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**IMMERSING THE LAY SELF INTO MEDICATION REASONING –
A THEORY OF PARENTAL HEALTH BEHAVIOR
IN THE CONTEXT OF ASIAN DEVELOPING COUNTRIES**

THESE

En vue de l'obtention du
DOCTORAT ÈS SCIENCES DE GESTION

Par

Phuong NGUYEN

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ECOLE DOCTORALE DE MANAGEMENT
PANTHÉON-SORBONNE

**IMMERSING THE LAY SELF INTO MEDICATION REASONING—
A THEORY OF PARENTAL HEALTH BEHAVIOR
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**IMMERGER LE SOI POSÉ DANS LE RAISONNEMENT DE LA MÉDICATION
UNE THÉORIE DU COMPORTEMENT DE LA SANTÉ PARENTALE
DANS LE CONTEXTE DES PAYS ASIATIQUES EN DÉVELOPPEMENT**

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ABSTRACT

This study aims to explore and understand the substantive area of parental decision-making and its main concern to develop a theory of parental behavior towards children health in an everyday life context in Asian developing countries, which are characterized by unstructured and uncertain healthcare systems. We employed classic grounded theory method and analyzed data collected in Vietnam from 34 interviews with parents and pharmacy staff and six health-related themes of a parental online forum. We observed patterns of behaviors that under the conditions of high-level uncertainties and mistrust in multiple social relationships, living the social norms and role identity, parents in Asian developing countries extend their lay selves into the informal reasoning of medication. Health care services and medications are not just products or services but a process in which parents immerse themselves to build their experience. We propose a novel theory of parental immersion of the lay self into medication reasoning. We defined the construct of *immersing the lay self* as the devotion of parents' mentality and the occupancy of parents' centrality to the health care of children. We argue that consumer immersion does not necessarily happen in extraordinary hedonic settings, but it is also embedded in the everyday life experience of parents and reflected through various social contracts and interactions in Asian developing countries. Our proposed theory provides a greater understanding of parental health behaviors of immersion regarding children's health and medications in developing countries. The construct of lay self immersion expands the concept of healthcare involvement and requires further studies and conceptualization from a broader view of consumer involvement.

Keywords: immersing, lay self, parent, medication reasoning, grounded theory, developing countries.

RÉSUMÉ

Cette étude vise à explorer et comprendre le domaine substantiel des prises de décisions parentales et son principal soucis de développer une théorie du comportement parental envers la santé des enfants dans le contexte de la vie quotidienne des pays asiatiques en développement, qui sont caractérisés par des systèmes de santé non structurés et incertains. Nous avons employés la théorie classique de méthode fondée et nous avons analysé les données collectionnées au Vietnam provenant de 34 interviews avec des parents, du personnel de pharmacie et de six thèmes liés à la santé d'un forum parental en ligne. Nous avons observé des modes de comportements qui, sous les conditions d'incertitudes de haut niveau et de méfiance dans de multiple relations sociales, vivre les normes sociales et l'identité de rôle, les parents dans les pays asiatiques en développement étendent leur soi posé dans l'informel raisonnement de la médication. Les services de santé et les médicaments ne sont pas seulement des produits ou des services mais un processus dans lequel les parents s'immergent pour construire leur expérience. Nous proposons une théorie originale de l'immersion parentale du soi posé dans le raisonnement de la médication. Nous avons défini la construction d'*immerger le soi posé* comme le dévouement de la mentalité des parents et l'occupation centrale des parents quant aux services de santé des enfants. Nous arguons que l'immersion du consommateur n'a pas nécessairement lieu dans des extraordinaires cadres hédoniques, mais que c'est aussi intégré dans l'expérience de la vie quotidienne des parents et que c'est reflété à travers divers contrats social et interactions dans des pays asiatiques en développement. Notre théorie proposée prévoit une meilleure compréhension des comportements de santé parentale d'immersion concernant la santé des enfants et les médicaments dans les pays en développement. La construction de l'immersion du soi posé

étend le concept d'implication des services de santé et exige des études supplémentaires et une conceptualisation d'un point de vue plus étendu quant à l'implication du consommateur.

Mots clés : immerger, le soi posé, parent, raisonnement de la médication, théorie fondée, pays en développement.

EXTENDED ABSTRACT

Purpose

With this study, we strive to understand patterns of parents' health behaviors concerning medications for common minor ailments among children in Asian developing countries, which are characterized by unstructured and uncertain healthcare systems. The study answers the questions of what parents behave toward selecting, obtaining, using, and evaluating medications in children and what the patterns of parental behaviors regarding health care decision-making process are. The study aims to explore and understand the substantive area of parental decision-making and its main concern to develop a theory of parental health behavior for children in an everyday life context in Asian developing countries, principally Vietnam.

Research Method

We employed classic grounded theory method and analyzed data collected in Vietnam from 34 interviews with parents and pharmacy staff and six health-related themes of a parental online forum.

Results

Health care services and medications are not just products or services but a process in which parents immerse themselves in building their experiences. In our study, we observed patterns of behaviors that parents immersed themselves during their healthcare experience, which was filled with uncertainties and distrust. We defined the construct of *immersing the lay self* as the devotion of parents' mentality and the occupancy of parents' centrality to the healthcare of children. Parents' mentality encompasses a broad range of attention, thoughts, feelings, senses, and emotions that parents experience in making health care decision for their children. Parents' centrality includes the centering of their lay self in the health care of

children and their proximity to their child as well as other actors in the decision process. We review, compare, and contrast the construct of lay self-immersion that emerged from our data with other immersion conceptualizations.

Grounded in the data, our analysis generates a construct of informal medication reasoning that has both cognitive and affective characteristics. The reasoning process comprises three components: knowledge integration, child-medication harmony sensation, and loyalty construction by parents. Unlike the setting in sciences, in the socio-scientific context of everyday life informal reasoning, issues that require reasoning are viewed and perceived as open-ended, unstructured, and debatable, and being subject to multiple perspectives. People engage in informal reasoning as they attempt to overcome dilemma problems without precise answers.

We propose a novel theory of parental immersion of the lay self in medication reasoning. We contend that under the conditions of high-level uncertainties and distrust of multiple social relationships, living the social norms and role identity, parents in Asian developing countries extend their lay selves into an informal medication reasoning process. Consistent with the extant literature, we argue that three categories emerging from our data, i.e., perceived uncertainty, distrust of reference sources, and perceived role identities, influence parental immersion of their lay self positively. Parental self-immersion, in turn, is assumed to influence the informal reasoning process concerning medications.

We argue that consumer immersion does not necessarily happen in extraordinary hedonic settings, such as adventure or tourism experiences, but it is also embedded in the everyday life experience of parents and reflected through various social contracts and interactions in Asian developing countries.

Implications

Our proposed theory provides a greater understanding of parental health behaviors of immersion regarding children's medicine in developing countries. The construct of lay self-immersion expands the concept of healthcare involvement that requires further studies and conceptualization from a broader view of consumer involvement. Like students of second language immersion, parents immerse themselves in their consumption experience to acquire and master the medical 'language' and make health decisions to care for their children and construct their social identities. Our proposed theory provides insights into the extended selves of lay people living with unstructured and uncertain healthcare systems. The findings regarding the lay self-immersion of parents help initiate the basis for the development of measures to test (a) the causal relationship between lay self immersion and its assumed antecedents: parents' perceived uncertainty, trust/distrust in medical professional sources/experts, and role identities; and (b) the consequences of the lay self immersion to informal medication reasoning.

Health care policymakers and medical institutions should devise effective educational initiatives on children's health and medications to improve parents' knowledge and decision-making process made by the actors. Educational efforts deployed by policymakers and health institutions would help transform the health systems from a value chain of healthcare into knowledge economies, which can be organized in ways to draw upon other aspects of the economy and society. Further, marketers should be aware of several types of experiences among consumers that can be distinguished and measured in creating a brand experience for consumers. Our theory provides insights for marketers to design product and service brand experience that would consider the lay self of consumers immersed in multiple social relationships. We propose the following implications for developing countries: (a) reference

sources for a product and service requires both credibility and expertise, and (b) marketing communication that would be aligned with and build on consumer social identities.

Limitations

Limitations of this study include the lack of participant checks for theoretical construction, data collection from medical professionals, older children, parents in rural areas, parents in other Asian developing countries. Other limitations are the handling of preconceptions in coding, and the insufficiency of behavioral interactions between parents and spouse as well as between parents and children.

Direction for Further Studies

Given the socio-political dynamics and the unorganized structure in the developing countries, patients' immersion in the complex healthcare decision is variable. From the findings of our study, we suggest that further studies should work on developing measures of the construct of lay self immersion to test our proposed hypotheses using quantitative empirical data. In their everyday lives, children receive regular messages regarding medicines through mass media, observe medicine administration through family member's behaviors, and practice taking medicines themselves hence forming beliefs and perceptions about medicines. However, studies on children's involvement in their health care decisions are scarce. Understanding children's perception regarding medicines would guide future studies in their explorations of the decision-making process in which parents and older children engage when using medications.

Originality and Value

The construct of parents' immersing the lay self in the context of everyday life health care decision in Asian developing countries contributes to the knowledge gap of consumer self-immersion.

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CHAPTER 1. INTRODUCTION

This introductory chapter presents an introduction to this grounded theory study: background and relevance of the substantive research area, open research questions, research objectives, and context. It also provides the rationales and significance of the research as well as the perspectives of the principal researcher. The structure of this dissertation writing is also presented to offer an overview of chapters and sections in this grounded theory study. The last part of this chapter provides notes on referencing formats that this writing is applying.

Classic grounded theory method is generating theory from data which is obtained systematically (Glaser, 1978, p. 2). A grounded theory consists of relational statements of concepts developed from empirical data (Glaser, 1998, p. 22). The theory “offers a transcending view of the main concern in a substantive area and the social behavior that explains how the concern is processed, managed, and resolved” (Holton & Walsh, 2016, p. 10). Consistently with the classic grounded theory method, this study started with a substantive area of research and its main concern. In this study, I aim to discover a theory that can explain how the main concern in the substantive area is processed, managed, and resolved.

1.1. The Substantive Area of Interest

Children health care in Asia is a public issue that requires a particular attention from governments, healthcare policymakers, health care professionals, children caregivers and caretakers (Bredenkamp et al., 2015, p. 243; Currie & Reichman, 2015, p. 3; Gracey, 2000, p. 462; Palmer, Mitra, Mont, & Groce, 2015, p. 217). Bloom, Standing, and Lloyd (2008, p. 2076) reported that the healthcare systems in developing countries in Asia are characterized by a high level of market’s unorganized structures, incomplete boundaries between public

and private sectors and a lack of regulatory reinforcement. Consequently, there has been an increasingly enlarged gap between the standards of health care and the realities of healthcare services and products especially those informal or unregulated in developing countries.

According to a report by World Health Organization (2009, p. 86), what remains unknown is the health care service quality provided by private practitioners including physicians, nurses, pharmacists, pharmacy assistant, and informal pharmacy sellers. More specifically on medication usage, there have been significant concerns regarding the rational use of medicines in developing countries because of the irrational, wasteful and dangerous use of medicines in children (Bush & Hardon, 1990, p. 1044; Mao, Tang, & Chen, 2013, p. 694); inappropriate prescribing practice of physicians (Dong, Bogg, Rehnberg, & Diwan, 1999, p. 692; Dong, Yan, & Wang, 2011, p. 65; Li et al., 2012, p. 1078); multiple medication treatment (Mao, Vu, Xie, Chen, & Tang, 2015, p. 9); knowledge gaps in health seeking behaviors of consumers (Sontakke, Magdum, Jaiswal, Bajait, & Pimpalkhute, 2015, p. 179), and self-medication practice of the health care system actors (Kaljee, Anh, Minh, Batmunkh, & Kilgore, 2011, p. 264; World Health Organization, 2009, p. 87).

The interrelationship between actors in the healthcare market possesses high-level uncertainties in all social contracts (Bloom et al., 2008, p. 2076). In its inherent structure that makes the healthcare market vulnerable to failures, the disproportion of knowledge distributed among the actors is a leading cause. Because of the lack of expertise knowledge, patients are not able to evaluate the quality of technical and complex medical regimens and service (Chandra, Cutler, & Song, 2012, p. 397) even after using them (Alford & Sherrell, 1996, p. 72; Brown, 2001, p. 3). Lay people have different thoughts and ideas about health and health care that compose their lay theories (Hughner & Kleine, 2008, p. 1701). The most significant problem in the functioning of healthcare market is the imbalance of knowledge and power distributed among health care professionals, patients, and caregivers (Blumenthal,

1997, p. 402). Such an imbalance in children health care significantly increases because of the differences in knowledge between the mother and father of a child, the discrepancies in perceptions of parents about the child's health conditions and the actual status that the child is not able to express accurately. The nature of information and knowledge disproportions embedded in children healthcare environment in transition countries requires parents' excessive efforts to make health care decisions for their children in the everyday life context (Conn et al., 2005, p. 308; Evans, 1994, p. 479; McKenna, Collier, Hewitt, & Blake, 2010, p. 626; Serpell & Green, 2006, p. 4042).

During the 1990's, most studies in health care decision-making have focused on the relationship and interactions between patients and medical professionals such as physicians and nurses and in the context of more severe, chronic or life-threatening diseases from the professional's perspective. These studies suggested models of shared decision making that examine only two actors – patients and physicians Cederlof and Tomson (1995). In the 2000's, scholars supported the notion of health care decision making that shifted to patients as the central actor who interacts with various sources of references (Fenton, 2003), have different opinion of illness and medications (Fiks, Gafen, Hughes, Hunter, & Barg, 2011, p. 241; Fiks, Hughes, Gafen, Guevara, & Barg, 2011, p. e193). Despite intensive research of shared decision models, systematic reviews have questioned its role in increasing knowledge of the actors (Joosten et al., 2008, p. 224); the role preference of patients (Chewning et al., 2012, p. 9); the entirety of models examined in previous studies (Joosten et al., 2008, p. 225); the improvement in decisional conflicts and patient satisfaction (Wyatt et al., 2015, p. 573). Calls for further studies on health care decision-making include the approach that examine “the influence that the broader communicative and relational contexts have on decisions” (Matthias, Salyers, & Frankel, 2013, p. 176), “a process consisting of a series of specific behaviors on the part of the patient and of the health provider” and involving not only doctors

and their patients (Légaré & Thompson-Leduc, 2014, pp. 283–284); decisions with “less clinical equipoise” when persuasion of patients, and parents – caretakers of children patients, is the essence of the decision-making process (Wyatt et al., 2015, p. 580).

In the context of complex information and difficult trade-offs, high-stakes decision making in health care is somewhat constructive than being of clear preferences (Bettman, Luce, & Payne, 2008, p. 589). Existing differences between healthcare contexts and those of consumption demand further studies on the former (Kahn et al., 1997). Parental healthcare experience has the congruence with consumption experience which is defined as being involved with “a series of activities that influence consumers’ activities and future actions” (Carù & Cova, 2007b, p. 9). Emerging as a new stream of consumer behavior research, research of consumption experience focuses on the “experiential view of symbolic, hedonic or esthetic nature of consumption” (Holbrook & Hirschman, 1982, p. 132). Although there have been studies on consumption experience in retailing (e.g. Addis & Sala, 2007), adventure and sports (e.g. Arnould & Price, 1993; Holt, 1995; Lindberg & Eide, 2016; Tumbat & Belk, 2011), branding (e.g. Brakus, Schmitt, & Zarantonello, 2009), and entertainment (e.g. Fitchett, 2004), research on consumption experience in healthcare is exceptionally scarce.

Emerging as a new field of academic research, consumer health behavior within the domain of pharmaceutical marketing has its unique characteristics that require industry-specific knowledge development (Crié & Chebat, 2013, p. 123; Stremersch, 2008, p. 232). As I previously discussed (Nguyen, 2013, p. 414), until recently, most research work in health marketing had almost been carried out in Europe or North America. Research models applicable in these regions may not be assumed equally applicable in all territories of the world. Therefore, the *context of Asian developing countries* would offer new insights to

scholars and marketing professionals alike. The present study will be conducted in Vietnam which is one of the emerging pharmaceutical and healthcare markets in Asia-Pacific region (Campbell & Chui, 2010, p. 4). It potentially yields new theory and new knowledge of methodologies regarding inquiry and units of analysis which require different development (Steenkamp, 2005, p. 7). Research in developing countries will also contribute to the growth of marketing science regarding data acquisition and theory development (Burgess & Steenkamp, 2006, p. 340). In this research stream, scholars have chosen the inductive qualitative research approach to align with the need of fulfilling the significant role in “orienting quantitative studies” (Hanson & Grimmer, 2007, p. 68).

1.2. Research Objectives and Open Research Questions

Medication use in children is part of adult consumption behavior and becomes more necessary when the logic of medicating shifts from health professionals’ to consumers’ choices (Moorman, 2002, p. 157). While there is a rich body of research in the field of consumer behavior, consumer health behavior, and pharmaceutical marketing, the phenomenon of children’s medication behavior has not been fully understood. Parental behaviors of purchasing and administering medications for children have been largely ignored in academic research, with little work being conducted and published. Therefore, this research strives to understand the primary issue or concern of parents in Asian developing countries on how to make the decision to select, purchase, administer, and comply with medications in children in an everyday life context.

The open research questions in this grounded theory study are:

- (1) What parents behave toward selecting, obtaining, using, and evaluating medications and medication usage in children;

- (2) What are the patterns of parental behaviors regarding health care decision-making process for children;
- (3) What are the relationships between behaviors of parents and the characteristics of such relationships?

1.3. Research Context

Given the unique characteristics of children health care in developing countries such as Vietnam, with the multifaceted disproportion of information, a significant multitude of uncertainties, this study aims to explore parents' health care issues with their children and to understand parental behaviors into the medical decision experience. I seek to explore and understand the dimensions and properties of parental behaviors in selecting, purchasing, and administering medications to their children. The objective is to develop a theory of parental medication behavior for children in an everyday life context in Asian developing countries, principally Vietnam.

In grounded theory studies, research context is defined in relation to the substantive area of study. The contexts are not supposed to preconceive deductive statements such as causal relationship. In this study, it is necessary to define the contexts of parental behaviors our study explore in this study (Pratt, 2009, p. 859). First, regarding children health, this study looks into *minor childhood ailments* and health conditions in an *everyday life context*. The consumption experience that parents have is also viewed as ordinary events and happenings that they involve in daily activities through which parents build up their accumulated health care decision experience. There have already been a number of studies on extraordinary experiences of consumers such as adventure and sports (e.g. Arnould & Price, 1993; Holt, 1995; Tumbat & Belk, 2011), and in children's more severe health conditions such as attention deficit hyperactivity disorder in children, or a specialty medication regimen

(Cormier, 2012; Taylor, O'Donoghue, & Houghton, 2006), or vaccination (Benin, Wisler-Scher, Colson, Shapiro, & Holmboe, 2006; Brunson, 2013; Tickner, Leman, & Woodcock, 2010). However, as Carù and Cova (2003, p. 281) suggested new studies should “take in the full breadth of a phenomenon such as an experience, from the ordinary to the extraordinary.” I have argued that by exploring the everyday experience, I can bring in new insight into the healthcare decision-making process which has been intensively focused on the just the relationship between patients and medical professionals (Joosten et al., 2008, p. 225; Matthias et al., 2013, p. 176). Second, the *categories of medications* considered in our study range from prescription to over-the-counter (non-prescription) to food supplements for health care purpose (e.g., mineral and vitamins that are classified as medicines in Vietnam). By accepting to view the medications in this broad spectrum, I have expected to gain a more holistic understanding of child health care by parents and the larger multitude of social contracts parents in which engage to make their decisions. As additional information, the medications in this full range can be prescribed by physicians and are mainly dispensed through pharmacies. In reality, parents can obtain prescription medicines from pharmacies without prescriptions from physicians which is a common reality in developing countries (Brata et al., 2013, p. 182; Sontakke et al., 2015, p. 371; Yadav & Rawal, 2015, p. 139). Third, I view the decision-making process in children health care involves parents and their social network. The collectivism of the behaviors in the decision-making process is considered as the *unit of analysis*. It is relevant for research to “examine the reciprocal or dynamic relations between individual and group norms, attitudes, and behaviors” in emerging markets of developing countries (Steenkamp, 2005, p. 7).

1.4. Rationales and Significance of the Research

Consumer behavior is central to any discussion of consumers' intention and action of purchasing and using products or services marketed by firms (Ajzen, 2008, p. 525). Insights into how consumers buy and consume a product or service have significant implications for any business. This issue is particularly critical in the marketing of pharmaceuticals because, compared to fast-moving consumer goods; consumer behavior toward drug products is far more complex. The complexity of patients' and caregivers' behavior toward drug products can be attributed to the distinctions in consumer health behaviors. Our subject is substantially positioned at the intersection of three research domains: life science marketing, qualitative health research, and consumer psychology, in an Asian context. Using Venn diagram (Saldaña, 2014, pp. 117–118), I depicted the multidisciplinary foundation of our study in Figure 1.1. First, intention and behavior to purchase and use pharmaceutical products are far more complicated than those of consumer goods (Manchanda et al., 2005, p. 294; Moss, 2007, p. 317). Emerging as a new field of academic research, consumer behavior within the domain of *life science marketing* has unique characteristics that require industry-specific knowledge development (Crié & Chebat, 2013; Stremersch & Van Dyck, 2009, p. 4). Health and marketing have been considered relevant to major stakeholders such as public policymakers, life science firms, and individual consumers. It can raise new questions for the development of new knowledge which can be meaningfully generalized at least in the contextual bounds of health and marketing field (Stremersch, 2008, p. 233).

Second, the present research is also positioned in the field of *qualitative health research*, which as a new discipline explores the health and illness of children as perceived by their parents. Researchers use an inductive qualitative approach to explore emotions, beliefs, values, and actions to understand participants' responses to health and illness and the

underlying meanings (Morse, 2012, p. 21). The grounded inductive design in this research aligns with the need to fulfill a significant role in providing deeper knowledge and understanding of phenomena as well as orienting quantitative studies in marketing (Hanson & Grimmer, 2007, p. 68) and other related fields.

Figure 1.1. Focused Domains of the Our Study

Third, the present research is of *consumer psychology* in its nature. Its focus lies in the role of affect and cognition constructs. Emerging as a significant additional construct to models of attitude, further research on affect's explanatory power in consumers' judgment, decision, intention, and behavior has recently been suggested (Cohen, Pham, & Andrade, 2008, p. 334; Malhotra, 2005, p. 481).

1.5. Perspectives of the Principal Researcher

I graduated from the faculty of medicine at a medical college in Vietnam as a general practitioner. Since then I have spent more than 20 years working in the pharmaceutical industry with my devotion to marketing and management functions. I later earned an M.B.A. by research in 2008 from Maastricht School of Management.

Through the years of my career with multinational pharmaceutical companies, besides my career advancement in business, I have thought about my life now and in the future. I then develop a firm belief and desire that I should and can pursue an academic career in the future. I expect to live to the research behavior that is “scientifically sound and yet practicable” to bridge the gap “between rigor and relevance” (Fendt, 2013, p. 10) to further my understanding of management in general and marketing and consumer behavior in particular. To move on, in 2011, I earned a Research Master degree from University of Lille 2.

With my enhanced and focused experience in pharmaceutical marketing, I believe that I can do high-quality academic research to contribute to knowledge creation of Vietnam contexts in the field of consumer health behavior. I have pursued this ambition for years, with particular “resonance” between theory, research and practice of life science marketing according to an argument from Ellson (2009, p. 1163) that emphasizes the urgent need for focusing academic research on providing answers to real-life business problems. I firmly believe that I can “cross-fertilize” (p. 1162) my conceptual ideas and my business practice experience in doing high-quality research work. Further, the research problem in the present study originated from my professional experience that involved the marketing of children medications directly to parent consumers. It encourages me to do a high-quality job, and it is expected the opportunity to do it successfully increases (Corbin & Strauss, 2014, p. 34).

My recent research papers have been employing mixed methods in social cognition models. My first research project adopted the reasoned action approach to investigate the key antecedents of the repetitive use of anthelmintic medications and their relative importance in predicting the intention and behavior of mothers of school-age children to use these drugs (Nguyen, 2012). The second research project was to examine the predictive validity and

moderating effects of perceived vulnerability and perceived threat on mothers' intention to administer vitamin products to their school-age children (Nguyen, 2013).

Figure 1.2. Researcher's Perspectives

I have opened my mind to new methodologies, at least, new to myself, and accepted to move from stringent testing of predetermined models or priori theories that I did in my recent research projects in a positivism approach, to a more interpretive research tradition, as illustrated in Figure 1.2, that lets theories emerge from data. I expect it will open room for surprising facts and then the new knowledge that I have desired for through my work career in healthcare and pharmaceutical marketing and my educational journey. This is to quote Suddaby (2006, p. 633) that “new discoveries are always the result of high-risk expeditions into unknown territory” with “a committed entrepreneurial researcher spirit” (Gummesson, 2005, p. 325) as my developing mindset.

In the present research, I wanted to adopt grounded theory method. It is clear that I, through the years of my work and research, have developed my disciplinary background from which my perspectives have been built up before conducting this grounded theory study. This circumstance provides sensitivity and focuses on interpreting the research data (Goulding, 2002, p. 53). However, at this time of the study, it is essential for me to eliminate my

preconceptions to ensure the highest level of objectivity opening my mind to embrace new knowledge in the entire research process.

1.6. Structure of the Dissertation

Chapter 1: Introduction

This introductory chapter presents background and relevance of the substantive research area, open research questions, research objectives, and context. It also provides the rationales and significance of the research as well as the perspectives of the principal researcher. The structure of this dissertation is also presented to offer an overview of chapters and sections in this grounded theory study. The last part of this chapter provides notes on referencing formats that this writing is applying.

Chapter 2: Initial Literature Review

In this dissertation, given the adoption of grounded theory method, literature reviews are divided into two phases: initial review and integrated review. The purpose of the *initial review of literature* in this chapter is to set an essential stage for the research. The review is limited to the topics that the researcher had learned, acquired, and experienced before entering the data collection phase of this study. The review provides the context and foundation concerning the phenomenon of study. It is more descriptive rather than critical; it is broad and general. The initial review of literature helps the researcher to be sensitized with field knowledge before data collection (Lo, 2016). However, this review must not be extensive and in-depth, it is not for the purpose of identifying knowledge gaps so as to avoid being influenced by preconceived ideas, concepts, and theories (Christiansen, 2011, p. 21; Glaser, 2013; Holton & Walsh, 2016, p. 32; Morse & Mitcham, 2002, p. 29). Chapter 2 provides reviews of theoretical foundation to set a crucial stage for our inductive research

work. The reviews set a stage for the emergence of a new theory. In the chapter, I have discussed the concepts of children health care, health behaviors, medication, consumer decision making in general and decision making in healthcare in particular, and the position of cognition and affect in models of intention and behavior.

Chapter 3: Research Method

The chapter briefly discusses highlights of classic grounded theory method. At first, the overall approach of classic grounded theory method is presented with particular evidence of the approach being applied in this study. Based on it, details of methods employed in this study are specified. The details include methods for data generation, empirical abstraction, and theoretical abstraction. The texts cover methods of substantive and theoretical coding, development of categories, constant comparison method, memo writing, and theoretical sampling and theoretical saturation. I have provided rationales for empirical and theoretical abstractions. As such, a particular work process of grounded theory method is proposed for the present research. This chapter also provides details of data collection, examples of data analytics, and a summary of the data analysis. Lastly, a summary of analysis output is presented to provide a background for furthering to the next chapter.

Chapter 4: Results

In this chapter, I have presented our data analysis as a stage of substantive coding. It includes details what, how and why I generated initial codes, focused codes and how and why I developed categories. In summary, at an abstract level, I identified seven categories and their properties and dimensions grounded in data. In this chapter, I also provide integrated literature review and analysis concerning the categories. As integrated literature reviews, a more in-depth and critical review is done and discussed in this chapter and next chapter

(Theory building). This review is not segregated but recursive; it is knitted into various sections in the two chapters. It was carried out after the data analysis had come up with categories (Glaser, 2013; Holton & Walsh, 2016, p. 33). The literature integration includes the triangulation of the validity of the emerged theory (Lo, 2016).

Chapter 5: Theory Building

This chapter is all about our theoretical coding. As discussed in Chapter 3, regarding theoretical coding, in this chapter I have presented how, what and why I identified relationships – relational statements or hypotheses – between the categories and how the identified hypotheses support the choice of core categories relying on the richness of their relationships with other categories. From that, I propose a novel theory of parental medication behavior and its governing hypotheses. I then show how further integrated literature review supports our proposed theory. Lastly, I evaluate the rigor of this study as well as the emergence and theoretical saturation of the proposed theory.

Chapter 6: Conclusions

This chapter discusses implications for theory in three knowledge gaps, implications for practice for health marketing forms and health care policymakers. The utility of the proposed theory and the common sense understanding of the theory are also presented. Further, limitations of the study are considered and explained for references. Directions for further studies of grounded theory in the same substantive area are discussed.

An overview of the contents of each chapter is detailed in Table 1.1.

Table 1.1. *Dissertation Structure*

Chapter	Main contents
Chapter 1: Introduction	It provides background and relevance of the substantive research area and its main concern, open research questions, research objective, and research scope and context, referencing formats.
Chapter 2: Initial Literature Review	It includes initial literature review to set a stage for the research. The review is limited to those topics that the researcher had exposed to before data collection fieldwork.
Chapter 3: Research Method	It presents a review of classic grounded theory and when necessary comparing with the constructivist approach. As a result, it provides explicit descriptions of the grounded theory approach in this study, which is primarily the classic grounded theory. This chapter also provides details of data collection, examples of data analytics, and a summary of the data analysis.
Chapter 4: Results	It summarizes the findings from the substantive coding phase (open and selective coding) for developing conceptual categories. A critical literature review is presented.
Chapter 5: Theory Building	It summarizes details of the theoretical coding phase for identifying hypotheses. A critical literature review is presented. It evaluates the study regarding the emergence and theoretical saturation of the theory, and rigor of the research.
Chapter 6: Conclusions	It discusses implications for theory and practice, study limitations, and directions for further research.

1.7. Referencing Style, Format, and Notes on Writing

This dissertation is written using the APA Style of the American Psychological Association (2010). The format requirements include A4 paper size with one-inch margins from all margins. Figures and tables are located as nearest to the related texts as possible. When paraphrases are used, or contents are referred to ideas from other publications, APA reference style requires the inclusion of only the author name and year in the in-text citation. However, according to the recommendation of the American Psychological Association (2010, p. 171), it is encouraged to provide a page or paragraph number for a paraphrased citation if it helps the author and readers locate the relevant passage in an extended or complicated text. Therefore, in this dissertation, in-text citations do have page numbers whenever relevant so that it can help the author refer to the reference.

Regarding self-plagiarism, when “duplicated words are limited in scope, this approach is permissible,” and “only the amount of previously published material necessary to understand” (American Psychological Association, 2010, p. 16) the contribution of the author’s previous publications should be included. Consistently with the logic of initial literature review that discusses the topics to which the principal author of this dissertation had been exposed prior to data collection fieldwork, I utilize some ideas from one of my papers. In such incidents, I have provided in-text citations for one of my papers (Nguyen, 2013).

It is necessary to share some notes of writing styles in this dissertation. I have presented a number of figures and diagrams to display what abstraction process of data generate concepts and categories. It not only helps organize my thinking but also convey my points to readers (Pratt, 2009, p. 860). Presentations of the dissertation follow APA styles such as heading, sub-headings, tables, and figures. Line spacing is double for texts, one and a half for tables in the body, and single spacing for appendices. Usage of the personal pronoun is primarily

considered as “I” even though the contents of this dissertation have been significantly improved thanks to detailed comments and advice from my Research Director, Prof. Dr. Jacqueline Fendt, as well as the two kind Rapporteurs.

Final dissertation is submitted in Adobe Acrobat Reader file format. When viewing its contents, readers can always see the table of contents on the left pane of the screen by clicking on “Bookmark” button.

CHAPTER 2. INITIAL LITERATURE REVIEW

This chapter presents a brief review of the literature to set a crucial stage for our inductive research work. In this chapter, I discuss the challenges and characteristics of health systems and children healthcare in Asia, the concepts of health behaviors, medications, and societies. I next discuss the background literature of consumer decision making in general and decision making in healthcare in particular, and the position of cognition and affect in models of behavior.

2.1. Purpose of Initial Literature Review

In hypotheticodeductive studies, in-depth reviews of extant literature are required to propose research models for testing with empirical data. A literature review is carried out before data collection and analysis. In contrary, in grounded theory research, it is not recommended for the researcher to start his fieldwork with a “blank mind.” Rather, the researcher must be highly aware of the possible influence of his prior knowledge and experience on the steps throughout the grounded theory work process (Suddaby, 2006, pp. 634–635).

It is agreed that viewing the current knowledge from literature is necessary as in a later phase, emerging theories from the current research may need comparisons with existing concepts and theories (Gummesson, 2005, p. 319). This initial review of the literature does not prevent the emergence of grounded theory from the inductive approach in grounded theory method (McGhee, Marland, & Atkinson, 2007, p. 340). Instead, it sets a stage for the emergence of a new theory. The review of current knowledge, and also the search for the theory from adjacent domains is iterative with data coding (Glaser & Strauss, 1967), as in a later phase emerging theory needs constant comparisons with theories from a wide array of

fields. The review serves as a source of comparisons and analyses with grounded theory emerged from data analysis in Chapter 4. This initial literature review also helps researchers be closely acquainted with the main contents of existing theories (Shah & Corley, 2006, p. 1827). This initial review provides a general sense and directions (Lo, 2016, p. 180), and sensitizing concepts (Bowen, 2006) for further work in the whole grounded theory study process.

It is important to reiterate that, however, this review must not be extensive and in-depth, it is not for the purpose of identifying knowledge gaps so as to avoid being influenced by preconceived ideas, concepts, and theories (Christiansen, 2011, p. 21; Glaser, 2013; Holton & Walsh, 2016, p. 32; Morse & Mitcham, 2002, p. 29). Furthermore, consistent with the purpose of initial literature review, in this chapter when possible only meta-analytic reviews of existing theories and models with general comments are presented. The review does not aim to compare and contrast findings of individual papers in details.

2.2. Challenges of Health System in Asia

Healthcare system in Asian developing countries faces several significant and unique challenges to universal health coverage (World Health Organization, 2012, p. 1). Universal health coverage belongs to one of the sustainable development goals that United Nations member states agreed to try to achieve by the year 2030. Measures for the countries, especially developing countries, include financial risk avoidance, improvement for people's access to "quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines." In the lay language, universal health coverage means the services and solutions every person in a country can obtain. It is whether a person in need can get always get help from well-trained healthcare professionals, can get a safe treatment that helps him or her get better, and can get medications and other health products

that that person need. For the deployment of universal health coverage, health care policy makers should define and realize who will pay for the services and treatments, make policies to ensure quality health service is available to any person at any time. The governments need to have accurate information to make related decisions about the health system.

The first challenge concerns the reach of citizens. While citizens who work in formal sectors are feasibly covered by health insurance system, those who work in informal sectors of the economy may not be well reachable and are covered by governments' subsidies. The second challenge is related to the fact that health authorities in developing countries are to improve the design of health insurance packages that are acceptable as value for money by the majority of the population and suitable to the patterns of diseases and medication behaviors of patients. The third challenge is that the insurance system should minimize the gap between legal requirements and actual benefit of the packages. (Bredenkamp et al., 2015, p. 244). Tackling these challenges, country health authorities play a major role in the marketing authorization approval process, price control and reimbursement schemes (Jirawattanapisal, Kingkaew, Lee, & Yang, 2009, p. S4). Countries should devise sufficient pharmacoeconomic studies to drive right decisions to improve the financial aspect and price control policies (Tarn et al., 2008, p. S137). Until recently, out-of-pocket payments continue to finance the healthcare system substantively in developing countries in Asia. The situation makes the standard living of people worse due to the uncertainty of out-of-pocket household funding for medical expenditure (O'donnell et al., 2008; Van Doorslaer et al., 2006, p. 1160).

In the following sections, the issues of self-care and self-medication in developing countries and the situation of the shared decision-making process in health care, and the Asian pharmaceutical markets mechanisms are discussed.

2.3. Children Health Care in Asia

Children are the future of countries. They need to be well protected by being given a healthy environment where they can develop and grow well. Only by such strategies, countries can prepare for their future of well-being, prosperity, and advancement. Children health is the most critical issue in many countries, especially developing countries in Asia. Children health care in developing countries is a public issue which requires a particular attention from governments, healthcare policymakers, healthcare professionals and children caregivers and caretakers (Bredenkamp et al., 2015, p. 243; Currie & Reichman, 2015, p. 3; Gracey, 2000, p. 462; Palmer et al., 2015, p. 217). The economic burden of children maltreatment is significant in Asia-Pacific countries in which an estimated economic value of Disability-Adjusted Life Years lost to violence against children ranged from 1.2% to 3.5% of state GDP across sub-regions defined by the World Health Organization; the estimated economic burden was US\$194 billion in 2012 (Fang et al., 2015, p. 146).

As various stakeholders are involved the healthcare of children, it is necessary to conceptualize child health broadly. Felix et al. (2014, p. 49) proposed a definition of children health as “a dynamic state, not merely the absence of disease or disability, but also adequate resilience that permits optimal physical, mental, and social functioning, and optimal quality of life, in order to achieve full potential and to become an independent, functional, and social individual.” The dimensions of child health include (1) the absence of physical ailments, (2) the lack of psychiatric disorders, (3) the optimal physical, mental and social functioning of the child, (4) the high quality of life or the well-being, and (5) the adequate resilience (Felix et al., 2014, p. 49) being integrated in a varying model depending on circumstances and contexts.

Approximately one-fourth of the world children aged under five are living in South Asia. Nearly forty percent of them are suffering growth retardation (Paintal & Aguayo, 2016, p. 39). In Southeast Asia, the annual mortality of children less than five years old during the period 2000–2003 was more than three million, which accounted for 29% of the world's total deaths. Among the top six causes of deaths, pneumonia (19%) and diarrhea (18%) were the most common (Bryce, Boschi-Pinto, Shibuya, Black, & Group, 2005, pp. 1150–1151; UNICEF, 2014). Out of various factors, rate of tuberculosis case detection, number of death on measles, percentage of population accessible to improved water sources, and number of birth trauma have been found to influence the mortality rate of children under five years old according to a research on data from 47 Asian countries in 2010 by Fitrianto, Hanafi, and Chui (2016, p. 255).

Childcare by Asian parents has unique characteristics. In Asia, the child health is managed in a different way. Mishra, Roy, and Retherford (2004, p. 289) found that there is gender discrimination in child care regarding childhood feeding, immunization coverage, treatment-seeking, and nutritional status. In general, women in Asian countries have more problems with their health but tend to seek supports and treatments less frequently (Liu & Bryson, 2015, p. 3). Further, there is a significant gap between knowledge and practice of shared decision making which healthcare professionals in Asian countries have adopted. Patients expect to gain more information concerning their health problems, to access to accurate information and shared the decisions made by their medical doctor (Ali, Syukriani, & Sulthana, 2015, p. 464; Ng et al., 2013, p. 1). Further studies are called upon the need of better understanding the ideal and actual decision-making roles in healthcare.

2.4. Health Behavior

2.4.1 Health behavior categories

Behavior represents something that *people* “do or refrain from doing,” which is not necessarily done willingly or intentionally. Health behavior is broadly defined by Gochman (1997, p. 3) as “personal attributes such as beliefs, expectations, motives, values, perceptions, and other cognitive elements; personality characteristics, including affective and emotional states and traits; and overt behavioral patterns, actions, and habits that relate to health maintenance, to health restoration, and to health improvement.”

According to Gochman (1997, p. 3), health behaviors include “a person’s perceptions of health status, or of its deterioration or improvement, or of recovery or non-recovery from an illness or accident, or other changes in health status.” Health behavior also comprises analyses of specific actions, such as taking medication in an appropriate manner or complying with a treatment regimen. The behaviors not only include directly observable, overt actions but also consist of mental events and feeling states that are observed or measured indirectly. Conceptually, health behavior is different from medical treatment and physiological responses to therapy.

Kasl and Cobb (1966a, p. 246) posited that there are three distinct categories of health-related behaviors; namely, preventive and protective behavior, illness behavior, and sick-role behavior. ***Preventive and protective behavior*** comprises actions taken by people who perceive themselves as healthy but also desire to act so to maintain their health status. The actions are intended to prevent the actors from diseases and health problems or to detect possible early health trouble in the actors’ human body (Kasl & Cobb, 1966a). This category of health behavior was described by Conner and Norman (2005, pp. 2–3) using a practical definition that health behavior includes any activity undertaken for the purpose of preventing or detecting disease or for improving health and well-being. Health behavior thus includes using healthcare services (e.g., physician consultation, vaccination, disease screening),

compliance and adherence to preventive and treatment regimens (e.g., dietary, medication regimens), and self-directed health behaviors (e.g., diet, physical exercise, alcohol drinking).

