayers throughout and do Zikr (Astagfaar) ... I remain busy with religious activities, keep up my prayers and recite The Holy Book." (P32)

One of the participants (female) reported that her religion and spirituality were critical in her recovery process; she defined this as an elementary philosophy, which made her think about the causes of her illness and strategies to cope with her illness.

"I go to work … I keep up with my prayers, and I keep myself busy … I follow my doctor's advice especially regarding my nutrition." (P33)

"I recite the Holy Quran, and Holy verses… meet my friends and chat with them… I watch tv … I do cycling as well … I love to do painting too." (P43)

"I am not aware that any social activities are arranged by the hospital for the outpatients. If I know, I will definitely participate and attend." (P47)

One of the female participants discussed her issues:

"I know our obligation as Muslim[s] is to seek help. I mean I am married for the last ten years; I faced three miscarriages. I am much improved since I started the medication. So many things have changed in my life. I am a different person since the first time I came here. I have changed. I mean previously I didn't used to study. I wasn't doing anything. I still have dizziness, and some bad habits like biting my nails. Maybe because I feel myself powerless and empty. But honestly, however bad the situation is now, it is still better than it used to be before coming here. I mean I didn't have a life. I didn't feel like a normal human being at all. I was just walking without a goal." (P22)

"On the day I got diagnosed, I kept crying for three days feeling so depressed. As compared to the day when I got diagnosed with this disease, I feel much better today, I look after my kids, keep up my prayers." (P49)

4.1.6. Trust

It is largely preferred by the women to get checked up by female doctors, particularly in cases of reproductive health issues. In some cases that may be because they are just more comfortable with a person of the same gender examining their private areas, but others are clearly in search of a female doctor who is aware of the feelings of a woman. One of the patients stated:

"I have trust in my doctor. The way she treats me and examines me always makes me feel comfortable." (P4)

"I have confidence that he will operate on me with good manners, with a lot of care and specialist skills." (P17)

Patients who do not feel free to trust their medical professionals have less chance of engagement in healthy attitudes. One of the doctors described this as:

"…… trust in health professionals and treatment creates long-term relationships and promotes shared interests and smaller power of difference with patients." (Dr. L)

"I saw my first gynecologist when I was 19 and recently married. Doctor told me that I am suffering with PCOS (polycystic ovary syndrome). The same doctor that diagnosed me started

me on medicines around the same time. Between the ages of 19 to 26, I was always on medication, with it changing over time. Yes , I am fed up of all the treatment and have no more trust in doctors." (P56)

Also, trust is very important for patient fulfillment and it leads to repeated appointments of patients with the same doctor on whom they have built trust.

"…They wanted to find out if I'm competent and a doctor they can trust. So if I had got any of their questions wrong, they would not have come to me again ... I think it's natural that if you trust somebody, you are at peace with him/her, you can freely discuss issues and you have the belief that, that person will not let you down … I consider it valuable." (Dr. M)

"Trust in the consulting room seems mandatory and reciprocal. The patient must trust me as a doctor and, likewise, I have to trust the patient about the information he/she is providing ... It is very important because when the patient feels uncertain of your judgment as a doctor, it creates a problem in managing his/her condition."(Dr. H)

"I was very dissatisfied with Dr. '1' then I met Dr. '2'. Dr. '2' gave me medicine, which improves my health. Now I have trust in Dr. '2'." (P34)

Some patients do not trust because of illiteracy; they do not understand the advice/instructions of the doctor and try to change it according to their perception. Trust matters a lot in health treatments.

4.2. Accumulation of Value

Through an exploration of value conceptualizations by users and providers of service in the context of maternal healthcare services, the previous section showed that the concept of value is a temporal one; it varies with time and depends on the particular context. From these findings, it can also be inferred that there is a possibility of value co-creation during individual or multiple service encounters in a maternal health context. These findings demonstrated the key factors that contribute to the apparent benefits of service utilization (including the quality of interactions, resource integration, access to skills and knowledge, and organizational elements) to patients' well-being. It also found that some patients had negative experiences many times, which leads to value co-destruction instead of value co-creation. Many researchers are currently working to find out the perspective of customers on value co-destruction and what the factors are that lead to value co-destruction. Most of the patients in this study experienced multiple maternal service encounters across multiple organizational sites. This finding showed that value can accrue over the course of single and multiple service encounters.

4.3. Value Co-Destruction

Maternal healthcare services investigated within this study cover indoor and outdoor patients. All the patients had experienced the services provided in the hospital. The perception of value co-destruction occurs not only within the hospital premises, but it is also based on the overall experience of the patient. Thematic analysis on data was done as used in value co-creation analysis and it explored two major themes of value co-destruction (see Table 16). These themes are quality of interaction and misuse of resources.

Table 16: Summary of Value Co-Destruction Themes

Themes	Patients	Family Members
Quality of interaction	25	8
Misuse of resources	12	6

4.3.1. Quality of Interaction

The main element of value co-destruction is the quality of interaction during service use. The main area of concern explored in this study in quality of interaction is interpersonal skills and communication between staff and patients, patient and patient, and staff to staff.

The ways in which patients were treated by administration staff in terms of relational ability was an essential part of investigating value co-destruction resulting from the quality of interaction during service use. The investigation of staff's relational abilities concerned not exactly how patients and their relatives were spoken to and identified with, but whether the patients felt they had been listened to. Fundamentally, this incorporated the inactions of staff and lack of communications among patients and staff. There seemed, by all accounts, to be additional conditions which affected the impact of poor relational aptitudes on the general understanding of administration and the component of significant worth co-pulverization caused. These are as per the following: ruptures in the normal lead of social protection staff, explanations behind collaboration, varying points of view of staff and patients, and past encounters.

The impact of negative cooperation amid medicinal services benefit experiences gave off an impression of being intensified if connections were seen by patients as speaking to a generous break in 'anticipated lead' or 'jobs' of social protection staff (e.g. patients felt they were being overlooked, lack of empathy, lack of mindfulness with respect to calmness and poise, lack of respect for the patient, staff not telling patients the reality of a situation, staff being discourteous to the patient, lack of any correspondence). This impact was, moreover, intensified if the aftereffect of interactions or lack of collaboration led to denial of access to assets (for instance learning, treatment and counselling).

Additionally, these interactions appeared to have a larger effect because it was impractical to test or redress the actions of staff.

