DOCTOR-PATIENT COMMUNICATION AND PATIENT SATISFACTION: AN EXPLORATORY STUDY OF THE SIMILARITIES AND DIFFERENCES BETWEEN TRADITIONAL CHINESE MEDICINE AND WESTERN MEDICINE PRACTICES IN MAINLAND CHINA

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Doctor-patient communication and patient satisfaction: An exploratory study of the similarities and differences between traditional Chinese medicine and western medicine practices in Mainland China

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Certificate of originality

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Abstract

Communication is a fundamental component in medical interviews. It is believed (Bensing, 1991) to be a potent tool in improving the quality of medical care and thus a skill to be learned. Over the decades, scholars have made both theoretical and empirical contributions to knowledge of the medical encounter. While much is known about communication in western medical practice, what is left unknown is how people interact with each other in alternative medical practices, resulting in many unwarranted claims and suspicions. This thesis contributes to research on doctor-patient communication by exploring the communication behaviors in both western medical practice and traditional Chinese medical practice in Mainland China and the impact on patient evaluation of their medical care. In particular, communication outside the biomedical domains of medical interviews is chosen as a specific area for in-depth examination, focusing on where talk of this nature usually occurs in medical interviews, which topics are usually discussed, how participants encourage or discourage exchanges of information at this level, and what kind of interpersonal relationships are indexed by discourse at this level. In addition, this research also compares patient evaluations of their doctors' communication styles and global satisfaction.

The research context on which this study was conducted is a first-grade level-three referral general public (*三甲医院*) hospital (i.e. hospitals ranked highest) in Mainland China. The data comprises 69 audio recordings of medical interviews and post-consultation questionnaire surveys. Data includes medical interviews from both the western medical division and the traditional Chinese medical division. The data were translated into English for illustrative purposes.

In the analysis of medical discourse, the Roter Interaction Analysis System codings were adapted to the interviews in both medical practices. The analytical frameworks in analyzing medical discourse include conversation analysis when analyzing the sequential turns and consequences and frame analysis when analyzing participants' orientation and understanding of the current discourse. Post-consultation patient

evaluations were also collected adapting the relational communication scale to explore if variations in communication styles affect patient assessment of their medical consultation. In interpreting these variations, the social interaction theory was invoked to explain the relationship between the affective domains of communication and patient evaluations.

Findings from this research suggest that compared with medical interviews in western medical practice, those in traditional Chinese medical practice feature a more patient-centered style of communication, with more doctor-patient interactions in non-biomedical domains of medical communication. Doctors in traditional Chinese medical practice also demonstrate more attentive listening, better attitude, lower dominance, and acquaintance with their patients, all of which are correlates of higher global patient satisfaction. The thesis argues that one possibility of these diverging features of medical discourse is the clinical differences in philosophy, pathology, and etiology.

Publications arising from the thesis

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Glossing conventions

onoma	onomatopoeia
pfv	perfect tense
prt	particle
vcl	verb classifier
vm	verb modifier

Chapter 1 Introduction and overview

1.0 Preliminaries

Communication is a fundamental human activity through which people establish, maintain and modify their social identities – aspects of individuals' self-concept derived from their understanding of the social groups to which they belong (Tajfel, 1982) – as well as their relationships with the world. It takes different forms such as casual conversation that people engage in everyday, or institutional talk that is shaped by workplace conventions such as talk between professors and students, between employers and employees, and between care-providers and care-seekers. This thesis is about care-providers (i.e. doctors) and care-seekers (i.e. patients) and what goes on between them in medical interviews. This research is also a comparative study of doctor-patient communication in two medical practices that co-exist in China – traditional Chinese medicine (TCM) and western medicine (WM).

Data were collected from two divisions at one of the state-owned hospitals in Mainland China. The data consist of both audio-recordings and post-consultation questionnaires. The comparisons between the two medical practices comprise three parts: (1) an exploration of participants' communication behaviors at different clinical practices using content analysis, (2) a qualitative discursive study of the behaviors that are noticeably different based on observations in study 1, and (3) a survey aimed at evaluating patient satisfaction and identifying the associations between communication and medical outcomes.