Illness behavior refers to action taken by people who question themselves about their health status. Through their feeling and perception, these people have doubts about their health status, and hence usually seek advice from professionals and acquaintances (Kasl & Cobb, 1966a). Illness behavior ranges from ignorance or rejection of a disease to magnification of health status (Kar and Kumar (2015). Appropriate health seeking is the wish of every parent in the management of illness in children. Critical behavioral factors include early disease identification, early treatment, persistence with treatment, and quickly opting for more efficient treatment (D’Souza, 2003). While health-seeking behavior literature exists, most such studies have been conducted on specific and life-threatening illnesses, e.g., tuberculosis, malaria, and mostly in rural areas (e.g. Nichter, 1994), though some in urban settings (e.g. Friend-du Preez, Cameron, & Griffiths, 2013).

Sick role behaviors include actions of people who already know they have some health troubles and do something toward addressing their problem (Kasl & Cobb, 1966b). It is worth noting that the boundaries between the three modes of individual health behaviors are blurred, as a person’s perception of him- or herself as healthy or ill is relative (Rosenstock, 1974, p. 354). The distinction between preventive and treatment regimens, respectively, is not separate (Kuehlein, Sghedoni, Visentin, Gervas, & Jamoulle, 2010, p. 4).

2.4.2 Health behavior variations

Primary prevention includes those medically recommended actions that help prevent people from contracting diseases. Typical examples are the behaviors of taking vaccines for immunization and vitamin usage for improved health status. ***Secondary prevention*** involves

those actions that help the actors to detect as early as possible health troubles and hence minimizing its impact. In addition to primary and secondary preventive behaviors, Harris and Guten (1979, p. 18) explored health-protective behaviors as people's actions which may not be medically recommended and proven, because of unbiased effectiveness, regardless but believed by the actors to promote or maintain the health protection of their health status.

Moorman and Matulich (1993) developed a model of preventive health behavior and tested in consumers to identify interrelationship of consumer health ability, health motivation, and preventive health behaviors. Preventive health behaviors were classified into health information-acquiring behaviors and health maintenance behaviors. Noar and Head (2014b, p. 1) classified preventive health behavior theories into four groups: value-expectancy approaches (theory of reasoned action, the theory of planned behavior), risk-oriented theories (health belief model), social cognitive theory, and stage theories (transtheoretical model). Nudelman and Shiloh (2015, p. 9) conducted studies with laypeople and healthcare professionals and identified 66 health behaviors that were classified into only two categories: psychosocial and physical. The categories were further divided into clusters of health maintenance, nutrition, risk avoidance, and general well-being. Zaltman and Vertinsky (1971, p. 21) suggested a health service model in the context of developing countries. Its purpose was to provide insights into relevant variables that marketers can influence to shape consumer health behaviors. The model proposed output be the four types of health behaviors: preventive health behavior, illness behavior and sick role behavior that were assumed to segment consumers.

There are two traditions of developing health behavior theories. The attention of health behavior theorists has been focused on positivism epistemology (e.g. Head & Noar, 2014, p. 39; Noar & Head, 2014a, p. 1; 2014b). Scholars have been encouraged to embrace the

diversity of epistemological approach in consumer research (Ozanne & Hudson, 1989, p. 1). Health behavior theorists met and recommended an integrated model to predict and explain human behaviors (Fishbein, Triandis, Kanfer, Becker, & Middlestadt, 2001). Interpretivism theories with qualitative analysis methods are also recommended such as those summarized by Spiggle (1994).

2.5. Medication

2.5.1 Purposes of medications

Children's medications can be used for either prevention or treatment of a possible illness. As we previously discussed (Nguyen, 2013, p. 400), preventive medications can be given to children, who have not had or who have just developed first signs of a health problem (that is, who are ill at an early stage with or without symptoms). Thus, they can be used for primary and secondary prevention (Clark & MacMahon, 1967). Primary and secondary prevention types, as perceived by parents, occur in the absence of illnesses (Kuehlein et al., 2010, p. 4). On the other hand, quaternary and tertiary prevention types occur when parents perceive the presence of disease regardless of the actual diagnosis (Jamoulle & Roland, 2005, p. 75).

In adopting preventive medications, parents shift their perception from the left upper and lower quadrants to the right ones, as illustrated in Figure 2.1. Unlike the transition from the non-existence to the existence of a disease supported by medical diagnosis, the shift from the absence to the presence of illness, as perceived by consumers, is a continuous variable. Thus, parents' perceptions of the existence of diseases are considered as a continuum (Rosenstock, 1974, p. 354). The point to be made is that parents will not have strong intention to prevent certain health problem in their children until the presence of illness becomes more apparent

when it shifts from the left half to the right half of the quadrangular in Figure 2.1 (Nguyen, 2013, p. 401). Considering this phenomenon, research on medication usage should not divide medications into preventive and treating ones. Rather, medication can be regarded as a single type of medical regimens to help patients prevent, enhance, or treat illnesses. This argument is in congruence with Starfield, Hyde, Gervas, and Heath (2008).

Figure 2.1. Conceptualization of Medical Prevention

(Kuehlein et al., 2010, p. 4)

Administering medications is one of the health-related behaviors that people perform (Bush & Hardon, 1990). Self-medication by parents is frequent across Asian developing countries such as India, China, Vietnam, Sri Lanka, and Pakistan (Ali, Ibrahim, & Palaian, 2010; Aqeel et al., 2014; Le, Ottosson, Nguyen, Kim, & Allebeck, 2011; Pan et al., 2012; Selvaraj, Kumar, & Ramalingam, 2014; Wijesinghe, Jayakody, & Seneviratne, 2012). Inappropriate use of medicines in developing countries has been attributed to the lack of healthcare education and the relation with cultural beliefs, custom, and traditions (Greenhalgh, 1987, p. 307; Hardon, 1987; Van der Geest, 1987). It is equally important for

having adequate primary healthcare as well as the educational tools for laypeople to acquire and improve their health care knowledge of using medications (Bush & Hardon, 1990).

Recent studies reconfirmed the trend of the issues. Self-medication practice poses a number of issues due to parents' lack of education in rational usage of medicines, uncontrolled availability, and dispensing of medications in the market, and the dependence on unreliable sources of information (Sontakke et al., 2015, p. 179; Yadav & Rawal, 2015, p. 140). The misuse of antibiotics in children through self-medication is common in developing countries deteriorate the health risks for children because of irrational use (Ocan et al., 2015, p. 9).

There has been a need for research with children, especially those in developing countries, in understanding their perception and behavior toward using medications to improve primary and self-care throughout the communities and for future generation (Sontakke et al., 2015; Yadav & Rawal, 2015).

2.5.2 Pharmaceutical markets and distribution in Asia

The pharmaceutical markets in Asian developing countries are characterized by three main issues that affect the well-being of consumers, especially children. First, these markets are dominated by generic pharmaceutical products, which account for 70-80% of the market share in private sectors in low- and middle-income countries. The market share is higher than that in European countries. In contrast to the United States, branded generic segment in developing countries is greater than generic segment (Kaplan, Wirtz, & Stephens, 2013, p. e74399). Although governments in developing countries have devised generic substitution programs (Hassali, Thambyappa, Saleem, & Aljadhey, 2012, p. 159), physicians and community pharmacists in private medical sector have negative perceptions about generic pharmaceutical products regarding bioequivalence, efficacy, safety, and quality (Chong, Hassali, Bahari, & Shafie, 2011, p. 127; Kumar et al., 2015, p. 4). In such situation, drug

regulatory authority approval system is suspected by physicians. As a result, the use of generic products in private medical sector is decreased despite the fact that generic substitution can reduce costs of treatment and preferred by low-income patients (Awaisu, 2008, p. 323; Ping, Bahari, & Hassali, 2008, p. 86).

Second, consumers in the markets face a significant challenge of counterfeit products that account for up to 50% in developing countries. Counterfeit products have serious implication on the public health and trust building in relational contracts in healthcare markets. The significant impact has been exerted on the categories of antibiotic, antimalarial, antiretroviral, anti-tuberculosis products (Glass, 2014, pp. 11–12). In addition to measures concerning legal actions and regulations, quality control, and supply chain management, healthcare professionals' increased awareness and recommendations consumers' educational efforts minimize the risks of dispensing and using counterfeit products (Bansal, Malla, Gudala, & Tiwari, 2013, p. 9). Stakeholders in the supply chain such as wholesalers, retailers and community pharmacists and informal sellers at pharmacies in developing countries should be aware of and participative in the joint efforts against counterfeit products (Shrivastava, Shrivastava, & Ramasamy, 2013, p. 371). Only by such programs, trust and credibility of medications distributed in the health system in developing countries can be secured and enhanced.

Third, the practice of community pharmacies in Southeast Asian developing countries with regard to pharmacy service scope and quality has not been changed significantly since the year 2000. The progress in advancement and improvement of services provided by community pharmacies has still been prevented by the lack of knowledge and confidence of pharmacy staff, the humble recognition by the public, and the supports by government policies (Hermansyah, Sainsbury, & Krass, 2015, p. 11). The situation has become worse as

consumers in developing countries usually obtain medication from community pharmacies without a doctor's prescription (Agbor & Azodo, 2011; Awad, Eltayeb, & Capps, 2006; Chuc et al., 2014; Sihavong et al., 2006). Pharmacists' gathering of information such as medical history, needed actions, and medication records for the provision of treatment at community pharmacies is inconsistent (Brata et al., 2013). Effective knowledge training and practice supervision programs increase pharmacy staff's knowledge and actual practice, which improves community health care (Minh, Huong, Byrkit, & Murray, 2013, p. 432).

2.5.3 Self-care and self-medication in Asia

Pharmaceutical products can be either over-the-counter (OTC) or prescription medications. OTC medications differ from prescription medications because they allow end-users to evaluate and decide on the use. As I previously commented (Nguyen, 2013, p. 402), OTC medications are effective drugs with known safety that consumers, both adults and children, may take to treat common minor ailments in an everyday life context. This class of medications can be obtained from retail pharmacies without much effort and medical consultation. The use of OTC medications depends primarily on the willingness of consumers and thereby is more relevant for studies with social cognition models. Regarding OTC children medications, parents, or other caregivers are those who decide to use medications in children. In developing countries, consumers may also obtain prescription medications from retail pharmacies without having a proper prescription from physicians (Ali et al., 2010; Bi, Tong, & Parton, 2000; Le et al., 2011; Wijesinghe et al., 2012). Medication behaviors are distinctive health behaviors that have a significant effect on individuals' health and, to some degree, are under individuals' control (Conner & Norman, 2005).

Patients in general and parents, in particular, evaluate, and decide on the use of the medications in children. Medically, medications are effective products with an established

safety profile that consumers, adults, and children, may use to treat illnesses with or without a physician's prescription. Medications can be obtained from retail pharmacies. The use of medicines more or less depends on the willingness of consumers. Regarding children medications, parents or other caregivers make decisions to administer medications to their children. Administering pharmaceutical products to children is part of parent consuming behavior and becomes more necessary when the logic of medicating shifts from medical professionals to consumers choices (Moorman, 2002, p. 157). Considering parents as active problem solvers of children health, one needs to discuss self-care and self-medication briefly. Self-care is what "people do for themselves to establish and maintain health, prevent and deal with illness" (World Health Organization, 1998, p. 3). The context of self-care, which is useful in inductive exploratory health research, includes hygiene, nutrition, lifestyle, environmental factors, and socioeconomic factors. These factors can be considered to develop a semi-structured interview questions guidance in grounded theory related to self-medication. Self-care is an important part of health care and accounts for 70–95% of disease incidence in both developed and developing countries (Yuefeng, Keqin, & Xiaowei, 2012, p. 1). There are concerns regarding where patients and caregivers get relevant information, how they make judgments and how this process varies in different social groups (Bloom et al., 2008, p. 2080). Mothers have several options to do such as self-medication in pharmacies, physician consultation in private or public sectors. In developing countries, education on life-threatening conditions and proper use of medications are summoned; and there is a practice of doctors that they dispense medications without labels to prevent parents themselves from buying or re-buying the medicines (Amuyunzu-Nyamongo & Nyamongo, 2006, p. 36).

According to a definition of World Health Organization (World Health Organization, 1998, p. 2), self-medication is "the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms." In the context of children's health, self-medication is

considered as selecting medications for children by their parents to prevent and to treat parent self-recognized health troubles. Self-medication is an important part of health system not only in America and Europe (Grigoryan et al., 2006) but also in Asia (Chang & Trivedi, 2003). The de-scheduling of prescription medication once required physicians' approval facilitates the trend of self-care and self-medication. Consumers become increasingly empowered in taking care of their health and illness. Self-medication is the central element of self-care in developing countries and is rapidly growing (Ali et al., 2010; Bi et al., 2000; Wijesinghe et al., 2012; Yuefeng et al., 2012). In developing countries, self-medication is common for health care of not only adults (Amoako, Richardson-Campbell, & Kennedy-Malone, 2003) and adolescents (Reimuller, Shadur, & Hussong, 2011; Shehnaz, Agarwal, & Khan, 2014) but also children (Friend-du Preez et al., 2013; Le et al., 2011; Sontakke et al., 2015).

In such a context, critical behavioral factors include confidence in understanding the health problem, the ease of accessibility to local pharmacies, and the influences of friends and peers (Wen, Lieber, Wan, & Hong, 2011), reduction in inconvenience to the parents (Allotey, Reidpath, & Elisha, 2004), and disease severity, seriousness and chronicity (Amuyunzu-Nyamongo & Nyamongo, 2006). Most studies adopted descriptive comparative analyses on specific illnesses in developed countries (Du & Knopf, 2009; Matziou et al., 2008; McIntyre et al., 2003; Trajanovska, Manias, Cranswick, & Johnston, 2010; Vernacchio, Kelly, Kaufman, & Mitchell, 2009) and also in developing countries (Ali et al., 2010; Wijesinghe et al., 2012).

2.5.4 Medication and the society

The use of medicines in societies depends on some factors. Understanding medication usage required insights in pharmacology, epidemiology and social sciences (Haaiker-

Ruskamp & Hemminki, 1993, p. 97). Medication use is part of the healthcare process in which the people who recommend, give and take, make a variety of decisions, which are influenced by cultural values, psychological factors and by their social network. The social and cultural setting influence people choice in specific ways regarding the use of medication. Medication has social, cultural and psychological effects (Haaiker-Ruskamp & Hemminki, 1993, p. 97). The social aspects of medications usage embraced a broad range of dimensions and variations (Sterky, Tomson, Sachs, Henningsson, & Bergman, 1988) and considered one of the basic social processes as detailed in Figure 2.2. Not only self-medication trend but also the empowerment of patients and consumers (Allotey et al., 2004) have changed the way the collaboration between healthcare professionals and patients/consumers. As Hodgetts et al. (2011, p. 353) commented, besides being as pharmacological objects, medications are “medications are complex, socially embedded objects with histories and memories that are ingrained within contemporary relationships of care and homemaking practices.” In childcare, medications for children are present in everyday life relational practice of parents and integrated into family care and life of children through which parents gift their time, knowledge, and efforts concerning medication decision-making process (Hodgetts, Hayward, & Stolte, 2013, p. 16).

The place of medication in society is not only situated in biomedical treatment or prevention of ailments and health conditions, but also factors that affect social situations (Cohen, McCubbin, Collin, & Pérodeau, 2001, p. 442). Medication has a social representation that is embedded with meanings in social relations. Medicine evolves along with societies; therefore, understanding medication and medication usage in societies require inquiry methods that can embrace the complexity of various social factors, the dynamic changes in these factors, and the social construction of human beliefs and judgments.

Figure 2.2. Medication Use as a Part of Health Care Process

(Haaijer-Ruskamp & Hemminki, 1993, p. 100)

Unlike constructs of social cognition models (Section 2.7) that are substantially the “inventions of the investigators” (Leventhal, Leventhal, & Cameron, 2001, p. 19) from a positivist perspective, constructs in the commonsense model of self-regulation are generated through interpretive inquiry with actors’ phenomenology into scientific terminology. The model emphasizes the features of self-regulation of behaviors concerning treatment and prevention of illnesses. The perceptual-cognitive model is representative of a type of theoretical model of sickness regulation. It is based on the following fundamentals: (a) individuals are considered active problem solvers; (b) adaptive processes are based on commonsense beliefs and appraisals; and (c) the perception of “folk illness” as the social concept of disease (Leventhal et al., 2001).

2.6. Consumer Decision-Making Process

2.6.1 Consumer decision-making

Consumer decision making has been long under intensive research. Bettman, Johnson, and Payne (1991) viewed consumer decision making as comprising of decision tasks and information processing. In everyday life, facing a significant number of alternatives, consumers constantly have to make decisions regarding choice, purchase, and use of products and services. Viewing a decision task, consumers face choices which consist of alternatives with different attributes of value and uncertainties (Bettman et al., 1991, p. 51). Looking at the information environment, consumers have limited capabilities and sources of information to consider when making a decision. Information sources include advertisements, in-store merchandising, social media, own experience, acquainted people such as friends, colleagues and relatives and experts in some areas. Consumer decision making also depends on their memory and the importance of decisions (Bettman et al., 1991, p. 53).

Different from the initial approach in researching decisions as a rational process or rational choice theory, Bettman, Luce, and Payne (1998, p. 187) posited an alternative information-processing approach in consumer decision research. The information- processing approach admits the relative rationality made by consumers because of their limitation in working memory and information integration and verification. With such assumptions, it is theorized that rather than process clear preferences when making choices consumers *construct* their decisions by using three underpinning strategies (Bettman et al., 1998). First, consumers make decisions to achieve their defined goals and sub-goals, and consumer decisions have goal hierarchy and goal meanings (Belk, 1988, p. 159). Exploration of meanings consumers possess to different goals has been a focus of interpretive consumer research. Second, consumers make a decision by selecting relevant information and paying voluntary and involuntary attention to the alternatives. Hence, trust and emotion play important roles in the selectivity and attention of consumers (Bettman et al., 2008, p. 604). The level of efforts consumers exert to examine and integrate information depends on the desire they have for the goals. Third, consumer decisions are based on their experience and training, particular context or situation or environment and own self-efficacy. Hence, consumers adopt a different approach when the circumstances and conditions and their experience and knowledge change.

Children do not decide their treatment. Parents evaluate and decide on the use of medications in children. Medically, medications are effective products with an established safety profile that consumers, adults, and children may use to treat illnesses with or without a physician's prescription. Medications can be obtained from retail pharmacies. The administration of medicines depends on the willingness of consumers. Regarding children's medications, parents or other caregivers make decisions to administer medications to their children. Administering pharmaceutical products to children is part of parents' consumption

behavior and becomes more necessary when the logic of medicating shifts from medical professionals to consumer choices (Blenkinsopp & Bradley, 1996, p. 632; Moorman, 2002, p. 157).

Emotion plays a significant role in consumer decision-making process. Changes in negative emotions (e.g., fear, sadness) or positive feelings (e.g., hope, relief) are consumer goals that influence the decision process. There are situations when consumers need to make trade-offs between conflicting essential goals that are concerned with safety and health risks for instances. For example, affective forecasting theory in medication behavior posits that a person may opt for medication use if he or she thinks the medication helps reduce their stress but may refuse to use it if the totaled calculated stress is expected to increase (Hoerger, Scherer, & Fagerlin, 2016, p. 594). Over-the-counter medications were intentionally used by parents to control children's irritating behaviors thereby reducing parental stress (Allotey et al., 2004), especially in full time working parents. Emotional well-being is evidenced to affect consumer decision making in general and in medication behavior in particular. Making such choices cause negative emotions, and the level of emotion depends on the value of the options (Bettman et al., 1998, p. 196). On the other hand, consumer choices are influenced by positive emotions. Emotional appeal such as feelings of warmth and hope have been intensively used in health care advertisements (Vater et al., 2014, p. 814) and may be associated with creating trust in consumers (Kemp, Min, & Joint, 2015, p. 434). Coletti et al. (2012, p. 226) found affective influence such as hope and fear as factors that affect parents' decision to initiate medication for their children with attention-deficit/hyperactivity disorder. Cognitive efforts have an impact on affect. When people make more cognitive effort to process an alternative, they suffer higher negative affect regarding it (Garbarino & Edell, 1997, p. 156).

Research on the involvement of family members in the family decision has been intensive with three categories in general: research on frequently purchased goods or service, research on durable products and husband-wife involvement in family decision making (Davis, 1976, p. 242). Husband-wife participation in family decision making varied by product category, within the category, and in families. The involvement in family decision-making process also changed according to age and income categories (Green & Cunningham, 1975, p. 331). Troutman and Shanteau (1989, pp. 141–142) undertook three experiments and identified in the joint decision-making of couples about health care, integration of information and individual interactive judgments. The interaction and consensus of couples are assumed to be due to various dimensions of medical information and have an influence on the share of decisions the couples make. Power and task responsibilities in decision making also depend on economic background and cultural norms (Davis, 1976, p. 250; Green & Cunningham, 1980, p. 96). In Asian families, household health care alternatives tend to be made by shared decision-making process (McLaughlin & Braun, 1998, p. 118).

2.6.2 Health care decision making

Healthcare decision-making has been an intensive research topic in multidisciplinary studies. Back to 1974, Rosenstock (1974, p. 371) depicts health decision making as a process of phases individuals go through while interacting with people and events, which increase or decrease the likelihood that a response is generated. Such response is any category of health behavior: preventive health behavior, illness behavior, and sick role behavior. Lay health theories “refers to consumers’ understandings of health, organized into systems of thought possessing varying degrees of complexity and integration” (Furnham, 1988, p. 105). In a recent review of patient involvement in healthcare decision-making, Say, Murtagh, and

Thomson (2006, p. 66) found that parent's involvement is rather a varied and complex process that evolves over time and changes according to the status of health conditions.

Regarding physician-patient relationship, Beck, Daughtridge, and Sloane (2002, p. 25) reviewed 22 studies of communication between medical physicians and patients. Physician' verbal communication such as empathy, reassurance and supports, explanation and non-verbal communication such as head-nodding, body orientation and forward lean positively associated with health outcomes in patients. In the primary care setting, pharmacists play a role in facilitating health outcome of patients. In-depth consultation by pharmacists enhances the acceptability of patients in complying treatment and medication regimens (Chen & Britten, 2000, p. 482).

In the study of MacKean, Thurston, and Scott (2005, p. 81), trust and open communication determine collaborative relationships between families and healthcare professionals. Family care center conceptualization puts both the family of patients and healthcare practitioners in a balance that facilitates the respect and understands the role of each side. Chewning et al. (2012) reviewed 115 studies on role preference of shared decision by patients and found that there is an increasing trend of the preferences of patients in studies after from the year 2000 onwards (71% versus 50%).

Shared decision making for pediatric patients was documented by Wyatt et al. (2015, p. 577) in a meta-analysis of 54 interventions mainly targeted at parents. The result shows that share decision-making improves intervention-specific and general knowledge of parents and reduces decisional conflicts between parents and healthcare professionals. The rationale of this improvement can be referred to the arguments and findings from Brodbeck, Kerschreiter, Mojzisch, and Schulz-Hardt (2007, p. 459) in which group decision making is better than individual decision making when there are information distribution asymmetries in the

condition of absence of information processing asymmetries. Lipstein, Brinkman, and Britto (2012, pp. 248-250) reviewed 52 qualitative or mixed method studies on parental preferences and involvements in medical regimens or medication decision-making process. It is evidenced that majority of parents in the studies prefer an active role in making decisions, which is expectedly collaborative and informed to autonomous and paternalistic approaches. The preference is stable over time and depends on the child's medical conditions, the diagnosis, and parents' information seeking behaviors and knowledge. Parents' preferences are influenced by prior experience, health care providers' recommendations, and familial emotional factors. Interestingly, emotion was found to be a stronger influential factor than professional recommendations on the parental decision process. In another circumstance, parental decision-making is delayed due to health care providers' lack of comprehensive knowledge and the child's specific conditions information causing possible mistrust and conflict in the patient-provider interrelationships.

2.7. Cognition and Health Behavior

2.7.1 Cognition and health behavior

There has been a variety of theoretical models in health psychology to improve understanding of health and behavior. The models focus on the analysis of health behaviors and examine aspects of individuals' cognition to predict future health-related behaviors, promote health, or treat and adapt to illness and health conditions (Conner & Norman, 2005, p. 6). According to Leventhal et al. (2001, p. 19), this set includes a number of social cognition models with variables concerning the cognitive processes within perception of vulnerability to illness (e.g. Becker et al., 1977), the accessibility of actions to manage threats, the intention to behave based on facilitators and benefits, the norms held by others

regarding healthy or risky behaviors (e.g. Ajzen, 1991), and the perception of self-efficacy (e.g. Bandura, 2000).

Medicating behaviors are distinctive health behaviors that have a significant effect on individuals' health and, to some degree, are under individuals' control (Conner & Norman, 2005, p. 2). As I previously argued (Nguyen, 2013, p. 402), some cognition factors from social cognition theories have been intensively applied as research frameworks for quantitative studies to test the explanatory power and the predictive validity of health intention and behavior. Intention models are highly relevant in research of new products and services, new consumer segments, repeated consumers, consumption levels, and consumer loyalty of available goods and services in the marketplace. The intensity of behavioral intention to use a product or service can be measured by consumer's subjective probability (Fishbein & Ajzen, 1975, p. 59) to use such product or service.

For decades, research has evidenced that intention and behavior on using health products and medications can be explained by various cognitive factors derived from social cognition models. Having their origins in expectancy–value theory (Peak, 1955, p. 149), the most widely used social cognition models are the health belief model (Becker et al., 1977, p. 29), the theory of protection motivation (Rogers, 1983, p. 157), the theory of reasoned action (Fishbein & Ajzen, 1975, p. 6), the theory of planned behavior (Ajzen, 1991, p. 182; 2012, p. 445), and the reasoned action model (Fishbein & Ajzen, 2010, p. 22). In general, these models explain the desirability of human behavior depending on individuals' cognitive factors, being “summed products of the expectancy and value of specific outcomes” (Conner & Norman, 2005, p. 7). More recently, some theorists suggested that in addition to such cognitive factors, affective phenomena such as emotional reaction should also be incorporated into cognition models (Fishbein et al., 2001, p. 5). Affect has recently emerged

as an important additional construct to models of attitude, intention, and behavior, in particular (Malhotra, 2005, p. 478), and in other aspects of consumer behavior, in general (Cohen et al., 2008, p. 303).

2.7.2 Social cognition theories

As previously reviewed in one of my papers (Nguyen, 2013, p. 402), *health belief model* (Becker et al., 1977) was developed in the 1950s to explain people's failure to take preventive health behaviors. The underlying concept is that what people act depends on their values and judgments about the goals that a particular action would achieve. The purpose is to avoid a health problem or an ailment based on the person's feelings about the susceptibility and severity of the ailment along with perceived threats, perceived benefits, and possible obstacles associated with such a preventive action. In health belief model, the independent variables are perceived threat, which depends on perceived susceptibility to and severity of an outcome behavior, perceived advantages, and disadvantages, perceived barriers, and cues to action as illustrated in Figure 2.3. These variables predict the likelihood of one's action against the preventive measures. However, there is a lack of evidence from empirical studies on how the two constructs of perceived susceptibility and perceived seriousness combine to predict the likelihood of taking preventive health actions. The issue is whether susceptibility and severity should be combined additively or multiplicatively as per the expectancy-value structure of health belief model suggests (Abraham & Sheeran, 2005, p. 38). Theoretically, perceived vulnerability and the interaction term of perceived vulnerability and severity predict the behavioral intention to take preventive health actions.

For the past over 60 years, numerous studies have adopted health belief model to predict health behaviors. In a meta-analysis, Carpenter (2010) reviewed 18 studies on the prediction of health beliefs on health behaviors longitudinally. The review found that beliefs in benefits

and barriers of health behaviors had the strongest influences on actual behaviors of a pool of over 2,700 subjects from the studies. Interestingly, behaviors for prevention versus for treatment, behaviors of medication usage versus other non-pharmacological actions moderated the predictive power of health belief model's constructs. The author of the review recommended that the direct effect of health beliefs should not be modeled in health behaviors research frameworks.

Figure 2.3. Health Belief Model

(Becker et al., 1977, p. 30)

In the most recent 40 years, scholars have also tested health belief models in interventional studies concerning the designs of intervention and the efficacy of these interventions. A recent meta-analysis by Jones, Smith, and Llewellyn (2014) reviewed 18 interventional studies. Fourteen studies out of the 18 studies reported significantly improved adherence to health-promoting advice. However, the review showed that interventions deployed in the studies were not significantly related to health belief model constructs. The

gap between actual intervention actions and health belief model constructs needs to be explored for new insights.

As I also discussed previously (Nguyen, 2013, p. 403) that Rogers (1975, p. 93) proposed the *theory of protection motivation* and later revised the model to provide a theoretical model of fear appeals focusing on cognition processes. Theory of protection motivation depicts adaptive and maladaptive responses to a health threat considering threat appraisal and coping appraisal as portrayed in Figure 2.4. Threat evaluation is conceptually computed by perceived vulnerability and perceived severity of the health threat. Factors that might increase the probability of maladaptive response include both intrinsic and extrinsic rewards, such as satisfaction, bodily pleasure (intrinsic), and social approval (extrinsic) (Rogers, 1983, p. 169). Coping appraisal concerns the evaluation of behavioral alternatives that are likely to minimize the health threat. This process is said to be dependent on one's expectancy to take the action that can remove the health threat (response efficacy) and a belief in one's capability to implement the recommended behavior (self-efficacy) (Norman, Boer, & Seydel, 2005, p. 83). Theory of protection motivation offers an understanding of reasons why people attitude and behaviors may change when facing health threats.

Figure 2.4. Theory of Protection Motivation

(Rogers, 1983, p. 168)

There have been only two meta-analytic reviews of the theory of motivation protection since the year 2000. The first ever meta-analytic review was carried out by Milne, Sheeran, and Orbell (2000). It included 27 studies with a pool of almost 7,700 subjects from 29 independent samples. The results showed the modest support that the threat- and coping-appraisal components of the theory of motivation protection predict adaptive intention. Threat-appraisal and coping-appraisal variables were found to associate with intention significantly. The review also confirmed that the variables were significantly associated with concurrent behaviors, and intention strongly associated with behaviors (pp. 133–134). In the second review, Floyd, Prentice-Dunn, and Rogers (2000) analyzed 65 studies with a pool of over 30,000 subjects concerning more than 20 health issues. The mean overall effect size of the studies has a moderate magnitude. Overall results showed that threat severity, threat vulnerability, response efficacy, and self-efficacy have a positive influence on the health-related intention and target behaviors under study. Maladaptive response rewards and adaptive response costs are negatively associated with the adaptive intention and behaviors (pp. 415–416).

Figure 2.5. Theory of Reasoned Action

(Fishbein & Ajzen, 1975, p. 16)

Fishbein and Ajzen (1975, p. 16) first developed the *theory of reasoned action* in the 1970's (illustrated in Figure 2.5) and later extended to become the *theory of planned behavior* (Ajzen, 1991, p. 182). According to the theory, attitude toward the behavior develops based on the evaluation of the likely consequences of a given behavior. Subjective norm deals with the likelihood of approval or disapproval of an action by the subject's friends, relatives, professional people, and public media for instance. Perceived behavioral control deals with the presence or absence of factors that make the behavior easier or harder to perform. Fishbein and Ajzen (2010, p. 22) called the later version of the theory the *reasoned action model*. The theory and its future extended versions continue to contribute to research works in attempts to better understand and change human behaviors (Ajzen, 2015) especially in the domain of healthcare (Conner, 2015). Figure 2.6 provides a detailed diagram of the model.

Figure 2.6. Reasoned Action Model

(Fishbein & Ajzen, 2010, p. 22)

Most recently, based on the previous works of Fishbein and Ajzen (1975) and Ajzen (1991), a report of Institute of Medicine (2002) recommended the utilization of an integrated behavioral model which expanded from theory of reasoned action and theory of planned behaviors Montaña and Kasprzyk (2008, p. 68). As depicted in Figure 2.7, on the attitudinal construct of the integrated model, the authors supported to include two factors: experiential and instrumental attitudes. The former is more related to affect and emotions; the latter concerns with the original factors of the theory of reasoned action and theory of planned behavior. Regarding perceived norm, consistently with the theory of reasoned action, two factors contribute to perceived norms are injunctive and descriptive. Besides attitude toward the behavior and perceived norms, the integrated behavioral model integrates personal agency into the model. The personal agency depends on two constructs: self-efficacy and perceived control.

Besides the utility of predicting behaviors in other domains, the integrated behavioral model has been used to predict health or health-related behaviors. Kasprzyk, Montaña, and Fishbein (1998, p. 1557) applied to further understanding and prediction of HIV preventive behaviors. The model was found of high predictive validity for condom use behaviors among high-risk groups of people. Attitude toward the behavior, perceived norms, and facilitators/constraints were confirmed as significant predictors of the preventive behaviors. Further analysis showed that perceived control and facilitators/constraints were two different constructs. Beville et al. (2014, p. 177) found gender differences in predictors of leisure time physical activities using the expanded theory of planned behaviors with two constructs descriptive norm and self-efficacy from the integrated behavioral model. The model was found to have stronger predictive power in an adult female group than the male group. Braun et al. (2014, p. 52) adopted the integrated behavioral model to predict high-risk drinking behaviors of college students. The study's results show that experiential attitude, injunctive

norms, and self-efficacy are of predictive validity for the behavior. McAfee, Jordan, Sheu, Dake, and Miller (2017, p. 10) tested the integrated behavioral model to explain and predict ethnic disparities in advance care planning behavior. Attitude and perceived norm were found to predict the behavior in adults significantly. We have searched for meta-analyses of the integrated behavioral model, but there has not been any such a review.

Figure 2.7. Integrated Behavioral Model

(Montaño & Kasprzyk, 2008, p. 77)

There are more than ten meta-analytic reviews of the theory of reasoned action and theory of planned behavior. Armitage and Conner (2001) did the most comprehensive review of 185 studies with the theory of planned behaviors. The model accounted for 39% and 27% of

variance explained in intention and behavior respectively. Overall, while perceived behavioral control was found to be a strong predictor of intention and behavior, subjective norm was found to explain a less significant amount of variance in intention and behavior. The authors suggested subjective norm components of the theory of planned behavior needed further empirical studies because the way the constructs are conceptualized failed to capture the important aspects of social influence (p. 488). Ravis and Sheeran (2003) examined the prediction of descriptive norms in 21 studies. It is said that descriptive norm had a medium to strong average correlation with intention. This construct provided an incremental increase of 5% in the prediction of intention after attitude, subjective norm and perceived behavioral control had been considered (p. 228). This result justified the inclusion of the descriptive norm component in the theory of planned behavior thanks to its predictive validity. The influence of descriptive norms on intention and behaviors was found to be larger than that of subjective norm. This finding suggested that observing people's health-related behaviors would be of greater importance than social pressure from others in making health-related decisions (p. 230). Cooke and Sheeran (2004) reviewed 44 studies and confirmed the understanding of the moderating effects of cognitive properties – “accessibility, temporal stability, direct experience, involvement, certainty, ambivalence and affective-cognitive consistency” (p. 159) on the relationship between cognition and intention and that between cognition and behavior. The review advocated the utility to include moderator variables to augment the prediction of intentions and behavior (p. 177). In another meta-analytic review of 40 studies across a wide range of behavior domains, Rise, Sheeran, and Hukkelberg (2010) confirmed the predictive validity of self-identity as an additional construct in theory of planned behaviors. Self-identity is suggested to be an important predictor of health-related intention and behaviors (p. 1100). Other reviews analyzed studies on the prediction of health behavior categories such as condom use (Albarracin, Johnson, Fishbein, & Muellerleile,

2001; Andrew et al., 2016), intention and attendance of screening programs (Cooke & French, 2008), and parental provision of alcohol Jones (2015).

In *social cognitive theory*, Bandura (2000, p. 120) positioned self-efficacy as the core construct to explain causal impacts on goal aspirations, outcome expectations, perceived barriers and facilitators of behaviors. According to the theory, self-efficacy beliefs influence what goals challenges people to pursue, how much effort they invest in their trials and how long they persist their attempt to achieve the goal and overcome the challenge; see Figure 2.7 for a representation diagram of the theory. The theory explains different behaviors of people, under challenging circumstances, whether people increase their efforts to reach a goal when they believe in their capabilities or loosen their attempts, abandon their try or settle for common solutions if they have doubts about their abilities. Affect directly influences self-efficacy (Bandura, 2009, p. 185). Individuals judge their efficacy by counting on both their physical and emotional states. On the other hand, self-efficacy can influence behavior via emotions, which ascend while following goals. For example, positive self-efficacy about individual's capabilities forms positive affective states that help one achieve the target (Luszczynska & Schwarzer, 2005, p. 130). Medical treatment and health interventions based on social cognition interventions have been found to maintain and increase positive health behaviors. I present in the next paragraph a brief review of results from four meta-analyses.

Graves (2003) assessed 38 studies on interventions using social cognition theory components to improve cancer patients' quality of life. The pooled sample of cancer patients exceeded 3,200. In the review, social cognition theory components concerning self-efficacy, outcome expectation, and self-regulation were found to be associated with significantly higher outcomes in quality of life of the cancer patients (p. 215). Young, Plotnikoff, Collins, Callister, and Morgan (2014) examined 44 studies regarding the utility of social cognition

theory in explaining physical activities. Self-efficacy and goal were found positively associated with physical activity behavior. However, outcome expectation and socio-structural factors were not positively associated with physical activity.

Figure 2.8. Social Cognitive Theory

(Bandura, 2000, p. 121)

The authors suggested more rigorously methodological studies were warranted (p. 983). Stacey, James, Chapman, Courneya, and Lubans (2015) analyzed 18 studies on interventions in physical activity and nutrition behavior changes in cancer surviving patients. Most studies showed improvements in dietary change or physical activity intervention in cancer survivors. Self-efficacy, positive outcome expectation, and intention were found to be significantly associated with behavior changes in physical activities or dietary measures. Further, the effectiveness of dietary behavior and physical activity changes was increased in positive relation with self-efficacy, behavior self-monitoring, goal setting, behavior performance feedback, and planning of behavior changes (p. 333). Tougas, Hayden, McGrath, Huguet, and Rozario (2015) reviewed 35 studies on interventions in chronic health conditions such as

overweight/obesity, diabetes, heart diseases, asthma, and arthritis. Constructs related to self-monitoring, self-judgment, and self-evaluation are found useful in designing the interventions. The social cognitive theory was found to be a helpful and feasible framework to guide the development of interventions in chronic diseases (p. 2).

Figure 2.9. Health Action Process Approach

(Schwarzer, 2008, p. 6)

The **health action process approach** advocates two distinct phases: (a) motivation phase in which pre-intention forms from outcome expectancies, risk perception, and action self-efficacy; and (b) volition phase consisting of initiation and maintenance phases, i.e. the cognitive process concerning initiating and monitoring actions (Sutton, 2005, p. 257). Figure 2.8 details the diagram of the approach. Both cross-sectional and longitudinal studies adopting health action process approach have been reviewed. The studies examined intention and behaviors such as healthy eating, physical exercises, drinking behaviors, and breast self-examinations (p. 258). To the knowledge of the author, to date, there has been only one meta-analytic analysis on the health action process approach. Gholami, Knoll, and Schwarzer

(2014) reviewed 11 studies that demonstrated high associations between social-cognitive constructs and physical activity behaviors. The effect sizes of model associations, except for those involving risk perceptions, were significantly positive. It was conclusive of the necessity for more meta-analytic analyses of the health action process approach in predicting physical activity behaviors (p. 84).

2.7.3 Evidence of social cognition theories

There have been a large number of studies testing the popular social cognition models and theories in various domains including health-related behaviors and consumer health behavior. For meta-analytic reviews of these theories, one can refer to Table 2.1 on the major works.

On the other hand, it is interesting that social cognition models have also been playing as conceptual frameworks to build upon consumer research models of attitude, purchase intention, and purchasing behavior from consumer behavior perspective. Sheppard, Hartwick, and Warshaw (1988) and Notani (1998) offered excellent meta-analyses of research in domains of consumer behavior. More specifically on the domain of health marketing and consumer health behavior, there have been several studies employing the social cognition models to build research models. Table 2.2 is a list of recent research in these domains, which were published in *Journal of Consumer Research*, *Journal of Marketing Research*, and *Journal of the Academy of Marketing Science*, *Journal of Pharmaceutical Marketing & Management*, *Health Marketing Quarterly*, and *Psychology & Marketing*, and *Journal of International Consumer Marketing*. Recent studies using the social cognition models, which were published in the last five years, are also included in Table 2.2.