"I just can't believe it, that I am suffering with pain but staff ignored me and treated another patient. I called her many times but she did not even reply. After shouting again and again, nurse came and gave me medicine." (P21)

One of the patients also described the ignoring behavior of the staff:

"After my C-section, one night I felt pain, I called the staff to give me medicine. After 20 minutes she came with medicine, 'Oh! I forgot to bring.'" (P32)

Limited interaction between staff and patients is also the biggest reason for poor communication. Due to dealing with large numbers of patients daily, less interaction is observed; the staff usually interacts with patients while giving them medical treatment or administering to them.

"I am quite busy trying to do more than one thing at once. How can I spend more time with patient?" (S8)

As most of the patients are illiterate and cannot understand the medical terminology, they asked about their health again and again. Staff members tried to help them but due to their busy routine most of the concerns of the patients remained untreated or unanswered. It was also observed that, in most cases, the family of the patient was the main cause of a negative impact. They tried to interfere during the treatment and sometimes they gave non-recommended medicines to the patients.

“I am surprised they gave the wrong medicine to the patients and now fight with me.” (Dr. C)

4.3.2. Misuse of Resources

The second important factor is misuse of resources by the staff and patients, which relates to delay in diagnosis, failure of the equipment, poor integration of patient and staff and, sometimes, misdiagnosis. Speedy reaction and taking action is a requirement of maternal healthcare staff because any delay can cause a serious health issue to the patient. Patients mostly reported a delay in health treatment. The negative impact of a delayed diagnosis has physical and emotional effects on patients.

“I lost my baby already due to delay in the start of doctors’ treatment. I fail to understand why the decision took time.” (P2)

Technical failure of equipment and skills and knowledge of the staff is also a big cause of misuse of resources.

“Due to unavailability of test services, I took my test reports from outside the hospital.” (P20)

Lack of skills and knowledge is also a big issue; patients perceive this as a lack of knowledge, lack in the nature of shared information and poor communication.

4.4. Chapter Summary

This part of the thesis has presented the first exploratory application of the S-D logic structure to a maternal healthcare setting in Pakistan. The conceptualization and trajectories of value (positive) across single and various health services encounters at the micro-individual level during maternal healthcare service experiences were explored. The key finding of this study is based on the experience of and the contextual nature of ‘value’ in a micro-level setting.

The analyses of observational data and interviews with the service users (patients and families) and service providers (doctors and staff) led to five study themes related to value and value co-creation trajectories, such as access/nature of resources, spiritual confidence and quality of interaction. These factors were found to be focal factors of value in the context of the service sector. During analysis, negative trajectories as value co-destructions were also found. Quality of interaction and misuse of resources (operand and operant) were the key factors. In the next sections, these findings are mapped onto S-D logic in the context of maternal healthcare.

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATION

5. Introduction

5.1. Discussion on Research Findings

5.1.1. Mapping S-D Logic onto Maternal Care Center

In Chapter four, the data revealed that in the background of a maternal service context, ‘value’ is apparent in terms of ‘service’. This process means an ‘actor’ applies his or her capabilities, knowledge, competences and experiences for others’ benefit (Lusch & Vargo, 2014; Vargo & Lusch, 2008). The study finds that an essential element of value is a decrease in knowledge asymmetry with the help of constant access to the skills and knowledge of the staff within the center. Many staff and patients thought that this process was a central component of the service exchange; introductory premises number 1 of the S-D logic framework applies: “Service is the fundamental basis of exchange”. The findings also reveal that the process of value co-creation contains numerous actors, with value well-defined in patients’ and healthcare staff’s interactions. Also, the staff’s perception of the nature of service they offer (value propositions) can be identified by the patients as aligned with dimensions of value. Within the context of a maternal service, this provides support to FP6.

The current study reveals that this value is provided with the help of healthcare staff. The S-D logic framework is revealed by the current finding as “firm/organization cannot deliver value but can participate in value creation and value proposition”. FP7 is also supported by the findings of the study as study participants were observed to be ‘resource integrators’ as they described the resources experienced by them throughout their maternal service, such as healthcare staff, personal staff, friends and family members. FP10 applies to the contextual, individual and phenomenologically determined nature of value which is also revealed by the current study. All this can be exemplified by the study which shows that ‘value’ is defined by family members and patients according to their personal experiences and the individual services provided by the hospital.

According to Vargo and Lusch (2008), attention to the interactional phases of service is focused on by the S-D logic framework where value is further created by the use of a service. The studies of Greene, Hibbard, Sacks, Overton, and Parrotta (2015); Janamian, Upham, Crossland, and Jackson (2016) revealed that concepts of patient activation and engagement and co-production in healthcare fit with the framing of a service user as someone who brings their own operant resources, like skills and knowledge, to the determination of value and service encounters.

It is also a fact that S-D logic does not apply to this context of highly specialized service. There are numerous areas and caveats discussed below in which S-D logic does not apply. It is known that competences/skills are applied in the assistance of another whereas the S-D logic framework is based on the set up of services exchange with each other (Janamian et al., 2016; Lusch & Vargo, 2006). The S-D logic framework does not address directly the effects of levels of engagement in service exchange; however, the S-D logic framework recognizes that the operant properties of several actors involved in value co-creation differ from one another. This study further reveals that there is a variation in the perceived levels of engagement in service exchange. FP1 implies that patients are always willing to participate actively in the mutual exchange of skills and knowledge and process of healthcare, which is not always true. Whereas, the participation level of the users of that service is shaped by the nature of resources that were integrated and offered to them.

The above-mentioned issues are considered within the context of the five main outcomes of this study and existing literature and research related to value, S-D logic, value co-creation, and the engagement of patients in healthcare (see Table 17).

Table 17: Summary of Key Findings and Mapping to Value Co-Creation

Themes	**Sub-Dimensions**	**Foundational Premises/Axioms (Vargo & Lusch, 2016)**	**Key Findings**		
Access to Resources	Ongoing access and support Knowledge and skills of staff Technical information Timely access/ responsiveness Reduction of information asymmetry	**FP1 (Axiom 1)** Service is a fundamental basis of exchange			
Quality of interaction	Interpersonal and communication skill Patient-focused care Treatment time	**FP6 (Axiom 2)** Value is co-created by customers (multiple actors)	Improve level of engagement Resource integration (both operand and operant)	Value co-creation	
Usage of Resources	Operant & operand resources Nature of value proposition Meet expectations	**FP9 (Axiom 3)** All economic and social actors are resource integrators			
Organizational factors		**FP10 (Axiom 4)** Value is always uniquely and phenomenologically determined by the beneficiary			
Spiritual Belief					
Trust					**Satisfaction**

5.1.2. Approach/Trajectories of Value in Maternal Services

In Chapter four, the findings reveal that conceptualizations of value change over time according to the experiences of study participants and context. This process shows that value can be formed at the level of a patient, within single or multiple healthcare encounters. It is difficult for any organization and actors to sustain related service experiences by themselves. Chandler and Lusch (2015); Lusch et al. (2007) thought that there is need to involve others (actors) and, in this way, they can offer value propositions like invitations to be involved in service systems. There is dissipation in lack of alignment in value propositions which means engagement is not possible anymore. With this process, the engagement cycle continues because actors find new value propositions.