As the thesis title suggests, an overarching aim of the thesis is to identify the clinical similarities and differences in relation to doctor-patient communication. In this introductory chapter, a preliminary review of the background is provided to set the rationale for the research, followed with an overview of the organization of the thesis.

1.1 Communication and medicine: research rationale

Communication between doctors and patients has sparked considerable interest in both areas of linguistics and healthcare. In the past four decades, since Engel's (1977) critique of the traditional biomedicine as devoid of social behaviors in explaining the disease, qualitative and quantitative studies have contributed insights to the understanding of communication in medical encounters. Scholars have mostly agreed that communication is one of the fundamental ingredients in healthcare (Roter & Hall, 2006). In fact, it is widely endorsed that the art of communication and the art of medicine are intricately crafted together to achieve both therapeutic and interpersonal goals. While the therapeutic power of medicine is indisputable, recent scholarly sources have also indicated the therapeutic power of communication (Matusitz & Spear, 2014; Slade *et al*., 2015). As noted by Street (2013), many studies in the literature have consistently demonstrated a positive correlation between communication and patient outcomes, both biomedical (e.g. symptom resolution and pain control) and psychosocial (e.g. emotional health).

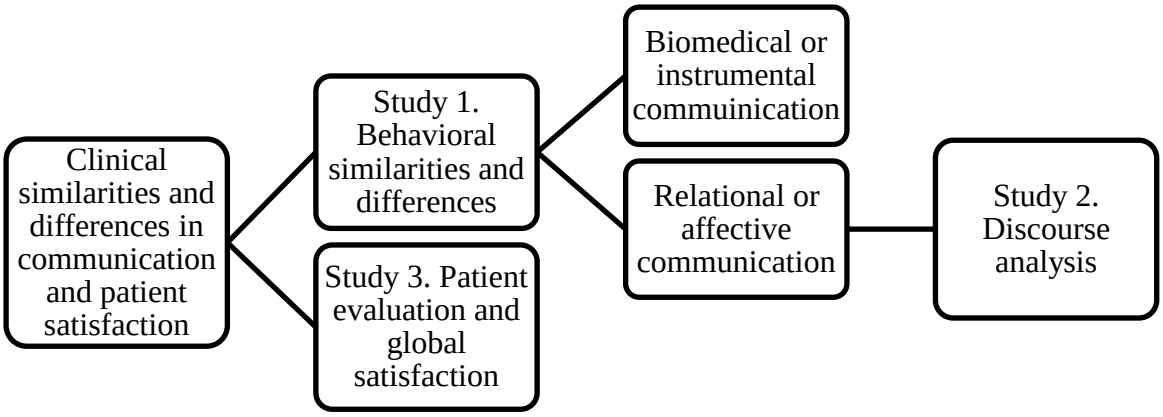
Insofar as the importance of talk in medical care, researchers and medical practitioners have endeavored to understand the dynamics between language and health-related issues. In recent years, a flourishing multidisciplinary and interdisciplinary effort has been directed towards the investigation of the dynamic interplay of doctor-patient communication, doctor-patient relationships and the perceived medical outcomes (Thompson, Parrott, & Nussbaum, 2011), including immediate outcomes such as patient satisfaction and tension release (Christen, Adler, & Bitzer, 2008; Greene *et al*., 1994), intermediate outcomes e.g. compliance with recommended treatment and increased self-confidence (Zolnierek & Dimatteo, 2009), and long-term outcome such as improved quality of life and rising survival rates (Kreps, 2003). A large corpus of extant research reports a positive relationship between doctor-patient communication and medical outcomes (Saha & Beach, 2011; Trummer *et al*., 2006).