Table 2.1. *Meta-Analytic Reviews of Studies in Social Cognition Models*

Social cognition model	Number of studies under review	Authors of meta-analytic papers
Health belief model	16	Harrison, Mullen, and Green (1992)
	18	Carpenter (2010)
	18	Jones et al. (2014)
Theory of protection motivation	27	Milne et al. (2000)
	65	Floyd et al. (2000)
Theory of reasoned action and planned behavior	87	Sheppard et al. (1988)
	36	Notani (1998)
	96	Albarracin et al. (2001)
	185	Armitage and Conner (2001)
	21	Rivis and Sheeran (2003)
	44	Cooke and Sheeran (2004)
	33	Cooke and French (2008)
	40	Rise et al. (2010)
	16	Jones (2015)
	74	McEachan et al. (2016)
	12	Andrew et al. (2016)
Social cognitive theory	38	Graves (2003)
	44	Young et al. (2014)
	18	Stacey et al. (2015)
	35	Tougas et al. (2015)
Health action process approach	11	Gholami et al. (2014)

Table 2.2. *Health Marketing Studies with Social Cognition Models*

Authors	Behavior	Social cognition model
Oliver and Berger (1979)	Swine flu vaccination	Health belief model Theory of reasoned action
Chinburapa and Larson (1991)	Intention to use OTC analgesics	Theory of reasoned action
Moorman and Matulich (1993)	Preventive health behaviors	Health belief model Theory of reasoned action
Jayanti and Burns (1998)	Preventive health care	Health belief model
Luce and Kahn (1999)	Medical testing	Health belief model Theory of reasoned action Theory of planned behavior
Bowman, Heilman, and Seetharaman (2004)	Medication compliance	Health belief model
Lodorfos, Mulvana, and Temperley (2006)	OTC brand choice decision	Theory of planned behavior
LaBrosse and Albrecht (2013)	Food consumption	Health belief model
Schaller and Malhotra (2015)	Hormone replacement therapy	Theory of planned behavior
Schuster, Kubacki, and Rundle-Thiele (2016)	Physical activities	Theory of planned behavior
Chan, Prendergast, and Ng (2016)	Healthy eating	Theory of planned behavior

Further, to be more accurate in the context of parents' behavior toward the health of their children there are also some studies utilizing social cognition models. Table 2.3 is a non-exhaustive list of such studies most of which are in the domains of medicine and psychology. Recent studies using the social cognition models, which were published in the last five years,

are also included in this Table. For instance, theory of planned behavior has been successfully used to predict parents' intention and behavior toward their children's health such as using oral rehydration products (Hounsa, Godin, Alihonou, Valois, & Girard, 1993); not smoking indoors in the presence of children (Moan, Rise, & Andersen, 2005); and limiting frequency of infants' sugar intake (Beale & Manstead, 1991).

To the knowledge of the author of this paper, there have not been studies in the domain of consumer health behavior that explore the intention and behavior of parents for non-prescription medications for children in an everyday life context.

Table 2.3. *Studies on Social Cognition Models in Children Health*

Model	Behavior	Authors
<i>Health belief model</i>		
Parents	Therapy adherence	Charney et al. (1967)
Parents	Prophylaxis adherence	Gordis, Markowitz, and Lilienfeld (1969)
Mothers	Therapy adherence	Becker, Drachman, and Kirscht (1972)
Parents	Dietary compliance	Becker et al. (1977)
Parents	Therapy adherence	Becker et al. (1978)
Parents	Measles vaccination	Hawe, McKenzie, and Scurry (1998)
Parents	Prophylaxis compliance	Elliott, Morgan, Day, Mollerup, and Wang (2001)
Parents	Vaccination	Reiter, Brewer, Gottlieb, McRee, and Smith (2009)
Mothers	Using iron supplements	Raeis, Alidosti, Raeisi Dehkordi, Saeli, and Mahmoudi (2014)
Parents	Fever evaluation	Schultz et al. (2015)

Model	Behavior	Authors
<i>Theory of protection motivation</i>		
Parents	Therapy adherence	Flynn, Lyman, and Prentice-Dunn (1995)
Parents	Eye patching	Norman, Searle, Harrad, and Vedhara (2003)
Parents	adherence	Searle, Vedhara, Norman, Frost, and Harrad (2000)
Parents	Eye patching	Beirens et al. (2008)
Mothers	compliance	Neuberger, Silk, Yun, Bowman, and Anderson (2011)
Mothers	Use of stair gate Infant safety	van Beelen, Beirens, den Hertog, van Beeck, and Raat (2013)
<i>Theory of reasoned action or theory of planned behavior</i>		
Mothers	Use of sugar intake	Beale and Manstead (1991)
Mothers	Use of oral rehydration	Hounsa et al. (1993)
Mothers	Choice of infant food	Ramayah, Nasurdin, Noor, and Sin (2004)
Parents	Not to smoke indoor	Moan et al. (2005)
Fathers	Parental involvement	Perry and Langley (2013)
Parents	Oral health behavior	Van den Branden, Van den Broucke, Leroy, Declerck, and Hoppenbrouwers (2013)
Parents	Use of online health information	Walsh, Hamilton, White, and Hyde (2015)
Parents	Walking to schools	Schuster et al. (2016)
Mothers	Vaccination	Kim and Choi (2016)

2.8. Affect and Health Behavior

Emerging as a significant additional construct to models of attitude, intention, and behavior, further research on the predictive validity and interactive power of affect, with cognitive factors explaining consumers' judgment, decision, and behavior has been recommended (Cohen et al., 2008, p. 298; Malhotra, 2005, p. 478). As an example of the sparse work in this emerging research stream, an integrated model of attitude and affect was

empirically tested and shown to be significantly better than the traditional multi-attribute model in the context of fast-moving consumer goods (Agarwal & Malhotra, 2005, p. 491).

In the health-related domain, the emotional experience was found to be a significant predictor and moderator in attitude models (Allen, Machleit, Kleine, & Notani, 2005, p. 497). In addition to the cognitive factors of the models, an affective response such as an emotional reaction has always been recommended by major theorists to be incorporated into their cognition models (Fishbein et al., 2001, p. 5). Oliver and Berger (1979, p. 120) tested health belief model (Becker, 1974) and behavioral intention model (Fishbein & Ajzen, 1975) and found that the latter incorporating emotional factors had a higher predictive validity onto health care decisions. However, since then there has not been much research conducted to test the integrated model (Head & Noar, 2014, p. 38). Thus, one of the knowledge gaps in the domain of consumer health behavior is about the nature of the cognitive and affective factors regarding their predictive validity and interactive power on medicating intention and behavior.

2.8.1 Affect, cognition, and behavior

Behavioral intention and actual behavior are key constructs in academic research to explain consumer behaviors. Regarding an attitude object, intention and behavior interrelate with affect and cognition, as conceptualized in the tricomponent attitude model (Ostrom, 1969, p. 28). An attitude object is defined as a product, a product category, or product use. In a contemporary view, affect is defined as a feeling state distinctive from liking and cognition (Cohen et al., 2008, p. 298). Cognition reflects the beliefs that consumers hold about a particular attitude object; the underlying salient beliefs form the overall favorable or unfavorable attitude toward the object (Ajzen & Fishbein, 2005, p. 185). Conation reflects the tendency or the likelihood that an individual will behave in one way or another concerning

the attitude object. This definition of conation includes behavioral intention and the actual behavior itself, in which intention is assumed as an immediate antecedent of behavior.

Affect is one of the components originally derived from the tricomponent attitude model (Ostrom, 1969, p. 28) concerning attitude objects as exhibited in Figure 2.9. The definition of an attitude object is broad and can comprise a product, product category, or product use. Simply put, affect is the emotions and feelings that consumers have about the attitude object. Cognition reflects the beliefs consumers held about an individual attitude object; the underlying salient beliefs form the overall favorable or unfavorable attitude toward the object. Conation reflects the tendency or the likelihood that an individual will behave in one way or another concerning the attitude object. The definition of conation includes behavioral intention and the actual behavior itself in which intention is assumed the immediate antecedent of behavior. Affect, cognition, and behavior interrelate to one another in the structure of the model. Each component can have effects on the other two components within the model, and a fixed hierarchy of effects concerning the three elements cannot be determined. It is possible that beliefs can be developed first that forms affect about an object. Affect in turn influences intention and the actual behavior. It is also possible that beliefs influence the behavior and by taking an actual behavior, consumers can develop emotions and feelings about the object.

However, the tricomponent attitude model fails to distinguish adequately evaluative measures and processes of forming precursors or successors. In a contemporary view, affect is defined as “a feeling state that is distinct from either liking or purely descriptive cognition” (Cohen et al., 2008, p. 298). While there has been a substantial body of research on mood as a type of affect, research on emotion is still in the emergent stage. Unlike moods, emotions are “much more differentiated and hence provide more attitude- and behavior-specific

information” (Cohen et al., 2008, p. 299).” For example, feeling anger (emotion) will “often lead to target and context-specific responses rather than more general displays of unhappiness” (Cohen et al., 2008, p. 299).

Figure 2.10. Three Components of Attitude

(Ostrom, 1969, p. 28)

Differentiating emotion from mood is necessary. Schimmack and Crites (2005, p. 401) studied with lay people and identified the following emotion words described as an emotion rather than moods: hate, ashamed, jealous, envious, love, pity, hurt, loathing, terrified, outraged, disgust, angry, guilty, dismayed, and disappointed. Typically, emotion words are those having more profound affects directed at objects and have a known cause than mood words. Accordingly, emotions are directed at objects with intentional states, while moods do not have any object (Frijda, 1993).

2.8.2 Emotion

Previous research in consumer behavior has found that cognitive reactions alone could not account for the total variance of intention and behaviors of consumers (Curren &

Goodstein, 1991, p. 624). Not only cognitive factors, but affective ones also play a significant role in the development and maintenance of consumer preferences, which comprises of both cognitive and affective antecedents. In the formation of consumer attitude, intention and behavior there is an interaction of both affective and cognitive reactions (Zajonc & Markus, 1982, p. 127).

The underpinning of the commonsense model of self-regulation is the respect of individuals as active problem solvers who try to understand potential or existent changes in their physical state and to act to control or avoid those changes perceived as illness and physical disorder, as portrayed in Figure 2.10. The individuals are self-regulating systems. The representation of illness consists of five elements (Leventhal et al., 2001, p. 22): (a) the perceived identity of the disease as a threat; (b) the believed timeline of illness during which it develops and continues, at which it can be treated and cured; (c) the cause of illness including external factors, internal susceptibilities, or human behaviors; (d) the anticipated physical, emotional, social and economic consequences of illness; and (e) the controllability of disease with regard to the anticipated and perceived responsiveness of illness to treatment and intervention.

In the representation of illness, individuals implement various coping procedures for different purposes. Perceiving a health threat, people will deal with the need to determine and control the threat such as prevention and treatment. The illness representation affects the choice, goals, and implementation of the coping strategies and procedures (Leventhal et al., 2001, p. 23).

The advantage of the commonsense model of self-regulation is the appraisal of affect in the model. Emotional responses appear, in a wide diversity, at different points in time and varying strengths in reaction to the identification, diagnoses, treatment, and predictable

consequences of health threats and illness. Examples of emotional responses are a mixture of fear, anger, and depression; fear responses and avoidance, a sense of devastation; anxiety and fear; anxiety and distress (Leventhal et al., 2001, p. 24). In response to emotions, individuals may have additional coping plans and appraisals to control one's emotional reactions. The process of coping with emotional reactions does not completely depend on cognitive processes involved in representation and coping with the health problems (Leventhal & Cameron, 1987, pp. 127-128).

Figure 2.11. The Commonsense Model of Self-Regulation

(Leventhal et al., 2001, p. 21)

2.8.3 Role of affect in health cognition and behavior

Lazarus (1982, p. 1019) posited that “emotions are products of cognitive processes.” The interaction between affect and cognition is bidirectional. Affective reactions can come first or follow cognition and influence behavior (Leventhal et al., 2001, p. 25). Buck (1985, p. 405) postulated that affect is defined as the subjective aspect of emotion. Simply put, affect “is

immediate and direct subjective experience” (Chaudhuri, 2006, p. 5). It is consistent with the interpretive research approach deployed by attribution models such as the commonsense model of self-regulation. Its distinction from the social cognition models is the “bi-directionality of emotion and representations” (Leventhal et al., 2001, p. 25), which emphasizes the role of affect in shaping health behaviors. In response to health threats, illnesses, and medical treatment, the affective reaction occurs from and is dependent on, the meanings that individuals ascribe to it.

2.9. Chapter Summary

The purpose of this chapter is the initial review of existing literature. Figure 2.12 draws on an illustrative diagram consisting of the main domains and topics of this initial literature review. The boxes in gray depict the review in the Asian context.

The review starts with discussions of the healthcare environment in Asia with a focus on the challenges Asian health systems are facing and the characteristics of children health care in Asia. The review then looks into the basic concepts of healthcare such as health behaviors and medications. On the one hand, within the domain of medicines, discussions of self-care and self-medication with extant literature are presented. The review then views main points of the pharmaceutical market and distribution in Asia. On the other hand, a review of the consumer decision making and more specifically on healthcare decision making is offered. Finally, this chapter looks at health behaviors and cognitive and affective factors under in light of research behavioral models and theories.

Figure 2.12. Overview of Initial Literature Review

CHAPTER 3. RESEARCH METHOD

The chapter briefly discusses highlights of classic grounded theory method. At first, the overall approach of classic grounded theory method is presented with appropriate evidence of the approach being applied in this study. Based on it, details of methods employed in this study are specified. The details include methods for data generation, empirical abstraction, and theoretical abstraction. The texts cover a method of substantive and theoretical coding, development of categories, constant comparison method, memo writing, and theoretical sampling and theoretical saturation. I provide rationales for empirical and theoretical abstractions. As such, a particular work process of grounded theory method is proposed for the present research. This chapter also provides details of data collection, examples of data analytics, and a summary of the data analysis. Lastly, a summary of analysis output is presented to provide a background for furthering to the next chapter.

3.1 Grounded Theory

The evolution of consumer research methodologies has attracted the attention of leading scholars in the field to a “naturalistic” approach, namely interpretivism (Goulding, 1999, p. 862). Emphasis is the “personal” perspective (Goulding, 1999, p. 859) and the necessary self-reflection of the researcher as a philosophical departure in applying these interpretive approaches. The interpretive approach is mostly different from the formalized, structured quantitative empirical methodology of the positivist approach, which was the only approach used by academic scholars for more than 30 years. Although there have been debates on positivist academic scholars and controversial issues of epistemology, remain, the methodologies of interpretivism had been developed, and there are some conventional interpretive approaches such as ethnography, phenomenology, grounded theory, hermeneutics, and ethnomethodology. However, because of the lack of standardization in

their fundamental processes, there are boundary overlaps between them, a lack of clarity in their applications, and common methodological transgressions between these methodologies in the main steps of academic research such as sampling procedures, data collection, and analytical techniques. This overlap caused confusion and ambiguities among qualitative researchers.

Out of the methodologies of interpretivism, the grounded theory approach utilize theoretical sampling and requires data saturation before the theory can be developed (Goulding, 1999, p. 868). Literature is referred as part of the iterative and interactional process of data collection and interpretation (Goulding, 2005, p. 296; Ramalho, Adams, Huggard, & Hoare, 2015, p. 7). Initially, grounded theory method was employed by sociologists. However, it is increasingly used in multidisciplinary research, which includes consumer behavior (Malhotra & Peterson, 2001, p. 220), management (see reviews of Bluhm, Harman, Lee, & Mitchell, 2011; Flint, Gammelgaard, Denk, Kaufmann, & Carter, 2012; Turner, 1983), health psychology and health behavior (e.g. a review of Hutchison, Johnston, & Breckon, 2011). Although there are various adaptations in using grounded theory across disciplines, there are principles for any grounded theory method to be used (Goulding, 2002, p. 46).

Given the present study's emphasis on inductive theory development, grounded theory was considered an appropriate methodology. The reasons for employing a grounded theory method for this study are twofold. First, the research questions focus on behavior and its related categories, such as cognitive and affective facilitators and implications. Grounded theory is a suitable methodology for consumer research with a focus on behavior (Goulding, 2002, p. 1) through which new dimensions and variations of facilitators and implications can be understood. Second, the research objective is to build a new theory in the studied

phenomenon of interest. It helps further my understanding of possible answers to questions of the properties of a new construct, the parsimony of a prior conceptualizations of well-established constructs, the facilitators and implications of a construct, or the adequacy of previous conceptualizations of facilitators and consequences of a construct (Fischer & Otnes, 2006, pp. 21–23).

Since the first publication on grounded theory method by Glaser and Strauss (1967), variants of grounded theory methods have been developed (Charmaz, 2006; Glaser & Strauss, 1967; Morse et al., 2008; Strauss & Corbin, 1990). Grounded theory development and variation are considered as “a methodological spiral” (Mills, Bonner, & Francis, 2008, p. 25) on which various epistemological positions grounded theorists pursue are located somewhere and are reflective of their ontologies. There are two different variants of grounded theory namely ‘objectivist’ or classic grounded theory and constructivist grounded theory. The former variant derived from positivism and the latter is part of the broader interpretive tradition of theory.

3.2 Research Approach

This study relies on the classic grounded theory method. At the beginning of this research project, I learned and tried adopting the approach of constructivist grounded theory. I attended two training courses on constructivist grounded theory in 2014 and 2015. However, when I had advanced my work into the focused coding, I analyzed data and changed to adopt the hypothesis development method of Glaser (1978) to propose an integrated conceptual framework for a substantive theory. I went to participate in a troubleshooting seminar on classic grounded theory, which was organized by Grounded Theory Online (www.groundedtheoryonline.com) in 2016. In fact, the open coding was made with a focus on actions of participants as we can review in the Appendix I. In this study, the classic

grounded theory method has been applied according to the key features and requirements of the method. The characteristics of classic grounded theory differ from the constructivist variant in five tenets (Gibson & Hartman, 2014, pp. 61–62): openness, explanatory power, discovery nature, the structure of the theory, and the research process. I discuss in the following paragraphs the basics of the classic grounded theory and provide evidence why the present study has followed the classic approach.

Openness. The first one of grounded theory is the openness of grounded theory, which can be validated by looking at the avoidance of preconception of researchers (Glaser, 2012, p. 1; Glaser & Holton, 2005, p. 4). The development process of grounded theory in a certain study should not be preconceived. The basis of starting a grounded theory study is just to define a phenomenon and its location, open research questions regarding human behaviors as a unit of analysis. A neutral collection of data focuses on people behaviors. In constructivist grounded theory, the openness of grounded theory focused on meanings however for *specific* problems. Research questions are developed to address meanings of *more specific* objects to people (Charmaz, 2008b, pp. 89-90; 2014a, p. 241; 2014b, p. 6). A negotiated collection of data focuses on meanings and the researcher can co-construct the theory.

In this study, I have been aware of my preconceptions, which originated from my knowledge and experience but have made efforts in not making use of them in the whole research process. My research questions just identify the social phenomenon in which parent behaviors pertaining children's health and medication are the unit of analysis. Data collection was open. Data collected as diverse as possible and the previously collected data indicated further sources of data. In this study, the data was primarily from parents and pharmacy staff. Theoretical sampling was made by collecting data from online communities. My data analysis included open coding phase, which I read line-by-line for coding. This method

makes us open to words and phrases in the incidents of behaviors that indicate possible concepts. During the data collection, coding, and memo writing, I have attempted to listen to participants for behaviors of parents. I did not code for meanings, but for behaviors.

Explanatory power. The second tenet of the grounded theory lies in its explanatory power. Grounded theory is to explain the formation and interrelationship of social phenomena surrounding problems (Glaser, 2002, p. 787). Such interrelationship is to be explored and conceptualized in an iterative process. There is a balance between generation and justification of grounded theory (Glaser, 2014, p. 13; Glaser & Strauss, 1967, p. 13). Such a theory needs to be grounded in the field with various perspectives of participants. In constructivist grounded theory, the explanation is less emphasized (Charmaz, 2008a, p. 398; 2014a, p. 230). Instead, it seeks to capture how meaning varies for individuals and groups. Constructs are co-built by the researcher and participants. The method has a more interpretive power.

In this study, I have aimed to discover a theory that can explain how the main concern of parents in making health care and medication decisions in the substantive area is resolved. I sought to identify relevant concepts in the field of study and the relationship between such concepts. I described core categories in the studied phenomenon; how they vary and relate to the main concern of parents and how these are reorganized and resolved. I proposed causal relationship hypotheses through theoretical sorting and integration.

Discovery Nature. The third tenet concerns the discovery nature of the method. The theory is to be discovered, not justified. (Glaser, 2014, p. 13; Glaser & Strauss, 1967, p. 13). Such a theory needs to be grounded in the field with various perspectives of participants. The theory is co-generated. Both researcher and participants are expected to be flexible and open

to sharing their views (Charmaz, 2014a, p. 236). Constructs are rather discovered and analyzed regarding meanings to both researchers and participants (Charmaz, 2008b, p. 82).

The purpose of this study is to discover a theory not to justify or verify it. There have been no efforts in testing the theory. The theory is grounded in data that I collected as neutrally as possible and through different sources. During the theoretical coding phase, I revised the tentative theory until it fits the data. The theory, therefore, should fit that data. Even though it is not required to provide justification of the emerging categories and theory, in this study, I do provide some forms of justifications to prove the value of my proposed theory. I justified how the categories and theory contribute to knowledge and relevant literature in the related fields.

The structure of the theory. The fourth aspect of the grounded theory is the structure of the theory. It is required to structure and integrate categories, both core and non-core ones (Glaser & Strauss, 1967, p. 108). There are hypotheses (or propositions) of the relationship between the core category and other categories or concepts. In constructivist grounded theory, categories are interrelated by some propositions, which connect them in an undefined way; categories are rooted in the meaning the phenomenon has for the participants (Gibson & Hartman, 2014, p. 62). The categories integrate rich data, construe and pinpoint “patterned relationships between categories” (Charmaz, 2008b, p. 81) to shed light on possible theoretical explanations. Coding includes initial codes and focused codes.

My emerging theory needs to have relationships between a core category and other categories. The core category will have dimensions and properties that are well-defined setting, role, or group of people.

Research process. The final tenet of grounded theory is the iterative research process in which data collection and data analysis are combined iteratively (Glaser & Strauss, 1967, p. 61). There are two coding phases: substantive coding and theoretical coding. In constructivist grounded theory, alignment between researcher and participants in meanings are the focus of the process. It engages the interaction and reflexivity of both researcher and participants throughout the co-construction of data (Charmaz, 2014a, p. 236). There is no singular way of doing (Gibson & Hartman, 2014, p. 62).

The grounded theory process in the present study is iterative. Findings from data indicated what data I would collect next, I collected and re-analyzed until a theory emerges. The research process has two main coding phases. The first coding phase is to identify categories – substantive coding phase in grounded theory. The second coding phase is to sort and integrate the categories theoretically to propose relational hypotheses, which is theoretical coding phase.

3.3 Data Generation

3.3.1 Overview

Data collection. The most common method of data collection in grounded theory research is face-to-face, semi-structured, open-ended, ethnographic, in-depth conversational interview (Goulding, 2002). This method helps obtain rich and detailed data from subjects' experience, attitude, beliefs, and emotion. It should also be flexible enough to allow the discussion to lead into areas which may not have been considered before the interview but which may be potentially relevant to the study. Guiding questions can be used. Such questions play just as guidance on the logic, but not compulsory, the flow of the interviews. They were reordered, adapted during each interview session according to the interaction and

the nature of the interviewer and the respondent. The interviewer did answer certain questions from the participant when appropriate to facilitate the conversation and to make clarifications if necessary. Interviewers need skills and practice. They need to understand the language and cultures possessed by the respondents. Early in the individual interview sessions, interviewers must gain trust from respondents and establish necessary rapport to facilitate the sharing conversations (Goulding, 2002). Grounded theory questions must avoid forcing the data into preconceived categories (Glaser, 1978). Researchers' use of regional language and vocabularies and gender language differences are also considered carefully and pre-practiced to avoid influencing participants' notions as recommended by Charmaz and Belgrave (2002, p. 354) to "study your interview questions!"

In grounded theory, sampling is an iterative process in combination with data analysis and literature review. Whenever data analysis and literature review provide output for the need for further inquiries more respondents are to be sampled. The researcher first can go to the most obvious respondents for the research area of focus understudy to collect preliminary data. However, as categories and concepts are then identified more respondents under required circumstances are to be sampled, and collected data can reconfirm and further the development of theory using multiple pieces of evidence. Data analysis such as coding can be started early when the first data pool is available (Corbin & Strauss, 2008).

In this study, I collected data from diversified sources as relevant as possible over 'encounters' in different settings including face-to-face in-depth interviews with individual parents, dyadic parents, pharmacy staff, and online health communities. Glaser and Strauss (1967) advocated various sources and methods of data and data collection can be adopted for theoretical sampling to develop saturation of categories and properties. The diversity of data and data collecting techniques yield more information under a wide range of conditions of the

main concern on a category rather than limited data sources and collection methods. Slices of data facilitate the width and depth of data leading to saturation of categories. Such “slices of data” allow grounded theorists obtain multi-faceted investigation in the main concern under study. Comparing the differences in the various data provides clues for properties of categories. The authors recommended that there are no limits on data and data collection (p. 65). “All is data” (Glaser, 2001, p. 145).

In line with the concept of “slices of data” from Glaser and Strauss (1967, p. 65), grounded theorists have adopted secondary data in their studies (e.g. Andrews, Higgins, Andrews, & Lalor, 2012, p. 12; Holton & Walsh, 2016, p. 58; Leonardi & Bailey, 2008, p. 418). In contrast to the limitation (Andrews et al., 2012) faced in of secondary data analysis, in this study secondary data is available sufficiently thanks to the diverse source of online communities. As stated in Table 3.5, I increasingly collected more data from an online forum of parents where I completely gathered parents’ sharing from six different themes with rich data. Online communities such as internet forums provide a platform for sharing ideas, contacting fellow groups of consumers, as well as building communities, which are seen as an objective source of information (Kozinets, 2002, p. 61). Data from online communities form the “wisdom of the specialist” through the integrated “knowledge of the many” consumers (Dellarocas, 2006, p. 1577). In health-related topics, online communities provide records of data for not only parental perception, beliefs, and understanding, but also their emotions, likes, and moods. By collecting data from online communities, I was able to capture in my data meaningful, honest, and up-to-the-moment affective elements. Another advantage of data from online communities is the richness of information, thanks to the intensive sharing from a large parental pool of members of communities and the depth of topics under discussion.

Theoretical sampling. Theoretical sampling is collecting more data on purpose to help us develop the categories and an emergent theory. It is not for the purpose of representation of the population neither the generalization of results. After a core category emerges, additional data collection, analysis, and memo writing are restricted to theoretical sampling to identify additional conceptual indicators and to move the theorist to selective coding phase (Holton & Walsh, 2016, p. 89). Theoretical sampling will generate slides of data to expand the categories and the relationships between them. It helps delimit and integrate the theory and the central relationships. It can develop the scope of the theory by expanding the application of the theory in other groups of participants and social units (Gibson & Hartman, 2014, p. 133). Theoretical sampling reduces the necessary data amount. The deductive approach of theoretical sampling does complement the inductive approach of grounded theory (Glaser, 1978, p. 37).

Theoretical saturation. Theoretical saturation refers to the adequacy of data collected from the field. The adequacy is determined based on the repetition of categories even from new data sets. To confirm the repetition, constant comparison of the data sets is conducted. Before theoretical saturation can be achieved theoretical sampling is to be done. The researcher must ensure that collected data reaches its saturation for the rigor of grounded theory method (Goulding, 2002). There are no clear rules about when data is saturated. Researchers have to rely on the indicator of repetition of information about previously identified categories, their properties, and the relationship to other categories (Locke, 2001). Comparisons of incidents in data help provide evidence of saturation of categories and properties by the interchangeability of indicators (Glaser, 1998, p. 139).

3.3.2 Data collection

I conducted face-to-face interviews with 28 parents and six pharmacy staff recruited in Ho Chi Minh City, Vietnam. All interviews were audiotaped for transcription

Parent dyads. Ten parent dyads were recruited who had at least one child aged between 2 and 11 years. Then either the father or the mother was separately interviewed, followed by the other parent of the same dyad. The two interviews were conducted consecutively, one after the other, to prevent a prejudicial impact of the father on the mother's thoughts and vice versa. Also, eight individual parents with children aged 2 to 15 years old were recruited equally from Hanoi and Ho Chi Minh City, Vietnam, two mothers and two fathers in Hanoi, and the same from Ho Chi Minh City. In searching for the participants, I aimed to screen for open-minded, ready-to-share parents who have two children aged up to 15 years and have a wealth of experience in childcare. The average time of interview per parent dyad was 57 minutes of which average mother interview lasted for 32 minutes and that of fathers for 26 minutes. The interviews were audio-tapped for transcription. The demographic details of 10 parent dyads are presented in Tables 3.1 and 3.2. To protect the identity of the participants and other people mentioned by the participants, their pseudonyms are used in this dissertation.

The purpose of the parent interviews was to explore and understand parents' perceptions of illness prevention and usage of preventive medications in children; parents' interaction with referent groups related to the use of medicines; and parents' beliefs and actions in the use of medicines. Data collection from the parents of the same dyad allowed comparison for understanding differences in father's and mother's perceptions and behaviors in using medications for their children.

There was not any standardized questionnaire. According to Aaker, Kumar, and Day (2008, p. 196) and Berg (2009, pp. 105-107), the questions presented played just as guidance on the logic, but not compulsory, the flow of the interviews. I reordered and adapted the questions during each interview along with the interaction and the nature of the participants and us. Further, I did not follow exactly the wording of the questions but rather conveyed the main ideas and exchanges with the participants. I did answer certain questions from the respondent when appropriate to facilitate the conversation and to make clarifications if necessary. I asked additional questions during the interviews to ensure my understanding of participants' attitude and perception.

My memos are summarized as follows. Parents perceived illness prevention in children primarily as a matter of general personal hygienic measure and daily intake of nutritious foods and drinks. Parents perceived medications unnatural and more or less harmful. Whereas others tended to utilize natural preventive measures, such as nutritious foods and drinks, fathers preferred a balance of medicines and healthy food or drinks. Parents acquired a substantial knowledge of several over-the-counter medications categories that can be used to enhance children's health, resistance to illnesses, and children's physical and intellectual development. They are vitamin and mineral supplements, calcium and vitamin D supplements, probiotics, and anthelmintics. Parental decisions to administer such medications to children depend on (a) past use of the medications by physicians' prescriptions, (b) related information searched from social webs, (c) recommendation from referent groups, and (d) recommendations from experienced pharmacy staff.

Pharmacy staff. Moreover, six pharmacy staff, who worked on a daily basis in Ho Chi Minh City at retail pharmacies advising and selling medications to consumers, were recruited for face-to-face interviews. The pharmacy staff had at least two years of working experience

in pharmacies. The average time of interview per person was 37 minutes. Two of the six pharmacy staff attended a single interview. The interviews are also audio-tapped for later transcription. The demographic details of six pharmacy staff are presented in Table 3.3. Again, pseudonyms of the pharmacy staff and other people mentioned by the staff are used in this dissertation to protect their identity. The objective of the pharmacy staff interviews was to further explore and understand parents' perceptions, beliefs, and actions, which, for certain sensitive reasons, parents might not have shared in their interviews. This could be achieved because the pharmacy staff had sufficient working experience at pharmacies and in interactions with parent clients. Data from pharmacy staff also plays a role for data triangulation (Thurmond, 2001, p. 254) in which I listen to only parents but also pharmacy staff who have frequent contacts with parents during the medication process for children.

Individual parents. Eight individual parents with children aged two to 15 years old were recruited equally from Hanoi and Ho Chi Minh City, Vietnam, two mother and two fathers in Hanoi, and the same from Ho Chi Minh City. A market research agency recruited the participants. In searching for the participants, the agency aimed to screen out for open-minded ready-to-share parents who have two children aged up to 15 years with a wealth of experience in childcare. I conducted the interviews in a particular room with audio and video recording equipment. The average time of the interview with the participants was one hour and 32 minutes. It ranged from one hour 22 minutes to 1 hour 50 minutes. Demographic details of the participants are presented in Table 3.4. Intensive interviews with participating parents followed the recommendations of Charmaz and Belgrave (2002, pp. 350–351). I made an effort to build quickly on my relationship with the participants during the interview sessions. When appropriate, I properly applied initial open-ended questions, immediate questions, and closing questions. However, I did not use any discussion guide during the eight interviews.

Theoretical sampling. Theoretical sampling data was collected secondarily from one popular parental online forum in Vietnam, <http://www.webtretho.com/forum/> (“webtretho” translates to “website about children”). In the first round, I selected four topics for this data collection based on the following criteria: (a) topics about popular or chronic children’s health problems in an everyday context; (b) highest number of replies from forum members; and (c) greatest number of views. As a result, I chose to collect data from the topics: “Caring and treatment of children with asthma at home,” “Nasal obstruction in children” “Experience in nasal problems and sore throat,” and “Viral fever (due to viruses).” In the second round, two more themes were selected. They were “Experience in treatment of a sore throat, cough, and tonsillitis by simple regimens” and “kid’s coughing and running nose.” Details of the data are presented in Table 3.5. The topics had a range of views from 119,000 to 720,000 and a range of replies from 294 to 1,160.

Table 3.1. *Details of Research Participants: 10 Parent Dyads*

Participant Pseudonym	Relationship	Age (years)	Education	Occupations	Monthly Income (million VND)	Number of children	Children age
Vinh	Father	29	University	IT manager	16–20	1	Three years
Quyen	Mother	28	University	Teacher			
Hang	Mother	41	High school	Business owner	11–15	2	Six years, 11 years
Danh	Father	44	High school	Business owner			
Quoc	Father	30	University	Transport Manager	16–20	2	Three months, two years
Uyen	Mother	31	University	Office worker			
Sanh	Father	39	University	Housewife	16–20	2	Two years, five years
Yen	Mother	36	University	IT Engineer			
Thi	Mother	28	University	Housewife	21–25	1	Three years
Nhan	Father	32	University	Architect			
Duyen	Mother	35	High school	Private trader	11–15	2	Seven months, four years
Tu	Father	35	High school	Technician			
Khoi	Mother	31	College	Housewife	21–25	2	Four years, nine years
Tuyen	Father	37	College	IT shop assistant			
Trang	Mother	32	High school	Shop owner	> 31	1	Three years
Than	Father	38	High school	Private trader			

Table 3.2. *Details of Research Participants: 10 Parent Dyads (Cont.)*

Participant Pseudonym	Relationship	Age (years)	Education	Occupations	Monthly Income (million VND)	Number of children	Children age
La	Father	32	University	Architect	21–25	1	Four years
An	Mother	30	University	Housewife			
Mao	Mother	31	High school	Trader	11–15	1	Six years
Toan	Father	33	High school	Driver			

Table 3.3. *Details of Research Participants: Six Pharmacy Staff*

Participant Pseudonym	Address (district)	Age (years)	Education	Experience (years)	Number of customers at pharmacy per day
Dan	Binh Thanh	25	College pharmacist	2	50
Hoa	8	23	College pharmacist	2	30
Thuan*	Go Vap	32	College pharmacist	4	100
Phong*	Binh Thanh	25	College pharmacist	3	80
Nha	5	29	Pharmacist	2	90
Linh	7	45	College pharmacist	14	110

* Thuan and Phong joined in a single group interview with the author.

Table 3.4. Details of Research Participants: Eight Individual Parents

Participants Pseudonym	Gender	Age	City	Education	Occupation	Children age			
						2–6 years		7–15 years	
						Boy	Girl	Boy	Girl
Thu	Female	31	Hanoi	Bachelor	Clothes own business	2			9
Van	Male	29	Hanoi	High school	Tailoring factory owner	2		7	
Ai	Female	38	Hanoi	Bachelor	Accountant		6		8
Manh	Male	30	Hanoi	College	Cell phone shop owner	3			7
Thanh	Male	45	Ho Chi Minh	High school	Taxi admin manager	5		11	
Minh	Female	33	Ho Chi Minh	High school	Trader		2	10	
Tran	Male	44	Ho Chi Minh	Bachelor	Warehouse keeper	6			15
Hong	Female	39	Ho Chi Minh	College	Post office staff	5		9	

Table 3.5. *Data from Six Themes from a Parental Online Forum*

Theme	Theme and Link	Pages of extracted as data	Number of views	Number of replies
1	“Caring and treatment of children with asthma at home” http://www.webtretho.com/forum/f87/cham-soc-va-dieu-tri-be-bi-benh-hen-phe-quan-7564	59	246,000	1,160
2	“Nasal obstruction in children” http://www.webtretho.com/forum/f87/van-de-ngat-mui-cua-em-be-2001	32	194,000	634
3	“Experience in nasal problems and sore throat” http://www.webtretho.com/forum/f87/mot-so-kinh-nghiem-khi-tre-bi-viem-mui-hong-61562	16	155,000	316
4	“Viral fever (due to viruses)” http://www.webtretho.com/forum/f87/sot-sieu-vi-sot-do-virus-19886	15	119,000	294
5	“Experience in treatment of a sore throat, cough, and tonsillitis by simple regimens.” http://www.webtretho.com/forum/f87/kinh-nghiem-chua-ho-viem-hong-viem-amidan-va-ha-sot-bang-nhung-bai-thuoc-don-gian-248981	35	720,000	699
6	“Kids’ coughing and running nose” http://www.webtretho.com/forum/f87/be-ho-va-so-mui-2086	43	188,000	849

Source: Data collected on 30th November 2014 (themes 1-4) and 2nd Oct 2016 (themes 5-6) from <http://www.webtretho.com/forum>.

3.3.3 Data formatting

All interview records were transcribed into textual data using Microsoft Word 2013. The principal author of this study completed the transcription of full interview records of the ten parent dyads, six pharmacy staff, and eight individual parents. By self-transcribing the audio records, the author had the chance to listen to the interviews one more time in the early analysis process. Although Glaser (1998) did not recommend full transcription of interview data, I do keep full transcribed interviews to enable us to conduct an iterative analysis at any point in the analysis process that followed (Charmaz, 2014a, p. 136). Transcribed textual data from the parental online forum was exported directly from the website using N-Capture for QSR-NVivo built-in Google Chrome version 45. The textual data in the files of Microsoft Word 2013 and N-Capture were then imported into QSR-NVivo in the Source folder, and data was placed into different folders for easy access.

In this study, I utilized QSR-NVivo software package version 11.0 (Bazeley & Jackson, 2013) to facilitate various aspects of the grounded theory process including data analysis and coding, constant comparison analysis, literature analysis, theoretical development, and presentation of results (Hutchison, Johnston, & Breckon, 2010, p. 284; Leech & Onwuegbuzie, 2011, p. 72). I also used Microsoft Word 2013, NCapture for NVivo and Endnote X7 applications to assist and integrate the process of data and literature analyzes. While software packages for qualitative data analysis can increase research productivity, they cannot replace the human researcher's role in the critical process of analyses and interpretation (Gummesson, 2005, p. 313). I utilized N-Vivo application for archiving purpose that integrates coded data and manages links of memos to incidents in the data for an iterative analytic process in this study. The organization of the memos helped us increase productivity in the writing process (Holton & Walsh, 2016, p. 96).

3.4 Empirical Abstraction

3.4.1 Overview

Grounded theories help explain and further understanding of patterns of interesting human behaviors and important and relevant basic social processes (Glaser, 1978, p. 100) at a high abstract level. “Process is ongoing action/interaction/emotion taken in response to situations, or problems, often with the purpose of reaching a goal or handling a problem” (Corbin & Strauss, 2014, pp. 96-97); process relates to context. Different actions, interactions, as well as emotional response, happen over time with purpose and continuity of context and vary according to timing, intensity, and type. Glaser and Strauss (1967, pp. 101–102) recommended an integrated method of data coding and categorizing taking into account the two qualitative analysis approaches at the time (Glaser & Strauss, 1967): “explicit coding and analytic procedures” of constant comparison (Glaser & Strauss, 1967, p. 102). Explicit coding is the assignment of relevant qualitative data to a point to assemble, assess, and analyze systematically toward evidence of a proposition. The analytic procedure of comparative method constantly redesigns and reintegrates theoretical notions through close reviews of data in parallel with theoretical sampling (Glaser & Strauss, 1967, p. 102).

In grounded theory approach, data collection and analysis by coding are interrelated and iterative (Locke, 2001, p. 112). To generate categories, constant comparisons of data sets are conducted theoretically. Coding analysis with constant comparison suggests differences and similarities in incidents within the collected data (Locke, 2001, p. 73). While similarities in incidents suggest conceptual properties or categories and help adequately develop concepts, differences in incidents of data expand properties or categories of concepts and demand for next collection of data. In the next loops, analysis of new data can compare new incidents

with the emerging categories (Spiggle, 1994, p. 494) to increase the explanatory power of suggested categories (Glaser & Strauss, 1967).

Open coding. Charmaz (2008b, p. 95) classifies coding into two types: *initial coding* and *focused coding* which is considered previously as the stage of substantive coding by Glaser (1978, p. 56). Doing coding is by gerunds which (a) enhances theoretical sensitivity (Glaser, 1978, p. 1) by moving the researcher “out of static topics and into enacted processes” (Charmaz, 2014a, p. 245); and (b) facilitate an analytic sense of actions embedded in the studied phenomenon. *Focused coding* is coding the initial codes to decide what codes are raised to focused codes which “make the most analytic sense” for categorization of data (Charmaz, 2014a, p. 138). Whereas initial codes reflect a broad analytic view of data, focused codes are the researcher’s interesting choice of in-depth analytics that provides direction to move forward to categories. Assigning focused codes requires comparison of patterns of initial codes versus the data which can help reveal gaps in the data, determine the codes that best account for the data and that have insights potential for tentative categories and grounded theory (Glaser & Strauss, 1967, p. 254). During open coding phase, I asked what data is a study of, what category it indicates, what properties of a category would be, what was happening in the data, what basic social problems tackled by participants would be, what basic social process that makes life viable might be, and what part of the emerging theory this incident would indicate (Glaser & Strauss, 1967). In this study, I applied the coding phases and their details as described in Table 3.6.

In this study, I did a line-by-line coding to generate codes that are described and grouped together advances the development of categories. Open coding focuses on actions or behaviors in the substantive area to highlight what is happening in the data. The output of

open coding includes initial codes (in vivo and descriptive codes) and focused codes that are more selective.