5.1.2.1. Value Conceptualizations

According to this study, positive conceptualizations of value in the maternal services context are related to the maternal center instead of other organizational sites. There are two ways in which values were conceptualized:

(a) Interpersonal and relational aspects of care and,
(b) Trust, spiritual belief, and access to knowledge and skills of staff in maternal center.

The interplay of these factors with other organizational factors, such as the nature of the staff resource in the center, is considered to contribute overall to increased well-being.

The findings of the current study are consistent with the conceptual work of Ranjan and Read (2016). Their study offers illustrations of five of the six factors (i.e. personalization, knowledge, interaction, relationship and experience) that they think contribute to value co-creation. According to Mitleton-Kelly (2011), the healthcare staff (doctors, nurses) and the patients may have a better impact on attaining value with the help of strategies and behaviors that already exist, which may be further synergized through increased knowledge creation. The understanding of 'value' is further elaborated in this study which is offered in the context of maternal service.

Value, according to the access to skills and knowledge and the nature of interactions during service use, are conceptualized by the patients in two different ways either on value co-creation or value co-destruction. The findings of the current study revealed that value is considered to be positive experiences during the use of service rather than final benefits. This view emphasizes the positive relational aspects of the service experiences with the staff, such as interpersonal and communication skills. Examples show that 'value' was often defined as direct benefits related to health, such as successful delivery of baby and release from pain, or it was considered an impact on the perceived benefits to daily life like postpartum health. The effects of the service, such as treatment effectiveness, may have been unknown for the use of service or/and participation in this project, therefore, the stress is on process-based aspects of value. The findings of this research study further reveal that perceptions of value can change over time in line with experiences in the maternal-related service.

The work of Prebensen and Xie (2017) is also related to this study in terms of different ways of perceiving value because it is being perceived as 'outcome value' and 'process value'. This research further improves and extends understandings of value by showing that it is not perceived as static. In this study, 'seasoned' patients' experiences illustrate that their conceptualizations of value moved over time as 'resources' were increased in terms of success of treatment interventions and their knowledge of the processes of the treatment and disease. The outcomes of the study show that dimensions of value recognized by the patients have connections to the concepts of both 'service quality and services marketing' and 'literature related to health'. The data of this study reveal that the perceived proficiency of staff and the quality of collaborations were emphasized. The conceptual work of Ayalew et al. (2017) revealed that service quality in healthcare is related to technical and interpersonal aspects. The exploratory evidence of this study reveals the importance patients attach to these respective (technical and interpersonal) 'quality' dimensions in the context of maternal health service in Pakistan.

Huber et al. (2016) proposed a framework that outlined six dimensions of quality (i.e. patient centeredness, safety, effectiveness, efficiency, timeliness and equity) which is similar to the dimensions conceptualized in this study. The findings of the study show that there is a potential overlap between value, when applied in an exploratory context, and quality concepts. Similarly, such observations were also made by Medberg et al. (2016) in a study undertaken in the sector of Finnish banking rather than in a context of healthcare. The study of Medberg et al. (2016) is related to perceptions of value-in-use from SL rather than from the perspective of S-D logic.

The current study also finds that members of staff consider value in terms of the extent to which they were able to meet and manage the expectations of patients. The evidence of low and unknown expectations of the patients of ‘service’ before attending the center was outlined by this point. The data in Chapter four illustrate that the relationship between value and patients’ low expectations is interesting. It shows that by exceeding the low expectations of the patients, there is a potential for their perception of value to be exaggerated artificially. This study reveals the importance of staff who outlined the nature of the ‘value promise’ or ‘service’ they offer (Osborne et al., 2015). According to staff , there is a gap in the service quality between perceived and expected service named as ‘gap theory’.

Chapter 2 summarized a debate in the literature of services marketing about how much the concepts of service and value overlap, and how service quality is measured (Hardyman, 2017b; MEDBERG, 2016). The current exploratory study clearly contributes to these debates. The participants of the current study consider value to be the impact on their physical and emotional well-being in spite of observed similarities with dimensions of service quality. According to Gummesson (2014), it can be said that ‘value’ is considered a ‘wider concept’ in this research which extends beyond the evaluation of customer satisfaction and quality. MEDBERG (2016) suggested that service quality is considered as where value is operationalized by the customers.

It is obvious that further work is needed to untangle the practical relationship between value-in-use and service quality considering the nature of value within the application of the S-D logic framework and the context of a maternal service. Moreover, the findings of this work suggest that with relation to the experience of maternal-related service, this perception of value can change with the passage of time. The fact that this perception arises from use of maternal-related service is very important because patients may be involved with the service for a long period of time.

The current study provides data which support FP10 within the context of a maternal service as value is conceptualized as an experiential, phenomenological and dynamic concept. It is obvious that the nature of the service exchange (FP1) influences the value conceptualizations in participants' accounts while emphasizing the quality of interactions, access to the resources of staff and interpersonal skills. The nature of the resources and to what extent resource integration is perceived are considered contributory factors according to the type of value that is perceived by the patients. The outcomes of the study illustrate that FP9 is significant in the process of value co-creation. Lastly, the findings of the current research study show that in the health center, the nature of the service offered by the staff was related to the patient's value perceptions. There is a close relationship between the nature of the promised service and service as perceived by the patients as eliciting value. This illustrates that the FP7 is influential in value creation.

5.1.3. Value Co-Creation Processes

This section of the study describes the outcomes related to the nature of processes, observed in S-D logic as co-creation of facilitating value, such as resource utilization, service exchange and integration.

5.1.3.1. Level of Involvement/Engagement

The term 'involvement' is mainly defined as inclusion in decisions and discussions related to the health and treatment processes, and which further provides consent to the treatments to be undergone. The terms 'joint decision' and 'partnership' are used and this predominantly is related to inclusion in discussions and decision making rather than the distribution of role. Although a few patients describe their point off view on the decisions making related to their care and treatment, passive practices of 'engagement' appear obvious in this context. The above-mentioned findings reflect involvement in two ways: (i) the need to choose between interventions and treatments in different centers, or (ii) only one option is available. The current study presented some exploratory support to reveal that a few patients try to find information in order to enable participation in making decisions. The willingness of the patients to participate influenced their perception of participation, their perceived capacity to participate, the way patients were invited to participate, and belief related to the relative roles of the medical staff and the patients. Moreover, there were only a few staff members who discussed involvement as a shared decision making and co-production.