The notion of effective communication is thus widespread among communication researchers and healthcare practitioners. However, despite such rich literature in communication between health professionals and patients, most of these prior studies

are located in the WM practice, with less attention to other medical practices that co-exist in the broader field of healthcare. As Kim (2014) puts it, this dearth of study on complementary and alternative medicines (CAM) leaves us ignorant of doctor-patient communication in "professionalized heterodox medical systems" (p. 520). In a ground-breaking study of CAM use, Eisenberg and colleagues (1993) reported a higher than expected frequency of CAM use in the United States. Eisenberg *et al*.'s study has since then triggered a surge in exploring communication in CAM (Frass *et al*., 2012;). These studies have contributed insights about communication in other medical practices. This thesis attempts to deal with the issue of doctor-patient communication in TCM, specifically focusing on the similarities and differneces between TCM and WM (or what is widely regarded as the 'orthodox' biomedicine) practices in relation to doctor-older adult (with chronic illness) communication and patient satisfaction. The reason to concentrate on older adults with chronic diseases is two-fold. On the one hand, older adults spend more time in hospital than younger people and are more likely to engage in interactions with health professionals (Thompson, Robinson, & Beisecker, 2004). On the other hand, given the global aging population, rates of chronic diseases are increasing. Therefore, this group of people is supposedly to constitute a large percentage of the patient population and a huge challenge of the health care.

1.2 Organization of thesis

This study was designed to advance our knowledge on doctor-patient communication in both TCM and WM practices that co-exist in Mainland China. By WM, it refers to WM practiced in China. The overarching aim of the thsis is to examine the clinical similarities and differences in doctor-patient communication and patient satisfaction. This research aim is further developed into three sub-objectives: (1) to explore participants' verbal communication behaviors in different clinical practices; (2) to investigate how communication outside the biomedical domain is co-constructured in different practices and its implications on the social relations between doctors and patients; and (3) to examine patients' evaluations of doctors' communication styles and whether these evaluations correlate to global patient satisfaction.These three research objectives will be revisited in Chapter 8.



The first research objective is oriented to participants' verbal behaviors in medical interactions. The second research objective is developed based on the findings from objective one. Taking a sociolinguistic and pragmatic approach, the second objective is related to medical discourse outside the biomedical domain and draws from the findings of prior studies on medical communication in this area. Findings from objective two also provide insights on the knowledge of doctor-patient relationships. The third research objective is oriented to patient evaluation and satisfaction about their doctors' communication behaviors and mainly draws on the literature on relational communication.

A concise review of the literature is incorporated in Chapter 2. The review comprises mainly two different parts that are related to the research objectives of the current study: doctor-older patient relationships and communication behaviors. Given the paucity of extant research in TCM, the review presented in Chapter 2 mainly focuses on prior studies in WM practice. More in-depth reviews in relation to communication and patient satisfaction are provided in Chapters 4 to 7.

Chapter 3 introduces the analytical frameworks and methodological approaches based on the research conducted. The chapter begins by presenting the research objectives, followed with a detailed discussion of how different analytical frameworks would be borrowed and methodological approaches designed to address these objectives. First, the chapter discusses the use of content analysis to the investigation of doctor-patient interactions, and how this approach could help address the research objectives. Different content analysis approaches are compared and critiqued, making the case for the adaptation of the Roter Interaction Analysis System in this study. The analytical frameworks discussed in Chapter 3 include mainly conversation analysis and frame analysis. Next, the chapter explains the considerations in the design of questionnaires for a collection of patient perceptions. Given the fact that this research involves three studies, using different methodological approaches and analytical frameworks, a detailed discussion of each method is presented in subsequent chapters. A description of the research context, sample population, and inclusion and exclusion criteria is also presented in Chapter 3. In an overview, Chapter 3 explains how different analytical frameworks and methodological approaches are used to address the research objectives.

Chapter 4 examines the communication behaviors, specifically verbal communication, of both doctors and patients in medical interactions. It begins by introducing the Roter Interaction Analysis System, weighing its strengths and limitations in analyzing medical interactions. Next, the chapter reports results from a pilot study, providing evidence to the reliability and content validity of the codes among the Chinese population. Examples are given to illustrate how verbal behaviors are coded to different categories. Analytical procedures are explained in mathematical formulae. In the latter part of Chapter 4, findings are reported and discussed. Given a lack in the literature in exploring participants' communication behaviors in TCM interviews, this chapter aims to address the issue and contributes to the knowledge of clinical similarities and differences in terms of communication behaviors.