Table 3.6. *Coding Phases: Description and Purpose*

Phase	Coding	Output	Description	Purpose
Substantive coding	Open coding	Initial codes	In vivo and analytic codes to conceptualize what is happening in the data	Identify incidents in data that may indicate categories
		Focused codes	Analytic codes	
	Selective coding	Properties and dimensions	Coding for properties and dimensions of categories	To identify properties and dimensions of categories
Theoretical coding		Hypotheses	Coding to model the relationship between categories	To determine hypotheses regarding the categories and determine the central categories as Core Category

Constant comparative method. The constant comparative method is a dynamic and transformative process with four consecutive stages: (a) comparing incidents applicable to categories, (b) integrating categories and their properties, (c) delimiting the theory, and (d) writing the theory” (Glaser & Strauss, 1967, p. 105). Moreover, comparison of incidents in data to emerging concepts help the theorist verify the concept as a category of the proposed theory, the fit of the categories nomenclature versus the data pattern, generate properties of

categories, and saturate the categories and properties with the evidence of interchangeability of indicators in data (Holton & Walsh, 2016, p. 36).

Memo-writing. Another principle employed in the whole process of grounded theory is memo-writing, which can be applied to any form of data to generate a pool of ideas to work with throughout the sampling and data collection stages. Memo-writing is about writing down striking ideas of researchers about categories and their properties for an occasional revisit in the process to figure out possible emerging theories. Contents of memos are used in the process of abstraction, ideas, and descriptions of memos as originated by researchers should be written in conceptual jargons (Goulding, 2002). There are two types of memos (Locke, 2001). The first type is field notes, which are powerful ideas and description to researchers by incidents of collected data in the field, more in the data collection process. In developing categories, during the course of identifying properties of categories memos are about new ideas more related to theoretical consideration that helps facilitate selective coding procedures, theory diagramming, and first draft writing. Writing specifies researchers' thoughts as visible and concrete arguments and enhances the articulation of categories and emergent theories.

Gibson and Hartman (2014, p. 178) suggested to include in memos how researchers develop emerging categories, the choices of names to fit categories regarding ideas and images the categories can convey, how categories are formulated, specified, added or removed. Memos also document reasons for selection of categories, hypotheses concerning the categories, process of theoretical sampling, integration of categories and theory into extant literature, and coding families.

3.4.2 Coding

All *initial coding* was completed in the Vietnamese language, as per advice from Tarozzi (2013, p. 10). The following is an example of the original codes I did with data. The underlined textual data was code initially as *consulting a pharmacist*.

“I asked [pharmacists] the prescription has this medicine, what it is for... This medication is not mentioned in the prescription, do you have that mentioned there. It is not the same name as that in the prescription...” The pharmacist said the different name but the same usage; do you agree to buy? I asked different names, different manufacturers, but the same formulation? If the pharmacy recommends a medication with different formulation from that in my prescription, I will not buy I will go to another favorite store.” (Participant: Minh).

During the initial coding process, I also re-listened to the voice records of the interviews to obtain a better understanding of the meanings and emotions of the participants. Using NVivo, I was able to merge the codes into one code whenever I felt that they should represent a single code. During the subsequent coding steps, I sometimes came back to review the initial codes to obtain a better overview of the codes or to verify the fit of some codes. In total, I created more than 600 initial codes. After refining the codes, I have a final total of 524 initial codes, of which 229 initial codes are included to be abstracted 18 focused codes and seven categories and their properties or dimensions. The full list of the 229 initial codes is presented in Appendix I.

In this study, I coded emotion using the 6 clusters of emotion (Shaver, Schwartz, Kirson, & O'connor, 1987, pp. 1070–1071) which represent the fundamental level of emotion concepts (Schimmack & Crites, 2005, p. 413). These clusters comprise of words describing

emotions of love (16 words), joy (32 words), surprise (three words), anger (29 words), sadness (37 words), and fear (17 words). I assigned each cluster as a parent node in QSR-NVivo software. Under each cluster (parent node), I coded child notes referring to the emotion words in each cluster of emotion (Benski, 2011). List of emotion words for each cluster is presented in Appendix F (Shaver et al., 1987, pp. 1070–1071).

I created *focused codes* in English by studying the corresponding initial codes in Vietnamese. To select appropriate words in English, I did translation and back-translation and looked up synonyms and antonyms by referring to *Webster's New World College Dictionary* (Merriam-Webster, 2009), *Roget's Thesaurus of English Words and Phrases* (Roget, 2012), and *Lac Viet mtd Dictionary* (an English–Vietnamese and Vietnamese–English dictionary). The list of final focused codes is presented in Table 4.1 in relation to categories; descriptions of the codes are given in Chapter 4. Initially, I had 25 tentative focused codes, I analyzed and raised the focused codes to categories resulting in finally 18 focused codes. The list of tentative focused codes is presented in Appendix G as an example.

3.4.3 Constant comparison

In this study, constant comparison was made between the following sources of data: ten mothers and ten father who came from ten parent dyads, four mother and four fathers from the group of eight individual parents, twenty-eight parents versus eight pharmacy staff, and four parents from Hanoi (a northern city in Vietnam) and four parents from Ho Chi Minh City (a southern town in Vietnam), eight individual parents, and those parents who shared on the online forum. Constant comparison was also conducted for each type of parental experience under each focused codes and categories. I found the data is enriched by the parental experience of interactions with physicians, with pharmacy staff, and through social networking. I count data sources as equivalent to participants or a theme of the online forum.

In total, I have 34 participants and six forum themes together totally 40 data sources.

Constant comparison of indicators for initial codes and focused codes provides the frequency of code repetition as a reference of data saturation.

3.4.4 Memo writing

Two initial memos have been drafted early in the process of data collection of ten parent dyads and six pharmacy staff respectively. Advanced memos were developed from the initial memos with the inclusion of further data from the interviews of eight individual parents.

During and after each interview I built on memos for individual interviews. I used NVivo to file memos, and I could link each memo to the interview data in the NVivo project file.

Examples of field note and memo are presented in Appendices J and K.

I made field notes during the conceptualization process while I was doing fieldwork. I listened for the main concern of participants, and I took notes of indicators of how that concern was processed or resolved. I have taken care to write memos, which are similar labeling schemes for all data to offer an opportunity to keep data clearly connected with written work while the study progressed. The memos provide a tracking tool for compiling the theoretical coding and writing this thesis.

I employed the clustering technique, assisted by NVivo, to organize focused codes and categories to facilitate advanced memo writing (Charmaz, 2014a, pp. 184–186). The clustering puts core categories in the center and builds defining properties around sub-categories showing the relationship and relative significance. An example of interim clustering of focused codes and tentative categories is presented in Appendix L. The development of the categories is done based on the selected ten focused codes and in relation to existent literature. I finalized with seven categories and raised them to even a higher

abstract level to have two core categories. I documented links between data and memos for further tracking during the whole process.

3.5 Theoretical Abstraction

3.5.1 Overview

Categorizing is an important analytic step in grounded theory to extract a *category* from data. In this step, the researcher chooses significant focused codes that best capture what is happening in the data then abstract them into common themes, give rise to the conceptual definition, and identify its analytic properties. A category integrates common themes and pattern in several focused codes. Kelle (2005, p. 15) suggested developing ground theory the researcher with a diverging mind of theoretical backgrounds empirically makes a considerate choice of categories from the different concepts. To do so, the researcher is required to consider the theoretical backgrounds about and relevance of the studied phenomenon carefully. Understanding of the properties will enable us to see the movements of a category on origination, continuation, and change as well as the consequences of such movements. In a broader view, by examining properties of different categories, one can layout the interrelationship between categories. The constant comparative method helps identify “similarities, differences and degrees of consistency of meaning” (Glaser, 1978, p. 62) between focused codes which generate “an underlying uniformity” (p. 62) resulting in a category and its properties. “A category stands by itself as a conceptual element of the theory. A property, in turn, is a conceptual aspect or element of a category” (Glaser & Strauss, 1967, p. 36). In addition to properties, the researcher should define conditions under which the category operates and changes. Not only the category but also its properties are entirely and exclusively grounded in the data of a grounded theory study (Glaser, 1978, p. 64; Glaser & Strauss, 1967, p. 36).

In this study, I defined that categories are conceptual codes. Categories fit and work for the theory. Categories directly relate to the phenomenon under study and explain how the phenomenon varies. Properties are defined as characteristics that specify the categories, dimensions (shape and size) of the categories.

Theoretical integration and sorting offer an integrated view of relationships between categories. Gibson and Hartman (2014, p. 190) compiled a summary of how to do sorting in grounded theory. Start to do sorting with anywhere in the pool of memos. Examine categories and define the boundaries of them. Decide to focus on which category to become a core category and which categories to be dropped out of the theory. Memo-writing should be continued during the sorting. Consider ordering memos in the best way to express the theory and convince readers. Examine the parsimony of the proposed theory by including only the right categories. In this study, theoretical coding phase focused on integrating categories into a theory and delimiting it. Theoretical coding explores the categories at the center of the emerging theory, the relationships between the categories, especially the relationships between a core category and other categories in the theory. The relationships between categories give the meanings and relevance of a theory.

A core category possesses the centrality of a theory (Glaser, 1978, p. 94). Core categories are overarching and consistently relate to all other categories and their properties and explain for “a large portion of the variation in a pattern of behavior” (Glaser, 1978, p. 95). A core category should frequently be observed in the data, needs more time to saturate, and has clear connections with observed relationships with other core categories thereby having high relevance and explanatory power. Glaser (1978, p. 96) emphasized the important criteria of a core category as it is “completely variable” and “a dimension of the problem” in the studied phenomenon. To identify a core category from data, when making comparisons of data,

incidents, and concepts, the researcher need to look for the “main theme” or the major concerns, issues, interests of the participants in the context, conditions of the studied phenomenon. In other words, the researcher observes and locate the meaningful “essence of the relevance reflected in the data” for the basic social process in interest (Glaser, 1978, p. 94). While a core category can be a process, dimensions, or conditions, it must emerge from and be grounded in data. Also, its connections with other categories need to be grounded in data, not forced to become so. The difference between the main concern under study and a core category is that while the main concern expressed the issue or problem that occupies most of the actions and attention in the research setting, “the core category explains how that concern or problem is managed, processed, or resolved” (Holton & Walsh, 2016, p. 89).

In this study, I defined that core category is a category that is dominant and central. It relates as much and as easily as possible to other categories and explains a large variation within the pattern of behaviors of the phenomenon under study. It reoccurs frequently and takes more time to be saturated. A core category enables the development of theory. The relationship between a core category and the main concern is shown in Figure 3.1.

The researcher needs to specify the domain of a construct (or a category in grounded theory), in other words, its conceptual specifications (Churchill, 1979, p. 67). A good definition of a construct should specify the “construct’s conceptual theme in unambiguous terms” and distinguish it from other related constructs (MacKenzie, 2003, p. 325). A good definition of a category, therefore, facilitates the development of measures (for testing purpose) to represent the category, enhances the understanding of the relationship between the categories and the measures (e.g. formative or reflective measurement models), and increases the credibility of the hypotheses (MacKenzie, 2003, p. 324). Well-defined categories are facilitative of developing theoretical rationales for hypotheses.

As specified in Section 1.1, in this study the substantive area under research is the main concern of parents on how to make the decision to select, purchase, administer, and comply with medications in children in an everyday life context.

Figure 3.1. Characteristics of a Core Category

Adapted from Holton and Walsh (2016, p. 89)

3.5.2 Literature analysis

Initial Literature Review. The purpose of the initial review of literature is to set a basic stage for the research. In grounded theory studies, a comparative literature review is deferred from the early stage of grounded theory process to avoid being influenced by preconceived ideas, concepts, and theories. However, a brief review of the theoretical foundation set a crucial stage for inductive research work. It is agreed that viewing the current knowledge from literature is necessary as in a later phase, emerging theories from the current research may need to be compared with existing concepts and theories (Gummesson, 2005, p. 319). This initial review of the literature does not prevent the emergence of grounded theory from the inductive approach in grounded theory method (McGhee et al., 2007, p. 340). Instead, it sets a stage for the emergence of a new theory. In this study, the review is limited to the topics that the researcher had learned, acquired, and experienced before entering the data collection phase of this study. The review provides theoretical foundations concerning with

the main concern in the phenomenon of this study. It is more as a descriptive but not critical review.

Integrated Literature Review. It is agreed that viewing the current knowledge from literature is necessary as in a later phase; emerging theories from the current research may need comparisons with existing concepts and theories. In this stage, more in-depth and critical literature review is done and discussed in Chapter 4 (Results) and Chapter 5 (Theory Building). It was carried out after the data analysis had come up with categories. Suggestions for the critical use of the literature in grounded theory (Gibson & Hartman, 2014, p. 207). A comparative literature review is acknowledged and incorporated iteratively in the data analysis. It is intensively conducted during the writing of grounded theory and a part of the grounded theory comparison and analysis and presented the grounded theory. I searched literature databases in health, consumer behavior, marketing, and other related fields for research papers that have published with any terms associated with the names of the categories in this study. In the critical review, I employed most the technique of compare and contrast for ideas to help modify and extend my categories and theory. Particular attention is paid to possible gaps that the study and its theory can fill.

I reviewed my theory with other grounded theories in the related topics: children medication and children health by the care of parents. I first selected only papers in English on the subject of children health adopting grounded theory method, wholly or partly applied, conducted with respondents of parents, either mothers or fathers. I conducted a literature search with literature databases of EBSCO Business, Emerald, ScienceDirect, PsycINFO, and PsycARTICLES. Keywords used for searches include “grounded theory” in the title and abstract, and “health,” “parent,” “parental,” “mother,” “father,” “medication,” and “medicine” in abstract field. The search results have brought in 28 papers published between

1996 and 2016. Further shortlisting screened out as a result of nine studies on the focused topic of children medications, including vaccinations, and another ten studies on the parental care and experience with children health issues in which parents are the primary participants. The details of these studies are presented in Tables 5.1–5.4.

3.6 Theory Building

Hypotheses are relational statements that reflect the relationship between categories (Glaser & Strauss, 1967, p. 39). The relationship in grounded theories drives from the concept-indicator model as illustrated in Figure 3.2 with adaptations taken into consideration of the only meaning of indicators (Glaser, 1978, p. 62).

Figure 3.2. Concept-Indicator Model in Grounded Theory

Adapted from (Glaser, 1978, p. 62).

In this study, I defined that a hypothesis is the probability statement about the relationship between categories. Hypotheses are a set of conceptual propositions developed from empirical data. The sets of relationships are expressed by one or more coding families. I have argued that the concept-indicator model used by Glaser (1978, p. 62) in grounded theories has the reflective characteristics of the relationship between data and initial codes but a formative nature of that between initial codes and focused codes and between focused codes and categories. Table 3.7 summarizes the distinctions between the reflective-indicator and

formative-indicator models (Jarvis, MacKenzie, & Podsakoff, 2003, p. 203; MacKenzie, Podsakoff, & Jarvis, 2005, p. 713). In this study, I adopted both models during my coding and abstraction process.

Table 3.7. *Characteristics of Concept-Indicator Models*

Formative-Indicator Model	Reflective-Indicator Model
Indicators represent defining characteristics that collectively explain the meaning of the concept. The indicators are not necessarily conceptually interchangeable	Indicators are manifestations of the concept; each indicator is determined by the concept. Changes in the indicators would not change the concept. The indicators should be conceptually interchangeable.
Formative indicators may not necessarily share a common theme and are not necessarily interchangeable. Each of the indicators may capture a unique aspect of the concept.	Reflective indicators share a strong common theme, and all of them capture the (same) essence of the concept. Here, indicators can be viewed as being sampled from the same conceptual domain.
Formative indicators may have a low, moderate or high correlation between them	Reflective indicators are strongly correlated with each other
Formative indicators would not necessarily be expected to have the same antecedents and consequences.	Reflective indicators should have the same antecedents and consequences.

Figure 3.3 displays a diagram of raising the abstraction level from data to categories. The diagram is adapted from that of MacKenzie et al. (2005, p. 715). In this diagram, data, initial codes, focused codes, and categories are used to illustrate the method of developing a

category in this study. The arrows express the direction of causality from a concept to indicators in reflective-indicator model, but from indicators to a concept in formative-indicator models. The concept-indicator models illustrated in Figure 3.3 are consistent with the perspective of Lazarsfeld (1959) that in the reflective-indicator models of the substantive coding, indicators express what the concept is about and in the formative-indicator models of the theoretical coding, indicators express the links between categories and between categories and the respective properties or dimensions.

Figure 3.3. Two Concept-Indicator Models Applied in this Study

Adapted from MacKenzie et al. (2005, p. 715).

During the grounded theory process, the working *integrated framework* evolves in several versions, as there are different ways of integration of categories. The researcher will decide on what best makes the theoretical sense of the studied phenomenon. A conceptual framework is an analytic scheme and is better visualized to represent main categories and how they interplay with one another (Miles, Huberman, & Saldana, 2014, pp. 24–25). Diagramming integrated frameworks is recommended as it helps the researcher to raise thinking up and reduce analytic data to the conceptual level with relative power, scopes,

direction, and multiple interrelationships between the categories (Corbin & Strauss, 2008, p. 125). In this study, after having achieved theoretical saturation of a core category, its properties, and its related categories, I proceeded to review, sort, and integrate the memos captured along the way. The sorted memos generate an integrated conceptual framework for the full articulation of a theory through an integrated set of hypotheses.

Glaser and Strauss (1967, p. 114) posited two types of *theories*: substantive theory for a substantive area of research and formal theory that comprise of sociological categories in a conceptual area. Substantive theory can be developed to formal theory by raising the level of generality that requires further analyses of the former. Therefore, it is necessary that theorists be aware of the degree of generality in their research from the starting point to the end. Grounded theories consist of (a) *categories* and their *properties*, and (b) *hypotheses* that depict the relationship between the categories (Glaser & Strauss, 1967, p. 35) which account for the pattern of behaviors of interest (Glaser, 1978, p. 93). In this study, the theory is defined as a substantive grounded theory reaches beyond observed incidents and analyzed data but applies to the substantive area of inquiry. In this study, the theory is not a formal theory.

3.7 Grounded Theory Work Process

This research relies on classic grounded theory method. The grounded theory method consists of principles and tools deployed in an iterative process. In the early stage, to initiate research questions, I collected data from ten parent dyads and six pharmacy staff. Initial coding was carried out, initial memos were written, and analysis was done to refine the research questions. I then moved on to recruit, interviewed eight individual parents, four mothers, and four fathers, for the main analysis with initial, and focused coding. Memo

writing was further carried out during this step. Finally, I had theoretical sampling by collecting secondary data available from parental online communities.

The coding process went from initial coding to focused coding and tentative and theoretical categories. Along with coding, memo writing proceeded through several levels, starting with initial memos, upgrading to advanced memos, and then converging into final memos for writing. After the focused coding had begun, literature analysis was carried out in an iterative process with data coding and category identification. Constant comparison was conducted during the analysis early from data of parent dyads and continued until the stage of theory building. Figure 3.4 depicts the process of grounded theory in this study. By no means the research process is linear, but it is an iterative process.

Figure 3.4. Grounded Theory Work Process

3.8 Rigor Standard Criteria

I adopted criteria of rigor of grounded theory studies according to recommendations of Glaser (1992, pp. 116–117) and further illustrations by Holton and Walsh (2016, p. 155). Grounded theories generated from classic approach should fit the real world, be workable to predict and explain, be relevant to people in the substantive area, and be readily modifiable. I discussed the evaluative criteria of my grounded theory study: fit, workability, relevance, and modifiability in Section 5.5.3.

3.9 Chapter Summary

This chapter has presented the detailed data analysis actions in an everyday life context for common health conditions in children. In Table 3.9, specific details of method elements applied in this grounded theory are presented.

Table 3.8. *Main Elements of Grounded Theory Method Applied in the Study*

Method Elements	Description of Elements
Data	I collected data from diversified sources as relevant as possible over various ‘encounters’ in different settings such as face-to-face in-depth interviews with parent dyads and individual parents, interviews with pharmacy staff, data shared by parents from online communities.
Field Note	I made field notes during the conceptualization process while I was doing fieldwork. I listened for the main concern of participants, and I took notes of indicators of how that concern was processed or resolved.

Method Elements	Description of Elements
Memo	I had taken care to write memos, which are similar labeling schemes for all data to offer an opportunity to keep data clearly connected with written work while the study progressed. The memos provide a tracking tool for compiling the theoretical coding and writing this thesis.
Open coding	I did a line-by-line coding to generate codes that are described and grouped together advances the development of categories. Open coding focuses on actions or behaviors in the substantive area to highlight what is happening in the data. The output of open coding includes initial codes (in vivo and descriptive codes) and focused codes that are more selective.
Selective coding	I selectively focused on initial codes that could be used to delimit a parsimonious theory. By selectively coding, I identified properties and dimensions of categories.
Substantive coding	Substantive coding in this study consists of open coding and selective coding. It helped me conceptualize the empirical substance of the area under study.
Category	I define that categories are conceptual codes. Categories fit and work for the theory. Categories directly relate to the phenomenon under study and explain how the phenomenon varies. Properties are defined as characteristics that specify the categories, dimensions (shape and size) of the categories.

Method Elements	Description of Elements
Core category	I defined that core category is a category that is dominant and central. It relates as much and as easily as possible to other categories and explains a large variation within the pattern of behaviors of the phenomenon under study. It reoccurs frequently and takes more time to be saturated. A core category enables the development of theory.
Theoretical coding	In this study, theoretical coding phase focused on integrating categories into a theory and delimiting it. Theoretical coding explores the categories at the center of the emerging theory, the relationships between the categories, especially the relationships between a core category and other categories in the theory. The relationships between categories give the meanings and relevance of a theory.
Hypothesis	I define that a hypothesis is the probability statement about the relationship between categories. Hypotheses are a set of conceptual propositions developed from empirical data. The sets of relationships are expressed by one or more coding families.
Integrated conceptual framework	After having achieved theoretical saturation of a core category, its properties, and its related categories, I proceeded to review, sort, and integrate the memos captured along the way. The sorted memos generate an integrated conceptual framework for the full articulation of a theory through an integrated set of hypotheses.

Method Elements	Description of Elements
Theory	The theory is defined as a substantive grounded theory reaches beyond observed incidents and analyzed data but applies to the substantive area of inquiry. In this study, the theory is not a formal theory.
Rigor standard	Fit, workability, relevance, and modifiability

3.10 Data Analysis Outcome

I followed the process of grounded theory as provided in Figure 3.4. The output of data collection and analysis are illustrated in Table 3.9. The next chapter depicts details of substantive coding that helped to identify the seven emerging categories.

Table 3.9. *The Output of Data Collection and Analysis*

Research Questions	Collected Data	Codes	Memo-writing	Categories
Initial research interests	Ten parent dyads in Ho Chi Minh City Six pharmacy staff in Ho Chi Minh City	126 initial codes	Two initial memos	Six categories and one core category
Defined research substantive area	Four mothers and four fathers (each gender has two participants in each city: Ho Chi Minh and Hanoi) Six themes from an online forum: webtretho.com	Accumulatively 524 initial codes Shortlisted 229 initial codes 18 focused codes	Nine advanced memos	

CHAPTER 4. RESULTS

In this chapter, I present my data analysis as a stage of substantive coding. It includes details what, how and why I generated initial codes, focused codes and how and why I developed categories. In summary, at an abstract level, I identified seven categories and their properties and dimensions grounded in data. In this chapter, I also provide integrated literature review and analysis concerning the categories. Table 4.1 summarizes the properties for each category that is discussed in the following sections of this chapter.

Table 4.1. *List of Categories*

Categories	Respective Focused Codes
Awaking to Asymmetry	Realizing discrepancies Perceiving uncertainties
Distrusting Reference Sources	Distrusting professional sources Doubting social sources
Living Role Identity	Accepting parental role Fulfilling parental role Relying on self
Immersing the Lay Self	Devoting the mentality Occupying the centrality
Integrating Knowledge	Acquiring information Analyzing information Synthesizing knowledge
Sensing Harmony	Watching out health state Perceiving medication benefits Seeking tolerance
Constructing Loyalty	Believing in medications Building trust Owning parental role

4.1 Awakening of Asymmetry

Informational asymmetry is the imbalance in distribution and processing of information between two parties of relational interaction.

4.1.1 Realizing discrepancies

The participants recognized the differences of knowledge and information between different physicians and that of the same physician but in two different settings: working at a public hospital and private service outpatient clinic. Minh said, “No two prescriptions are the same.” From the data, I comprehend such discrepancies in the interactions of parents with their children with medical experts such as physicians and pharmacies.

“There was a time when my child got a severe problem, brought him to hospitals, my child was prescribed with Zinnat... brought him to a private clinic, the physician did not prescribe Zinnat, it is a potent drug. In pharmacies, they replaced it with Gianat [a generic copy antibiotic] made in Vietnam.” (Participant: Tran).

“I do not know well, patients cannot compare, it is possible that this physician my child was recommended with one drug, but when to bring him to another physician he was prescribed with another medication. I tried to compare the drugs prescribed by the two doctors; they were different in about 50%.” (Participant: Thu).

Taking the service provided by a physician to a parent, a parent can know much better the symptoms reflected in the health condition of the child while the physician with his or her expertise knows much more about medical signs of the child trouble as well as probably the cause of such trouble and possible treatment regimens suitable for the child.

“It means that after consulting a physician my child’s health was still not stable, it did not cure, still severe, so I wanted to bring my kid to another physician for better confidence...The second physician asked himself why the first one prescribed these drugs. I did not know why there was such a difference.” (Participant: Thu).

Information asymmetry is common in the service user-provider relationship. Because of the asymmetry distributed between such lay parents and medical professionals, parents for caring their child health, need to make a multitude of social interactions in the structural process. The participants tried to understand such discrepancies even though they do not have the necessary skills and knowledge to access to and understand such medical or clinical details.

4.1.2 Perceiving uncertainties

Through the social interactions in health care encounters, parents recognize a significant level of discrepancies that brings in uncertainties. It reflects the lack of understanding parents have.

“... the physician just repeated the same prescription, it had strong antibiotics + anti-cough drug + a supportive drug (...) My child had a cough again after completing each prescription. I brought him back [to see the physician] it was again the ‘chorus’ of antibiotics. Parents always want their children quickly recover... Pediatricians have very little medical examinations... approximately 1–2 minutes, almost do not allow parents to talk about the illness of the children...” (Participant: A forum member, Theme 3).

“My child rarely has to use antibiotics. Most of the time it is a mild syrup, a product of France, but it is very gentle, or Atussin, my child has been used to Atussin, he does

not use many antibiotics. I did not tell, but he [the physician] would have known, [he] just saw inflammation [my child has] he automatically prescribed antibiotics, and I thought these drugs were quite strong, I asked a pharmacy near my house, I know them, they said my child did not necessarily use these antibiotics, the drugs were too strong for my kid.” (Participant: Ai).

To the parents, there has been to consult with a second or third source of reference; they demand to understand what is behind such asymmetrical information. Understanding the asymmetry level and its underlying reasons would help parents make right decisions of whether to follow a medication regimen.

4.1.3 Discussion

The saturation of this category – *awaking to asymmetry* – is supported by the fact that there are nine data sources with a frequency of 26 indicators corresponding to ten initial codes. There are at least three data sources that indicated each of the properties of this category: realizing discrepancies (three sources with four initial codes) and perceiving uncertainties (nine sources with six initial codes). Numbers of data sources and frequency of indicators of initial codes and focused codes are shown in Appendices H and I.

A high level of unorganized market structures, incomplete boundaries between public and private sectors and a lack of regulatory reinforcement characterize the health care systems in transition countries in Asia. As a result, there is an increasingly wide gap between the standards of health care and the realities of healthcare services and products especially those informal or unregulated in developing countries (Bloom et al., 2008, p. 2076). In its inherent structure that makes the healthcare market vulnerable to failures, information asymmetry is one of the root causes. The original definition of information asymmetry was made in

commerce; it is defined as the asymmetry in available information and knowledge in the seller's side is more than the buyers (Aaker et al., 2008, p. 489). The interrelationship between actors in the market possesses a high-level uncertainty in all social contracts. Because patients lack expertise knowledge in the medical field, they are not capable of evaluating the quality of technical and complex medical regimens and service (Chandra et al., 2012, p. 397) even after experiencing the medical service consultations and/or the medical regimens, including medications (Alford & Sherrell, 1996, p. 72; Brown, 2001, p. 3). The most significant problem in the functioning of health care market is the asymmetry of information between healthcare professionals and patients and caregivers (Blumenthal, 1997, p. 402). The imbalance in the interaction of medical encounters poses a risk that health care professionals may exploit on their interests (Bloom et al., 2008, p. 2077).

The category of *information asymmetry awaking* describes the awareness of information discrepancies and the perception of uncertainties because of the disproportion and imbalance of information and knowledge acquired, maintained and used by different actors of the healthcare decision-making process. The actors include the sick child, his or her mother, his or her father, physicians, nurses, and other medical professionals in different settings, pharmacist, pharmacist assistant, informal pharmacy sellers, and public sources of health information. The multidimensional asymmetry of information causes a power disproportion between one actor and another actor, resulting in high level of uncertainties and ambiguity.

4.2 Distrust of Reference Sources

As parents have multiple social contracts with healthcare stakeholders, I examine parental trusts and belief in professional sources of experts and references.

4.2.1 Distrusting professional sources

Although parents have general trust and belief in professional people in the field of medicine and pharmacy, I observe a level of distrust among parents.

“I am not ‘good’ that I did not follow prescriptions of physicians because their prescribed antibiotics were very potent, it is very often that way, most of the physicians do nowadays. I asked [pharmacies] it is strong while my child was ‘ordinary’ therefore when I visited a pharmacy I described what my kid is suffering, I did not show the pharmacy the prescription, I got a milder antibiotic, also a moderate anti-coughing drug.” (Participant: Ai).

“Parents always want their children quickly recover... However, after I read the article on VnExpress ... I was sorrowful because some pediatricians nowadays do not have the conscience, do not make enthusiastic consultations for children, having very short medical examinations... approximately 1–2 minutes.” (Participant: A forum member, Theme 3).

“I think usually physicians are more knowledgeable, the ladies at pharmacies are just assistant nurses working as pharmacy staff, I came [to counsel] they were embarrassed... I do not really trust them.” (Participant: Duyen).

“I once suffered cheating from a pharmacy, so I do not trust them any longer like I was buying medications according to a prescription, but they were out of stock, so the pharmacy gave me different medications which were not suitable for my child... I am not a healthcare worker I cannot know. I asked another pharmacy... I realized that the first pharmacy tried to sell, so they gave me different medications from the prescribed ones.” (Participant: Thi).

Parents distrust pharmacists and physicians for reasons. Below is an experience a mother found out how her kid was given powerful antibiotics, which caused diarrhea.

“I wish the physician had better responsibility; they should have prescribed mild medications, my child would not have suffered that much. When prescribing antibiotics, which may cause diarrhea, if the physician had a responsibility, he should have prescribed probiotics as well. My kid was not prescribed in that way. For a little child with 4.5-kilogram body weight, what was irresponsibility of the prescribing physician?” (Participant: A forum member, Theme 3).

Because of physicians’ overuse of antibiotics, educated mothers who understand the harmful effects of antibiotic misuse, become more believing in pharmacies.

“My weak point is that I do not always follow physicians’ prescription because they prescribe strong antibiotics. I asked [pharmacies] and understood those antibiotics were quite strong while my kid was on average, so I consulted with pharmacies about my child’s sore throat and bought gentle antibiotics for my kind.” (Participant: Ai).

4.2.2 Doubting social sources

Parents also have doubts about health information sources available for their references. The social sources of information and knowledge include social networks such as an online forum, relatives, colleagues, friends, and mass media. The participant keeps referring to these sources, but they are not confident about the accuracy of such information.

“Researcher: In your opinion, how do suggestions and comments from grandparents affect the usage of medications by your children?

Participant: It is just for a reference.

Researcher: How is about your friends, have you ever asked them for opinions about medications for your children?

Participant: At my work, some colleagues shared [their opinions] but it is just for references, the decisions are depending on physicians." (Participant: Sanh)

"Well now that is the ambiguity, it means I do not know children at what age need what medications, what is the dosage... Information is not always accurate, for example, [the information] on the Internet or from relatives is not necessarily right. I wish for a source of comprehensive and scientific information to which to refer." (Participant: Tuyen).

4.2.3 Discussion

The saturation of this category – *distrusting reference sources* – is evidenced by the emergence from eight data sources with a frequency of 16 indicators corresponding to nine initial codes. There are at least three data sources that evidenced each of the dimensions of this category: distrusting professional sources (six sources with six initial codes) and doubting social sources (three sources with three initial codes). Numbers of data sources and frequency of indicators of initial codes and focused codes are shown in Appendices H and I.

The participants have doubts about the recommendations and advice provided by healthcare experts who have their learned expertise in the field of medicine and pharmacy. Also, parents also feel uncertain about health information supplied from other sources such as that from the Internet, health care forum for laypeople, web pages of health institutions, pharmaceutical companies. Care decision-making by laypeople, consumers have difficulties in searching accurate information related to their health troubles, the quality, and contents of service medical professionals provide. Consumers do not have sufficient medical knowledge

to evaluate the accuracy of the information they obtain and the service quality their physicians and pharmacists offer (Kahn et al., 1997, p. 362). However, parents perceive themselves as the caretakers of their child and try to live to their role effectively.

In developing countries, trust in physicians has been affected by malpractice in physicians' decision making (e.g. Chen, 2007, p. 636) and distrust between patients and healthcare professionals due to the lack of interaction between the two stakeholders in public healthcare setting (Hoa, Öhman, Lundborg, & Chuc, 2007, p. 326). In this study, I observed that parents do not completely trust physicians' prescriptions. Parents have concerns about "potent" or "expensive" or "too many" medications that doctors usually prescribe for children. Chen (2007, p. 636) discussed a possible reason why physicians prescribe expensive medications for patients in China as rooted in the "corruption of medical decision-making by physicians." Although community pharmacies are supporting parents' self-medication, the service provided by community pharmacies are to be improved regarding healthcare expertise, dispensing regulatory compliance and service quality (Hermansyah et al., 2015, p. 11). Furthermore, there is evidence that people mistrust sources of information such as media and the Internet (Serpell & Green, 2006, p. 4043). As shown in Figure 4.1, I develop the typology of *distrusting in professional sources* with two dimensions: distrusting medical experts (e.g., physicians, nurses, pharmacists) and doubting social sources (e.g., Internet forum, sharing from the acquainted sources).

Figure 4.1. Typology of Parents' Trust

4.3 Parental Role Identity

Parents take care of their children as social norms define. In the data, I identify three themes related to the parental role: acceptance, fulfillment of parental role and self-reliance for fulfilling that role.

4.3.1 Accepting parental role

Thu shared she takes her role as a caretaker of her two children while working in a clothing shop of her own. It gave her husband time for his work and social relationship building. Yen said every mother try her best to take care of the children. Trang thought that only parents could give the best things for their children, so it is not necessarily to have supports from someone such as house cleaners.

“I got married after graduating from college. My families did not want me to go to work. Therefore, I have children. My daughter is nine years old; my son is two. They both go to school. General speaking, taking care of children is the job of most women. I see that I spend more time and make more efforts to do that than my husband makes.

I do most of the stuff. I have a shop at my house; I have time, I can take care of my children and look after my shop at the same time.” (Participant: Thu).

“It is the norms. It is precisely the miscellaneous jobs at home. Housewives do such things... I need to arrange the necessary stuff. It is not simple for housewives to care for all the stuff their families need.” (Participant: Thu).

“Every woman loves her children, takes care of them the most.” (Participant: Yen).

“My husband works the whole day whereas I can arrange stuff for my family. I have no maids; no one is better than parents in looking after children.” (Participant: Trang).

There is domination of parental role in health care in either the mother or father of the same child. Among ten parent dyads I interviewed, the fathers admitted that they do not spend more time than their spouses do in caring their children. Consistently, mothers interviewed confirm that they do spend much more time than their husbands to look after their children not only for foods, drinks, and hygienic measures but also for medicating common medications for children. There is also a difference between fathers and mothers in which mothers tend to utilize more natural measures of prevention such as nutritious foods and drinks, whereas fathers tend to have a balance in using between medicinal supplements and healthy foods and drinks.

Table 4.2 provides with details the counts on the main themes from the transcripts of the interviews with the ten parent dyads. The comparisons are based on numbers of related initial codes. Although the time spent on interviews with mothers and fathers are similar, and the order of whom will be interviewed first for individual dyads is similar for mothers and fathers, the mothers expressed more interests and concerns with themes of preventive medications and the advantages, and disadvantages medications can give.

Table 4.2. *Details of Ten Parent Dyads Interviews*

Time spent versus themes discussed	Time of interview (minutes)		Initial codes related to illness prevention		Initial codes related to preventive medications		Initial codes related to advantages/disadvantages of medications	
	Total	Percent	Count	Percent	Count	Percent	Count	Percent
Mother	304	53%	61	53%	62	71%	145	63%
Father	269	47%	55	47%	25	29%	87	38%
Total	573	100%	116	100%	87	100%	232	100%

4.3.2 Fulfilling parental role

By accepting the parental role, parents make efforts to look after their children. Thi is a young mother, aged 28, after graduating from university who stay at home to take care of her ill child aged three. Because her son has problems with the gastrointestinal system, she had tried many solutions. The fulfillment of her role is significant according to her sharing:

“It has been hard to nourish my child. First, he suffered frequent regurgitation... physicians did not know the cause. It was severe... when he was three years, it was over. Second, the problem is his crying at nights. It has been tough to take care of him up to now. Physicians said he lacks vitamin D, and for many other reasons. We have looked for many solutions but have not managed to cure the disease. He still cries several times at nights. It is hard...” (Participant: Thi).

“As always, I put my family’s health first. Often, I wanted to smoke [cigarettes], but I tried not to do so.” (Participant: Tran).

“A mother can give her kid many good things, to many mothers, feeding children, teaching them for the knowledge... Regarding health, they can give children calcium and vitamin supplements...” (Participant: Thu).

4.3.3 Relying on self

Without prompting, the participants referred to their coping with children’s health troubles by seeing a professional to get counseling for treatment and medications.

“For my second baby, I did not have a maid, I do stuff ‘by my hands,’ except for the first month after delivery, my child has been taken care of myself; I am reassured with that...” (Participant: Thu).

“I have a maid, but she does only the housework. I do cook for my children; they eat the only food I prepare.” (Participant: Ai).

“Grandma cannot help much. I myself do the housework. The grandma cannot do better than me. Let me do it myself.” (Participant: Minh).

“Eating out sometimes is not good, not safe...I purchase fresh food for safety, avoid having fat, they are nutritious, I work harder, but it is better for my children.” (Participant: Hong).

4.3.4 Discussion

Living parental role category is supported by the fact that there are 14 data sources with a frequency of 77 indicators corresponding to 34 initial codes. There are at least five data sources that indicated the individual dimensions of this category: accepting the parental role (five sources with nine initial codes), fulfilling the parental role (eight sources with 14 initial

codes), and relying on self (six sources with 11 initial codes). Numbers of data sources and frequency of indicators of initial codes and focused codes are shown in Appendices H and I.

Self-image is equivalent to self-concept that is commonly constructed in research of consumer behavior. A theory conceptualizing self-concept has been proposed as self-image/product-image congruity theory (Sirgy, 1982, p. 289). There are different opinions in the construction of self-concept. Sirgy used the construct of self-image belief - the degree of belief or perception strength associated with a self-image. Self-concept is of value for which individual's behavior is influenced in the way to protect and enhance his or her self-concept. The purchase and use of particular products or services represent symbols to the individual and people surrounding him or her. Therefore, consumer behavior is directed toward enhancing self-concept by the use of such goods or services (Grubb & Grathwohl, 1967, p. 25). Fishbein et al. (2001, p. 5) proposed that self-image to specific behavior reflect the extent to which performing the behavior is consistent with one's self-image. For instance, if a person perceives him or herself more as a kind of person who carries out a particular behavior, he or she will have more intention to do such behavior. Self-image to a behavior reflects the extent to which performing the behavior is consistent with one's personal standards.

Originated from social identity theory (Tajfel, 1974, p. 69) and used in social cognition models, self-identity is defined as a salient part of oneself concerning a particular behavior. Self-identity expresses how much a person perceives him or herself in fulfilling criteria for any societal role. Self-identity represents how much a person perceives him or herself in fulfilling criteria for any societal role. Self-identity has been proposed as an additional construct to social cognition models, and its prediction power has also been tested in empirical studies. Despite unsupported evidence in some studies, there is an argument that in

certain behaviors self-identity will provide additional predictions of intentions (Conner & Norman, 2005, p. 20).

According to the identity theory (Stryker, 1968); identities build the self. The self consists of various identities which are meanings that “one attributes to oneself as an object in a social situation or social role” (Burke & Tully, 1977, p. 883). In interactions with other people, one’s identity is experienced, so people know and understand one’s identity and they “respond to the person as a performer” in that particular social role (Burke & Tully, 1977, p. 883). According to Burke (1991), when an identity is activated by a feedback loop consisting of 4 components is recognized: a standard or “a set of self-meanings,” an input like a perception of “self-relevant meanings,” which come from the social interactions, a comparative process that associate the input with the standard, and an output to the social interactions as a result of the comparison in the form of “meaningful behaviors.” Assume that the mother-role identity is important to a parent. The identity includes some level of *care*. However, assume that the input she receives from her social interactions with others is “perceptions of herself implied in the behaviors of others” Burke (1991, p. 839) does not match the degree of caring that embedded in her mother role identity. The identity process proposes that the mother will feel agony with the incongruence and change her behaviors to alter the input others will express in the interactions with her.