The findings of the study propose that there is a need to have a degree of learning before patients are able to use the resources required to qualify them to participate. This is apparent in the accounts of patients who made many visits to the center due to maternal health. This example shows that the level of engagement increases as patients acquire more information about their maternal health. The theoretical work of Kleinaltenkamp (2015) and Plé (2016) is further elaborated by this finding of the study, which suggests that prior experience of utilizing the resources increases: (i) engagement in the service for service exchange, and (ii) the ability to integrate and use resources. Engagement and resource integration is considered a significant process in the models of engaging patients in healthcare. According to Greene et al. (2015); Hibbard, Greene, Shi, Mittler, and Scanlon (2015), in order for patients to be 'activated', first of all they need to learn how to use the resources before they are able to participate actively. Furthermore, as referred to before, the mode of invitation by the staff to participate shapes the level of the patient involvement. The exploratory data illustrated in this study show that there were only a few members of staff who discussed co-production as a method to involve patients in the decisions of healthcare. In the current examples, the staff stressed the proactive part of the patients and one staff member challenged the 'nurturing' method that they perceived was implemented by the center. By doing so, it is understood that there is a relationship between the way patients are invited to take part in their healthcare and the extent to which patients are responsible for their own health issues.

In Chapter two, the literature review of this study, various explanations are suggested related to these exploratory findings. In 2015, Sweeney and colleagues suggested that participation in co-creating value activities is inclined to be accepted if it requires a slight effort such as co-operating with requirements of basic clinics in comparison to those activities that are difficult and demand more effort, such as emotional regulation, and proactive participation in decision making. Active participation in making decisions may not happen due to the high level of effort required to meet demands of the patients to incorporate the resources they want to actively participate, in terms of intellectually and emotionally.

The current study finds that the related types of involvement are consistent with the conceptual model of Wetter-Edman (2014) which suggests that there is a relation between emotional affect and participation levels. It was further suggested that there were higher levels of participation when affect levels show positivity. This study identified a significant element (patients' access to the resources offered by staff) of value that reduced knowledge asymmetry, which lessened depression related to knowledge of treatment outcomes and processes. This finding indicates that patients were not able to participate in their decision-making process of their care because of their emotional position, also, to what extent they can use 'resources' to participate in service exchange.

5.1.3.2. Resources, Resource Utilization and Resource Integration

The outcomes of the study reveal that there are various 'actors' who are involved in the co-creation of value. These comprise not only service users and service providers but also other patients, friends and family. Patient-to-patient value co-creation seems mostly to occur in the sharing of information about maternal service use and 'insider' tricks or tips for getting through processes of treatment. Such interactions probably function as a means of interpreting difficult technical information into a more manageable form while facilitating a sense of understanding in parts of the broad community of patients. However, if these experiences are negative, there is a potential for the occurrence of value co-destruction. Within the center, the key resources which were exchanged and accessed were the operant resources of staff. Direct interactions, such as face-to-face, were used to access these resources.

Furthermore, the outcomes of this study confirm the conceptual assertion of the S-D logic framework that resources are not inert and that they 'become' as they combine and basically form new resources which may create 'value' (Lusch & Vargo, 2006). This is evident in the accounts of the patients who drew on their past experiences of service usage to help with the process of decision making and to challenge the routine of a proposed treatment. This finding indicates that information exchanged in past encounters in healthcare is combined to make a 'new resource' which benefit patients in later encounters in the maternal health service. It is evident from this study that patients have different views regarding their desire to access knowledge of treatment results and processes. This study is also built on the research work of

Skålén et al. (2015) which emphasized that hospital staff should adapt their value propositions according to the usage processes of customer resources.

According to Hollebeek (2017), the S-D logic framework is premised on the capability of ‘actors’ to assimilate resources, as briefed by FP9. The outcomes of the current study indicate that patients thought that knowledge was the main resource. Whenever patients were capable of accessing and assimilating the resources offered by the staff in the center, this was linked with greater well-being or reduced depression, as knowledge asymmetry was reduced. However, it is evident that when there is a breakdown in the resource integration process, results are negative and may lead to value co-destruction.

Within this subsection of the study, on the basis of outcomes discussed, it would appear that processes of resource integration (FP1, FP9) and service exchange influence the extent and nature of value co-creation (FP6, FP10). This can be observed in relation to the different levels of patient involvement in decision-making and direct care processes, as well as the capability to use the resources that are offered. The nature of ‘value propositions’ offered by the staff to the patients (FP9) is also discussed in this section of the study. The offering of the ‘resources’ outcomes in the benefits of the patients cannot be supposed. The way, in which resources can be optimized, used and combined needs further careful attention in the context of a maternal service.

5.1.4. Value Co-Destruction

There is increasing awareness in the field of marketing literature and S-D logic of service failures. Service failure gives rise to the destruction of some values that can be functional, emotional and conditional. Plé and Chumpitaz Cáceres (2010, p. 431), in a conceptual paper, described value co-destruction as: “[...] an interactional process between service systems that results in a decline in at least one of the systems’ well-being (which, given the nature of a service system, can be individual or organisational)”.

Plé (2017) described value co-destruction as a process within systems of services which shows a decrease in a portion of a system function provided that the nature of such systems is either individual based or organizational based. Vargo and Lusch (2017) explained the notion of service system as a process which includes a team, information and use of technology in order to connect other systems. Skålén and Edvardsson (2016) stated that value co-destruction is an interrelation between customer and service provider in order to work smoothly and gain more benefit. Cherry, McGrath, and Baumann (2018) stated that the misuse of power by either customer or service provider, gives rise to value co-destruction. The misuse of power occurs when either the customer or the service provider fails to behave properly, as stated by Lintula, Tuunanen, Salo, and Myers (2018). This study found that value in healthcare is self-oriented and based on the patients' emotions, experiences and functional attributes.

An absence of information is an important factor of value co-destruction; Vafeas et al. (2016) stated that the main contributors to the emergence of value co-destruction are an absence of information and co-coordinating skills. . Prior and Marcos-Cuevas (2016) stated that a loss in well-being leads to parties neglecting to communicate or coordinate with each other. Although there are various drawbacks and losses of value co-destruction, awareness and use of the notion is still very limited. It has been observed from several types of research that both the provider and the customer are affected by a lack of proper information because interaction between the provider and the customer fails if either of them is unable to provide clear information. Hence, an absence of information is one cause of value co-destruction.