While Chapter 4 addresses research objective one by providing a systematic comparison of the similarities and differences between TCM and WM in relation to participants'

behaviors in different domains of medical communication, Chapters 5 and 6 concentrate on communication outside the biomedical domain and thus address objective two. Based on findings from Chapter 4, TCM differs from WM mainly in terms of how participants communicate outside the biomedical domain of medical interviews. Chapter 5 focuses on lifestyle communication. The chapter begins by conceptualizing lifestyle in medical communication, followed by an investigation of the location, topics, and turn structure of lifestyle exchanges. In this chapter, lifestyle communication is examined in two kinds of activities: lifestyle questioning and information giving.

Chapter 6 concentrates on non-medical small talk in medical interviews. It first of all conceptualizes what is referred to as small talk in medical interviews, drawing on Holmes' (2000) and Coupland's (2000) context-based approach to define small talk. This chapter examines small talk at the interactional boundaries of medical interviews (i.e. the opening and the closing stages). Analysis concentrates on the various forms of small talk in medical conversations, examining when talk of this nature tends to occur and what kind of topics are usually discussed between doctors and patients. The argument in Chapter 6 is that the comparison of these features could reflect the interpersonal relationships between doctors and patients in medical encounters.

While Chapters 5 and 6 explore the communication outside the biomedical domain of medical interviews and address objective two, Chapter 7 extends this knowledge by examining patient evaluation of their doctors' relational or interpersonal communication and global satisfaction about the medical care. The chapter starts by introducing the analytical framework based on which patient evaluation is interpreted – the Social Interaction Theory. Next, it describes the instrument used to collect patient opinions – the Relational Communication Scale. Results of the pilot study are also reported to demonstrate the scale reliability and content validity. Additional to the survey findings, this chapter also presents patient comments on their doctors' communication behaviors. Moreover, associations between communication behaviors and global satisfaction are also examined. Chapters 4 to 7 constitute the three studies of this research thesis. Findings from these studies corroborate with each other.

Finally, Chapter 8 concludes the thesis with a synthesized summary of the major findings and revisits the research design of this thesis to demonstrate how it helps addressing the research objectives. In the latter part of Chapter 8, I discuss the limitations and contributions of this research and implications for future investigations.

Chapter 2 Doctor-older patient communication

2.0 Chapter introduction

In the last three decades, talk between doctors and patients has aroused an increasing amount of interest among scholars in different fields. Concern for doctor-patient talk has been fueled by a growing awareness of the significance of talk in medical consultations. Much of the earlier literature is coming out of the United States and some European countries. Many scholars believe that talk and expertness comprise the two fundamentals in medical care (Roter & Hall, 2006; Slade *et al*., 2015). One of the important purposes of medical talk is to craft a good doctor-patient relationship, which falls within one of the three functions of medical interviews (Cole & Bird, 2000). The other two functions are patient problem assessment and management. According to Cole and Bird, the effectiveness of the doctor-patient relationship greatly affects the outcomes of the assessment and management of patient problems. This belief is widely supported by scholars from diverging disciplinary fields including medical sociology (Cockerham, 2016; Silverman, 1987), medical anthropology (Matusitz & Spear, 2014), clinical psychology (Williams, Weinman, & Dale, 1998), and discourse analysis (Slade *et al*., 2015).

This chapter provides a concise review of scholarship on doctor-older patient communication. As Coupland, Robinson, and Coupland (1994: 91) rightly put, "older people are scarecely a minority group as users of medical services, and it is altogether appropriate for studies of medical interaction to represent older populations". The chapter comprises four parts. First, it begins with a description about established doctor-patient relationship models and their impact on patient satisfaction, illustrating how each model features different social relations between participants and the linguistic representations in medical talk. Second, the topic of communication behavior is reviewed, focusing mainly on the instrumental and affective dichotomy. Then I narrow down the focus to communication and patient satisfaction in China. The chapter closes by a critique on prior research, identifying the limitations of studies in this area and extending current research accordingly.