Congruently with the identity theory, I define *living to role identity* is the way parents behave to live to their parental role identity. Parental role identity consists of meanings that parents attribute to themselves as an object in social situations of healthcare decision-making. In living to the role, identity parents try to behave in such a way those other actors of the healthcare environment respond to them as parents. Living to their role identity, in medical decision-making situations, parents not only accept their parental role and attempt to fulfill

their role of giving their children the best things for health. Parents take the highest responsibility to look after their children and self-reliance is the meaningful behaviors parents do to enhance the meaning of their role identity.

4.4 Immersion of the Lay Self

During my analysis process, I started to become more interested in parents' efforts to close the gaps in their lay knowledge and required medical knowledge they would ideally obtain to make decisions for their child health care. The efforts are in the conditions that parents have high role identity and desire to live to that identity.

4.4.1 Devoting the mentality

Parents devote themselves to experiencing and learning knowledge from various sources of health and medication information to build on their integrative experience. Having a desire for information, parents are willing to approach by a different course to learn.

“First, the most significant source of information is physicians. In each consultation for my child, I need to have conversations with the doctor, ‘if my kid gets such a problem, what would I do?’ Each child has its nature, which is different from other children. I need to know... Second, I need to find out by myself from reliable sources such as television programs, the Internet, or from grandparents, relatives, or neighbors. Other children get health problems; [I] do not think my child will not get the same. It builds up a relationship with people; it also helps learn how to do when I need. Knowledge comes from all sources.” (Participant: Manh).

Parents devote themselves to caring their children. They devote not only efforts and but also their time.

“Well, taking care of my two little ‘sisters’ [daughters] gives me no more time to take care of myself. They come back [from school], having some snacks. We have a housemaid, but for meals, I do cook for the sisters. They enjoy only the meal that mom prepares; they get used to that. After meals, the sisters study [homework]; I work with the younger while, the older can do it herself... They then go to bed, before that each drinks a glass of fresh milk. [I] encourage them to go to sleep early so they can go to school early the next morning. In the early morning, mom gets up early for a busy day ahead with the two [kids].” (Participant: Ai).

This view was echoed by other participants:

“With children, I am very busy. That is the norm. Mothers are overhead and ears in work, for cooking, health, and tons of other stuff... Everyone is busy. Fathers have business dinners outside the working hours.” (Participant: Thu).

“I am very busy with the housewife stuff, but the highest priority is giving time for my children. Earning money can be done later, it is the secondary. Now I need to have healthy children. That is it.” (Participant: Van).

“Generally speaking, everyone has his or her timetables, own family. Everyone wants his or her children to have good things...” (Participant: Tran).

4.4.2 Occupying the centrality

Enriching interactions with reference sources with an understanding of the multitude of angles of the interactions

“Illnesses, we did all the care. Now they [their children] are stronger. I work the whole day. At nights, I look after them because they are quite annoying, until 1–2

a.m. I go to sleep after 2:00 a.m. I went to sleep yesterday at that same time. I got up at 6:00 a.m. for my work...Now we have two children. For years, we gathered all experiences, learn a lot more, ask people to understand. To have the best for our children.” (Participant: Van).

“Children are born to mothers’ care. Moms certainly love them... Some mothers sacrifice for their children, overcoming all the pains and miserable things and expecting good health, a better life for children.” (Participant: Thu).

“For children, we are paying high attention not only their schooling but also their health. Health is first, for children...We care for the health.” (Participant: Manh).

Parent position themselves in the center of care. They play the central role of caretakers who know everything in and out of the child health.

“For examples, when my kid got sick, doctors give me medicines, I asked him what the medicines were... I asked him what my kid's problem was... I asked pharmacy what the medicines were (again)... I wondered how to use them... I always ask for information and knowledge...I asked and studied for myself about medications; I should know the medications my kids are taking...” (Participant: Minh).

They gain the proximity with the main actors of health decision-making process: medical professionals, reference sources, spouse and relative, and especially their child. By centering themselves, parents can perceive better the asymmetry of information, try to improve their knowledge, sense the changes in their child, the “interaction” between the child and medical regimens. Parents maximize their sensing especially feeling and emotion.

4.4.3 Discussion

Immersing the lay self is a category that emerged from 11 data sources with a frequency of 101 indicators corresponding to 32 initial codes. There are at least eight data sources that indicated each of the two dimensions of this category: devoting the mentality (eight sources with 12 initial codes) and occupying the centrality (nine sources with 20 initial codes). Numbers of data sources and frequency of indicators of initial codes and focused codes are shown in Appendices H and I.

The participants devote themselves to becoming personally and profoundly acquainted with diversified sources of learning and integrative experiences. In my observations, I borrow the term “immersion” from ethnography (Gold, 1997, p. 389) to describe the behaviors of the participants in their efforts to comprehend medication and medical regimens necessary for their children. In a closer field, medical students and nurses have clinical immersion programs to “extract values and meaning and synthesize contents” from their experiences (Diefenbeck, Plowfield, & Herrman, 2006, p. 76). I realize the same phenomenon is happening with my research participants: clinical immersion programs for students and nurses, and learning immersion in health and medication decision-making process by parents.

Since 1982 when Holbrook and Hirschman (1982) published their seminal article on the experiential views of consumer’s consumption encounters, many studies have been conducted in the domain of consumption experience. Examples of the studies are those in retailing (e.g. Addis & Sala, 2007), adventure and sports (e.g. Arnould & Price, 1993; Holt, 1995; Tumbat & Belk, 2011), branding (e.g. Brakus et al., 2009), and entertainment (e.g. Fitchett, 2004). Hypothetically theorizing from consumers experience in Las Vegas’s thematized environments, Firat (2001, p. 113) posited that postmodern consumers “seek to find meaning in varied experience” or search for “alternative/alternating experiences to

extract meanings of life in the present.” The consumers explore and construct meanings and experiences by immersing themselves in thematized environments such as the unique tourist destination of Las Vegas. There is a growing interest among postmodern consumers to go and seek their “immersion into ‘thematic setting’ rather than merely to encounter ‘finished’ products” (Firat, Dholakia, & Venkatesh, 1995).

In this study, I observed similar patterns that parents expected to immerse themselves into the healthcare experiences, which are unorganized and filled with multifaceted asymmetry of information and knowledge, causing a high level of uncertainty and distrust. Health care and medication are not just products or service but become a process in which parents immerse themselves in building their experiences (Firat et al., 1995, p. 51).

Hansen and Mossberg (2013) provided a summary of immersion summaries from various studies as shown in Table 4.3. I expand the summary by including recent studies on immersion. According to Carù and Cova (2007a, p. 41), immersion need three contextual conditions to occur: (1) a boundary context that separates consumers from their daily life, (2) secure context that helps consumers to pay attention to the experience by ignoring all distractions other things of their life, and (3) thematized symbolic context in which consumers assess their experience with memorable and understandable meanings from the theme.

However, as Carù and Cova (2003, p. 281) suggested new studies should “take in the full breadth of a phenomenon such as an experience, from the ordinary to the extraordinary.” Lanier and Rader (2015, p. 2) expanded the notion of consumption experience by adopting a 2 x 2 matrix of structure and functions. Anti-structure is defined as “relatively unstable, inconsistent and disorderly relations among elements” of a consumption experience; and anti-function “as the ambiguous, inexplicable and unintended consequences” of a consumption

experience. Adventure experience is the circumstances where there are existing anti-structural relations and anti-functional consequences as demonstrated in Figure 4.2. In the healthcare decision-making process in developing countries, I argue that the social relations be relatively unstable, inconsistent and disorderly due to the multifaceted asymmetry of information between the actors and the distrust of parents towards health care professional experts and other reference sources. Moreover, parents experience anti-functional consequences of the experience due to the uncertainty in medical outcome in children as a result of adopting medical regimens and medications.

Table 4.3. *Definitions of Immersion*

Context	Definition
Classical music concerts	“Being plunged in a thematized and secure spatial enclave where they can let themselves go” (Carù & Cova, 2006, p. 5)
Participatory medium	Immersion is a metaphorical concept describing a physical experience of being plunged into water (Murray, 1997, p. 98).
Computer games	“Immersion is an experience in one moment in time and graded (i.e., engagement, engrossment, total immersion). Immersion involves a lack of awareness of time, a loss of awareness of the real world, involvement and a sense of being in the task environment” (Jennett et al., 2008, p. 657)
General experience economy	“Becoming physically (or virtually) a part of the experience itself” (Pine & Gilmore, 1999, p. 31)
Computer games	“Immersion involves a lack of awareness of time, a loss of awareness of the new world, involvement and a sense of being in the task environment” (Jennett et al., 2008, p. 657)

Context	Definition
Daily activities	“Attentional involvement represents the degree to which one's attention is devoted to the activity at hand” (Abuhamdeh & Csikszentmihalyi, 2012, p. 258)
Creativity at work	“Immersion is an accurate representation of the fact that, during the state of engrossment, one is not self-conscious, as one's attention resources are totally captivated by the task” (Mainemelis, 2001, p. 557)
Sports racing	“Immersion involves more broadly a state of deep involvement that blur awareness of time and erases self-consciousness during consumption” (Schouten, McAlexander, & Koenig, 2007).
General review	“Immersion can be defined as a form of spatiotemporal belonging in the world that is characterized by deep involvement in the present moment. Immersion involves lack of awareness of time and a loss of self-consciousness” (Hansen & Mossberg, 2013, p. 212)
Parental health behavior (this study)	Parental immersion of lay-self is defined as the devotion of parents’ mentality and the occupancy of parents’ centrality and proximity to the daily life health care of children.

In this study, I define the category of immersing the lay self as the devotion of parents’ mentality and the occupancy of parents’ centrality and proximity to the health care of children. Parents’ mentality encompasses a broad range of attention, thoughts, feeling and senses, and emotions parents experience in making health care decision for their children. Parents’ centrality includes the centering of the lay self in the health care of children, and the

proximity parents want to raise up to close the imbalance between themselves and the child as well as other actors in the decision process.

		Functional Consequences	
		Function	Anti-Function
Structural Relations	Structure	Performance Experiences	Stochastic Experiences
	Anti-Structure	Liberatory Experiences	Adventure Experiences

Figure 4.2. Classification of Consumption Experiences

Lanier and Rader (2015, p. 7)

4.5 Integration of Knowledge

Given parents' effort to learn and understand health knowledge concerning their children, I furthered analyze the data to see the categories of parent knowledge management.

4.5.1 Acquiring information

Without prompting, the participants referred to their coping with the kids' health troubles by seeing a professional to get counseling for treatment and medications. Choosing a reliable pharmacy for counseling is important to parents. The parents rely on those stores that they perceive as offering high-quality advice, the essential knowledge of staff, and being at as convenient a location as possible. Minh and Manh shared how they chose his pharmacy:

“I visit only my preferred store. I do not go to other drugstores. I buy medicines from just that pharmacy. If it does not have the medicines I need, I will go to a big hospital’s pharmacies...” (Participant: Minh).

"I bought [medications] from large, well-known, reputable pharmacies, I feel more confident, in city’s central areas, it diminishes the risks of [buying] expired medications, anyway I still need to check [the expiry date], but it is nonetheless less risky. Before I buy, I already have the knowledge, but I still need to receive counseling from pharmacists.” (Participant: Manh).

Parents visit their preferred pharmacies not just to buy medicines, but also to consult with the pharmacists or knowledgeable pharmacy staff. This is also the case when parents already have a prescription written by a physician.

“I asked [pharmacists] the prescription had this medicine, what was it for... This medication was not mentioned in the prescription, do you have that mentioned there?. It was not the same name as that in the prescription... The pharmacist said it had a different name but the same usage; do you agree to buy? I asked for different names, different manufacturers, but was it the same formulation? If the pharmacy recommends a medication with various formulation from that in my prescription I will not buy, I will go to another acquainted pharmacy.” (Participant: Minh).

The pharmacists whom I interviewed also recognize the importance of counseling given to parents as pharmacist Nha, shared:

“The parents I have ever met have concerns about their child’s diseases. I know some acquainted parents living near my pharmacy. We know each other very well. Usually, in the evening, the parents come to ask me many questions about children health,

treatment, and medications. Quality and effective counseling are essential for pharmacies to keep customers.” (Participant: Pharmacist Nha).

To choose the right physician, parents experience, alongside the doctor’s consultation, other sources of information, including mass media, and their judgment of the medicines that physicians prescribe for their children. Examples of questions parents ask themselves include whether the medicine is effective and safe, and after how long the disease relapses or reoccurs.

“I see Dr. Thuong has also been on television talks for 1–2 times. It is hard to make an appointment with her, but she gives priority to younger children, sometimes we could only meet her at 11:00–12:00 p.m., the following morning my child had to go to school... I once experienced with Dr. Thuong when my child got a sore throat; she gave me medicines. For Dr. Trung., she gave more expensive medications with many indications, also a nasal medication while Dr. Thuong gave me only a drop medicine for use at night... prolonged use may not be right; we can change to Xisat, a half month after using Dr. Trung’s prescription it relapsed while after Dr. Thuong’s it was one and a half months.” (Participant: Hong).

Parents also want to take children to hospitals because they think that hospitals have modern medical equipment and facilities to take care of children. Having a medical consultation at a hospital is the most reliable solution for addressing a child’s illness. However, the service quality is perceived as inadequate, as parents need to wait a long time for physician examination, laboratory testing, and medication purchase.

“When she is not good I bring her to a hospital because it has better facilities. For example, she had a moderate fever and might have other problems such as respiratory

distress, diarrhea, or gastrointestinal disorders which caused fever; she should have a medical examination at the hospital.” (Participant: Thanh).

Searching for and finding out the right information related to children’s health troubles are necessary for parents, as they stated during the interviews. This is the case when parents consider health problems as mild or simple. Parents rely on their shared information and experience. Parents use their understanding to make decisions about whether to follow general advice or to see a physician. The more doubt parents have about the medications their children should take, the more desire they have to search for guidance and sharing from the social network.

“By surfing the Internet [I] usually read and find out information from experienced mothers, I asked, and they advised how to take care of my kid, so it is not always necessary to see a physician or visit a pharmacy all the times. For simple solutions, I am capable... In general, I have learned a lot from other mothers, from Internet information, to find out about those medications.” (Participant: Thi).

Parents also refer to Internet forums for information on choosing right physicians to consult.

“Regarding the information... children ailments..., who are the physicians that parents should see, where their offices are, it is all right. I also asked from relatives and the acquaintances about doctors; they said he is OK, I become confident.” (Participant: Manh).

In summary, parents acquire information from two different sources: expert source and lay source. From the expert source, parents can go to counsel a pharmacy or to consult with a physician. From the lay source, parents can search for information and can also learn from it.

4.5.2 Analyzing information

Once they have obtained relevant information from online communities, parents also cross-check it with other sources of information available on the internet to see whether they have been given correct and accurate information that can be applied to their children.

“My child could not eat much, so I read parents mentioned a kind of granule medication. Then I searched Google for more information about that drug, learned about its instruction for use. If I have free time I will try to find out more; I do not believe 100% from the first glance. It is just the basis. I will see physicians and ask for more information to understand whether it is all right.” (Participant: Manh).

When involved in the justification of medication use, a parent will also ask his or her spouse about possible solutions they are considering. From interviews with the research participants, I observed that only one parent dominates in making such decisions. In other situations, the couple share, discuss and obtain consent from each other on their decisions. To convince the other partner, a parent will integrate what he or she has learned from reference sources including pharmacists or other pharmacy staff, physicians, information, and mothers’ shared experience from the social network.

"For that we always share, I told my wife we should read and find out from the Internet, in general, what I see was interesting I asked my wife to read and let me know whether it was good to apply to our children or not" (Participant: Van).

"Most of the time my wife agrees with my ideas. My thoughts are appropriate and relevant, so my wife agrees. Otherwise, we bring our kids to a hospital... We understand each other well [in that way]. For example, the physician said our child

should take that medicine... I discussed with my wife that I consulted the physician we agreed to buy it for her..." (Participant: Thanh).

4.5.3 Synthesizing knowledge

Parents collect, combine, and fit their knowledge and understanding about health, illness, and medication for their children from different sources of reference into their learning for making decisions. These sources can be medical professionals, reliable information from the internet, social communities such as parental online forums, or sharing with other mothers. This integration process includes verification, comparison, and justification of knowledge and understanding of different sources of information to which parents are exposed. Parents synthesize learning for the best conclusions on the medications their child will take to treat and prevent specific health troubles.

"For instance, he got sick; the physician gave me a prescription... I asked the physician the medications are for what diagnosis, what is my child's problem, why he was sick...I also came to ask pharmacies. Usually, a prescription has several medications, which I do not know. I came to the pharmacy to ask about the drugs. I asked what kind of medicines the first one was ... It is said that medicine was to enhance human resistance to diseases, the second was an antipyretic medication, use it only when there is a fever if my child no longer has a fever stop taking it. The third medicine was for anti-inflammation or antibacterial effects for specialty treatment... so I always ask which medication is for what usage or effect. Other people may just take prescribed medications without knowledge about the medications. I am not that kind of people... It is beneficial because for follow-up examinations I would not see the same physician we met for the first time. There are different physicians in the children's hospital. They often change medications in the prescriptions... I also asked

pharmacy staff about how to use. They will let me know the medication dosage according to body weight, which med is for what purpose? I ask pharmacies so I can study medications. I always need to know what medications my child uses.”

(Participant: Minh).

In learning the required knowledge, parents develop confidence in making decisions to give their child the recommended medications. The learning is supported by multiple sources of reference, consulting, and counseling.

“In general, through learning of medications I get to know a lot about diseases of children, prevention of common illness and accidents, I know for what disease my child would take what medications. That is not only from own experience, however. I also find out about such knowledge from other mothers’ sharing, choosing medications, which one my child should take. Furthermore, we need medical advice from physicians as well, not just give my child whatever medications... because my kid health is essential. I have obtained knowledge but not enough...” (Participant: Thu).

“For severe conditions, I need to see a physician, certainly, primarily physicians, after that, I find out for what I do not know yet, nowadays there is information about everything on the Internet. Some of the sources are official [for me to learn from]... I also know there are health seminars for parents I will certainly attend it if I have free time. Alternatively, I can watch television programs such as *Health & Life* to learn more even though my children do not have yet such diseases, just in case... I can apply...” (Participant: Manh).

4.5.4 Discussion

The saturation of *integrating knowledge* category is supported by the fact that there are 17 data sources with a frequency of 252 indicators corresponding to 69 initial codes. There are at least six data sources that indicated each of the three dimensions of this category: acquiring information (17 sources with 52 initial codes), analyzing knowledge (six sources with nine initial codes), and synthesizing knowledge (nine sources with eight initial codes). Numbers of data sources and frequency of indicators of initial codes and focused codes are shown in Appendices H and I.

Returning to the literature, the framework of health literacy and health action (Von Wagner, Steptoe, Wolf, & Wardle, 2009, p. 863) places knowledge and understanding in the center of the motivational phase of health actions. Health literacy is assumed to facilitate knowledge acquisition and understanding of health and illness. Parents living with children are the experts in their health, illness, and treatment. Parental expertise should be welcomed, valued, and fostered by healthcare professionals (Karazivan et al., 2015, p. 438). In this study, I observed an experiential learning process from participants who acquire knowledge to comprehend health, health problems, medication, and medication usage in their children. Parents in the present study consult multiple sources of information to bring all aspects of learning into their conclusion. In a grounded theory study, Nelson, Caress, Glenney, and Kirk (2012, p. 801) observed similar actions by which parents perceived their lack of essential knowledge of health and illness to make a particular medical decision on elective surgeries for their children. As a result, parents defer to the expertise of professionals such as physicians to help in the shared decision-making process. The reason for this is that parents want to have the “right” medications for their children. Information related to their child’s health, illness, and treatment is important to parents. Parental satisfaction increases when they

acquire more knowledge and understanding of the decisions they make for their child's health and treatment (McKenna et al., 2010, p. 626).

My research participants have their preferred pharmacies that offer quality and reliable counseling for parents. For example, Chen and Britten (2000, p. 482) found that patients are willing to discuss their medications with pharmacists. Patients accept and appreciate the counseling of pharmacists, as it is useful, informative, and rich in content. The role of dispensing pharmacies in the primary care setting becomes increasingly beneficial. In developing countries such as those in Southeast Asian region, community pharmacies are the first contact points for consumers to turn to for straightforward advice and counseling and purchase of medications (Chalker, Ratanawijitrasin, Chuc, Petzold, & Tomson, 2005, p. 131; Chua, Ramachandran, & Paraidathathu, 2006, p. 171) because of its network in the communities, extended service hours and low-cost administrative service of counseling (Hermansyah et al., 2015, p. 2). Prevention and treatment of infectious diseases with the most common ones being upper respiratory infections (e.g., a sore throat) and diarrhea commonly in children are handled in community pharmacies setting in Asia (Chuc et al., 2002; Chuc et al., 2001; Lönnroth, Lambregts, Nhien, Quy, & Diwan, 2000; Saengcharoen & Lerkiatbundit, 2010; Vu et al., 2012).

In the collectivist culture of Asia, health decision-making process involves family members rather than by individuals. Implicit communication is the norm that people do not speak out the bad luck and unfortunate things in general because the preservation of harmony is encouraged. Asian people may delay the use of Western medication but try using traditional or herbal medicines and conforming to the advice of experienced and respectful older people (McLaughlin & Braun, 1998, p. 118).

Lastly, the role of the social network as an immediate, extensive, and interactive source of information on health, illness, and medications is evidenced by my interviews with participants. Medical knowledge was once strictly controlled and moderated by specialty healthcare professionals, and healthcare policymakers are now open to consumers, whose role is essential as the leading actor for the “construction of knowledge about medications” (Cohen et al., 2001, p. 545). The Internet plays the role as an instrument to diminish the information asymmetry between healthcare professionals and patients and caregivers (Blumenthal, 1997, p. 402). Patients and caretakers can be more active information seekers and actors in the healthcare transactions to minimize the asymmetrical information relationship (McKenzie, 2002, p. 43).

Figure 4.3 depicts a schematic representation of *parental knowledge integration* observed in this study. Knowledge acquired from pharmacies, physicians, social networks, and spouses is integrated into parents’ understanding of health, illness, and medication. In my representation of the integration, I position parents in the center of the process. I grasp that parents are the ultimate decision makers regarding the use of medication.

Figure 4.3. Components of Knowledge Integration

4.6 Sense of Harmony

On integrating their understanding of children's health conditions, illness, and available treatments, parents make decisions to pursue a medication regimen. Parents can obtain such medications from their preferred pharmacies and start administering medications to children.

4.6.1 Watching out health state

Parents are usually worried about their child's health status. When the child gets sick, parents always watch out for the state, before and after administering medications.

"He [my son] sometimes has a fever I know if having no cough and no other symptoms just give him a cold remedy for him. So the fever should relieve from the second day...that's human body. Recently my older kid, two months ago, got a fever. The grandparents said it was a common fever [common cold fever], so I think if the fever was just for 24 hours, no problem, it was good. However, I felt he continued to

have a fever until the second day, no relief in fever. I stopped working and left the office for home, just follow-up my kid with prescribed medicines. No relief, so I brought him to Bach Mai hospital. He was transfused with mineral solutions. I was afraid of his suffering pneumonia. However, the laboratory tests showed it was a cold fever; doctors gave us medicines so that my kid can just stay at home.” (Participant: Manh).

“In my opinion, a thin kid can become in good shape, but a fat kid cannot come back to the average. Daily food sometimes is toxic; we have to be [very careful] ... about foods for children especially for sick children.” (Participant: Manh).

“It has been hard to nourish my child. First, he suffered frequent regurgitation... physicians did not know the cause. It was severe... when he was three years, it was over. Second, the problem is his crying at nights. It has been very hard to take care of him up to now. Physicians said he lacks vitamin D, and for many other reasons. We have looked for many solutions but have not managed to cure the disease. He still cries several times at nights. It is hard...” (Participant: Thi).

4.6.2 Perceiving medication benefits

Outcome evaluation involves rational justification of medication efficacy, safety, and convenience. The data reveals lay perceptions of parents on these properties of treatment outcomes, which interrelate with medication compliance and persistence. I observed three significant lay perceptions from the participants: “supplementing nutrition and vitamins,” “child absorption of nutrition,” and “enhancing body resistance.” The research participants are highly familiar with several medication categories that can be used by their children to improve their health status and “body resistance” to illnesses and to ensure children’s

physical and intellectual growth and development. These medications include vitamin and mineral supplements, vitamin C supplements, calcium and vitamin D supplements (vitamins and supplements are classified as medications in Vietnam), and supportive digestive enzymes. There is a pattern that parents consider those medications that enhance children's health status and development in general as a preventive measure against illness.

"When the environment changed, my baby got sneezing and runny nose because of the cold weather. Changes in weather such as too hot conditions, human body temperature cannot go along [with the weather]. In that situation, we should use functional foods or vitamin supplements to enhance body resistance ability against diseases, avoiding coughing, sneezing, and runny nose; that is what I mean."

(Participant: Thu).

"For example, Lactomin probiotic, two tablets in the morning, two more in the afternoon as higher doses, but I studied well I know it is not an antibiotic, so it is OK. Antibio Pectin is for increasing stomach movements, so it is also fine... Every time my child has a cough I give her lemonade and antipyretic tablets with an orange flavor, she likes it. I know that anti-fever medicine I used is Hapacol with an orange flavor, she usually takes 250 [milligrams], and her older sister uses para[cetamol] 500 [milligrams]. I determine the dose according to their body weights, not to ages. I learned that from pharmacy staff. I am cautious. I give my children Antibio two hours after she takes antibiotics prescribed by physicians. It is to avoid gastrointestinal disorders caused by antibiotics. Physicians told me to give her yogurt, I already know it, but I prefer Antibio. My child, I nourished him I realize, her intestine is fragile, and so I try to learn more..." (Participant: Hong).

4.6.3 Seeking tolerance

Parents perceive the tolerance of medication with their child, not just efficacy or safety. From the meanings parents implicitly shared with us, I term this described tolerance as *harmony*. Sensing the harmony means that parents sense or feel that the child's body gets along well with the medication; that is, the medication works well with the child's human systems. The properties of harmony revealed from the data have elements of both cognition and affect. Harmony includes rational perceptions of efficacy regarding the onset of action, fast relief of symptoms, and high effectiveness of medications.

"Based on that, I see the medication suited my child, it cured, so I believe it. Every year, my child takes that medication for a few times, I see it works fast, and well I believe in it. I keep the prescription for future use." (Participant: Thu).

"I do not like or dislike any medication; it depends on whether it cures the disease, no matter traditional or Western medicines. I do not reject any these varieties; I choose to use the medication that is effective that will be okay. When I use I will see if it is fine, then I continue using it. Otherwise, I drop it and take another one; it is not necessary to use just one medication for many times." (Participant: Minh).

Harmony also includes affective properties: the emotion, liking, and love that parents experience during the care of the ill child. The mothers shared their thoughts on and experience of caring for their sick child with lots of emotion. One mother from the online forum at webtretho.com quoted a song, "*no one loves kids as much as mom does...*" at the time she found out her child had the severely debilitating disease asthma. Parents are ready to make financial and personal sacrifices for the well-being of their children.

“When she was 16-17 months old, I brought her to see a nutrition specialist [because] she lost her weight from 12-13 kg to 7-8 kg... She was fragile, lots of skin wrinkles, I loved her so much, her face looked sad, [she was] easy to get fatigued, not energetic at all.” (Participant: Ai).

“My kid is 15 months. She has suffered coughing for the past one month. Even physicians gave her a “mountain” of antibiotics she has not recovered... Fortunately, last week a doctor found out she was suffering asthma. I am sorrowful because her grandparents also had asthma; very miserable... anyone knows more about asthma; please share with me... No one loves kids as much as mom does...” (Participant: A forum member, Theme 1).

4.6.4 Discussion

Sensing harmony category is supported by the fact that there are 24 data sources with a frequency of 107 indicators corresponding to 25 initial codes. There are at least six data sources that indicated each of the two dimensions of this category: watching out health state (six sources with seven initial codes), perceiving medication benefits (23 sources with 13 initial codes), and seeking tolerance (eight sources with five initial codes). Numbers of data sources and frequency of indicators of initial codes and focused codes are shown in Appendices H and I.

The research participants used “*nói trộm vía*” during my interviews. I found out the meaning and usage of this informal language from parents of the Northern region as follows: According to folk notions, “*nói trộm vía*” (“speaking stealthily from the soul”) is the preamble in the form of an informal language to compliment or praise a young child’s good health in such a way as to avoid bad luck happening to him or her. For example, a parent says

“*Nói trộm vía, độ này cháu nó mập lắm*” (“speaking stealthily from the soul, the child has gained much weight healthily”). Parents want to express the child’s well-being status that they sense, but tacitly expect that such a health condition persists without illness or health problems, as the parents cannot control the environmental impact on the child’s health. When using “*nói trộm vía*,” parents sense the well-being of children, appreciate its value, and luck to the children they love. The use of “*nói trộm vía*” reflects a combination of cognition and affect that parents use to assign meanings to children’s well-being. With the kids situated in the center of parental lives and concerns, parents are willing to learn more and more about how they can take care of their children safely and healthily (Bush & Hardon, 1990, p. 1045) and ready to change their behaviors in the way that will promote their children health conditions (e.g. Beale & Manstead, 1991; Hounsa et al., 1993; Moan et al., 2005).

I define *sensing the harmony* is parents’ perception of medication benefits and suitability in comparisons with children health conditions. Parents feel, desire and think in a total harmony that their child is in a well-being status. Parents seek for a kind of tolerance between children human body and the experienced health regimen. Children’s well-being includes personal, mental, environmental, and social dimensions in which parents are the actors (McCarthy, 2007, p. 14). I propose a schematic representation using the Asian cultural belief’s negative-positive space to illustrate this category as illustrated in Figure 4.4.

Figure 4.4. Parental Sensing of Harmony

4.7 Construction of Loyalty

With improved experience in medicating and caring for their children, parents develop increasingly stronger beliefs and confidence. They build on their loyalty to the care, nutrition, and medication of their children. This is reflected in the way parents perceive and care for their children. A typical day of caring was described with positive and loving emotions.

4.7.1 Believing in medications

Once parents make decisions, they follow, as much as possible, the use of medicines such as dosage and warnings, details of medication regimens, and timing to use according to their integrated knowledge. Parents know exactly the purpose and usage of the medications about their child's health status, body weight, and illness.

“With a prescription, I came to a pharmacy to fill it. If the pharmacy would not have such medications available, the pharmacy might ask to buy a different one. I will not accept I would better go to another [pharmacy] to buy it. I do not want to change the medications which physicians prescribe.” (Participant: Manh).

"For vitamins such as vitamin A, vitamin C, Vitamin D... I purchased and gave to my kid. My child was so thin that I bought calcium supplement liquid form for her. She took 15 ampoules a month. Nevertheless, she developed constipation, so I stopped the medication. A few months later, I restarted the drug. It is calcium supplement for her physical development. Her brother was a kind of obesity I gave him fish oil medications which were good for his eyes, once per day after a meal; it was good for his eyes." (Participant: Minh).

Once parents develop confidence in the medication their child has been using, they perceive its suitability and feel confident in its efficacy and safety; they will keep using the medication to complete the entire regimen. Parents will also use the medicine in subsequent episodes of similar health troubles that might occur with their children.

"Based on that, I see the medication suited my child, it cured, so I believe it. Every year my child takes that medication for a few times, I see it works fast and well, I believe in it. I keep the prescription for future use." (Participant: Thu).

"For the common illnesses such as fever and sore throat... I am familiar with the medications... Once I see it works well with my child I memorize it for future use when my child has similar health conditions." (Participant: Thanh).

Adherence to medications is classified into two types: compliance and persistence. Medication compliance denotes the extent to which healthcare professionals' recommendations about day-to-day treatment are followed on the timing, dosage, and frequency of medicines. It is defined as "the extent to which a patient acts in accordance with the prescribed interval and dose of a dosing regimen" (Cramer et al., 2008, p. 44). Medication persistence refers to the behavior of continuing the medication for the prescribed duration. It

is defined as “the duration of time from initiation to discontinuation of therapy” (Cramer et al., 2008, p. 45).

After much experience with medications and the care of the particular health problems of their children, parents come to be highly familiar with the recommended medications and start to develop beliefs about the drugs. Parents perceive well the efficacy and safety of the medications that children take, and have clear perceptions of their child’s body, health status, and the beliefs in what effects medications can bring about in their children. “My child I nourished him I realize,” is what one parent shared.

"My older child once got malnutrition. Nutroplex was very suitable for my child; it is an eating stimulant. It helped my kid eat more, it is in the form syrup, similarly to probiotics but it is easier to administer, it is delicious. At the time my child took a lot of it, more than ten bottles, many, he got used to it." (Participant: Ai).

Parents’ beliefs about medication are reflected in their thorough understanding of the medications: not only the dosage and when to use them but also how the medications work for the child’s health.

“For example, Lactomin probiotic, two tablets in the morning, two more in the afternoon as higher doses, but I studied well I know it is not an antibiotic, so it is OK. Antibio Pectin is for increasing stomach movements, so it is also fine... Every time my child has a cough I give her lemonade and antipyretic tablets with an orange flavor she likes it. I know that anti-fever medicine I used is Hapacol with an orange flavor, she usually takes 250 [milligrams], and her older sister uses para[cetamol] 500 [milligrams]. I determine the dose according to their body weight, not to ages. I learned that from pharmacy staff. I am cautious. I give my children Antibio two hours

after she takes antibiotics prescribed by physicians. It is to avoid gastrointestinal disorders caused by antibiotics. Physicians told me to give her yogurt, I already know, it but I prefer Antibio. My child, I nourished him I realize, her intestine is fragile, and so I try to learn more..." (Participant: Hong).

We classify the initial codes into four different groups, which represent four steps in a process: selecting a health regimen, administering a health regimen, complying with the regimen, and mastering the medications.

4.7.2 Building trust

Parents also build their confidence in pharmacies and physicians with whom they have experience. Parents trust pharmacists who show conscientiousness. Experience with a pharmacist who refuses to dispense the wrong medications builds trust in parents.

"She advised this is not good; my child did not have to take it. She told me how to use the medication properly. It was different from other pharmacies they just sell me what medications physicians prescribed without any advice. That pharmacist tells me everything about drugs; she refused to sell me the wrong one even I insisted on buying it. She asks me to buy it from other pharmacies but not from hers because she said it was not right for my child. That is the story. She sells medications with her conscience. She told me she needed to consider and recommended right medications to parents; not just tried to sell as many [medicines] as possible." (Participant: Minh).

Pharmacists who know and show empathy with children gain trust from the parents. Parents feel secure and "peaceful" when getting counseling and buying medications from such pharmacists.

“He even remembers my face well, also my children, how old my younger one is, he then chooses the right medicines for her. Buying from my preferred pharmacies is easier than any other certain pharmacy where they just sell medications they do not know how my children are about while buying from my favorite pharmacies is secured and peaceful. Similarly, I buy my stuff such as food always from my favorite shops.” (Participant: Minh).

Through their experience, parents develop trust in pharmacist(s) at their preferred stores and become loyal to them. Unless the pharmacy to which they are loyal closes, parents do not go to other stores that are not their first choice. By choosing to visit only one pharmacy and to see only their preferred pharmacist there, parents imply that they trust in this pharmacist because of his or her service and counseling quality.

“I visit only that acquainted pharmacy on Tran Quang Khai Street, [its name is] Hong Ngoc, to buy [medications] for my son unless it closes.... It’s Pharmacist Chanh’s she is excellent; she can make prescriptions...” (Participant: Hong).

When illness symptoms get worse or are prolonged to the extent that worries parents, they want to take their children to see a physician. Choosing a trusted physician not only depends on physicians’ expertise but also their personality. Cheerful and enthusiastic physicians who display care of children are highly appreciated. Considering the expertise and experience of physicians, parents develop trust to physicians.

“When [my child’s] a sore throat gets worse, I certainly bring him to see a physician.”
(Participant: Tran).

“Most pediatricians are cheerful, enthusiastic, and diligent. Nutrition specialists always want children to be healthy; they are conscientious and helpful. They give lots

of advice such as which medications, what doses... what diets for obese children..."

(Participant: Thanh).

"I really want to share [my experience], Dr. Quang is reputable, and she is very smart." (Participant: Hong).

4.7.3 Owning parental role

With beliefs in the medications their children use and with trust in the professionals, pharmacists, and physicians who recommend the drugs, in addition to socialized knowledge gained from other people, parents build on their experience of coping with the child's health problems. The dimensions of parental experience in caring for children's health include insight into dealing with environmental factors that may affect children's health.

"Dryness is not okay. Dry weather makes nasal vessels dry so causing upper respiratory infections, especially nasal problems. The drier the weather is, the more chance children get a cough and nasal problems, quite often; while humidity causes so many other diseases. Because of moisture bacteria grow so much, many diseases..." (Participant: Ai).

"When the environment changed, my baby got sneezing and runny nose because of the cold weather. Changes in weather such as too hot conditions, human body temperature cannot go along [with the weather]. In that situation we should use functional food or vitamin supplements to enhance body resistance ability against diseases, avoiding coughing, sneezing, and runny nose, that is what I mean." (Participant: Thu).

We classify the initial codes into two groups that represent two dimensions of “owning parental role”: caring for children and sharing with others. Parental subjective experience interrelates with a desire to care and accumulates to help parents own the care of their children.

“Parents should not underestimate the importance of caring children. Caring our children never loses anything.” (Participant: Manh).

“I gained experience in child care from my first child. We took care of her very well; we were learning a lot. For the second child, I am confident to care her with the experience I gained from her sister. We know what to do with common illness; we already have a wealth of experience.” (Participant: Ai).

Loyalty to the right care, treatment, and medications for children, parents describe a typical caring day. “Living a caring day with kids” is their pride and motivation, although it takes a lot of their personal time. Ai called her children her little sisters.

“Well, taking care of my two little ‘sisters’ [daughters] gives me no more time to take care of myself. They come back [from school], having some snacks. We have a housemaid, but for meals, I do cook for the sisters. They enjoy only the meal that mom prepares; they get used to that. After meals, the sisters study [homework]; I work with the younger while, the older can do it herself... They then go to bed, before that each drinks a glass of fresh milk. [I] encourage them to go to sleep early so they can go to school early the next morning. In the early morning, mom gets up early for a busy day ahead with the two [kids].” (Participant: Ai).

“Both of them quite like beef rib steaks, but grilled meat may not be good although they like it. Therefore, I went shopping fresh meat and prepared at home for them. It

is safer, limiting fat and oil; I know which part is fresh meat... fresh is healthy and nutritious, right? It is good no matter how hard I need to work because health is number one.” (Participant: Hong).

Upon mastering the usage of medication and developing trusts in other actors, parents can exchange ideas, advice, and experience with their selected parental online communities. Such social learning replaces what physicians cannot provide to parents because physicians do not spend enough time with parents at private clinics or hospitals.

"Well, there is usually a series of information from other mothers' replies, it is nice... If my child illness is mild I should ask [other mothers], for example, my child got fever... if seeing a physician, he will prescribe an antipyretic medication but taking lots of this medication may not be good for the stomach; so I asked other mothers, they usually use antipyretic suppositories, it is less harmful. I often ask for advice in such situations; they share with me." (Participant: Ai).

“Well, being able to discuss and talk, I see it is relevant and genuine... mothers share good things... For clothes, they said which clothes suit their children, so the same, for sneezing, sick, nutrition, and weight loss... mothers also share and converse about what foods, what medications... I see that I can learn from others the experience which I have not had, I have not found out by myself...” (Participant: Thu).

4.7.4 Discussion

The saturation of this category – *constructing loyalty* – is supported by the fact that there are 12 data sources with a frequency of 132 indicators corresponding to 50 initial codes.

There are at least three data sources that indicated each of the two dimensions of this category: believing in medications (nine sources with 23 initial codes), building trust (three

sources with four initial codes), and owning parental role (nine sources with 23 initial codes). Numbers of data sources and frequency of indicators of initial codes and focused codes are shown in Appendices H and I.

Based on patients' cognitive representation of medications, Horne, Weinman, and Hankins (1999, p. 9) developed a questionnaire on beliefs about medicines. This focuses on beliefs about medications in general and about specific drugs that patients are taking. The questionnaire was designed to capture patients' beliefs about the necessity of and concerns over medications, as well as the perceived harm and overuse of medicines. Lehané (2014, p. 116) proposed a model of reasoning and regulating medication adherence. The model consists of medication reasoning (health versus health protection) and medication regulating (medication planning strategies). However, the disadvantage of this cognitive-based questionnaire and model is its overemphasis on the rationality of the decisions that patients exercise to decide on medication adherence. The emotional element is little or not at all reflected in the constructs.

Trust has been identified as being central to all social contracts as the function to govern the transactions between actors in the healthcare market. Two kinds of trust: general moral norm based and reputational mechanism base trust governs the management of information asymmetry. Typical examples of both moral norm based and reputational mechanism trust can be found in healthcare markets (Bloom et al., 2008, p. 2078). In the patient-healthcare professional relationship, trust is a means to help manage the information asymmetry in health care transactions. Trust diminishes the cost of transactions (Davies & Dibben, 2001, p. 10) and increases the disclosures of health information, patient-professional cooperation and patients' recommendation of the service to others (Gilson, 2003, p. 622; Mechanic, 1998, p. 661). Trust in health care transactions is somewhat irrational and emotional which reflects the

vulnerability of the patients in the circumstances (Hall, Dugan, Zheng, & Mishra, 2001, p. 617). Trust plays the central role in healthcare decision-making process that involves parents and health care professionals (Benin et al., 2006, p. 1532).