Osei-Frimpong et al. (2018) stated that both employees and the customer have different points of view about value co-destruction which may result in either a positive manner or negative manner. Several public services are trying to create awareness about the concept of value co-destruction. The end users of value co-destruction are the general public which leaves both the negative and positive impact over this concept.

One of the doctors described this issue by stating that we fail to develop value co-creation when we cannot explain clearly what our firm wants to offer. The inability of a provider to convey the right information to a customer weakens their relationship. The converse is true; if customers cannot give correct information, then it is problematic for the providers if they are unaware that their products do not work properly because the customer failed to report this issue. Value co-destruction also occurs when a consumer does not follow steps of guidance and therefore processes information in a wrong way. This act can be either intentional or unintentional. It can be unintentional because maybe the language is too hard or too technical for a layperson to understand. It can be intentional if a customer ignores instructions and does not follow the steps provided in a manual to operate the product.

Another main reason behind value co-destruction is lack of trust. If the customer and the provider fail to trust each other, then their relationship bond will suffer from value co-destruction. Vafeas et al. (2016) stated that value co-destruction is caused by several factors, such as lack of communication, lack of coordination, lack of trust and an imbalance of power.

This thesis reveals that customers experience value co-destruction due to their unrealistic expectations. If a customer raises her or his expectations because of previous healthcare experience, then the hospital staff cannot meet the requirement of a customer; hence, collaboration about goals and needs is needed. The relationship between patients and service provider (doctors and staff) can be weakened because of an increase in unrealistic expectations (Järvi et al., 2018) because both the patient and the provider realize the fact that they fail to achieve their desired goals (the service provided by healthcare center is not up to the requirement and expectations of a patient). However, if patients do not express their feelings and cannot give a review about the service, then healthcare will not be able to meet the requirements of users in the future. The providers accepted that they contribute to value co-destruction when they fail to deliver the service according to the requirements of patients. When patients visit the maternal health services from the healthcare unit, they expect service that is of high quality. Interviewees stated that it is the fault of a provider to fail to provide a good service by giving false expectations to maternity patients, such as normal delivery and post-partum health, and if this service is found to be faulty then the patient experiences disappointment. If maternity patients admitted to the hospital for delivery find the attitude and the behaviors of the staff and doctors to be not very supportive, then they did not receive the services as per their expectations.

There are two types of failure that exist in the public sector: public service failure and public value failure. Van Dooren and Van de Walle (2016) stated that the term public service failure indicates a failure to provide necessary services to customers according to their desired requirements. Whereas public value failure depends upon four factors: misuse of the power of any user by another user, misuse of the power of any user by the provider, misuse of the power of any provider by another provider and the last one is misuse of the power of any provider by the user (Sami, Jusoh, Nor, Irfan, & Qureshi, 2018).

It has been observed that value co-destruction occurs when there is an inability to serve. Many patients were upset by expensive offers: when a customer feels that the product is overpriced or costly then they start to believe that they are paying more and receiving a low quality product. If a provider is pressurized to increase the price of a product, then this increase in price leads to the disappointment and dissatisfaction of customers. The government is responsible for the quality of the service given in public sector hospitals and nonprofit organizations with nominal charges. This study identifies that at many places patients pay money for tests, laboratory services, medicine and so on. The medical superintendent justified this point by stating that the center tends to focus on patients not on revenue and it optimizes its functions in order to make patients comfortable; however, patients expressed dissatisfaction. It is our prime duty to see that change from the eye of a customer. Many of the participants mentioned that customers apply force to organizations in order to achieve what was required. One of the problems raised by the providers is that they cannot appreciate the point of view of customers every time; this happens in co-creation projects when the opinion of the customer is not given a high value of importance and the final product is launched according to the design of the health requirement.

One of the reasons behind value co-destruction is an inability to change. Both the provider and the customer fail in the changing process. The changing cultural environment of an organization, the after-effects of megatrends and verdicts on service enhancement are factors that enable the customer and the provider to change their behavior and act accordingly. If either the customer or the provider fails to do so, then the other party experiences a decrease in their well-being. Many studies revealed that inability to change occurs in relationships with customers, between customers and firms, or between consumers and actors of government. When providers do not respond then they fail to provide new services and products to their customers. Changing rules and regulations over time and the involvement of new competitors are the factors which force a firm to respond. Moreover, if any customer is unable to behave in a new way then there is an emergence of value co-destruction. The doctors stated that we do not force any customer to avail themselves of new service functions. Although these self-services are very helpful and easy to use, still many customers fail to use them properly or make the most of these services. It can be argued that if customers are not willing to make use of services that companies have developed for the ease of customers, then they are simply undermining the efforts of the providers. Providers are willing to find any possible way to minimize cost and increase the efficiency of services. In order to achieve this goal of efficiency, customers have to behave in new ways in many situations. However, if customers are not willing to avail themselves of the offered services, then the opportunities to make customers happy become very low.

Another factor of value co-destruction is the absence of expectations. When customers are unable to describe their needs and requirements to providers, then it becomes nearly impossible for providers to develop a product which matches the requirement of a customer. Value co-destruction is experienced by both customers and the providers because customers fail to receive a product according to their needs and requirements and the providers fail to deliver because the expectations are not clearly defined by the customers. Many providers stated that they cannot develop a value co-creation relationship with customers until or unless the customers clarify their needs and requirements. Participants of the study expressed this problem by saying that most customers cannot state their needs which makes it very hard for providers to fulfill these needs. The doctors explained this issue by stated that customers do not aware of the needs of their treatment. Customers who change their needs and demands frequently are not the happiest customers of a firm.

This study also finds that the misbehavior of service user to service provider or service provider to service users is a factor contributing to value co-destruction. The negative misbehavior of a service user (patient and families) causes unnecessary stress for the providers (doctors and staff) which results in a decrease in quality of services. Misbehavior of customers can occur when they misuse the services. One of the doctors described that during the labor pain of patients, the staff try to help the patients by providing timely medications but the attitude and behavior of the patients and their families can humiliate the staff.

Blaming is the final and the main reason of value co-destruction. Although hospitals put every effort into customer satisfaction, mistakes can happen. A good reputation is maintained by providing quality services to the patients and delivering a good service which fulfills their requirements. If the reputation of the maternal healthcare center is lowered by the negative feedback and comments of patients, then it will be very difficult for the hospital management to gain a competitive edge. Studies revealed that there are two types of blaming: one is harmful complaining which is termed as an independent aspect, while the second is a specific aspect. Customers create value co-destruction by harmful complaining on social media platforms such as Facebook, Twitter and Instagram. Blaming is harmful when a patient complains about a very small mistake of a doctor or staff and misbehaves with the them publicly. Several case studies revealed that if patients failed to get the result they desired from treatment, then they start blaming the staff and doctors. A survey of quality services provided to the public observed that failures occur due to negligence of patients and their families and due to noncompliance with doctors' perceptions.