2.1 Doctor-older patient relationship models

2.11 The sick role and its critique

Doctor-patient relationship has come to be seen as one of the priority factors in patient satisfaction (Roter & Hall, 1989). A good relationship is considered a *sine qua non* for optimal medical care (Ong, de Haes, Hoos, & Lammes, 1995; Street *et al*., 2009). Much of the existing research in the field of medical sociology tries to abstract and categorize the medical communication into different types/models.

Parsons (1951) provided one of the pioneering efforts to examine doctor-patient relationships. As a sociologist, his theoretical concern is that the society has some expectations of different roles, which determine the behaviors of individuals. Illness, according to Parsons, is "a type of deviant behavior" (p. 285). The sick individual is dependent and needs to be taken care of by a "technically trained person" (Parsons, 1951: p. 441). According to Parsons, the sick have the right to be temporarily exempt from normal social responsibilities, and the extent of exemption is positively related to the seriousness of the illness. The sick also have a duty to cooperate with medical professionals so that early recovery is possible (Arluke, 1988). The conception of the patients' sick role and the doctors' professional role shape the most conventional doctor-patient relationship and has influenced many of the later studies on doctor-patient relationship.

Despite its influence, Parson's sick-role concept has been critiqued and later abandoned by sociologists (see Burnham, 2014 for a review). Discussions of patients' behaviors saw a shift from sick behaviors to health behaviors, fueled by the motivation to change individuals' lifestyle from problematic to healthful and the highlight on health promotion. With the access of the internet with resources not exclusive to health professionals, many layman individuals know what symptoms stand for and what might be the potential causes of the illness. Communication between doctors and patients is therefore better understood as a talk between two experts who contribute their own knowledge and expertness to the consultation and to the betterment of the patient's

health. This argument is supported by more recent scholars in discourse analysis. In a special issue of *Research on Language and Social Interaction*, Candlin and Candlin (2002), Candlin (2002), Sarangi and Clark (2002), Linell, Adelswärd *et al*. (2002), and Peräkylä (2002) consistenly adopt a position that the discursive display of expertise is a joint endeavor of all parties involved in a situated interaction. According to these scholars, the display of expertise relates not only to one's command of knowledge in a particular field, but more importantly refers to one's communicative ability to deploy various discourse resources in a strategic manner such as frame negotiation, topic management, and the use of rhetorical devices. Sarangi (2010: p. 36) extended the discussion of expertise or expertness with the concept of "role-set". He pointed out that individuals are given multiple roles within any social activity. As Sarangi and Candlin (2011: p. 16) rightly note that rather than assuming the professional-client role relationship as binary and that the lay and expert systems as "homogenous" in themselves, it would be wiser to understand professionals and clients as occupying "different positions in a continuum".

2.12 Doctor-dominated communication

A review of published work on doctor-older patient communication suggests that the relationship between doctors and older patients can be viewed as locating on a continuum of autonomy. On one extreme of the continuum is a doctor-dominated relationship that emphasizes doctors' authority. It features high professional control and low patient control over the medical interaction. This includes, for example, participants' control of the type and the amount of the information to be shared, the length of the visit, and the role in making treatment decisions. Elsewhere, some scholars call this type of relationship paternalism (Emanuel & Emanuel, 1992; Roter & McNeilis, 2003). Paternalistic relationship or paternalism is recognized as the traditional form of doctor-patient relationship and is still being prevalent in medical practice. This is particularly the case when doctors are interacting with older adults who are more dependent and are less autonomous (Benbassat, Pilpel, & Tidhar, 1998). As Williams, Haskard, & DiMatteo (2007) rightly note, many older patients grew up in an eara of paternalism, and were quite accustomed to the traditional practice of doctor-patient relationship even

when their doctors encourage mutuality and joint decision making.