In the context of service relationship, trust has two distinct dimensions: reliability, which is the service provider's intention and ability to keep promises; and benevolence, which is evidence of the service provider's honest concern for the service receiver through "sacrifices that exceed a purely egocentric profit motive" (Ganesan & Hess, 1997, p. 440). With the conception of competencies instead of credibility, interpersonal trust can be defined as cognition-based trust and distinguished from the affect-based trust that stems from affective bonds among individuals (Chua, Ingram, & Morris, 2008; McAllister, 1995, p. 27).

Figure 4.5 visualizes the elements that parents use to **construct loyalty** in the care of children, of which medication is a part. I use the term "loyalty" to represent the favor parents have for reliable medicines, the loyalty to professionals and services that parents build through their interactions, and the confidence in self in owning and mastering the caring experience that parents accumulate.

Figure 4.5. Construction of Loyalty

4.8 Chapter Summary

In this chapter, I have reviewed my analysis and category development to propose the following seven categories; they are summarized in Figure 4.6.

Information asymmetry awaking describes the awareness of information discrepancies and the perception of uncertainties because of the disproportion and imbalance of information and knowledge acquired, maintained and used by different actors of the healthcare decision-making process. The actors include the sick child, his or her mother, his or her father, physicians, nurses, and other medical professionals in different settings, pharmacist, pharmacist assistant, informal pharmacy sellers, and public sources of health information. The multidimensional asymmetry of information causes a power disproportion between an actor and another one, resulting in high level of uncertainties and ambiguity.

Figure 4.6. A Representation Diagram of Categories

Distrusting in professional sources has two dimensions: distrusting medical experts (e.g., physicians, nurses, pharmacists) and doubting social sources (e.g., Internet forum, sharing from the acquainted sources).

Living to role identity is the way parents behave to live to their parental role identity. Parental role identity consists of meanings that parents attribute to themselves as an object in social situations of healthcare decision-making. In living to the role identity, parents try to behave in such a way those other actors of the healthcare environment respond to them as parents. Living to their role identity, in medical decision-making situations, parents not only accept their parental role and attempt to fulfill their role of giving their children the best things for health. Parents take the greatest responsibility to look after their children and self-reliance is the meaningful behaviors parents do to enhance the meaning of their role identity.

Immersing the lay self is the devotion of parents' mentality and the occupancy of parents' centrality and proximity to the health care of children. Parents' mentality encompasses a broad range of attention, thoughts, feeling and senses, and emotions parents experience in making health care decision for their children. Parents' centrality includes the centering of the lay self in the health care of children, and the proximity parents want to raise up to close the imbalance between themselves and the child as well as other actors in the decision process.

Parental knowledge integration has three factors. First, information is acquired from pharmacies, physicians, social networks, and spouses. Then the information is integrated into parents' understanding of health, illness, and medication through a process of knowledge synthesis

Sensing the harmony is parents' perception of children health state, medication benefits and suitability in comparisons with children health conditions. Parents feel, desire, and think in a total harmony that their child is in a well-being status. Children's well-being includes personal, mental, environmental, and social dimensions in which parents are the actors. Parents seek for a kind of tolerance between children human body and the experienced health regimen.

Constructing loyalty by parents in the care of children, of which medication is a part, has several elements. "Loyalty" represents the favor parents have for reliable medicines, the preferences of professionals and services that parents build through their interactions, and the confidence in self in owning and mastering the caring experience that parents accumulate.

In the next chapter, I present the theoretical analysis of the relationships between these categories to propose an integrated framework for the theory of parental health behaviors in childcare.

CHAPTER 5. THEORY BUILDING

This chapter is all about my theoretical coding. As discussed in Chapter 3, with respect to theoretical coding, in this chapter I present how, what and why I identify relationships – relational statements or hypotheses – between the categories and how the identified hypotheses support the choice of core categories relying on the richness of their relationships with other categories. From that, I propose a novel theory of parental health behavior and its governing hypotheses. I then show how additional integrated literature review supports the proposed theory. Lastly, I evaluate the rigor of this study as well as the emergence and theoretical saturation of the proposed theory.

5.1 Immersion of the Lay Self

5.1.1 Immersing the lay self

In the present study, the research participants shared their stories of devotion and sacrifice. They sacrificed their lives and worked to cope with the kids' health issues. They devote their time to taking care of their children. They spend their working hours and leisure time, at work and home, offline and online, to search, learn, integrate, and build their knowledge and understanding. Parents perceive well the efficacy and safety of the medications that children take, and have clear perceptions of their child's body, health status, and the beliefs in what effects medications can bring about in their children. "My child I nourished him I realize," is what Hong shared. That sentence reflects parental role as being centered in the care of children surrounded by relationships with actors in health care.

"For example, Lactomin probiotic, two tablets in the morning, two more in the afternoon as higher doses, but I studied well I know it is not an antibiotic, so it is OK. Antibio Pectin is for increasing stomach movements, so it is also fine... Every time

my child has a cough I give her lemonade and antipyretic tablets with an orange flavor, she likes it. I know that anti-fever medicine I used is Hapacol with an orange flavor, she usually takes 250 [milligrams], and her older sister uses para[cetamol] 500 [milligrams]. I determine the dose according to their body weights, not to ages. I learned that from pharmacy staff. I am cautious. I give my children Antibio two hours after she takes antibiotics prescribed by physicians. It is to avoid gastrointestinal disorders caused by antibiotics. Physicians told me to give her yogurt, I already know it, but I prefer Antibio. My child, I nourished him I realize, her intestine is fragile, and so I try to learn more...” (Participant: Hong).

Analyzing the difference between immersion and involvement is necessary. Because of the effect of the asymmetry of information toward lay people, the level of participation in health care decision by non-specialists is intensified (Kahn et al., 1997, p. 362). Patient involvement in medical decision-making process is well studied (e.g. Angst & Deatrick, 1996; Chewing, 1997; Chong, Quah, Yang, Menon, & Krishna, 2013; Garfield & Isacco, 2012; Gottfredson & Hussong, 2011; McKenna et al., 2010; Redley et al., 2013; Say et al., 2006; Smith, Dixon, Trevena, Nutbeam, & McCaffery, 2009; Thompson, Pitts, & Schwankovsky, 1993). However, most of these studies conducted in the context of developed countries such as United Kingdom, Australia, and the United States. The studies examined primarily the relationship between patients and medical experts without a holistic coverage of patients’ consumption experience and in the context of specific chronic diseases, not that of everyday life. One study was conducted in Singapore, but the focus was on a descriptive statistic result (Chong et al., 2013, p. 1). Garfield and Isacco (2012, p. 41) collected data from 32 fathers and proposed a framework in which parental involvement consists of physical participation such as direct contact with professionals, medication administration, playing with children, providing meals to children, the general response to child health issues. Smith

et al. (2009, p. 1808) conducted 66 interviews with parents presented findings on the moderation effects of education and income on the perceived involvements of parents. The parents perceived involvements as either sharing responsibilities with medical experts or consenting recommendation from these experts. Say et al. (2006, p. 66) reviewed 33 studies, 25 of them are quantitative ones, to have an overall view of parents' preference for involvement and factors affecting the involvement. The review shows that parent's involvement is rather a varied and complex process that evolves over time and changes according to the status of health conditions. No specific definitions of patient involvement were proposed. More specifically on examining patient involvement, Elwyn et al. (2001, p. 17) conducted an intensive review of the extant literature on research instruments of involving the patient in the decision-making process and found no measurement items (from a total of 29 identified items) meet the criteria of measurement items. The authors called for more research in developing an assessment of patient involvement process.

5.1.2 Antecedents of lay self immersion

In this section, I analyze data to search for connections and links between the seven categories I identified in Chapter 4. I also re-analyzed the data of the participants to search for the links between coded data respectively to the seven categories to propose tentative hypotheses. The relationship between the categories is hypothesized according to the identified links taken into consideration the categories, their respective focused codes and the properties of the categories.

Thu is young mother aged 31 with two children aged two and nine. He studied at University but was working on the own business with a small fashion shop at her house. Her husband was very busy at work; she took the responsibility of a housewife while taking care of her two children. Thu experienced bringing her child to two physicians because the

prescription with the first doctor did not help her child recover. By seeing the second physician, she discovered the discrepancies in the knowledge, judgments, and recommendation of the two physicians. The second physician even said to her that he did not understand why the first physician prescribes such medications. Thu shared “I do not know why there is such a difference.” Once, she compared two prescriptions for her child’s same health problem and saw half of the medicines are different: “I tried to compare the drugs prescribed by the two doctors; they are different in about 50%.” Thu always expresses concerns with medications doctors prescribed; she is afraid of using antibiotics for her children. However, experiencing many times that her kids were prescribed “antibiotics again and again” she has doubts about doctors’ credibility.

While Thu has to rely on doctor consultation, she then also tried to learn more about children health. Her learning has increased since she had her first baby. She tries to learn from many sources, in various instances. She devoted to learning, to understanding her child health and illness. She has built up her experience:

"I read books about how to become a mother, how to take care of a baby. I searched the Internet how to do when a child gets sick. I now know and has experienced such as at what severity level [of the illness] I should bring my child to a physician, and at what level I can take care by myself... When my kid gets sick, I first read its [the medication] patient leaflet, in modern time, via smartphones, I search Google, reading about sneezing, as such...What is the drug, sounding right medication? How do I use it? How much is the dosage per kilogram? It is not only my decision or just learning from one single physician consultation. Physicians prescribe medications; I review its information from the Internet, just press a button on my smartphone, drug name, usage for sneezing and runny nose. Everyone also mentions its name and says it is

OK. My close friends also share the same. [I] read and see that it is quite good, a well-known medication on the market... I know from what pharmacies I should buy medications that I trust, [the pharmacists are] not because of their much profit in trading medications. Health is the most important thing to my children.” (Participant: Thu)

Thu had become very busy doing her role to take care her children. She has no time for other things rather than caring her children: “With the kids, I am very busy. That is the norm. Mothers are overhead and ears in things (đầu tắt mặt tối), for cooking, health, and tons of other things... Everyone is busy.” Despite such efforts, Thu is fine. She understands that is her role, her task, her responsibility. Thu continued to learn more, understand more, and care more for her children. She is willing to “sacrifice for [her] children, overcoming all the pains and miserable things and expecting the children’s good health and a better life.”

Ai is another mother who is the participant in this study. She was 38-year-olds with a bachelor degree she was working as an accountant. She has two children aged six and eight. She is quite busy at work and usually saves time to take care her children even during her working hours. She also has lots of concern regarding antibiotics doctors prescribed for her children: “he automatically prescribed antibiotics” because she understands the medicine is too strong for her children. As a layperson, Ai does not figure out why and usually ask her favorite pharmacy staff for advice. She found that (as pharmacy staff told her) the antibiotics are powerful and not safe for her children. She does not trust in some physicians she knows: “I do not follow prescriptions of physicians because their prescribed antibiotics are very strong.” She realizes and tries to understand the discrepancies between doctor’s prescription and pharmacy’s advice. As a good mother of the two children, she tries to do more with her kids and less for herself: “I do cook for my children, they eat only the food I prepare,” and

“caring for my two little sisters gives me no more time to take care of myself.” A typical day of her living is occupied by her children from early morning to late evening. Of course, she also needs to work in the daytime:

“They come back [from school], having some snacks. We have a housemaid, but for meals, I do cook for the sisters. They enjoy only the meal that mom prepares; they get used to that. After meals, the sisters study [homework]; I work with the younger while, the older can do it herself... They then go to bed, before that each drinks a glass of fresh milk. [I] encourage them to go to sleep early so they can go to school early the next morning. In the early morning, mom gets up early for a busy day ahead with the two [kids].” (Participant: Ai).

From data, I realize that there is a relationship between the level of information asymmetry perceived by parents and the intensity they devote themselves to understanding their children’s health. The more parents concern with the discrepancies in the consultation and advice from medical experts the more they try to learn, to understand, and to care for their children. Parents’ efforts in learning and understanding increase when their trust in professionals decreases. We, therefore, theorize the following hypotheses:

Hypothesis 1: *The more asymmetry of information parents perceive the higher they immerse themselves into medication reasoning* (Figure 5.1).

Information asymmetry in health care encounters between parents as the central decision makers in developing countries causes uncertainties, distress, and distrust in parents. They have no choice but to attempt to reduce the gaps in their knowledge and understanding of children health care and medications. Because of the many social relations involved in the medical decision experience, parents devote themselves mentally and physically to achieve

their goals of bridging the gaps. In the environment where increasingly higher asymmetry of information exists parents more and more immerse their lay self to comprehending decisions in health regimens and medications.

Returning to literature, I found the evidence that supports the hypothesis in two points. First, there have been studies to evidence the divergence of patient consultations to community pharmacies because of poor medical service by physicians. Such situations cause patients to engage themselves in the broader scope of social contracts and relationships outside the service circle of medical experts. Studies of Whyte, van der Geest, and Hardon (2002) evidence an increasing practice of self-treatment by patients in developing countries, resourcing the pharmaceutical care available in pharmacies through pharmacists, assistant pharmacists, and informal pharmacy sellers. Wijesinghe et al. (2012, p. 35) surveyed self-medication practice of adults in a developing country and evidenced a more common practice of self-medication through community pharmacies by the group perceiving low-quality medical service by physicians. The survey revealed the reason for perceived low-quality consultation service included profound considerateness and explanation by doctors. Second, recent studies have provided insights into the negotiation between patients and professional sources. There is a shift of consumers or patients from consultations with professional experts to alternative sources to diminish the impact of information asymmetry. Giannakas (2002, p. 47) examined the asymmetry of labeling information in food markets and concluded on the negative impact on consumer purchasing decisions and trust. Henderson (2011, p. 7) study found that non-face-to-face negotiations achieve more integrative agreements than face-to-face negotiations. Consistently, Keeling, Laing, and Newholm (2015) analyzed data from online health communities and in-depth interviews and found the evidence of asymmetry relief in the patient-professional negotiated relationship. The author posited that the engagement and empowerment of patients in online health communities support to equalize

the power asymmetry inherited in the relationship because it creates a better mutual benefit balance between the parties (p. 305). The finding is consistent with the fact that perceiving the asymmetries the participants turn to other professional sources such as pharmacy staff, online health forum, or knowledgeable relatives to diminish the disproportion of knowledge and power (Hypothesis 1).

Hypothesis 2: *The lower the level of trust between parents and professional sources the higher parents immerse themselves into learning and understanding their children health and medical regimens (Figure 5.1).*

The characteristics of information asymmetry in developing countries leave the expertise-dominating actors to exploit the social relations for their benefits. The resulting distrust, in professional sources, of lay people who are also in the center of the healthcare decision-making process requires the lay people extraordinarily engage and involve in making right choices for their sick children. The more parents suffer their distrust in professional sources and referents the higher parents immerse their lay self to understand medications for making right decisions concerning their children health.

A multitude of studies has been conducted on the physician-patient trust relationship. “Trust refers to people’s expectation typically for goodwill, advocacy, and competence” (Goold, 2002, p. 79). Trust or distrust occurs in relationship and interactions. Therefore, the focus of the studies was on interpersonal trust which is constructed from repetitive interactions of patients with their physicians by which the physician trustworthiness is observed over time (Pearson & Raeke, 2000, p. 510). The dimensions of physician-patient trust include physician competence, physician concern with patient well-being, physician control over decision making, physician control of confidentiality, and physician’s two-way openness with patients (Mechanic, 1998, p. 663). Consequences of trust or distrust are

divided into two categories: behavioral and attitudinal. I want to provide details of behavioral consequences concluded from literature. Patients' trust in physician correlates with patients' empowerment of physician choice, managed care quality, physician interpersonal skills, physician's priority set for patient's welfare (Kao, Green, Davis, Koplan, & Cleary, 1998, p. 681), willingness to stay with the same physicians, perceived effectiveness of care (Hall et al., 2002, p. 293), physician verbal communication effectiveness (Fiscella et al., 2004). Health outcome from the physician-patient trust is patients' improved adherence to treatment and health status, patient's satisfaction in physicians (Safran et al., 1998, p. 213).

Mechanic (1998, p. 663) reviewed the functions and limitations of trust in healthcare domain. He suggested the increasing distrust in patients have two reasons. First, the patients became more autonomic and empowered with their improved education levels, more informed, more knowledgeable, better aware of available medical solutions to diseases. As a result, patients increasingly seek to control health care decisions concerning their health. Second, there have been significant changes in structures and organizations of health care system resulting in discrepancies between practice and regulations causing potential conflicts for distrust. Distrust concerns with interpersonal distress (Gurtman, 1992, p. 1001). Patients' distrust in medical professionals prompts them to search for a second opinion or desire to switch physicians (Hall et al., 2002, p. 314), turn to other pharmacies (Bonnal & Moinier, 2014, p. 482). Although community pharmacies have limitation and issues in service quality, lay people in developing countries are coming to consult with pharmacies because of the better geographical convenience, lower costs of service, more extended service hours (Hermansyah et al., 2015, p. 2).

Distrust in physicians and the shift of patients from medical professionals to interact with a broad range of reference sources require patients to engage and involve deeper and longer

in the health care decision-making process. This observation and its evidence, therefore, support the hypothesis that distrusting professional sources encourage lay people to immerse themselves in understanding their health care decisions (Hypothesis 2).

Figure 5.1. Antecedents of Lay Self Immersion

Hypothesis 3: *Parental lay self immersion requires parental role identity* (Figure 5.1).

Parents possess their role identity. It is the meanings reflected in response from interactions of parents and people around them that imply their role as parents. The norms require parents to give the good care of children in general and right medical decisions. The more parents accept, perceive and live to their role identity has a positive impact on parents' self-immersion into medication reasoning.

As discussed in the previous chapter, one's identities build his or her self (Stryker, 1968). The self consists of various identities which are meanings that "one attributes to oneself as an object in a social situation or social role" (Burke & Tully, 1977, p. 883). In interactions with other people, one's identity is experienced, so people know and understand one's identity and

they “respond to the person as a performer” in that particular social role (Burke & Tully, 1977, p. 883). I reviewed the literature and searched for studies on the relationship between people’s identities and his or her intense involvement, engagement or immersion in behaviors they believe to live up to their identities.

Houston and Rothschild (1978) defined a type of product (or product category) involvement – enduring involvement – that is built on the strength of the product’s (or the product category’s) to one’s needs, values, and self-concept. The involvement may “occur as a result of a practical, role-related needs” and maintains on a long-term basis (Bloch, 1982, p. 413). Enduring involvement encompasses a broad range of consumer’s experience, not merely purchasing incidents. Bloch (1982, p. 416) tested with empirical data in clothing and automobile categories and found substantial evidence that consumers use enduring involvement as a vehicle for expressing their self-concept. The author argued that consumers highly involve themselves in a product or product categories that carry symbolic meanings to enhance a part of their self-image. Enduring involvement is not confined to extraordinary or recreational products; it occurs in common product categories such as clothing, automobile, furniture, record albums (Bloch & Bruce, 1984, p. 199). The model of enduring involvement included various activities supplementary to the product category that consumers engage themselves in doing (Bloch & Bruce, 1984, p. 200) as a multidimensional consumption experience.

In consumption experience research stream, consumer immersion has been supported in extraordinary, adventurous or tourism experiences (Addis & Sala, 2007; Arnould & Price, 1993; Brakus et al., 2009; Fitchett, 2004; Holt, 1995; Tumbat & Belk, 2011). The theoretical basis that explains consumer immersion is social identities consumers possess in their self. Consumers are assumed to immerse themselves in experiences to seek for what are

“(re)presenting and (re)producing their self-images” (Firat & Shultz, 1997, p. 199). In line with arguments and empirical evidence from Bloch (1982, 1986); Bloch and Bruce (1984); Firat and Shultz (1997), Carù and Cova (2007b, pp. 3, 34) summarized relevant postulations on consumers’ experience, immersion, and identities. In the postmodern era, consumers desire to build up and strengthen their identities, including their self-image, self-concept, self-identity, role identity, as shown in Figure 5.2, through consumption experience rather than just purchasing a product or service. They prefer to seek to immerse themselves in “thematized setting” of experience rather than just running into a finished product. Consumers see immersion as a means to access experience they value.

Figure 5.2. Constitution of Images

Source: Firat and Shultz (1997, p. 199)

Consistent with the extant literature, I support the hypothesis between parental role identity and parents’ lay self immersion to comprehend medication and health regimens (Hypothesis 3).

5.1.3 Consequences of lay self immersion

Manh is 30 years old and a father of two children aged three and seven. He has a college degree and is the owner of a smartphone shop in Hanoi. The data from Manh has the richness

of his learning health knowledge. He has a full scope of learning from multiple sources as the data indicates: “I searched Google” because “everything [is] on the Internet,” “from health seminars for parents,” “I also asked from relatives and the acquaintance,” “from grandparents, relatives, or neighbors,” and from “television programs such as Health & Life.” Furthermore, he put high priority for “information ... about children ailments” from physicians, and pharmacies: “I bought [medications] from large, well-known, reputable pharmacies.” He said, “Things come from all sources.” We were curious about his motive for his learning efforts. The data indicates his significant needs for learning: “I need to find out by myself,” “I need to have conversations with the physician,” “It builds up a relationship with people; it also helps [me] learn how to do when I need to.” His ultimate underlying reasons are “health is the first, for children...we care for the health.”

On the other hand, Manh also tries to sense the health conditions of their children. Manh shared an event of fever happening with his kid. He interprets the health status from a lay sense of illness, health symptoms, and signs and tries to draw reasoning and conclusion from his experience.

“He [my son] sometimes has a fever I know if having no cough and no other symptoms just give him a cold remedy for children. So the fever should relieve from the second day...that’s human body” (Participant: Manh).

“Recently my older kid, two months ago, got a fever. The grandparents said it was a common fever [common cold fever], so I thought if the fever just lasted for 24 hours, no problem, it is good. However, I felt he continued to have a fever until the second day, no relief in fever. I stopped working and left the office for home, just follow-up my kid with prescribed medicines. No relief, so I brought him to Bach Mai hospital. He was transfused with mineral solutions. I was afraid of his suffering pneumonia.

However, the laboratory tests showed it was a cold fever; doctors gave us medicines so that my kid could just stay at home” (Participant: Manh).

Hong is a 39-year-old mother of two children between the ages of five and nine. She is working for a public post office as general staff in Ho Chi Minh City. Hong has a wealth of experience with physicians whom she can not only learn from and judge their expertise, reputation, and consciousness, for example: “Dr. Quang is reputable, she is very smart.” As a result, Hong knows well all about medications her children use.

“For Dr. Trung., she gave more expensive medications with many effects, also nasal medication, while Dr. Thuong gave me only drop medicines for use at night... prolonged use may not be right; we can change to Xisat.” (Participant: Hong).

“For example, Lactomin probiotic, two tablets in the morning, two more in the afternoon as higher doses, but I studied well I know it is not an antibiotic, so it is OK. Antibio Pectin is for increasing stomach movements, so it is also fine... Every time my child has a cough I give her lemonade and antipyretic tablets with an orange flavor she likes it. I know that anti-fever medicine I used is Hapacol with the orange flavor, she usually takes 250 [milligrams], and her older sister uses para[cetamol] 500 [milligrams]. I determine the dose according to their body weight, not ages. I learned that from pharmacy staff. I am cautious. I give my children Antibio two hours after she takes antibiotics prescribed by physicians. It is to avoid gastrointestinal disorders caused by antibiotics. Physicians told me to give her yogurt, I already know it, but I prefer Antibio.” (Participant: Hong).

I identified in the healthcare experience of Manh his strong desire and efforts of learning and devoting himself to such learning to build up his knowledge and experience. His learning

is not only intellectual but also mental; it is made through feeling to perceive the harmonization of medical treatment and children health. The parents know very well not only basic knowledge but also the lay experts of children health. For example, Ai knows about the etiology of illness “Because of humidity bacteria grow so much, many diseases...” and Thu knows about the mechanism of actions of medicines: “we should use functional food or vitamin products to enhance body resistance ability against diseases...” As such, the participants’ self-immersion help explains their efforts and intensity of knowledge accumulation and synthesis, the in-depth sensing of the health conditions in children, and the constructive loyalty to health care decisions. The parents claimed that only they and no one else could know their children the most as Hong said: “My child, I nourished him I realize ...so I try to learn more...”

Hypothesis 4: *Parental self-immersion is positively associated with parental knowledge integration, child-medication harmony perception, and health care decision loyalty construction (Figure 5.3).*

Parents’ efforts, devotion, and occupancy in medications reasoning process result in the improvement of medical knowledge, the accuracy of health perception of children – medication interaction, and the affinity of parental loyalty to a medical decision. This hypothesis assumes that the higher intensity of parental self-immersion the stronger their knowledge integration, child-medication harmony perception, and healthcare decision loyalty construction.

I conceptualize parental knowledge integration as having three elements: acquiring information, analyzing information and synthesizing knowledge. Information seeking and knowledge obtaining are the purposes for parents’ immersion because of the uncertainties and discrepancies in information parents have. Parents can only diminish the information

asymmetry by building their knowledge in comparison with their sensed outcome and harmony of healthcare solution, treatment regimens, and medication usage. I have had a brief review of the extant literature with supportive evidence for this hypothesis. There is a correlation between patients' involvement in health care decision and their medical knowledge level. Thompson et al. (1993, p. 138) tested with empirical data and found that patients have a higher preference to involve themselves in health decision making when they have a greater level of knowledge required to make the decision. Better-educated patients desire for a higher level of decisional involvement. Harrison, Kushner, Benzies, Rempel, and Kimak (2003, p. 111) with in-depth interview data of pregnant women found that the women viewed their active involvement in health care decisions concerning themselves and their babies consists of health information access, partnership with healthcare professionals in monitoring their health and the baby health conditions. The women shared their "struggling" to find and assimilate health information and knowledge. Other studies also found similar correlation that patients' preference for more details and knowledge is associated with preference for more active involvement and engagement in health care decision-making (Cassileth, Zupkis, Sutton-Smith, & March, 1980; Catalan et al., 1994; Sutherland, Llewellyn-Thomas, Lockwood, Tritchler, & Till, 1989). There is a higher desire for the active involvement of patients when patients perceive their health conditions are severe, chronic, or threatening. Harrison et al. (2003, p. 111) found in qualitative data that pregnant women desire to monitor their health and their baby health conditions. The women ask nurses to help them in doing such monitoring. Sutherland et al. (1989, p. 13) found that parental involvement in health care decisions concerning their children is positively associated their interactions and relationship with medical professionals, the two-way communication between parents and the professionals, parents' knowledge and experience in child care and perceived the importance of the parental role. As children health is the primary concern of

parents, parents always seek to learn more about how they can take care of their children safely and healthily (Bush & Hardon, 1990, p. 1045) and make efforts to to change their behaviors in the way that will promote their children health conditions (e.g. Beale & Manstead, 1991; Hounsa et al., 1993; Moan et al., 2005).

Hypothesis 5: *Parental loyalty construction depends on parents' integrated knowledge, perceived child-medication harmony, and self-immersion intensity (Figure 5.3).*

Parents' loyalty to medications, medical regimens, and their health care decisions depend on their rationales and emotions. The rationality is subject to parents' reintegrated knowledge of health, illness, and medical solutions; the emotion is a result of their perception of medical benefits, child health conditions and the combination of these two – the child and the medical solution administered. This hypothesis argues that to build up the loyalty among parents, parents' rationality and emotions are key factors.

The proposed hypothesis has the consistency with the conceptualization of brand experience argued by Brakus et al. (2009, p. 53). The authors view the brand experience from three perspectives: product experience, purchasing, and service experience, and consumption experience. They developed and tested measures of brand experience in four dimensions: sensory, affective, intellectual, and behavioral; and found brand experience affects consumer loyalty directly. The loyalty construction in the hypothesis consists of elements of cognition (information and knowledge), affect (harmony sensing), and behavior (self-immersion). The authors recommended further research into a consumer experience that is extended over time to examine the antecedents and long-term consequences of experience on consumer loyalty Brakus et al. (2009, p. 66). Singh and Sirdeshmukh (2000, p. 156) developed a model of consumer loyalty taking into account the factors of information asymmetry and consumer trust/distrust. Loyalty is conceptualized as an intention of consumers who want to maintain

relationships with providers in the consumption experience that offer some user-provider encounters. More specifically on the health domain, Moliner (2009, p. 79) conceptualized and tested a model of health consumer loyalty of which the antecedents are consumer cognitive perceived values, perceived affective values, consumer satisfaction, and consumer trust/distrust. Here again, I see the hypothesis elements are in conceptual consistency with the elements of the health care loyalty.

Figure 5.3 depicts the relationships between the categories: Immersing lay self into medication reasoning, integrating parental knowledge, seeing the harmony of a child, health conditions and medical regimens (e.g., medications) and loyalty to health care decision and experience.

Figure 5.3. Consequences of Lay Self-Immersion

5.2 Medication Reasoning

5.2.1 The reasoning of medications usage

In this study, participants were found to develop their beliefs in the medications they use for children through a process of integrating knowledge and understanding. From the very beginning, parents have a certain feeling about a medicine without any rational judgments about it because of their lack of medical or scientific background. However, during the process of learning from trusted professionals (e.g., physicians, pharmacists) and other sources of reference (e.g., relatives, social media), parents build on their lay knowledge about the medication. Parents verify their knowledge and understanding of the medicine through their experience of using it before they develop beliefs in it. Through this experiential learning process, parents develop strong beliefs in medications.

In this study, I observed a high level of knowledge and understanding that parents acquire from their caring experience with children. The knowledge and understanding are the results of an integrated acquisition process concerning different sources of reference. In comprehending the health information, parents analyze the advantages versus the disadvantages of medications that a reference source recommends. This requires parents to conduct a reasoning process in an informal context that is multifaceted, ambiguous, and self-judgmental.

Let us take the example of one participant; her pseudonym is Ai. She is an accountant, 38 years old, living in Hanoi with two girls aged eight and six. She lives a typical busy caring day with her two daughters regarding educating and feeding them. Her life aspects include her work as an accountant, her relationship with her husband who is a busy working person and is usually absent from home during weekdays, and their distance from grandparents. One of her daughters developed malnutrition and experienced a severe health problem. Caring for such a malnourished child is complex considering food, medication, schooling, sleeping, entertainment, and environment. The reasoning to make health decisions concerning her child

under these complicated circumstances was difficult. From the data, I observed her reasoning process with a series of logical arguments based on her sources of reference. She then came up with conclusions. For instance, she developed conclusions on the safety of antipyretic suppositories over oral medications and the liquid form of vitamins over solid form medication.

"...But taking lots of this medication may not be good for the stomach; so I asked other mothers, they usually use antipyretic suppositories, it is less harmful. I often ask for advice in such situations; they shared with me." (Participant: Ai).

"My older child once got malnutrition. Nutroplex was very suitable for my child; it was an eating stimulant. It helped my kid eat more, it is in the form syrup, similarly to probiotics but it is easier to administer, it is delicious. At the time my child took a lot of it, more than ten bottles, many, he got used to it." (Participant: Ai).

Ai's conclusions were the result of a reasoning process with advice from medical professionals, for instance from her physician and a favorite pharmacist. In this example, Ai needed to determine what information was relevant to the question of what medication her child should take to cure the malnutrition: nine items from the physician or just one liquid vitamin product from her close pharmacist. Without medical knowledge, in an ambiguous situation, Ai attempted to make her judgments and come up with a plausible conclusion for medication choice.

"Dr. Thuong examined and told me my child lacked many vitamins. She was so right, why? Because my child body could not absorb anything, so she lacked vitamins. She gave me nine medications in bottles and tablets. I was so scared but said nothing, just kept silence. I brought the prescription to the pharmacy. She [the pharmacist] told me

she was going to tell me the truth that might hurt my feeling: If my child took all of those medications, she could not eat powder and milk at all. So use Nutroplex, which was a popular medicine, in the form of syrup, why? My child was so fatigue; poor absorption of nutrients, so liquid medication was better for faster absorption than tablets and less elimination from the body. I agreed with her [the pharmacist], and I bought two bottles.” (Participant: Ai).

Ai’s choice of medication was just an explicit manifestation of her living a busy caring day. She lives up to the standard of being a good mother.

“Well, taking care of my two little ‘sisters’ [daughters] gives me no more time to take care of myself. They come back [from school], having some snacks. We have a housemaid, but for meals, I do cook for the sisters. They enjoy only the meal that mom prepares; they get used to that. After meals, the sisters study [homework]; I work with the younger while the older can do it herself... They then go to bed, before that each drinks a glass of fresh milk. [I] encourage them to go to sleep early so they can go to school early the next morning. In the early morning, mom gets up early for a busy day ahead with the two [kids].” (Participant: Ai).

“I know a prescription is for what health problem of my child, what usage the medication has. I also know about each medication physicians prescribe for my kid. In case I am not sure about medication in a prescription I will ask the pharmacy why is for the similar problem, this time, physicians prescribed a new medicine, what it is for?” (Participant: Minh).

“For cakes, I always think of new cakes. My cakes are not the same as any other cakes. What do I want my cakes to be? I have my new ideas to make new cakes... I

make cakes of my own, with my thoughts and ways. My cakes have unique features. Similarly, we need to know about medications; we can consult [physicians, pharmacists]; we study, and think out of the box.” (Participant: Minh).

5.2.2 Components of medication reasoning

Healthcare reasoning of parents is a determinant that affects their adherence, health outcome, satisfaction, and loyalty. There are studies that focus factors that are associated with patients’ health comprehension such as medical reports (Wiener & Kohler, 1986), education materials (Davis et al., 1996), medical instructions (Chang, Chen, Chang, & Smith, 2012; Morrow, Weiner, Young, Steinley, & Murray, 2003), website interactivity (Lustria, 2007). The comprehension of people experience is required before the explanation of it can be made. The comprehension of healthcare experience requires consideration of patients’ meanings, values, intentions and concerns (De Castro, 2009, p. 470).

Parental medication reasoning consists of both rational and emotional aspects of their medication knowledge. In the extant literature, the experiential learning-based beliefs reflect two levels of knowledge that parents accumulate. Besides the scientific understanding of drugs, which is cognition based, parents may have more direct and subjective experience with the drugs, which generates affects such as happiness, sadness, fear, anger, joy, and pride. The affect is defined as Emotion III (Buck, 1985, p. 397), reflecting parental “knowledge by acquaintance” in contrast to “knowledge by description” (p. 401). Buck, Anderson, Chaudhuri, and Ray (2004, p. 648) posited the inclusion of both affective response (knowledge by acquaintance) and rational response (knowledge by description) in cognition. The relationship between knowledge by acquaintance and knowledge by description is bidirectional, given the lay perceptions and knowledge of parents who are lay people. Unlike the context in pure sciences, in the socioscientific context of informal reasoning in every life,

issues that require reasoning are viewed and perceived as open-ended, unstructured, and debatable subject to multiple perspectives. People engage in informal reasoning as they attempt to overcome dilemma problems without precise answers (Sadler & Zeidler, 2005, p. 113). Therefore, informal reasoning in everyday life context involves both rationality and emotions. Studies of Sadler and Zeidler (2005, p. 121) provides evidence that informal reasoning has both cognitive and affective processes.

A widespread phenomenon of reasoning happening in everyday life context is informal reasoning, which occurs when individuals need to make decisions, such as which detergent they should buy in a supermarket or what vitamin supplements their kids should take at the time. Informal reasoning involves all professional, business, and other working contexts (Voss, Perkins, & Segal, 2012, p. 14). Reasoning encompasses a number of behaviors including formulating problems, figuring out their solutions, drawing conclusions from premises, designing through trials and errors mode, formulating and using principles to evaluate arguments, making judgments of information's relevance, as well as surveying and assessing possible outcomes of decisions and plans (Voss et al., 2012, p. 173). With such effort, reasoning for comprehension comes in.

Informal reasoning is typically also observed within the medical profession (Voss et al., 2012, p. 37). It happens in complex, uncertain, and judgmental circumstances of physicians and nurses. From a more focused perspective, clinical reasoning in nursing education has been the core of the logical argument for nursing practice. Clinical reasoning takes into consideration all types of knowledge: formal, informal and experiential (Kuiper & Pesut, 2004, p. 381). The lay reasoning process observed from participants in this study is conceptually congruent with the informal reasoning in the medical profession. I understand that the data supports the phenomenon of informal reasoning by parents throughout the

process, from integrating their understanding to using medication, perceiving the well-being of children about treatment, and building loyalties to medical and pharmacy professionals.

I developed a hypothesis on parental medication reasoning which depends on parents' knowledge integration, harmony senses, and loyalty construction.

Hypothesis 6: *Parents' knowledge integration, harmony senses, and loyalty constructions have a positive influence on parents' medication reasoning* (Figure 5.5).

The medication reasoning process of lay people such as parents in developing countries has a scope of both rational and emotional aspects. This hypothesis posits that the reasoning process encompasses the aspects of integrated knowledge (more rational), perceived child-medication harmony (more emotional), and the constructive loyalty to healthcare experience from an experiential view of consumption. Supported by indicators in the data, as shown in Figure 5.4, I have built a model of three underlying components of medication reasoning integrating knowledge, sensing harmony, and constructing loyalty. These three components are the categories I have developed from data and discussed in the previous chapter. First, knowledge is acquired from pharmacies, physicians, social networks, and spouses. Knowledge is integrated into parents' understanding of health, illness, and medication. Second, sensing the harmony is parents' perception of medication benefits and suitability in comparisons with children health conditions. Parents feel, desire, and think in a total harmony that their child is in a well-being status. Children's well-being includes personal, mental, environmental, and social dimensions in which parents are the actors. Third, loyalty represents the favor parents have for reliable medicines, the preferences of professionals and services that parents build through their interactions, and the confidence in self in owning and mastering the caring experience that parents accumulate.

Figure 5.4. Components of Medication Reasoning

In the hypothesis regarding medication reasoning, I view parents' reasoning as a combination of factors related to cognition, affects, and beliefs that parents acquire through their experience with medications with the condition of self-immersion. Medication reasoning in the proposed hypothesis is at a higher abstract level compared to health literacy constructs (Andrus & Roth, 2002) and stages of information processing (Wyer, 2008, p. 32). The experiential reasoning of medications and health care decisions required accumulated accessibility of knowledge, a construction of loyalty and an intense sense of well-being.

Figure 5.5. Antecedents of Medication Reasoning

5.3 An Integrated Framework

5.3.1 Hypotheses

On the foundation of parental health care decision experience, which consists of the parent's life, family care, and children's health, I theoretically abstract from the data the overarching phenomenon of lay self-immersion as a core category into the integrated framework that builds the theory of parental health behaviors in developing countries.

Hypothesis 1: *The more asymmetry of information parents perceive the higher they immerse themselves into medication reasoning.*

Information asymmetry in health care encounters between parents as the central decision makers in developing countries causes bring in uncertainties, distress, and distrust in parents. They have no choice but to attempt to reduce the gaps in their knowledge and understanding of children health care and medications. Because of the various social relations involved in the medical decision experience, parents devote themselves mentally and physically to achieve their goals of bridging the gaps. In the environment where increasingly higher asymmetry of information exists parents more and more immerse their lay self to comprehending decisions in health regimens and medications.

Hypothesis 2: *The lower the level of trust between parents and professional sources the higher parents immerse themselves into learning and understanding their children health and medical regimens.*

The characteristics of information asymmetry in developing countries leave the expertise-dominating actors to exploit the social relations for their benefits. The resulting distrust, in professional sources, of lay people who are also in the center of the healthcare decision-

making process, require the lay parents extraordinarily engage and involve in making right choices for their sick children. The more parents suffer their distrust in professional sources and referents the higher parents immerse their lay self to understand medications for making right decisions concerning their children.

Hypothesis 3: *Parental lay self immersion requires parental role identity.*

Parents possess their role identity. It is the meanings reflected in response from interactions of parents and people around them that imply their role as parents. The norms require parents to give the good care of children in general and right medical decisions. The more parents accept, perceive and live to their role identity has a positive impact on parents' self-immersion into medication reasoning.

Hypothesis 4: *Parental self-immersion is positively associated with parental knowledge integration, child-medication harmony perception, and healthcare decision loyalty construction.*

Parents' efforts, devotion, and occupancy in medications reasoning process result in the improvement of medical knowledge, the accuracy of health perception of children – medication interaction, and the affinity of parental loyalty to a medical decision. This hypothesis assumes that the higher intensity of parental self-immersion the stronger their knowledge integration, child-medication harmony perception, and healthcare decision loyalty construction.

Hypothesis 5: *Parental loyalty construction depends on parents' integrated knowledge, perceived child-medication harmony, and self-immersion intensity.*

Parents' loyalty to medications, medical regimens, and their health care decisions depend on their rationales and emotions. The rationality is subject to parents' reintegrated knowledge of health, illness, and medical solutions; the emotion is a result of their perception of medical benefits, child health conditions and the combination of these two – the child and the medical solution administered. This hypothesis argues that to build up the loyalty in parents, parents' rationality and emotions are key factors.