Laamanen and Skålén (2015) posited that in a value co-creation process, customer and service provider coordinate to work smoothly and gain more benefit, but in some cases the value co-creation process lead to value co-destruction. Value co-destruction arises through the intentional or accidental misuse of operant resources (knowledge and skills), for example acting in an unexpected and inappropriate manner. In the literature related to service marketing, there is a disparity in building the concept of value co-destruction and failure of services. Skourtis and colleagues (2016, p. 565) argued that service failure and service recoveries are discussed under G-D logic. They suggested that service failure and service recoveries should be conceptualized and studied under S-D logic as value co-destruction caused by service failure leads to some destruction of value (such as social, conditional and functional) in a similar way to value co-creation.

Osborne et al. (2016) stated that general perceptiveness of the concept of value co-destruction is absent in the environment of the public sector. Value co-destruction is generally studied in private organizations. Hardyman (2017b) stated that there is a need to elaborate the concept of value co-destruction in private and public organizations in different contexts.

5.2. Contributions

In the areas of services marketing, hospital management and health services research, the current study offers conceptual, exploratory, and policy contributions that are discussed below as per the nature of each contribution.

5.2.1. Conceptual Contribution

In this study, the main conceptual contribution came from the assessment and identification of courses of value (positive) as outcomes of service-in-use. The results of this study illustrate that value is a concept with a temporal nature that changes with the passage of time and also according to the lived experiences of individuals. This research work has shown that according to the service experience, value can be produced at the level of service user. Value cannot be considered essentially a linear process. Further, the perception of value can fluctuate due to several service encounters. In services marketing and the literature of public management, this process has not been theorized before in this regard. This research project is the first step to discover trajectories of value regarding multiple and single service encounters. Furthermore, this study considers how value is collected at a single service customer level within and over single or several service encounters at micro level in one or several organizations. Although the current study collected data in a particular context related to healthcare, similarities can be found with other areas of knowledge industries if: (1) service users go between specialized and general provision, and (2) service can consist of several service encounters. Such concepts are relevant for areas that provide expert service where involvement with the service may be extended and there is continuous engagement instead of one-off distinct encounters. The current research study adds to the progress in understanding the process of value co-creation, considering the lack of other work that has reflected lines of value at a single service customer/user level over numerous encounters of micro-level service.

5.2.2. Exploratory Contribution

This research work presents exploratory information regarding the level to which S-D logic maps onto a context of a maternal health service in Pakistan. There have not been any exploratory investigations of S-D logic in this particular service context until now. This research work adds to the current information in two key areas.

First, this study covers present considerations of the concepts of ‘value co-creation’ and ‘value-in-use’ in the context of a maternal health service in Pakistan. Perceptions related to value have been discovered from the points of view of service providers and users; this is an area which is under-researched in both hospital management literature and services marketing literature. Currently, there is no exploratory study that explores the link between perceptions of value-in-use and patient involvement and S-D logic. Similarly, no study has discovered the ways in which patients perceive value (when it is framed as determined and supposed in use) in a context of a maternity service in Pakistan. However, a few studies have explored value co-creation in the context of healthcare; these studies reflected behaviors linked with value co-creation and investigated to what extent users made an effort to assimilate resources, rather than investigate the ways in which value is conceptualized (McColl-Kennedy et al., 2012). By comprehending how value can be perceived in a context of a maternity service, there was a possibility to report the aspects contributing to the formation of value in the current service context.

Second, the current study explores understandings of the procedures comprising value co-creation (resource integration and service exchange), which have been regarded in the past as a black-box that has not been explored (Pfisterer & Roth, 2015). This study illustrated that the ability to participate in service exchange, and to practice and assimilate the resources presented by staff, was affected by: (a) the way in which resources were offered, and (b) patients’ awareness of their ability to participate in and manage resource assimilation and exchange.

It should not be considered that all resources provided to the patients could willingly be assimilated and used. The outcomes of the study indicated that patients have different views and preferences regarding the approach, such as knowledge distributed in stages or all at once, and mode, such as verbal, written and electronic, of conveying resources. In a few examples, co-learning was needed to enable patients to improve and take advantage of the offered resources. The significance of interpersonal skills was also highlighted by this study during the exchange of services and the way in which resources were provided and replaced to patients.

On the basis of these results it can be revealed that the main suppositions in the framework of S-D logic, in connection to the nature of service exchange and processes of resource integration, do not map onto the fabric of the context of maternal healthcare in Pakistan and they need further expansion. The study has shown that the ability to replace, reach, use and assimilate resources is understood as a precondition for value co-creation. The results of this work have shown that a divergence in these procedures can have a negative result instead of a positive course of value.

5.2.3. Policy Contribution

The results of this research have implications for service delivery and healthcare policy. Particular attention has been given to the nature and value of connections (conceptual, emotional and mental) in maternal healthcare service eperience. The outcomes of this research strengthen the significance of concentrating not only on healthcare results but also of care. The relational features of care are of concern to patients and they affect overall service practices. In some examples, this can have an impact on the resources of healthcare, treatment, care and the ability to assimilate and use the offered resources. These results can be used to assist in the development of training programs for staff who are working in the context of healthcare. Moreover, in understanding the ways to add value in the context of a maternity service, this study has indicated that service providers may want to improve experiences of negative service, as faced by other organizations, and improve the service they provide. This may reveal further unpredicted demands on the available resources in the organization of healthcare.

5.3. Limitations

5.3.1. Design of the Study

There are various limitations in this study. One of which is the adoption of an individual case study design. The main reason to use this design is based on critical assessment of present theory or related literature, the use of a case study approach has the potential to limit the ability to transfer the outcomes to other situations (Yin, 2009a). Structures specific to the maternity center may have an impact on the nature of the phenomenon being studied and on value, and the way value was formed, conceptualized and encountered in this work. This applies in particular to the outcomes related to organizational aspects and the nature of the staff resource in the center. As this research work was conducted in the healthcare context of Pakistan, which is publicly funded, it can be said that the findings of this research work were influenced by this healthcare organization and by cultural implications. Similar arguments apply to the setting and the way in which the study was conducted to show local variances in the nature of service provision.