Hypothesis 6: *Parents' knowledge integration, harmony senses, and loyalty constructions have a positive influence on parents' medication reasoning.*

The medication reasoning process of lay people such as parents in developing countries has a broader scope of reasoning in both rational and emotional aspects. This hypothesis posits that the reasoning process encompasses the aspects of integrated knowledge (more rational), perceived child-medication harmony (more emotional), and the constructive loyalty to healthcare experience from an experiential view of consumption.

5.3.2 Coding tree

I visually integrate the categories and the hypothetical relationships into an integrated framework that is displayed in Figure 5.6. To have a whole view of the theory vis-à-vis the respective focused codes, I present in Figure 5.7 the full coding tree of the theory.

Figure 5.6. A Theory of Parental Health Behavior

(See Sections 5.1 and 5.2 for discussion of theoretical path construction of the hypotheses H1-H6)

Figure 5.7. Coding Tree of the Theory of Parental Health Behavior

(See Table 5.5, Appendices H and I for saturation details of categories and focused codes, and list of initial codes)

5.4 Literature Review

I have reviewed the theory with regard to other grounded theories in the related topics: children medication and children health by the care of parents. By searching literature database, I found nine studies on the focused topic of children medications, including vaccinations and another nine studies on the parental attention and experience with the kid's health issues, in which parents are the main participants. The procedures for identifying these studies are discussed in Section 3.5.2. The details of these studies are summarized in Tables 5.1–5.4.

5.4.1 The context of developing countries

Out of the 19 studies, 16 studies had participants as Western parents who were living in the United States, United Kingdom, Australia, Canada, or Sweden. Two studies recruited the participants as immigrants from Asian countries and the other study collected data from parents living in Taiwan. This study offers the uniqueness of research context in developing countries. In Chapter 1, I discussed a point from one of my papers (Nguyen, 2013) that until recently, most research work in health marketing had almost been carried out in Europe or North America. Research models applicable in these regions may not be assumed equally applicable in all territories of the world. Therefore, the context of Asian developing countries would offer new insights to scholars and marketing professionals alike. In such countries, the interrelationship between actors in the healthcare market possesses high-level uncertainties in all social contracts (Bloom et al., 2008, p. 2076). In its inherent structure that makes the healthcare market vulnerable to failures, the disproportion of knowledge distributed among the actors is a leading cause. The present study was conducted in Vietnam which is one of the emerging pharmaceutical markets in Asia-Pacific region (Campbell & Chui, 2010, p. 4). It potentially yields new theory as well as new knowledge of methodologies regarding inquiry

and units of analysis which require different development (Steenkamp, 2005, p. 7). Research in emerging markets such as Vietnam will also contribute to the growth of marketing science regarding data acquisition and theory development (Burgess & Steenkamp, 2006, p. 339). I theorized the lay self immersion with unique dimensions and properties as well as its antecedents and consequences which are different from parental involvement or engagement in these grounded theory based studies (Garfield & Isacco, 2012; Hayles, Harvey, Plummer, & Jones, 2015; Lovell, 2016).

5.4.2 Immersion versus involvement

In previous grounded studies on children health or children medications, as shown in Tables 5.1–5.4, twelve studies did not present any indicators in data that reflect patients involvement in health care processes under study. The remaining seven studies developed categories as adjuvants to the construct of immersion.

In the study of Hayles et al. (2015, p. 1145), the authors developed categories to express the active physical participation in the healthcare decision-making process through interactions and relationships with medical professionals. The partnership was theorized as being initiated from the professional side rather than from patients' desire and origination. In another study of Brunson (2013, p. 5468) classified two types of parents who either relying on alternative sources of references for information and advice but with self "superficial" investigation of the decisional options; or seeking to find out for themselves critical information concerning the health care decisions from various sources of references. Taylor et al. (2006, p. 118) found parents actively search for alternative solutions to their child's problem from a range of treatment solutions medical professionals shared and discussed with them. Nelson et al. (2012, p. 798) provided evidence that because of perceived 'moral'

obligations parents seek to normalize their child's appearance and communication ability through recommended surgeries.

In other three grounded theory studies, the authors proposed a process of parents' engagement and involvement in particular chronic disease settings. Cormier (2012, p. 350) detailed an engagement process in which parents' emotions and behaviors change through different stages from rejection and resistance, to help-seeking efforts and to accepting, welcoming and finally actively managing attention deficit hyperactivity disorder in children. Garfield and Isacco (2012, p. 41) proposed a category of parent engagement with characteristics of active physical participation in health care decisions such as direct contact, medication administration, providing meals, response to a sick child. Lovell (2016, p. 141) developed a category of parents' engagement that consists of credibility evaluation of reference sources, compliance with medical recommendations, and desire for health outcome.

Building on properties and categories, my proposed theory has in its central position the core category of immersion of the lay self in cognitive and affective medication reasoning process. This process has not been explicitly identified and developed in previous grounded theory studies on children's medication (Amin & Harrison, 2009; Benin et al., 2006; Brunson, 2013; Cormier, 2012; Hunt, Mastroyannopoulou, Goldman, & Seers, 2003; Nelson et al., 2012; Taylor et al., 2006; Tickner et al., 2010). The lay reasoning process observed from participants in this study is conceptually congruent with the informal reasoning in the medical profession. I appreciated that the data supports the unique self-immersion that has ever seen in tourism and extraordinary consumption experience but now evidenced in health care everyday life context in developing countries.

5.4.3 Comparison with stakeholder theory

Stakeholder theory provides a framework for understanding the environment in which a corporation operates. The theory initially defined stakeholders as “any group or individual who can affect or is affected by the achievement” (Freeman, 1984, p. 25); business organizations should consider the interests of stakeholders when making decisions. Another definition of stakeholders by Clarkson (1995, p. 106) provided practical application: “Stakeholders are persons or groups that have, or claim, ownership, rights, or interests in a corporation and its activities, past, present, or future.” Since then there have been variations of definitions of stakeholders. However, with any variation of the definition, the corporation is “required to address a set of stakeholder expectations” (Rowley, 1997, p. 889) and to ensure the creation of value, multiple stakeholder synergy in relation to diverse motives (Bridoux & Stoelhorst, 2014, p. 111) is an essential strategy (Tantalo & Priem, 2016, p. 319). A corporation was defined as “a system of primary stakeholder groups, a complex set of relationships between interest groups with different rights, objectives, expectations, and responsibilities as a system of stakeholder groups” Clarkson (1995, p. 107). Stakeholder concept has three fundamental factors: an organization, actors or stakeholders of the organization, and the nature of the organization-actor relationships (Mainardes, Alves, & Raposo, 2011, p. 228). The choice, which management of a corporation makes, depends on the influence stakeholders of that corporation exert. In other words, the management choice is a function of stakeholders’ influence (Brenner & Cochran, 1991). In order to understand a firm’s responses to its stakeholders’ influence, one needs to identify and understand features of the stakeholders and the characteristics of the influence the stakeholders cause on the firm. Understanding of the firm’s responses, therefore, requires examinations of the multiple and interdependent relationships existing in the stakeholders’ network of influences. Social network analysis has been advocated for a further understanding of patterns of stakeholder

relationships in a complex array of influences (Rowley, 1997, p. 890). Initially, Freeman (1984) suggested stakeholder theory to explain the relationship between an organization and its environment in which the organization resided in the center and connected with various actors around it.

Figure 5.8. Parental Theory of Behaviors versus Stakeholder Theory

Reverting to the proposed theory of parental behavior in children medication, I view the theory does apply the stakeholder concept from the stakeholder theory. However, I argue that there are two main differences of the theory from stakeholder theory. First, while in stakeholder theory, organization decision making is centered and the main concern in the

stakeholder environment, in the theory of this study parents as a stakeholder group are centralized and the main concern in the environment of relationships with various organizations, namely healthcare system, medical professional, pharmaceutical care professionals, social media, and networks. I proposed the theory to enhance understanding of decisions made by a specific individual stakeholder group in response to what organizational corporations around this group of stakeholders do towards them. Figure 5.8 proposes an illustrative diagram that compares the two theories for differences and similarities.

Second, while the stakeholder theory examines with an organizational level of analysis concerning organizations with a focus on organizational behaviors and management choice in relation to stakeholders' interests, my theory focuses on the individual level of analysis of a stakeholder group with an emphasis on stakeholder behaviors. In the theory, a diversity of organizations are involved, but the interaction between the stakeholder and organizations are individual relationships with employees or elements of the individual organizations. Stakeholder theory looks at organizational behaviors to satisfy interests of both organizations and stakeholders, the theory of parental behavior in this study views the stakeholder behavior to satisfy their interests.

5.4.4 A comparative review of other grounded theory studies

The studied phenomenon in this study is broad and popular. It covers a broad range of children's medications in an everyday life context for common health conditions in children. The main actor of the phenomenon is parents who are immersed in social contacts with various sources of referent people. In contrast, a number of grounded theory studies with medications have chosen to focus on a specific health condition, such as attention deficit hyperactivity disorder in children, or a particular medication regimen (Cormier, 2012; Taylor et al., 2006) or vaccination (Benin et al., 2006; Brunson, 2013; Tickner et al., 2010). The

theory has rich properties for each category. For particular, Amin and Harrison (2009) proposed a conceptual framework for oral health care for children with data from 26 interviews. Parenting strategies are placed in the center of social influences and family context categories. The dimensions of the categories are presented as scattered around the concepts, which differs from my framework in that the properties converge into several categories. On the other hand, other studies (Brunson, 2013; Nelson et al., 2012) have proposed conceptual frameworks with few properties for the categories. Another group of studies (Taylor et al., 2006; Tickner et al., 2010) have provided descriptions of properties and focused codes at a low abstract level, rather than developing such codes into categories to build theories.

The theory possesses some common categories developed by other authors, such as knowledge accumulation (Hunt et al., 2003) to give children the best and right treatments (Nelson et al., 2012; Taylor et al., 2006), facilitated by a number of factors such as social influences (Amin & Harrison, 2009; Brunson, 2013; Nelson et al., 2012), trust, and beliefs (Amin & Harrison, 2009; Benin et al., 2006; Nelson et al., 2012). On the foundation of parental life, which consists of own life, family care, and children's health, I realize from my data the overarching phenomenon of medication reasoning, both cognitively and affectively. The phenomenon has on its own the interrelationship of knowledge by acquaintance (affect) and knowledge by description (cognition). The experiential learning-based beliefs reflect two levels of knowledge that parents accumulate. Besides the scientific understanding of medications that is cognition based, parents have more direct, subjective experience with the medications, which generates affects such as happiness, sadness, fear, anger, joy, and pride. The relationship between knowledge by acquaintance and knowledge by description is bidirectional given the lay perceptions and knowledge of parents. The process of building the two types of knowledge occurs in all categories: integrating knowledge, sensing the harmony,

and constructing loyalty. The participants devote themselves to becoming personally and profoundly acquainted with diversified sources of learning and integrative experiences.

Table 5.1.1. *Grounded Theory Studies on Parental Care of Child Health*

Author(s)	Objective and Study Context	Participants/Data	Grounded Theory Method Strand	Categories related to Parental Involvement
Abdu, Stenner, and Vydelingum (2015)	“To explore the perspectives of South Asians regarding their experiences with the health visiting service” (p. 1).	15 Asian parents with a child at least two months old living in England.	<u>Glaser and Strauss (1967)</u>	Not identified.
Amin and Harrison (2009)	“To understand processes that influence parental adoption of dentally healthy behaviors following the experience of their child’s “dental general anesthetic” (p. 116).	26 interviews with parents in Canada.	Strauss and Corbin (1998)	Not identified. Data indicated parents’ uncertain attitude might prevent parents’ engagement.
Garfield and Isacco (2012)	“To understand how fathers are involved in the health and healthcare of their children” (p. 32).	31 fathers in the United States.	Corbin and Strauss (1990)	<i>Parent engagement</i> : physically active participation
Hayles et al. (2015)	“To explore parents’ experiences of health care for their children with cerebral palsy living in a regional area of Australia” (p. 1139).	11 mothers and two fathers in Australia.	Charmaz (2006)	Parental <i>partnership with medical professionals</i> to meet the needs.
Houston and Venkatesh (1996)	“To explore the sociocultural dimensions of health care consumption among Vietnamese immigrants before and after migration to the United States” (p. 418).	Field notes, in-depth interviews, focused groups collected from Asian immigrants to the United States	Strauss and Corbin (1990)	Not identified.

Table 5.2. *Grounded Theory Studies on Parental Care of Child Health (Cont.)*

Author(s)	Objective and Study Context	Participants/ Data	Grounded Theory Method Strand	Categories or Data related to Parental Involvement
Kai (1996)	“To identify and explore parents' concerns when young children become acutely ill” (p. 983).	95 parents of pre-school children in the United Kingdom.	Strauss and Corbin (1990)	Not identified. Data indicated parents share responsibility with others within their lay network and seek professional advice.
Lovell (2016)	“To investigate low-income parents' experiences in receiving, making meaning of, and applying sociocultural messages about childhood health and nutrition” (p. 138).	16 parents in the United States.	Charmaz (2006)	<i>Parent engagement</i> : evaluating whom to trust, thinking critically, passionate and being interested
Neill, Cowley, and Williams (2013)	“To understand parents' help-seeking behaviors in managing acute childhood illness at home” (p. 757).	15 families with children aged up to eight, in the United Kingdom.	<u>Glaser and Strauss (1967)</u>	Not identified. Data indicated parents learn from healthcare and non-healthcare professionals
Sallfors and Hallberg (2003)	“To explore parents' experience of living with a child with juvenile chronic arthritis” (p. 193).	22 parents (six fathers) of children aged seven to 17 years with JCA in Sweden.	<u>Glaser and Strauss (1967)</u> ; <u>Strauss and Corbin (1998)</u>	Not identified. Data indicated mother's daily life was intimately emotionally and practically engaged in the ill child.
Tsai, Tsai, and Shyu (2008)	“To explore the processes used by mothers to look after young children with autism and to manage their behaviors and symptoms” (p. 1798).	12 mothers in Taiwan	Glaser and Strauss (1967); Strauss and Corbin (1998)	Not identified.

Table 5.3. *Grounded Theory Studies on Children Medications*

Author(s)	Objective and Study Context	Participants/Data	Grounded Theory Method Strand	Categories or Data related to Parental Involvement
Benin et al. (2006)	“To investigate decision-making about vaccinations for infants” (p. 1532).	33 postpartum mothers in the United States.	Glaser and Strauss (1967), Strauss and Corbin (1998)	Not identified. Trust in medical professionals in the decision-making process
Brown et al. (2012)	“To explore parents’ vaccination decision-making for children aged one to three” (p. 1855).	24 mothers in the United Kingdom.	Glaser and Strauss (1967), Strauss and Corbin (1998), Charmaz (2006)	Not identified.
Brunson (2013)	“To develop an understanding of the general process parents go through when making decisions about their children’s vaccinations” (p. 5466).	15 mothers and three parent dyads in the United States.	Charmaz (2006)	<i>Assessing and reassessing</i> : turn to other for information; seek to find out for themselves from multiple sources.
Carrick, Mitchell, Powell, and Lloyd (2004)	“To investigate the subjective experience of side effects of antipsychotic medication to gain a greater understanding of service users’ experiences and to gain insights into adherence issues” (p. 19).	25 adults (12 women, 13 men) in England taking antipsychotic medication	Glaser and Strauss (1967)	Not identified. Data indicated participants seek to experience and improve knowledge.
Cormier (2012)	“To understand how parents decide to use medication to treat their child’s attention deficit hyperactivity disorder; and factors influencing medication adherence” (p. 345).	13 mothers and three fathers in the United States.	Glaser and Strauss (1967), Strauss and Corbin (1998)	Parents engaged in a multistage process of “ <i>doing what helps most</i> .”

Table 5.4. *Grounded Theory Studies on Children Medications (Cont.)*

Author(s)	Objective and Study Context	Participants/Data	Grounded Theory Method Strand	Categories or Data related to Parental Involvement
Hunt et al. (2003)	“To explore the diagnostic and clinical decision-making processes used by parents and health care professionals about pain in children” (p. 171).	Parents of 21 children in the United Kingdom.	Glaser (1978); Strauss and Corbin (1990)	No identified. Data indicated professionals engaged with parents and children.
Nelson et al. (2012)	“To examine parents’ decision-making for children in the context of elective treatments which aim to ‘normalize’ a child’s function, appearance, communication or identity” (p. 796).	35 parents with children from infancy to young adulthood in the United Kingdom.	Charmaz (2006)	“ <i>Doing something</i> ”: pursuing medical solutions
Taylor et al. (2006)	“To examine the decision-making processes that parents utilize when deciding whether to medicate or not to medicate their child diagnosed with attention deficit hyperactivity disorder” (p. 111).	Five fathers and 28 mothers in Australia	Strauss and Corbin (1990)	<i>Seeking alternative treatment options</i> : willingness to try alternative therapies.
Tickner et al. (2010)	“To explore parents’ views about pre-school immunization and to identify possible reasons for lower pre-school uptake compared with the primary course” (p. 190).	21 parents of children aged 2–5 years in England.	Glaser and Strauss (1967)	Not identified. Data indicated parents’ high needs for information and knowledge.

5.5 Study Evaluation

5.5.1 Emergence versus preconception

Emergence in classic grounded theory method means that the theorist remains open to what is actually going on in the data. First, the researcher needs to avoid using preconceptions of researchers (Glaser, 2012, p. 1; Glaser & Holton, 2005, p. 4). Preconception is simply forcing preconceived notions on the data. The theorist starts a study with just a defined phenomenon and its location, open research questions regarding human behaviors as a unit of analysis. A neural collection of data focuses on people behaviors (Holton & Walsh, 2016, p. 47; Shah & Corley, 2006, p. 1827). Second, the literature review needs to be handled with care into two different phases. The *initial review* of literature sets a basic stage for the research. The review provides the context and foundation concerning the phenomenon of study. The initial review of literature helps the researcher to be sensitized with field knowledge before data collection (Lo, 2016). This initial review of the literature does not prevent the emergence of grounded theory from the inductive approach in grounded theory method (McGhee et al., 2007, p. 340). However, this review must not be extensive and in-depth, it is not for the purpose of identifying knowledge gaps so as to avoid being influenced by preconceived ideas, concepts, and theories (Christiansen, 2011, p. 21; Glaser, 2013; Holton & Walsh, 2016, p. 32). The *integrated review* is a more in-depth and critical literature review. It must be carried out after the data analysis had come up with categories. The timing of integrated literature review helps researchers avoid the influence of preconceived constructs and hypotheses guide data collection (Shah & Corley, 2006, p. 1827).

Even though I do have preconceptions, I was not using the preconceptions when doing this study. In the present study, I have been highly aware of my preconceptions, which

originated from my knowledge and experience, but I have made great efforts in not making use of them in the whole research process. First, my research questions just identify the social phenomenon in which parent behaviors pertaining children's health and medication are the unit of analysis. Data collection was open. Data collected as diverse as possible and the previously collected data indicated further sources of data. In this study, the data was primarily from parents and pharmacy staff. Theoretical sampling was made by collecting data from online communities. My data analysis includes open coding phase, which I read line-by-line for coding. This method makes us open to words and phrases in the incidents of behaviors that indicate possible concepts. During the data collection, coding, and memo writing, I tried to listen to participants for patterns of behaviors. I did not code for meanings, but behaviors. Second, I did only the initial review of literature in the early stage of the research process. It was limited to the topics that the researcher had learned, acquired, and experienced before entering the data collection phase of this study. It was more descriptive rather than critical; it is broad and general.

5.5.2 Theoretical saturation

As discussed in Section 3.3.1, Chapter 3, theoretical saturation refers to the adequacy of data collected from the field. The adequacy is determined based on the repetition of categories even from new data sets. To confirm the repetition, constant comparison of the data sets is conducted. Before theoretical saturation can be achieved theoretical sampling is to be done. The researcher must ensure that collected data reaches its saturation for the rigor of grounded theory method (Goulding, 2002). There are no clear rules about when data is saturated. Researchers have to rely on the indicator of data repetition about previously identified categories, their properties, and the relationship to other categories (Locke, 2001).

Comparisons of incidents in data help provide evidence of saturation of categories and properties by the interchangeability of indicators (Glaser, 1998, p. 139).

In this study, data-grounded analyses were carried out according to the fundamental of the classic grounded theory that is based on the concept-indicator model. I adopted the formative-indicator and reflective-indicator model as discussed in Section 3.6, Chapter 3. From an accumulation of 524 initial codes, 229 initial codes were selectively shortlisted to support 18 focused codes for seven categories. The 229 initial codes are supported by 711 indicators from 40 data sources yielding an average of over three supporting indicators per an initial code. The selective 229 initial codes meet the criterion that each code has to emerge from two different data sources. The saturation of the categories is supported by the repetition of indicators, initial codes, and data sources. Table 5.5 displays the quantified saturation of each category and their properties/dimensions. A number of data sources displays the number of sources that have indicators and codes corresponding to the category and properties/dimensions. Each study participant or each theme of online community forum represent as one data source. Numbers of data sources and frequency of indicators of initial codes and focused codes are shown in Appendices H and I. Through the theoretical abstraction process discussed in Section 3.5; the hypotheses have emerged through the theoretical integration and sorting process.

Table 5.5. *Category Saturation*

Category	Number of data sources	Number of initial codes	Frequency of indicators
<i>1. Awakening to Asymmetry</i>	<i>9</i>	<i>10</i>	<i>26</i>
1.1 Realizing discrepancies	3	4	8
1.2 Perceiving uncertainties	9	6	20
<i>2. Distrusting Reference Sources</i>	<i>8</i>	<i>9</i>	<i>16</i>
2.1 Distrusting professional sources	6	6	12
2.2 Doubting lay sources	3	3	6
<i>3. Living Role Identity</i>	<i>14</i>	<i>34</i>	<i>77</i>
3.1 Accepting parental role	5	9	19
3.2 Fulfilling parental role	8	14	28
3.3 Relying on self	6	11	30
<i>4. Immersing Lay Self</i>	<i>11</i>	<i>32</i>	<i>101</i>
4.1 Devoting mentality	8	12	37
4.2 Occupying centrality	9	20	64
<i>5. Integrating Knowledge</i>	<i>17</i>	<i>69</i>	<i>252</i>
5.1 Acquiring information	17	52	198
5.2 Analyzing information	6	9	30
5.3 Synthesizing knowledge	9	8	24
<i>6. Sensing Harmony</i>	<i>24</i>	<i>25</i>	<i>107</i>
6.1 Watching out health state	6	7	19
6.2 Perceiving medication benefits	23	13	68
6.3 Seeking tolerance	8	5	20
<i>7. Constructing Loyalty</i>	<i>12</i>	<i>50</i>	<i>132</i>
7.1 Believing in medications	9	23	62
7.2 Building trust	3	4	10
7.3 Owning parental role	9	23	60
Total		229	711

In summary, the saturation of the categories is expressed in the repetition of indicators, initial codes, and data sources as follows. *Awakening to asymmetry* category is supported by the fact that there are nine data sources with a frequency of 26 indicators corresponding to ten

initial codes. There are at least three data sources that indicated each of the properties of this category: realizing discrepancies (three sources with four initial codes) and perceiving uncertainties (nine sources with six initial codes). *Distrusting reference sources* category emerged from eight data sources with a frequency of 16 indicators corresponding to nine initial codes. There are at least three data sources that evidenced each of the dimensions of this category: distrusting professional sources (six sources with six initial codes) and doubting social sources (three sources with three initial codes). *Living parental role* category is supported by the fact that there are 14 data sources with a frequency of 77 indicators corresponding to 34 initial codes. There are at least five data sources that indicated the individual dimensions of this category: accepting the parental role (five sources with nine initial codes), fulfilling the parental role (eight sources with 14 initial codes), and relying on self (six sources with 11 initial codes). *Immersing the lay self* category emerged from 11 data sources with a frequency of 101 indicators corresponding to 32 initial codes. There are at least eight data sources that indicated each of the two dimensions of this category: devoting the mentality (eight sources with 12 initial codes) and occupying the centrality (nine sources with 20 initial codes). *Integrating knowledge* category is supported by the fact that there are 17 data sources with a frequency of 252 indicators corresponding to 69 initial codes. There are at least six data sources that indicated each of the three dimensions of this category: acquiring information (17 sources with 52 initial codes), analyzing knowledge (six sources with nine initial codes), and synthesizing knowledge (nine sources with eight initial codes). *Sensing the harmony* category is supported by the fact that there are 24 data sources with a frequency of 107 indicators corresponding to 25 initial codes. There are at least six data sources that indicated each of the two dimensions of this category: watching out health state (six sources with seven initial codes), perceiving medication benefits (23 sources with 13 initial codes), and seeking tolerance (eight sources with five initial codes). Finally,

constructing loyalty category is supported by the fact that there are 12 data sources with a frequency of 132 indicators corresponding to 50 initial codes. There are at least three data sources that indicated each of the two dimensions of this category: believing in medications (nine sources with 23 initial codes), building trust (three sources with four initial codes), and owning parental role (nine sources with 23 initial codes).

5.5.3 Rigor Standards

Overall, the grounded theory method was rigorously applied in this study. The credibility of this study is based on the capture of the studied main concern. During the interviews, I let the participant lead my conversation. The process and steps of this study were documented. Theoretical sampling was carried out. Throughout the research work, I focused on the defined topic to collect and analyze the rich data. The analysis covers comparisons between data and categories. I also analyzed, revealed, and discussed the interrelationship between the categories. I analyzed data for the categories to emerge interpretively from triangulated sources of data (Ozanne & Hudson, 1989, p. 4). The links between the data and the categories are also evidenced in the entire analytic process in the present study.

This study has a good fit as the constant comparative method was applied throughout the research process. Initial codes meet the criterion that at least two different data sources have indicators for the same code. The categories emerge from empirical and theoretical abstraction process that integrates constant comparative method. All categories are saturated based on indicators, initial codes, and focused codes, which come from at least two different data sources.

I integrated the categories into an integrated framework, which reflects the iterative process and patterns of the medication behaviors of parents toward children's health. The

categories offer insights into the affective and cognitive reasoning process of parents to decide, use, evaluate, learn in medications and stakeholders surrounding the social phenomenon of medicines. The proposed theory provides a greater understanding of parental health behaviors of immersion regarding children's medication in developing countries such as Vietnam. It helps us to understand better the emotions, beliefs, values, and actions embedded in parental behaviors toward children's medications. The originality of the proposed theory is reflected in the hypotheses concerning the categories and the core category of immersing the lay self.

I have demonstrated the resonance of this study. From various incidents of parental behaviors revealed from the data, the theory offers a big picture of the parental life of care, with the immersion of the lay self and the medication reasoning deeply rooted in the core of the studied consumption experience. I gathered the whole picture of medication behaviors in the individual life of parents to compare and raise categories to a high abstraction level. During the analysis process, I also checked for similarities and differences between the categories through the different samples of parent dyads, pharmacy staff, individual parents, and online forum data. The theory offers a holistic and unique understanding of the studied phenomenon in the light of integrated literature analysis. As a result, the proposed theory remains modifiable when new data comes in.

The relevance of the proposed theory lies in the everyday context of parental health behaviors, which can be broadly applied. Unlike some grounded theory applications, which focus on a discrete topic of children's health, the theory provides an understanding of the common behavioral phenomenon of health care in children in developing countries, which has been left unexplored. The proposed theory deals with the main concern of parents in making medication choices in developing country context. This study, therefore, provides

another step forward in understanding the lay self of parents and ordinary people. It further sheds light on the volitional immersion and reasoning behaviors related to parents regarding children health and medications in an everyday life context.

5.6 Chapter Summary

This chapter has presented the detailed theoretical coding and proposed six hypotheses that connect the seven categories of the theory of parental health behavior. Theoretical integrating and sorting along with the integrated literature review support the emergence of the theory. Lastly, in this chapter, we also discuss main points on the evaluation of theory emergence versus preconceptions, theoretical saturation evidence, and rigor standards of a classic grounded theory study.

CHAPTER 6. CONCLUSIONS

This chapter discusses implications for theory in three knowledge gaps, implications for practice for health marketing forms and healthcare policymakers. The utility of the proposed theory and the common sense understanding of the theory are also presented. Moreover, limitations of the study are considered and explained for references. Directions for further studies of grounded theory in the same substantive area are discussed.

6.1 Implications for Theory

This study innovates in that it develops a novel theory on parental health behaviors adopting grounded theory method. The methods permit a detailed appreciation of how lay people act in decision-making situations of high distress, uncertainty, and distrust; how they cope with the need to make decisions in an everyday ‘world’ where they have not acquired the necessary scientific knowledge; what behaviors they develop and live to, how they reason, justify, and comprehend their health care choices. Prior studies have already addressed this question, but this study is different because it provides insights into three areas: expanding the lay self-concept, understanding in health care consumption experience, and lay health care decision-making process in developing countries. For this reason, other scholars will be able to test the models and hypotheses I have developed in this study to build on the emerging theory.

6.1.1 The extended lay self

One’s possessions are part of his or her self or sense of self. He or she assigns meanings to what he or she has. Studies that aim to understand consumer behaviors need to provide findings to help understand what meanings consumers attach to their possessions.

Furthermore, understanding of the relationship between possessions and the sense of self

helps us “learn how consumer behavior contributes to the broader existence as human beings” (Belk, 1988, p. 139). Self-defining role of experience is one of the extended self as it is expressed in tourists’ photos (Belk, 1991, p. 2; Belk & Joyce Yeh, 2011, p. 345), social network identities shared to others (Biocca, 1999, p. 113), social interactions and shared experience on social network (Boellstorff & Serapis, 2008), and one’s loved objects (Ahuvia, 2005). In the context of healthcare decision-making, lay people express their lay self in a different way from the self of medical professionals. The theoretical basis that explains consumer immersion is social identities consumers possess in their self. Consumers are assumed to immerse themselves in experiences to seek for what are “(re)presenting and (re)producing their self-images” (Firat & Shultz, 1997, p. 199). This study offers new insights into the self of lay people in their everyday life health care decision-making in the context of developing countries where there are high levels of uncertainties and distrust embedded in social relations contracts. The society consists of social relationships between actors. In the basic social process when there is a disproportion in distribution and processing of information, the involved actors will increasingly immerse themselves in comprehending the social process, as they perceive more their role identity as being compulsory to do so. I have argued that unlike the social norms and role identity as ‘normal’ parents, adult consumers in developing countries extend their lay self situated in consumption experience (Belk, 1988, p. 139) into health reasoning under the conditions of uncertainties and distrust in the social relationship as shown in Figure 6.1.

Figure 6.1. The Extended Self and Immersion

6.1.2 The medical “language” immersion

Although there have been studies on consumption experience in retailing (e.g. Addis & Sala, 2007), adventure and sports (e.g. Arnould & Price, 1993; Holt, 1995; Tumbat & Belk, 2011), branding (e.g. Brakus et al., 2009), and entertainment (e.g. Fitchett, 2004), research on consumption experience in healthcare is extremely scarce. This study, which focuses on consumer consumption experience in healthcare, provides insights into the lay experience in making health care decisions in the everyday life context. From the proposed theory, I understand that the construct of lay self-immersion grounded in data is different from the construct of involvement. First, the construct is positioned in the center of patients’ (as lay people) experience, not from the view or experience of medical professionals. Second, the construct should be measured multidimensionally taken into consideration the multifaceted social relations in which patients are the center. Third, lay self-immersions should encompass both mentality and centrality of patients’ devotion and occupancy in the everyday life context but filled with back-to-back and condensed episodes of health care decisions with high

uncertainty. The construct of lay self immersion provides new insight into healthcare involvement as (Kahn et al., 1997, p. 372) called for further studies and conceptualization of a “broader horizon in identifying consumer involvement.”

Figure 6.2 illustrates the theoretical notion of parental self-immersion in an everyday life context which is consistent with tourism immersion (Hansen & Mossberg, 2013, p. 224). The unique distinction is that parents with their role identity in developing countries live every one of their days filled with their devotion of mentality and centrality to childcare uncertainties and distrusters. I have argued that consumer immersion is not necessarily happening in extraordinary settings such as adventure or tourism experiences but is embedded in everyday life experiences of parents throughout various social contracts and interactions in developing countries.

Figure 6.2. Immersing the Lay Self versus Tourism Immersion

Adapted from Hansen and Mossberg (2013, p. 224)

I have discussed that parents' immersion of their lay self in learning healthcare 'languages' has a convincing analogy to the concept of second language immersion education. Immersion education has the unique characteristics: (a) it promotes the multilingual literacy of the participants, (b) it needs teachers of proficiencies in the languages, (c) its curriculum integrates language, culture, and contents, (d) its learning setting requires and encourage the immersion language, (e) it consists a high degree of social interactions and enriched relationship (Fortune & Tedick, 2008, pp. 9–10). Similarly, in the phenomenon of health care decision-making experience that this study addresses, parents immerse their lay self to learn the medical "language" through intensive social interactions and to build multiple relationships with related actors in the consumption experience. The medical "language" parents devote themselves to acquire, and master is the literacy in medical and healthcare field; it is facilitated by trusted teaching reference sources.

The findings regarding the lay self immersion of parents provide the basis for a rigorous development of measures to test (a) the causal relationship between lay self immersion and its assumed antecedents: asymmetry of health information, parents' trust/distrust in medical professional sources/experts, and parents' role identities; (b) consequences of the lay self immersion to medication reasoning and parents' loyalty to health care decisions.

6.1.3 The multifaceted relational health care decision-making

In addition to the contribution of consumption experience perspective, this study in the area of health decision-making process provides insights into the lay reasoning of health care and medication. The decision process of lay people involves both rationality and emotionality. Unlike social cognition models, the proposed theory captures both affective and cognitive elements of parental health behaviors. The affective element "penetrates" and influences all stages of parents' cognition in deciding on and using medications. On the one

hand, superficially the cognition process of parents occurs in the implicit development of emotions. Cognition and affect interrelate in the theory. It is congruent with the postulation of Lazarus (1982, p. 1019) and Leventhal et al. (2001, p. 25) that the interaction between affect and cognition is bidirectional. The integrated parental reasoning of knowledge provides insight on how parents interact, learn and build up their lay “expertise” of healthcare for children. The theory contributes to the body of knowledge of informal reasoning by lay adults in technical topics. The lay reasoning process observed from participants in this study is conceptually congruent with the informal reasoning in the medical profession. I appreciate that my data supports the phenomenon of informal reasoning by parents throughout the process from integrating their understanding, using medication, perceiving the well-being of children about treatment, and building loyalties to medical and pharmacy professionals. Therefore, I place medication reasoning as a core category that underpins the other categories. Parents immerse themselves in the integrative experience of medication reasoning.

6.2 Implications for Practice

6.2.1 The general utility of the theory

The relevance of grounded theory studies supports the practical value or the utility of the theory (Patton, 2002, p. 588). The relevance of the proposed theory is discussed in Section 5.5.3. This study’s relevance lies in the everyday context of parental health behaviors, which can be applied in and to different situations. The proposed theory deals with the main concern of parents in making medication choices in developing country context. I have demonstrated the resonance of this study. From various incidents of parental behaviors revealed from the data, the theory offers a big picture of the parental life of care, with the immersion of the lay self and the medication reasoning deeply rooted in the core of the studied consumption

experience. I gathered the whole picture of medication behaviors in the individual life of parents to compare and raise categories to a high abstraction level.

The subject is substantially positioned at the intersection of three research domains: life science marketing, qualitative health research, and consumer psychology, in an Asian context. Its purpose is the development of new knowledge in the fields of health marketing (Crié & Chebat, 2013) and indirect consumer behavior (Moorman, 2002). This is relevant to individuals, be they parents or other non-medical care persons that take care of people dependent on them. It can also have important implications for public policy makers, life sciences firms, and other life sciences stakeholders (Stremersch, 2008; Stremersch & Van Dyck, 2009). The proposed theory offers a holistic and unique view of the studied phenomenon in the light of integrated literature analysis. The theory further sheds light on the volitional immersion and reasoning behaviors related to parents regarding children health and medications in an everyday life context.

6.2.2 Common-sense understanding of the theory

The proposed theory provides a greater understanding of parental health behaviors of immersion regarding children's medicine in developing countries. The construct of lay self-immersion expands the concept of healthcare involvement that requires further studies and conceptualization from a broader view of consumer involvement. As a common-sense understanding, I claim for an analogy between students of second language immersion and parents who learn to medicate children. Parents immerse themselves in their healthcare consumption experience to acquire and master the medical 'language' and make health decisions to care for their children and construct their social identities. Parental medical 'language' is accumulated through their efforts in learning and immersing. The more parents immerse themselves, the better they can master it. The extent to which parents can master the

language is similar to that of an international student needs to study a language as second language. The best way for parents to master the medical ‘language’ is to make self-immersion in childcare in an everyday setting. The immersion required social interactions with various actors in the setting. Parents learn not only the knowledge but also the culture of the healthcare environment.

The theory provides foundational concepts for public communication and education on the healthcare knowledge and experience intended to target at parents, especially young parents. To best care for their children health, parents in developing countries should be aware of the needs to immerse themselves intensively in their everyday healthcare consumption experience. Parents’ goal is to become a “native speaker” of the medical “language” in childcare to live their parental role identities meaningfully in the society filled with uncertainties and trust/distrust mix.

6.2.3 Enhancing healthcare knowledge

The theory provides insights into patterns of behaviors of lay people such as parents in the unorganized health care market vulnerable to failures in the context of Asian developing countries. With the high-level uncertainties in all social contracts (Bloom et al., 2008, p. 2076), and because of the lack of expertise knowledge, patients are not able to evaluate the quality of technical and complex medical regimens and service, it is so critical for policymakers to enhance health care knowledge among lay people as they are the owner of any medical decisions concerning their health. Health care policymakers and medical institutions should devise effective educational initiatives for parents on children’s health and medications to improve not only knowledge and decisional conflicts among the actors (Wyatt et al., 2015, p. 573). Educational initiatives deployed by policymakers and health institutions would help make the health systems to transform from a value chain of healthcare (Burns,

2012) into knowledge economies which can be organized in ways which draw upon other aspects of the economy and society (Bloom et al., 2008, p. 2085). As Karazivan et al. (2015, p. 438) suggested, patients should be positioned as a central partner in the healthcare decision process. Parental expertise in childcare should be welcomed, valued, and fostered by healthcare professionals, policymakers, and healthcare institutions.

6.2.4 Leveraging experiential marketing

The emerging practice of experiential marketing pays a focus on consumption experience of consumers. On the one hand, consumption experience is very relevant to healthcare marketing because health marketing domain needs to work on the attachment to a particular context (Crié & Chebat, 2013). On the other hand, consumption experience consists of a wide range of emotions. Marketers should be aware of several types of experiences among consumers that can be distinguished and measured in creating a brand experience for consumers (Schmitt & Zarantonello, 2013, p. 42). The theory provides insights for marketers to design brand experience in both products and services that should take into consideration the lay self of consumers immersed in multiple social relationships. I propose the following implications.

First, *reference sources*, both formal and social ones, which advocate a product and service, need to have both credibility and expertise. Information symmetry in various sources is essential in building the credibility. It is appropriate for pharmaceutical marketers to emphasize the important role of medical professionals in explaining parental behaviors toward giving medications to children. Effective integrated marketing programs would be the answer to ensuring the symmetry of information and knowledge intended for consumers to learn. Such programs should exploit different components relevant to the strategic and tactical implementation of marketing program using solid scientific foundation. By

minimizing information asymmetry and increasing the credibility of reference sources, healthcare firms can alleviate painful lay self immersion of parents, thus promoting the welfare of parents.

Second, marketing communication should align and build on *consumer social identities*. Consumer communication campaigns should focus on shaping and changing mothers' perceptions and attitudes, the most important factors that influence parental behaviors toward selecting and using children medications. This has to do with both outcomes of giving medications and the efficacy and perceived safety of the medications. With regard to social identity role of parents, the more parents live to their proud role as parents and caretakers the better they learn and experience the children care with the proper use of medications and health-enhancing regimens. The ultimate outcome lies in the well-being of children as a whole.

Third, *education programs* are critical to helping consumers develop their loyalty. It is because the more knowledge parents own, the more confident they master their childcare resulting in, the better care for children in particular and family in general. The more parents are knowledgeable, the better they are confident in building their experience and become more loyal to what is best for their children. Parental education programs are crucial because knowledgeable parents can learn to trust medical professionals and services that parents build through their interactions, to believe in medications they experience, and build the confidence in themselves in owning and mastering the caring experience that parents accumulate.

6.3 Limitations of the Study

This study has four limitations. First, in this study, I have not had opportunities to *check the theoretical construction* with the participants I interviewed. In this study, although the

main data collection method is face-to-face in-depth interviews with parents that help yield insights into the theoretical analysis and categories, theoretical sampling was based primarily on a parental online communities' secondary data. Chiovitti and Piran (2003, p. 431) suggested that the research participants should be summoned "to refine, develop and revise" the tentative conceptual framework against their meanings of the phenomenon. By coming back to the previously interviewed participants, I would have been able to improve the clarity of properties and completeness of categories. Re-interviewing participants is also a form of theoretical sampling can help the theorist focus on the theoretical conceptualization of the categories (Holton & Walsh, 2016, p. 67).

Second, in this study, even though I obtained data from diverse pool of parents I collected **limited data** from (a) medical professionals such as physicians and nurses, (b) pharmacy staff working in different setting of pharmaceutical care, (c) other online communities, and (d) those participants living in more rural territories of Vietnam. Without such a data pool, there are limits for enhancing the data triangulation and its rigor. Glaser and Strauss (1967, p. 65) advocated different sources of data should be adopted for theoretical sampling in order to develop saturation of categories and properties. The diversity of data and data collecting techniques yield more information under a wide range of conditions of the main concern on a category rather than limited data sources and collection methods. Slices of data facilitate the width and depth of data leading to saturation of categories. Such "slices of data" allow grounded theorists obtain multi-faceted investigation in the main concern under study. In this study, a theoretical sampling of trusted and reputable doctors and nurses would provide more details concerning the properties of parents' trust and distrust and the meaning and influence of illness severity to parents' distress.

Third, in this study, we have a lack of understanding the *behavioral interactions* between parents and their spouses and between parents themselves and older children. The proposed theory has not been able to capture in details the behavior patterns of parental dyads in making healthcare decisions for children. Recent studies suggested that family couples move through the decision-making process in different patterns. The dyads have their information individual resources, which are moderated by collaborative and controlling behaviors. They switch on and off the dyadic decision-making process about their own individual process (Queen, Berg, & Lowrance, 2015, p. 372). The dyadic decision-making process in health care and medications for children need further studies to shed light on scholars understanding. Moreover, the proposed theory has not addressed the interactions between parents and older children who have not been encountered in the data collection process of this study. There has been evidence of children preferences of healthcare regimens, need for information, and desire for sharing opinions toward their healthcare (Coyne, 2006; Coyne, Amory, Kiernan, & Gibson, 2014).

Fourth, in this study, I did not have opportunities to collect data from *other Asian countries* in the region. Despite the common cultural characteristics in Asian countries, there are differences given the complexity of the culture that needs to be addressed in health care (Galanti, 2014). Furthermore, the heterogeneity of Asian populations because of the level of country development, income per capita, education levels would provide a better plausible data triangulation. A sample of Asian participants yields demographical and geographical heterogeneous diversity. Such samples of participants enhance comparative analysis for theoretical saturation. In general, interviewers need to understand the language and cultures possessed by the respondents. Data coding should be carried out in the mother tongue of the researcher Tarozzi (2013, p. 10). Due to resource constraints and language barriers, data from other Asian countries could not be collected. Cross-cultural collaboration in future studies

enhances knowledge transferring across nations and minimize “cultural assumptions” in theory building (Tsui, Nifadkar, & Ou, 2007, p. 468).

Fifth, a limitation of this study is concerned with how effective the principal researcher handled his *preconceptions*. Grounded theory method requires the openness, which can be validated by looking at the avoidance of preconceptions of researchers (Glaser, 2012, p. 1; Glaser & Holton, 2005, p. 4). The development process of grounded theory in a particular study should not be preconceived. The principal researcher does have preconceptions. Efforts have been made to avoid using such preconceptions when doing this study. However, it will be in a better position of preconception avoidance if the analysis process was carried out by two independent researchers when comparisons of coding would be made.

6.4 Directions for Further Research

From this study, further developing the proposed theory, I support three main directions for new studies.

6.4.1 Measures of lay self immersion

From the primary findings from this study, I suggest further studies should work on developing measures of the construct immersion of the lay self to test the hypotheses I proposed in the theory with quantitative empirical data. Given the socio-political dynamics and the unorganized structure of the developing countries, patients’ immersion in the complex healthcare decision is variable. An excellent review of measurements in patient involvement construct has shown a large variety of involvement measures in 33 studies spanned over nearly 30 years (Say et al., 2006, pp. 104–105). The researcher needs to specify the domain of a construct (or a category in grounded theory), in other words, its conceptual specifications (Churchill, 1979, p. 67). A good definition of a construct should specify the

“construct’s conceptual theme in unambiguous terms” and distinguish it from other related constructs (MacKenzie, 2003, p. 325). A good definition of a category, therefore, facilitates the development of measures (for testing purpose) to represent the category, enhances the understanding of the relationship between the categories and the measures (e.g. formative or reflective measurement models), and increases the credibility of the hypotheses (MacKenzie, 2003, p. 324).

6.4.2 Pediatric medical decisions making

The pediatric medical decision is a domain of consumer decision research that has been left unexplored (Lipstein et al., 2014). In their everyday lives, children do receive regular messages regarding medicines through mass media, observations of medicine administration through family member’s behaviors, and practice of taking medicines themselves, therefore, forming beliefs and perceptions about medicines (Coyne et al., 2014). Understanding children perception regarding medicines would help explore better the decision-making process made parents and older children in using medicines. Studies on children’s involvement in their health care decisions are scarce. For a rare example, a very recent study by Gilljam, Arvidsson, Nygren, and Svedberg (2016, p. 1) used grounded theory methods and found children seek to release fear and uncertainties and to gain participation and confidence in a better secured and comfortable setting to involve in their health care decision-making process. Recommended are studies with children as participants or respondents to explore the involvement of children in medical decisions (Coyne, 2006).

6.4.3 Toward a formal theory

As discussed previously in Chapter 1 and Chapter 3, the objective of this study is building a substantive theory of parental health behaviors in the context of Asian countries. I argue

that the proposed substantive theory can be considered for further development into other substantive areas thus approaching toward a formal theory (Glaser & Strauss, 1967, p. 114). The potential for further research can be focused on other substantive areas that lay people, on the one hand, do not have the expertise necessary to make important decisions, and on the other hand, parents need to live powerfully to their social role related to the decision making process. Elsewhere, there are examples of potential substantive areas for consideration. They include teaching children with information technology (e.g. Straub, 2009), learning nutrition science to take care of their family members (e.g. Grunert & Wills, 2007), especially the elderly and the kids, and learning social media psychology to involve into teenager social media interactions to understand their children attitudes and behaviors (e.g. O'Keeffe & Clarke-Pearson, 2011).

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APPENDICES

Appendix A: Question Guidance for Interviews with Parent Dyads

Screening Questions

1. How many children do you have?
2. What are their ages?
3. Does at least one of your children stay at the same house with you (living together with you)?
4. Do you or/and your spouse work in at least one of the following fields: market research, advertising, pharmaceutical production, distribution, promotion, mass media (press, radio or television), public health, medical service?

Main Exploratory Guiding Questions

5. At first, have your children recently got any health problems or illnesses, minor or major ones? Can you tell us about the problems, what did you do about them?
6. How about some health problems or illnesses, which your children may get in the future? Can you share with us your thoughts? What would you do about them?
7. Do you think for certain health problems or illnesses you can do something before the illnesses happen with your children? What you would do and why?
8. What is the difference between prevention and treatment of common illnesses in children? How do you think about the idiom, "*Prevention is better than cure*"? In what ways do you agree or disagree with this phrase?
9. What medications for children do you recall that you have used for your children? For what health problems? Can you tell us more details about the medications and the use of these medications in your children?
10. For the common minor ailments, your children may get in the future, how about the use of medications? For treatment and prevention? What are your thoughts? What would you do and why?
11. What do you think in general about medications if used in advance can help prevent certain illnesses from happening with your children? Do you know these medications? Can you mention the names and groups of these medications? What knowledge or experience with these medications do you have? How can you obtain these medications? Can you tell us more about them?
12. What are the differences between preventive medications and medications for treatment? Is there any important meaning of the medication types you have?

13. What specific medications do you think of for your children that you may use in the future for the prevention of what health problems? Can you tell us about these medications and the health problems?
14. Please share with us what, how and why you perceive a particular children's medications regarding its quality, efficacy, safety, cost, convenience, attractiveness.
15. In summary, what comes to your mind first when you think of medications that your children have used or would use in the future to prevent some illnesses from happening (medications)?
16. When you merely think about using the medications for your children, your actual experience, or your future act, what do you feel about using the medications? Please describe any feelings that you have had, or you would have.
17. Referring your medications above for your children, what do you see as the advantages (positive outcomes of, benefits of, good things that would happen) of using it for your children?
18. Referring your medications above for your children, what do you see as the disadvantages (negative outcomes of, costs of, bad things that would happen) of using it for your children?
19. What would you describe a parent who always properly use the medications above for his/her children? That is, what do you believe are the characteristics, qualities, or attributes of such a person?
20. What would you describe a parent who always improperly use the medications for his/her children? Once again, what do you believe are the characteristics, qualities, or attributes of this kind of people?
21. In your opinion, what are the potential consequences if your child gets the health problems because not using the medications above?
22. In what way would you consider contracting preventable health problems would affect your child's life?

Appendix B: Question Guidance for Interviews with Pharmacy Staff

Basic Information

1. Counterperson Name
2. Name and address of the pharmacy
3. Number of years working at pharmacies
4. In the past six months, how many hours per day on average do you work at pharmacies:
5. How many customers do you meet with per day on average in the past six months
6. What is your job at pharmacies
7. What are common medications for children do you sell to customers? For what health problems?
8. What are common medications for children do you sell to customers? For what health problems?
9. What is the difference between curing and preventive medications?
10. How and why parents choose this group of medications for their children?

Individual specific group of OTC preventive medications

11. What do they usually ask for from you, regarding these children medications?
12. According to your experiences, what are parents' perceptions of children medications regarding quality, efficacy, safety, price, convenience, attractiveness?
13. Other experiences and comments you can have about parents' perceptions?
14. Please share with us your age if possible.
15. Please let us know your educational level.
 - College pharmacist
 - University pharmacist
 - Others level

Appendix C:
Question Guidance for Interviews with Individual Parents

Example of questions used in an interview with an individual parent:

1. How is your work? Can you please tell me about your job, your family, and your life?
2. As you just mentioned the problem child care, in your opinion and practice what does it mean for child caring?
3. What do you think about the time you as a mother have to care for your child? Tell me about your role.
4. In a particular circumstance, that you may need advice from your husband, can you share with me about that? Tell me about your experiences.
5. What do you expect from your relatives when facing a health issue of your child? Tell me more about the interactions.
6. In general, there are times when your child suffers mild or severe disease, can you tell about that? Are there any events happening recently? What did you do then? Tell me more about the incidents.
7. Usually, you can tell what information is to be considered such medications, then how and why did you decide to use, attempt to buy the products? Tell me more about the sources of information.
8. When you find the right information for your child cases, what sources of information do you prefer? Why? Tell me more about it.
9. Can you tell me about how and what information do you search, select and understand from the Internet? Moreover, from other sources of information?
10. Can you share your experiences in interacting with pharmacies and pharmacy staff? Tell me more about your experience.
11. Can you share your opinions about the cost of medicines? Tell me more about the cost of prevention and treatment for your children.
12. Can you share experience in selecting, seeing and following doctors' advice?
13. Can you tell about the nutritional conditions of your children?
14. Moreover, can you tell about your experience when using some medications, to prevent diseases, and to treat illnesses?
15. Can you tell me more about the medications your children have taken recently? What else you can share about your experience.
16. Can you share your experience and opinions about the vaccination for your children?
17. What do you think are the differences between health issues in adults and children? What experience in comparison did you have?
18. What are the differences in medications for adults and children?
19. What is your opinion about physical exercise for your children? Any real stories can you share with me?
20. In addition to what we have discussed, do you have anything else to share and tell about?

Appendix D:
Sample of Nvivo's Data Organization, Coded Data, and Codes

Figure A.1. Data Organization, Coded Data, and Codes

Appendix E: Sample of Nvivo's Organization of Data, Codes, and Code Density

Figure A.2. Organization of Initial Codes, Coded Data, and Code Density

Appendix F: Emotion Clusters

Table A.1. *List of Emotion Words*

Source: Direct quotes from Shaver et al. (1987, pp. 1070–1071)

Love words (16 words)	Joy words (32 words)	Surprise words (3 words)	Anger words (29 words)	Sadness words (37 words)	Fear words (17 words)
adoration	amusement	amazement	aggravation	agony	alarm
affection	bliss	surprise	irritation	suffering	shock
love	cheerfulness	astonishment	agitation	hurt	fear
fondness	gaiety		annoyance	anguish	fright
liking	glee		grouchiness	depression	horror
attraction	jolliness		grumpiness	despair	terror
caring	joviality		exasperation	hopelessness	panic
tenderness	joy		frustration	gloom	hysteria
compassion	delight		anger	glumness	mortification
sentimentality	enjoyment		rage	sadness	anxiety
arousal	gladness		outrage	unhappiness	nervousness
desire	happiness		fury	grief	tenseness
lust	jubilation		wrath	sorrow	uneasiness
passion	elation		hostility	woe	apprehension
infatuation	satisfaction		ferocity	misery	worry
longing	ecstasy		bitterness	melancholy	distress
	euphoria		hate	dismay	dread
	enthusiasm		loathing	disappointment	
	zeal		scorn	displeasure	
	zest		spite	guilt	
	excitement		vengefulness	shame	
	thrill		dislike	regret	
	exhilaration		resentment	remorse	
	contentment		disgust	alienation	
	pleasure		revulsion	isolation	
	pride		contempt	neglect	
	triumph		envy	loneliness	
	eagerness		jealousy	rejection	
	hope		torment	homesickness	
	optimism			defeat	
	enthralment			dejection	
	rapture			insecurity	
	relief			embarrassment	
				humiliation	
				insult	
				pity	
				sympathy	

Appendix G:
List of Tentative Focused Codes

Accepting mother role
Being a good mother
Being a housewife
Believing in a regimen
Caring the child
Complying with prescription
Counseling a pharmacy
Consenting with spouse
Consulting a physician
Crosschecking a prescription
Evaluating medications
Finding time
Identifying a health trouble
Learning from others
Mastering childcare
Monitoring the health trouble
Needing reassurance
Refusing a prescription
Relying on doctors
Scarifying for child
Searching for information
Sensing well-being
Socializing with others
Tolerating medication
Trusting pharmacies

Appendix H:
Coding Tree: Category Structure and Saturation

A number of data sources: The number of participants from whose data initial codes emerged.

The frequency of indicators: The frequency of indicators that indicate initial codes.

Table A.2. *Category Structure and Saturation*

Category	Number of data sources	Number of initial codes	Frequency of indicators
1 Awakening to Asymmetry	9	10	26
1.1 Realizing Discrepancies	3	4	8
1.2 Perceiving Uncertainties	9	6	20
2 Distrusting Reference Sources	8	9	16
2.1 Distrusting Professional Sources	6	6	12
2.2 Doubting Lay Sources	3	3	6
3 Living Role Identity	14	34	77
3.1 Accepting parental role	5	9	19
3.2 Fulfilling parental role	8	14	28
3.3 Relying on self	6	11	30
4 Immersing Lay Self	11	32	101
4.1 Devoting the Mentality	8	12	37
4.2 Occupying the Centrality	9	20	64
5 Integrating Knowledge	17	69	252
5.1 Acquiring Information	17	52	198
5.1.1 Expert sources	15	34	134
5.1.1.1 Counselling a pharmacy	12	13	46
5.1.1.2 Consulting a physician	15	21	72
5.1.2 Lay sources	14	18	64
5.1.2.1 Learning from sources	8	5	14
5.1.2.2 Searching for information	11	13	50
5.2 Analyzing Information	6	9	30
5.3 Synthesizing Knowledge	9	8	24
6 Sensing Harmony	24	25	107
6.1 Watching Health State	6	7	19
6.2 Perceiving Medication Benefits	23	13	68
6.3 Seeking Tolerance	8	5	20
7 Constructing Loyalty	12	50	132
7.1 Believing in Medications	9	23	62
7.1.1 Selecting a health regimen	8	6	18
7.1.2 Administering a health regimen	6	8	24
7.1.3 Complying with a regimen	6	7	20
7.1.4 Mastering Medications	3	2	6
7.2 Building Trust	3	4	10
7.3 Owning Parental Role	9	23	60
7.3.1 Caring for a child	6	18	48
7.3.2 Sharing with others	8	5	12
Total		229	711

Appendix I: Category Structure: Focused and Initial Codes

Table A.3. *Category Structure: Focused and Initial Codes*

Category, Focused Codes, and Initial Codes
1 Awakening to Asymmetry
1.1 Realizing Discrepancies
Realizing discrepancies between physicians and self
Realizing discrepancies between physicians, pharmacies, and self
Realizing differences in child state versus other children
Not being able to compare medications
1.2 Perceiving Uncertainties
Perceiving uncertainties from interactions with hospitals, physicians, pharmacies
Perceiving uncertainties from physicians on antibiotics
Perceiving uncertainties from physicians on common medications
Change to see another doctor
Being uncertainty in prescribed antibiotics
Comparing physicians' services
2 Distrusting Reference Sources
2.1 Distrusting Professional Sources
Distrusting the guidance of pharmacies
Disbelieving in physician prescriptions
Unfollowing physician prescription
Losing faith in physicians
Verifying dosage made by doctors
Verifying information of doctor-prescribed medications
2.2 Doubting Lay Sources
Believing social information is just for reference
Verifying information with experts for opinions
Cross-checking drug information
3 Living Role Identity
3.1 Accepting parental role
Understanding parents always do like that
Accepting obligation women
Having children is so
Agreeing with the priority of parental duties
Understanding the rules as parents
Living multiple roles simultaneously
Thinking about children all the time
Compared self with other parents
Understanding the role of parents
3.2 Fulfilling parental role
Requiring extensive efforts to care for children and family

Category, Focused Codes, and Initial Codes

Needing to adapt to life
 Being careful about health care
 Fulfilling the family tasks
 Being lustful
 Making money
 Making money to raise children up
 Being of double roles at the same time
 Being caring for everything
 Being aware of a role in the family
 Being concerned about the health of my family first
 Doing it myself for family
 Learning to become a good parent
 Searching for the best things for family

3.3 Relying on self

Cooking for children as no one else can do better
 Doing all things for children but no one else
 Caring for children alone
 Caring housework by self
 Lacking help from a spouse
 Caring for children by self
 Caring for sick children by self
 Making favorite foods for children by self
 Bringing children to the hospital by self
 Being able to do, so just doing it
 Being the primary source of care for children

4 Immersing Lay Self

4.1 Devoting the Mentality

Removing all other things of life to focus on childcare
 Lacking time for self
 Trying to finish the job
 Devoting mind to child care
 Devoting mind and efforts to child care
 Spending more time for children
 Spending time for childcare
 Sacrificing for children
 Working hard for child care
 Being dedicated to childcare
 Prioritizing childcare
 Overcoming all sufferings for child care

4.2 Occupying the Centrality

Feeling too much to be done
 Saving time to bring children to a doctor
 Not remaining time for self
 Waiting for a medical examination in hospital

Category, Focused Codes, and Initial Codes

Waiting in line for medication dispensing in hospital
 Having time
 Working busily
 Giving the best for their children
 Being extremely busy
 Hurrying up
 Not having time
 Not having time for children
 Not having time for children's exercises
 Lacking time for children due to work
 Being the center of health information and treatment for children
 Managing time
 Organizing life appropriately
 Setting flexible schedule to take care of children
 Saving time
 Saving time for childcare

5 Integrating Knowledge

5.1 Acquiring Information

5.1.1 Expert sources

5.1.1.1 Counselling a pharmacy
 Choosing a pharmacy based on hospitality
 Choosing to buy medications from a pharmacy near the hospital
 Selecting pharmacies with pharmacist's counseling
 Selecting a pharmacy close to home
 Selecting trusted pharmacy to buy medicines
 Being able to find pharmacies easily
 Being advised by pharmacies how to select medications
 Being advised by pharmacies enthusiastically
 Being serviced well by pharmacies
 Being counseled by pharmacies
 Learning from pharmacies
 Asking about taking medicines from pharmacies
 Telling pharmacies about child problems for medications
 5.1.1.2 Consulting a physician
 Needing to see a doctor
 Needing a familiar doctor
 Bringing children to see a doctor when seriously ill
 Bringing children to the hospital
 Offering high quality serviced child care for imported medications
 Bringing children to nutritionists
 Paying attention to asking the doctor
 Proposing medications to doctors
 Rushing children to the hospital
 Bringing children to the hospital for emergency

Category, Focused Codes, and Initial Codes

Bringing children to doctor clinics for convenience
 Being advised by doctors with care
 Being prescribed with medicines
 Learning from the doctor
 Learning from doctor prescription
 Asking doctors during consultations
 Consulting a doctor for preventive medications
 Bringing children to see a doctor close to home
 Having doctor visited home
 Not wanting to change doctors
 Bringing children to the emergency

5.1.2 Lay sources

5.1.2.1 Learning from sources

Learning about non-medicated regimens
 Consulting experienced people
 Consulting the acquaintances
 Learning how to breastfeed children
 Learning how to feed children

5.1.2.2 Searching for information

Reading forum information for reference
 Reading for information on the net
 Being shared with detailed and realistic knowledge from social networks
 Learning to prevent epidemic diseases
 Finding out the cause of diseases
 Searching for information through books
 Searching for generic medications
 Searching for the understanding disease state
 Finding out about medications before use
 Searching for medication information from social networks
 Searching for information from the Internet
 Searching for information from social networks
 Searching for information about diseases and drugs from online forums

5.2 Analyzing Information

Evaluating information to make right decisions
 Asking pharmacies about doctor prescriptions
 Inferring decisions to use medications
 Verifying recommended medicines by an acquaintance
 Verifying with pharmacies doctor-prescribed medications
 Comparing doctors
 Comparing illness of children
 Comparing domestic and imported medications
 Comparing with other mothers

5.3 Synthesizing Knowledge

Analyzing for own solutions to child care

Category, Focused Codes, and Initial Codes

Learning from the care of first child
 Learning from the treatment of self and spouse
 Drawing lessons learned from the case of seriously ill children
 Gaining experience
 Accumulating experience of childcare
 Accumulating experience with medications
 Finding for own solution to child care

6 Sensing Harmony

6.1 Watching Health State

Having illness prolonged
 Having illness exacerbated
 Assessing severity of disease
 Not looking down disease progression
 Controlling children body weight
 Controlling diet of children
 Checking nutrition of children

6.2 Perceiving Medication Benefits

Knowing the medicine child is taking
 Feeling the harmful effects of medications
 Feeling medication tolerance
 Evaluating medication effectiveness
 Evaluating a medication as strong or mild
 Rating the tolerance of medications for children
 Underestimating the functional foods
 Evaluating medication usage
 Understanding of the status of children
 Selecting medications for tolerance
 Not concerning with cost of medications
 Not buying low-quality medications
 Worrying about medication quality

6.3 Seeking Tolerance

Feeling medicine is too strong
 Feeling the harmful effects of medications
 Feeling medication suitability
 Choosing medications suitable for children body
 Evaluating suitability of medications for children

7 Constructing Loyalty

7.1 Believing in Medications

7.1.1 Selecting a health regimen
 Choosing medications suitable for children body
 Choosing medications based on country of origin
 Choosing medications according to the experience of acquaints
 Re-using doctor-prescribed medications
 Re-using previous medications according to the efficacy

Category, Focused Codes, and Initial Codes

- Personalizing treatment for children
 - 7.1.2 Administering a health regimen
 - Using functional foods for children
 - Using supplements for children
 - Using cold remedies for children
 - Using medication regularly
 - Using antipyretics for children
 - Using appetite stimulants for children
 - Selecting right time for medications usage for children
 - Selecting right medications for children
 - 7.1.3 Complying with a regimen
 - Using medications at the lowest dose possible
 - Using medications for a sufficiently short period
 - Taking medicine as soon as early signs of disease
 - Using imported medications for better healing
 - Dosing medications by weight
 - Not arbitrarily using medications
 - Not misusing medications for children
 - 7.1.4 Mastering Medications
 - Knowing well medicines for children
 - Understanding each prescription
 - 7.2 Building Trust
 - Believing in medicine science
 - Trusting private consultation by pharmacies
 - Relying on physicians' knowledge and recommendations
 - Relying on hospital adequate facilities
 - 7.3 Owning Parental Role
 - 7.3.1 Caring for a child
 - Caring children
 - Caring for children's foods
 - Take care of everything for children
 - Caring nutrition state for children
 - Caring hygiene for children
 - Being affective with children
 - Feeding children with fruits
 - Bringing children to hang out
 - Bringing children to school
 - Letting children go to sleep
 - Guiding children to do physical exercises
 - Enabling children's exposure to the environment
 - Keeping children in hygienic conditions
 - Caring for children's knowledge
 - Enabling children's studying
 - Teaching children hygiene habits
-

Category, Focused Codes, and Initial Codes

Teaching children to drink milk
Massaging limbs for children
7.3.2 Sharing with others
Sharing know-how to others
Sharing knowledge on social networks
Sharing knowledge with acquaintances
Sharing with loved ones
Reading lots of sharing from social media

Appendix J: Sample of a Field Note

Field Note, Participant: Minh, Date: 21 November 2014

Sáng tạo, tạo khác biệt, tự làm thức ăn ưa thích cho con
Không biết sử dụng internet (nhờ con)

Trung tâm thông tin cho sức khỏe của con
Sử dụng nhiều người tham khảo để kiểm tra chéo thông tin trước khi quyết định

Kiểm tra chéo tổng hợp các nguồn tham khảo đáng tin cậy ==> tích lũy kiến thức ==> tiếp tục kiểm tra chéo ==> nuôi con thứ hai ==> chia sẻ cho người khác ==> tích lũy tiếp

Model: hình tròn

Bác sĩ luôn thay đổi, không biết tường tận về bệnh nhân ==> không yên tâm ==> luôn kiểm tra chéo

==> khác với nhà thuốc quen ==> yên tâm ==> kiểm tra chéo

Bệnh ==> Bác sĩ chẩn đoán ==> kê đơn ==> kiểm tra chéo với nhà thuốc ==> kế hoạch kinh nghiệm tích lũy ==> dùng thuốc ==> đánh giá ==> chăm sóc ==> dự phòng

Bà mẹ kiểm chứng thuốc với các nguồn khác như internet, nhà thuốc bác sĩ ==> theoretical categories. Đối chiếu nhiều nguồn...

Tin => mới dùng
Không tin => đối chiếu
Tin tưởng ==> tuân theo
Chưa tin tưởng ==> hỏi thêm

Nhà thuốc: hiểu, nắm rõ bệnh nhân (nhờ gần nhà)
Bác sĩ: không (không phải bác sĩ gia đình)

In developing countries, doctors' credibility is questionable??

theoretical sampling: what doctor means?

thời tiết - thực phẩm chức năng - sức đề kháng- thuốc

Nói trộm vía

lời mở đầu khi nói lời khen sức khỏe trẻ nhỏ để tránh cho lời khen khỏi chạm vía và thành điềm gở, theo quan niệm dân gian

Appendix K:
Sample Excerpt of an Advanced Memo

Integrating comprehension through medication reasoning

The mom built a pool of information regarding her child's health. She obtained information, advice, recommendations, and ideas from different sources without a well-organized structure in mind. She stretched herself to find out from such pool of information what is relevant to her child health conditions and she made decisions on what is the best for her child to apply. In doing so, she suffered a problem of justifying and verifying the gathered information. She lacked opportunities to double check her understanding and comprehension of the child conditions and treatment with all the reference sources once more time. The mom found her ways to gain more information from secondarily available information such as the Internet, relatives, and colleagues for her verifying process. Her knowledge at first was just descriptions of information in unorganized structure, but then it was accumulated, consolidated, structured, organized and integrated and become more structured in those ways. The mom's knowledge evolved to become more evident, insightful and trusted to her. She became familiar and acquainted with the essential knowledge to care for her child. In the beginning, her trust is limited regarding her knowledge, her relationship, her interaction with sources, but then her trust developed better and better in knowledge, people, and capabilities of caring her child. Not only trust, but her emotions also become more matured and obvious so that she had loyalty to the expertise, knowledge, relationship she relied on to take care of her child.

- Interacting with reference sources: have favorite sources, see the sources, and get information. Empirical evidence in data:
- Obtaining information: actively obtain information face-to-face (physicians, pharmacies, acquainted people) and online (Internet, online forum). Empirical evidence in data:
- Verifying information: the mom compared the judgments from different sources. Empirical evidence in data:
- Believing in the knowledge: confident knowledge is correct and right. Empirical evidence in data:
- Building loyalty: repetitive behaviors when similar situations come. Empirical evidence in data:
- Living the experience: understand and comprehend the experience of childcare.

Appendix L:
A Sample of Clustering Focused Codes and Categories

Figure A.3. Example of Clustering of Focused Codes and Tentative Categories

Appendix M:
Diagrams of Tentative Versions of the Theory

An Earlier Version of the Conceptual Framework:

Figure A.4. Diagrams of Tentative Versions of the Theory

Further Developed Versions of the Conceptual Framework:

Figure A.5. Diagrams of Tentative Versions of the Theory (continued)

Appendix N:
Immersion Codes Density of Eight Participants

Table A.4. *Immersion Codes Density*

Participants Pseudonym	Gender	Age	Education	Occupation	Total years of children	Children age				Code Density					
						2–6 years		7–15 years		Feeling	Listening	Seeing	Thinking	Finding time	Attempting
						Boy	Girl	Boy	Girl						
Thu	Female	31	Bachelor	Clothe own business	11	2		9		22	2	3	1	26	
Van	Male	29	High school	Tailoring factory owner	9	2		7		3		8	5	3	6
Ai	Female	38	Bachelor	Accountant	14		6	8		17	1	1		5	6
Manh	Male	30	College	Cell phone shop owner	10	3		7		21	1		1	5	2
Thanh	Male	45	High school	Taxi admin manager	16	5		11		4	1		6		
Minh	Female	33	High school	Trader	12		2	10		3			4	1	
Tran	Male	44	Bachelor	Warehouse keeper	21	6		15		7	3	2	3		
Hong	Female	39	College	Post office staff	14	5		9		2	1		3	2	2

Appendix O:
Selective Data Excerpts with Indicators for Categorization

Table A.5. *Interview Data for Individual Participants*

Interview Data for Individual Participants – Participant: Thu

Category	Data excerpts
Awaking to Asymmetry	<p>“It means that after consulting a physician my child’s health is still not stable, it did not cure, still severe, so <u>I want to bring my child to another physician for better confidence...</u> The second physician asked himself why the first one prescribed these drugs. <u>I do not know why there is such a difference.</u>”</p> <p>“I do not know well, patients cannot compare, it is possible with this physician my child was recommended this drug, but when bringing him to another physician, <u>he is prescribed with other medications. I tried to compare the drugs prescribed by the two doctors; they are different in about 50%.</u>”</p>
Distrusting Professional Sources	<p>“I have a favorite pharmacy; I usually buy medicines from it. She asks me to buy medicines that are good, local products or imported ones, for examples, which one is better, what is the price differences, <u>I do not trust other pharmacies</u>”.</p>
Living Role Identity	<p>“I got married after graduating from college. My families do not want me to go to work. So, I have children. My daughter is 9 years old; my son is 2. They both go to school. General speaking, <u>taking care of children is the job of most women. I see I myself spend more time and efforts to do that than my husband...</u> I do most of the things. I have a shop at my house; I have time, <u>I can take care of my children and look after my shop at the same time.</u>”</p> <p>“<u>It is the norms.</u> It is exactly the miscellaneous jobs at home. <u>Housewives do such things...</u> I need to arrange the <u>necessary things.</u> It is not simple for housewives to care for all the things family needs.”</p> <p>“For my second baby, I did not have a maid, <u>I do things ‘by my hands,’ except for the first birth after born, my child has been taken care by myself, I am reassured with that...</u>”</p>

Interview Data for Individual Participants – Participant: Thu

Category	Data excerpts
Immersing Lay Self	<p>“With children, I am very busy. That is the norm. Mothers are overhead and ears in things (đầu tắt mắt tới), for cooking, health, and tons of other things... Everyone is busy. Fathers are also doing team building outside the working hours”.</p> <p>“Children are born to mothers’ care. Moms certainly love them... There are mothers who sacrifice for their children, overcoming all the pains and miserable things and expect for children good health, better life.”</p>
Integrating Knowledge	<p>“Well, being able to discuss, to talk, I see it is relevant and real... mothers share good things... For clothes, they said which clothes suit their children so the same, for sneezing, sick, nutrition, weight loss... mothers also share and exchange what foods, what medications... I see that I can learn from others the experience which I have not had, I have not found out by myself...”</p> <p>“In general, through learning of medications I got to know a lot about diseases of children, prevention of common illness and accidents, I know for what disease my child would take what medications. That is not only from own experience, however. I also find out about such knowledge from other mothers’ sharing, choosing medications, which one my child should take. Furthermore, we need medical advice from physicians as well, not just give my child any medications... because my kid health is essential. I have obtained knowledge but not enough...”</p>
Sensing Harmony	<p>“Based on that, I see that the medication suits my child, it cured, so I believe it. Every year my child takes that medication just for a few times, I see it works fast, and well I believe in it. I keep the prescription for future use.”</p>
Constructing Loyalty	<p>“When the environment changes, my baby got sneezing and runny nose because of the cold environment. Changes in weather such as too hot conditions, human body temperature cannot go along [with the weather]. In that situation we should use functional food or vitamin products to enhance body resistance ability against diseases, avoiding coughing, sneezing, and runny nose, that is what I mean.”</p>

Interview Data for Individual Participants – Participant: Ai

Category	Data excerpts
Awaking to Asymmetry	“My child rarely has to use antibiotics. Most of the time is a mild syrup, a product of France, but it is very gentle, or Atussin, my child has been used to Atussin, he does not use many antibiotics. I did not tell, but he [the physician] would have known, [he] just sees inflammation [my child has] he automatically prescribes antibiotics, and I think these drugs are quite strong, I asked a pharmacy near my house, I know them, they said my child does not necessarily use these antibiotics, the drugs are too strong for my kid”
Distrusting Professional Sources	“I am not ‘good’ that I do not follow prescriptions of physicians because their prescribed antibiotics are very strong, it is very often that way, most of the physicians do nowadays. I ask [pharmacies] it is strong while my child is ‘ordinary’ therefore when I visited a pharmacy I describe what my child is suffering, I did not give the pharmacy the prescription, I got a milder antibiotic, also an average anti-coughing drug.”
Living Role Identity	“I have a maid, but she does only the housework. <u>I myself do cook for my children; they eat only the food I prepare.</u> ”
Immersing Lay Self	“Well, <u>taking care of my two little ‘sisters’ [daughters] gives me no more time to take care of myself.</u> They come back [from school], having some snacks. We have a housemaid, but for meals, I do cook for the sisters. They enjoy only the meal that mom prepares, they get used to that. After meals, the sisters study [homework]; I work with the younger while, the older can do it herself... They then go to bed, before that each drinks a glass of fresh milk. [I] encourage them to go to bed early so they can go to school early the next morning. In the early morning, mom gets up early for a busy day ahead with the two [kids]”

Interview Data for Individual Participants – Participant: Ai

Category	Data excerpts
Integrating Knowledge	“My weak point is that I do not always follow physicians’ prescription because they prescribe strong antibiotics. I asked <u>[pharmacies]</u> and <u>understand those antibiotics</u> are quite strong while my kid is on average so I consulted with pharmacies about my kid’s sore throat and bought gentle antibiotics for my kind.”
Constructing Loyalty	“ <u>Dryness</u> is not okay. Dry weather makes nasal vessels dry so causing upper respiratory infections, especially nasal problems. The drier the weather is, the more chance children get a cough and nasal problems, quite often; while humidity causes so many other diseases. <u>Because of humidity bacteria grow so much, many diseases...</u> ”

Interview Data for Individual Participants – Participant: Manh

Category	Data excerpts
Immersing Lay Self	<p>“First, the most significant source of information is physicians. In each consultation for my child, <u>I need to have conversations with the physician</u>, ‘if my kid gets such a problem, what would I do?’. Each child has its nature, which is different from other kids. I need to know... Second, <u>I need to find out by myself</u> from reliable sources such as television programs, the Internet, or from grandparents, relatives, or neighbors. Other children get a health problem; [I] do not think my child will not get the same. <u>It builds up a relationship with people; it also helps learn how to do when I need to. Things come from all sources</u>”, (Manh).</p> <p>“For children, we are paying high attention not only their schooling but also their health. Health is the first, for children... <u>We care for the health</u>”, (Manh).</p>
Integrating Knowledge	<p>“I bought [medications] <u>from large, well-known, reputable pharmacies</u>, I feel more confident, in large city central areas, it reduces the risks of [buying] expired medications, anyway I still need to check [the expiry date], but it is nonetheless less risky. Before I buy, I already have the knowledge, but I still need to receive counseling from the pharmacist”, (Manh).</p> <p>“My child could not eat much, so I read that parents mention a kind of granule medications. Then I searched Google for more information about that drug, learned about its instruction for use. If I have free time I will try to find out more; I do not believe 100% from the beginning. It is just the basis. I will see physicians and ask for more information to understand whether it is all right”, (Manh).</p> <p>“Regarding the information there about children ailments, who are the physicians parents should see, where their offices are, it is all right. I also asked from relatives and the acquaintance about physicians; they said he is OK, I become confident”, (Manh).</p> <p>“For severe conditions, I need to see a physician, certainly, primarily physicians, after that, I find out for what I do not know yet, nowadays there is information about everything on the Internet. Some of the sources are official [for me to learn from] ... I also know there are <u>health seminars for parents</u> I will certainly attend it if I have free time. Alternatively, I can watch <u>television programs such as Health & Life</u> to learn more even though my children do not have yet such diseases, just in case... I can apply...”, (Manh).</p>

Interview Data for Individual Participants – Participant: Manh

Category	Data excerpts
Sensing Harmony	<p>“He [my son] sometimes has a fever I know if having no cough and no other symptoms just give him cold remedies for children. <u>So the fever should relieve from the second day...that’s human body</u>”.</p> <p>“Recently my older kid, two months ago, got a fever. The grandparents said it was a usual fever [cold fever] so <u>I think</u> if the fever just for 24 hours, no problem, it’s good. However, <u>I felt he continued to have a fever for the second day, no relief in fever</u>. I stopped working and leave the office for home, just follow-up my kid with prescribed medicines. No relief, so I brought him to Bach Mai hospital. He was transfused with solutions. I was afraid of his suffering pneumonia. But the laboratory tests showed is it a cold fever, doctors gave us medicines form my kid to stay at home”.</p> <p>“In my opinion, the thin kid can become in good shape, but the fat kid cannot come back to the average. Daily food sometimes is toxic; we have to be [very careful] ... about foods for children especially for sick children.”</p>
Constructing Loyalty	<p>“With a prescription, I come to pharmacies to fill it. If the pharmacies do not have such medication available, <u>pharmacies may ask to buy a different one. I do not accept I had better go to the [pharmacies] to buy it. I do not want to change the medications which physicians prescribed</u>”, (Manh).</p> <p>“Parents should not underestimate the importance of caring children. <u>Caring our children never loses anything</u>”, (Manh).</p>

Interview Data for Individual Participants – Participant: Hong

Category	Data excerpts
Immersing Lay Self	<p>“For example, Lactomin probiotic, two tables in the morning, two more in the afternoon as higher doses, but I studied well I know it is not antibiotics, so it is OK. Antibio Pectin is for increasing stomach movement, so it is also fine... Every time my child has a cough I give her lemonade and antipyretic tablet with an orange flavor she likes it. I know that anti-fever medicine I used Hapacol with orange flavor, she usually takes 250 [milligrams], and her older sister uses para[cetamol] 500 [milligrams]. I determine the dose based on their body weight, not on ages. I learned that from pharmacy staff. I am cautious. I give my children Antibio two hours after she takes antibiotics prescribed by physicians. It is to avoid gastrointestinal disorders caused by antibiotics. Physicians told me to give her yogurt I already know it, but I prefer Antibio. <u>My child, I nourished him I realize</u>, her intestine is weak, so I try to learn more...”, (Hong).</p>
Integrating Knowledge	<p>“I see Dr. Thuong has also been on television talks for 1-2 times. It is hard to make an appointment with her, but she gives priority to younger children, sometimes we can only meet her at 11:00-12:00 p.m., the following morning my child had to go to school... I once experienced with Dr. Thuong when my child got a sore throat; she gave me medicines. For Dr. Trung., she gave more expensive medications with many effects, also nasal medication while Dr. Thuong gave <u>me only drop medicine at night... extended use may not be right; we can change to Xisat</u>, a half month after using Dr. Trung’s prescription it relapsed while after Dr. Thuong’s it was one and a half months”, (Hong).</p>
Sensing Harmony	<p>“Both of them quite like beef rib steaks, but grilled meat may not be good although they like it. Therefore, I went shopping fresh meat and prepared at home for them. <u>It is safer, limiting fat and oil; I know which part is fresh meat... fresh is healthy and nutritious, right?</u> It is good no matter how hard I need to work because health is number one”, (Hong).</p>

Interview Data for Individual Participants – Participant: Hong

Category	Data excerpts
Constructing Loyalty	<p>"I really want to share [my experience], <u>Dr. Quang is reputable, she is very smart,</u>" (Hong).</p> <p>"For example, Lactomin probiotic, two tables in the morning, two more in the afternoon as higher doses, <u>but I studied well I know it is not antibiotics, so it is OK. Antibio Pectin is for increasing stomach movement, so it is also fine...</u> <u>Every time my child has a cough I give her lemonade and antipyretic tablet with an orange flavor she likes it. I know that anti-fever medicine I used Hapacol with orange flavor, she usually takes 250 [milligrams], and her older sister uses para[cetamol] 500 [milligrams]. I determine the dose based on their body weight, not on ages. I learned that from pharmacy staff. I am cautious. I give my children Antibio two hours after she takes antibiotics prescribed by physicians. It is to avoid gastrointestinal disorders caused by antibiotics. Physicians told me to give her yogurt I already know it, but I prefer Antibio. My child, I nourished him I realize, her intestine is weak, so I try to learn more...</u>" (Hong).</p>