5.3.2. Nature of the Study

A cross-sectional design was adopted due to the burden on participants of the study, the exploratory nature of the research work, and time constraints regarding doctoral work. These factors led to the fact that all participants were interviewed at a single time point; although there were differences in the patients' length of stay at the center, their data were collected at a specific time point when the patients were being interviewed. Future research studies could adopt a longitudinal research design and interviews could be conducted at more than one time point regarding their experiences of maternity service. Although a few patients revealed their encounters over time, the outcomes of the study would be supported, especially the changes in opinions of value during service journey, with the help of a study conducted at several time points.

5.3.3. Sample Selection

Most of the study participants interviewed for this work were first recognized and approached by healthcare staff members instead of the researcher. This method was used in order to avoid a feeling among patients that they were obliged to participate. This is also related to the approval the researcher had to obtain to get information for the study. However, this could mean that staff only approached those patients who were vocal so that they would share their experiences willingly. Another limitation of the study sample was that staff participation was influenced by the availability of the staff who had to stop work in order to take part in the study. Some attempts were taken to minimize this issue, for example the researcher employed various strategies such as various 'drop-in' interview positions that did not need to be pre-organized.

5.3.4. Qualitative Research

The fourth limitation is related to the qualitative research design, in which the researcher is a tool in the research design as well (Creswell et al., 2007). This can lead to the fact that the interpretations and the nature of the data can be strongly influenced by the experiences and beliefs of the researcher. Discussions in Chapter 3 explain how the researcher tried to reduce this bias while conducting the study.

5.4. Recommendations for Future Research

The current study has discovered features and conceptualizations of value which contribute to descriptions of value. Although this study was conducted as a collective case study across three locations and had the limitations mentioned in Section 5.3., the results may be transferable to the contexts of other maternity services. Moreover, it can be said that the dimensions and results may be transferable to other contexts of healthcare that care for conditions that are highly dangerous like maternity, such as pulmonary obstructive airways. Further, the results of the study could also be relevant to knowledge services other than healthcare, such as law, in which: (a) there is a great degree of contact among providers and customers of the service, (b) stake is considered high, and (c) there is a considerable asymmetry between the knowledge and experience of providers and the knowledge and experience of customers of the service. This can help to conduct the future studies where these dimensions can be utilized as to what extent they are relevant to other contexts. This would need to refine some sub-dimensions, like the negative impacts of the conduct, but this can be outlined again as negative impacts connected to the involvements specified to other contexts. Recommendations for future study are mentioned in detail below.

A cross-sectional research design was adopted in this study. Future research studies could utilize a longitudinal study design in order to investigate how value is considered at various time points over a long period of time while using a service. Exploratory research can also be conducted to point out some specific actions in a healthcare context that form value co-creation. The current study illustrated five key areas: resource use combination, organizational aspects, access to resources, interactive quality and spiritual nature of beliefs. This research illustrated some instances of practices and actions contributing to the formation of value; the information related to positive concepts of value was explained in a general way. Future research could give more detailed instances of both value co-destruction and co-creation practices related to providers and customers of the services. There are some significant areas in the context of public service to investigate, such as particular actions and performances that add to or limit the formation of value and involvement in healthcare.

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APPENDIX 1: Glossary

Actors – According to S-D logic, Domecq et al. (2014) defined that actors are those persons who have agency and the capability to perform purposefully. In this research work, this term is related to those persons who are engaged in value co-creation or/and value co-destruction procedures such as users, patients, providers, their friends or families, and the staff related to health care.

Goods-dominant logic - According to Domecq et al. (2014); Lusch and Vargo (2014), it structures exchange in ways of elements of output, with the construction and exchange of properties making the main constituents of economics and business.

Interactive value formation – It is the value which is co-created during a collaboration between the user and the provider. It is different from non-interactive value formation where users use the value which is formulated by the provider (Storbacka et al., 2016).

Organizational sites - Value co-destruction contains episodes in which each episode is categorized in ways of whether it is linked to the use of service at one site of organization, such as one provider of healthcare, or at various sites of organization, such as multiple healthcare providers.

Patient-centered care - It is called an image of health care as a corporation, in which customers' (patients), standards and likings guide decisions related to hospitals and they have essential qualifications and help to enable patients to decide and engage in their own health.

Patient activation - Domecq et al. (2014) explained patient activation as the point that persons comprehend their demand to have a dynamic part in the administration of their healthcare and, most importantly, it is related to their skill, information and confidence to start this role of self-management.

Patient engagement - Domecq et al. (2014) described patient engagement as patients (their representatives as well) and healthcare staff cooperating in dynamic partnership at multiple parts across healthcare system to increase healthcare and health. This thing further engages the interventions made to progress resulting behavior of patients and activation.

Resources - Lusch and Vargo (2014) defined resources as anything that user or provider use for help. In S-D logic, resources are categorized as 'operand', which means other resources are needed to act on them so benefit can be provided and often they are fixed and concrete. Resources are also classified as 'operant' which means dynamic and abstract; capable of working on other resources.

Resource integration - Lusch and Vargo (2014) described it as the procedure of integrating resources that can lead towards the formation of new resources which can be helpful in co-creating benefit or value.

Service - It is a process where an actor relates his/her knowledge or skills for the assistance of others (Lusch & Vargo, 2006, 2014).

Service encounter -Jo Bitner et al. (1997) defined it as a time period where a consumer is in direct contact with the service.

Service system - According to Vargo and Lusch (2008), it is a system based on structures of resources, such as knowledge, characters and technology, that interact to further systems by value propositions.

Value - The studies of Chandler and Lusch (2015); Lusch and Vargo (2014) defined value as assistance and progress in welfare co-created while utilizing a service that is always exclusive to a specific context.

Value co-creation - It is concerned with the benefit formed by actors combining service assistance with other resources. S-D logic defines it as beneficiary of service who decides and evaluates the nature of co-created value (Lusch & Vargo, 2014; Wieland et al., 2012a).

Value proposition - The way an actor co-proposes another actor in order to effect positively or a promise to deliver value (Lusch & Vargo, 2014).

Value recovery - It is based on actions undertaken by persons (service users or providers) to stop further co-destruction of value and to decrease the influence of past adverse outcomes or effects on the welfare of the service users (patients) which can be emotional as well as physical.

APPENDIX 2: Participant Characteristics

Patients

Characteristic	***Patients (N=56)***
Gender	
Female	
Age Range	*12*
18–22 years	*12*
23–27years	*12*
27–31 years	*10*
32–35 years	*10*
35⁺ years	
Labor Ward	20
Emergency	20
Outdoor Patient	16 (3 previous patients had already received treatment from hospital)
Treatment reported	
Postpartum	15
Gynae	25
Obstetrician	16
Staff	
Characteristic	***Staff (N=23)***
Gender	
Female	*17*
Male	*6*
Age Range	
25–35 years	*4*
35–45 years	*7*
45–55 years	*4*
55^{+}	*8*
Role	
Nurses	*7*
Obstetrician	*4*
Gynecologist	*3*
Postgraduate Trainee	*4*
Undergraduate Trainee	*2*
Management Personnel	*3*
Family Members	
Characteristic	**Family Members (N=13)**
Gender	*10*
Female	*3*
Male	
Age Range	
25–35 years	*5*

35–45 years	*7*
45–55 years	*1*
55⁺	*None*

APPENDIX 3: Discussion Guide

A) Interviewee represents the patient's perspective

1. Introduction
    a. Self-introduction of the interviewer
    b. Explain the purpose of the meeting
    c. Explain the purpose and objectives of the study
    d. Guide interviewee through the information sheet and consent form
    e. Introduction of interviewee (name, age, educational background)
2. Past experiences of a service encounter with a physician
    a. Identify key incidents and ask for detailed description
    b. How incidents were handled/managed (negative/positive)
    c. Effects on the service encounter
    d. Your perception of these previous experiences
3. The service encounters process
    a. Describe the consultation process
    b. Cover the following areas among others:
        i. Involvement
        ii. Explaining
        iii. Opportunity to ask questions
        iv. Understanding
        v. Assertive responses
    c. Interaction process
        i. Information sharing,
        ii. Listening,
        iii. Communication (in terms of language usage)
    d. Any specific roles?
        i. Active
        ii. Passive
    e. Expectations before, during and after the encounter
    f. Your expectations of the physician
    g. What kind of resources or contributions are needed from the patient
    h. What does the patient do before and after the service encounter?
4. Behavioral issues
    a. Describe the relationship with the physician
        i. Effects on your participation in the service
    b. Doctor orientation and collaboration
    d. Effects on the level of participation or involvement in the service
    e. Beliefs and perceptions in consultations
    f. Patient compliance and influencing factors
5. Perceptions of value
    a. Perceived value of the consultation
    b. What value means to the patient
    c. Value outcomes of the service
    d. Impacts of the value co-creation process on the service delivery
    e. Effects of actor characteristics on the value co-creation process

i. Gender of doctor, age, education, frequency of visits, length of service of doctor

6. Closing phase
    a. Check to see if all necessary areas are covered
    b. Any additional information
    c. Any questions
        d. Thank the participant

B) Interviewee represents the doctors' perspective

1. Introduction
    a. Self-introduction of the interviewer
    b. Explain the purpose of the meeting
    c. Explain the purpose and objectives of the study
    d. Guide interviewee through the information sheet and consent form
    e. Introduction of interviewee (name, age, educational background)
2. Past experiences of a service encounter with a patient (with emphasis on incidents)
    a. Identify key incidents and ask for detailed description
    b. How incidents were handled/managed (negative/positive)
    c. Effects on the service encounter
    d. Your perception of these previous experiences
3. The service encounters process
    a. Describe the consultation process
    b. Cover the following areas among others:
        i. Involvement
        ii. Explaining
        iii. Opportunity to ask questions
        iv. Understanding
        v. Assertive responses
    c. Interaction process
        i. Information sharing,
        ii. Listening,
        iii. Communication (in terms of language usage)
    d. Any specific roles of patients?
        Active
        Passive
    e. Expectations before, during and after the encounter
    f. Your expectations of the patient
    g. What kind of resources or contributions are needed from the patient
    h. What does the doctor do before and after the service encounter?
4. Behavioral issues
    The relationship with the patient
        i. Effects on your participation in the service
    b. Patient's orientation and collaboration
    c. Viewpoint on how your social attributes influence the encounter?
        i. Social skills (friendliness, listening, conversational)
        ii. Empathy
        iii. Deference

d. Effects on the level of participation or involvement in the service
e. Beliefs and perceptions in consultations
f. Patient compliance and influencing factors

5. Perceptions of value
    a. Perceived value of the consultation
    b. What value means to the doctor
    c. Value outcomes of the service
    d. Impacts of the value co-creation process on the service delivery
    e. Effects of actor characteristics on the value co-creation process
    i. Gender of doctor and patient, age, education, frequency of visits, length of service of doctor

6. Closing phase
    a. Check to see if all necessary areas are covered
    b. Any additional information
    c. Any questions
    d. Thank the participant

APPENDIX 4: Consent Form

Consent Form for "***<u>An examination of value co-creation at micro level in maternal healthcare setting</u>***"

You are invited to participate in the research project identified above which is being conducted by Hummaira Qudsia Yousaf from the Management Sciences Department of The Superior College, Lahore under the supervision of Dr. Sikandar Khan. The purpose of the research is to explore the factors influencing value creation at micro-level in maternal healthcare setting. This study focuses on micro-level (direct) interaction between service users (patients and carers) and service providers (doctors and staff). For example: 1. the behavior and attitude of service provider, 2. the communication of service users and providers.

- I ________________________________ voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.
- I understand that disguised extracts from my interview may be quoted in dissertation.

- I understand that if I inform the researcher that myself or someone else is at risk of harm they may have to report this to the relevant authorities – they will discuss this with me first but may be required to report with or without my permission.

- I understand that signed consent forms and original audio recordings will be retained in supervisor cabinet with special password protection until the exam board confirms the results of dissertation.
- I understand that a transcript of my interview in which all identifying information has been removed will be retained for five years.
- I understand that under freedom of information legalization I am entitled to access the information I have provided at any time while it is in storage as specified above.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Hummaira Qudsia Yousaf

PhD Scholar,

Department of Management Sciences,

The Superior College, Lahore.

Pakistan.

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Name of participant	Contact number
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Signature of participant	Date

APPENDIX 5: Approval from Government for Data Collection

GOVERNMENT OF THE PUNJAB
SPECIALIZED HEALTHCARE & MEDICAL EDUCATION DEPARTMENT

Dated Lahore, the 8th February, 2016

ORDER

No.So(AMI-II)21-422/16: The competent authority is pleased to allow **MS. HUMAIRA QUDSIA YOUSAF** (CNIC# 31101-4141556-4) for collection of data from three (3) teritiary care hospitals (Jinnah Hospital Lahore, General Hospital Lahore and Lady Wellington Hospital Lahore).

SECTION OFFICER (AMI-II)

NO. & DATE EVEN:-

A copy is forwarded for information and necessary action to:-

1. Medical superintendent Jinnah Hospital, Lahore.
2. Medical superintendent General Hospital, Lahore.
3. Medical superintendent Lady Wellington Hospital, Lahore.
4. The Project Coordinator/Incharge-ICT Cell, SHS & MED.
5. Concerned Person.