Strongly influenced by Parsons' sick role concept, the paternalistic model describes the patient's role as passive and dependent and the doctor's role as authoritative and professional. It involves high doctor control and low patient autonomy – an explicit representation of the conventional power relations between an expert and a layperson. Doctors are considered to hold more power in the conventional sense by virtue of their authority. For example, a sociologist might take the stance that doctors have the "base" (Hewiston, 1995: p. 76), which comprises information (cause of illness, method of treatment, seriousness of the illness, etc.), goods (medicine, medical apparatus and instruments) and services (Ainsworth-Vaughn, 1998). In addition, doctors are usually regarded as professionals with high social prestige (Brody, 1992). Their professional knowledge and clinical experience are highly demanded by the patient (Maseide, 1991). Last but not least, medical consultations are arranged by patients and not at the request of the doctor (ten Have, 1991). Therefore, a power imbalance exists between doctors and patients and consequently, the doctor is "granted considerable control over the interaction" in medical consultations (Street, 2003: p. 70).

Medical interviews of this nature feature an absence of patient voice (Cockerham, 2016). In a paternalistic relationship, the doctor acts as the "patient's guardian" (Emanuel & Emanuel, 1992: p. 2221) who is professionally dominant over the interaction by setting the agenda, determining the patient's medical conditions, arranging appropriate (to the doctor's understanding) physical examinations, and deciding effective medical treatments for the patient. The doctor makes decisions based on the assumption that the patient shares with the doctor the same values and expectations towards the current medical consultation and will consent and comply with the treatment plan (Roter & McNeilis, 2003).

A fair amount of the research within the areas of medical sociology and discourse analysis has focused on such power asymmetries between doctors and patients (Ainsworth-Vaughn, 1992, 1995; ten Have, 1991; Pilnick & Dingwall, 2011; West,

1984, 2006). A main feature of this asymmetry is doctors' topical control in medical discourse – one of the prominent ways to exercise power in institutional settings (Davis, 1988). Certain discourse features have been shown to reflect control. These include:

Topic initiation and shift: Topic initiation is considered to be of primary importance in forming the basic structure of topic development (Tsui, 1994). The interlocutor who makes the initiation has a decisive role in determining the content of the follow-up response by informing and requesting information from the other speaker (Itakura, 2001). In medical interviews, the doctor normally initiates the topics and therefore has an "access to the first position" and a "major entry into interactional control" (ten Have, 1991: p. 146). The patient, however, is subject to the responding role, providing their doctor with the information required. In a study of doctor-older patient communication, Adelman, Greene, Charon, and Friedmann (1992) coded the medical interactions using the Multi-dimensional Interaction Analysis system (MDIA) and found that nearly two thirds of the topics observed in medical interviews were raised by the doctor. In terms of topic shift, Wodak (1997) discussed how doctors working in the outpatient department claim authority by strategically announcing topic shift in a sequential place immediate next to praise (of the patients' behaviors). While topic management is considered as an indicator of professionals' control over the interaction, Candlin (2002), in her investigation of nurse-older patient interaction, found that strict topic control was particularly pertinent for untrained or inexperienced nurses who disallowed patient digressions that might trigger discussions of other topics.

Turn-taking and sequential dominance. As an interactional unit of discourse, turn-taking constructs the sequence of the flow of conversation (Schegloff, 2001). It is, in itself, "a system for sequences of talk" (Sacks, Schegloff & Jefferson, 1974: p. 710), as it decides the role change between the interlocutors. Sequential dominance refers to one participant's control over the other speaker in relation to the direction of the conversation as well as the role sharing with one being the initiator and the other being the respondent (Itakura, 2001). In medical encounters, since doctors obtain the first position through initiation, they also possess the controlling power over the sequence of

questions, length of response, and the number and structure of these responses. The literature was replete with evidence on how doctors control the discourse through sequential management. A more extensive discussion of studies in this area will be presented in Chapter 3. Unlike most medical sociologists who understand professional power as a product of social roles, structures, and organizational cultures, conversation analysts regard power as emergent in and through the turn-by-turn sequence of situated talk (see also Jones, 2015).

Interruption. A considerable body of research across different medical encounters has looked upon the issue of interruption in medical dialogues (e.g. Ainsworth-Vaughn, 1995; Manning & Ray, 2009). In the classic study of resident-adult patient interaction in family practice, West (1984) found that doctors interrupted their patients far more frequently than the reverse. Similar findings were reported in Beckman and Frankel's (1984) study in primary care internal medicine, in which patients were constantly interrupted by their doctors, and finally they forgot what they had planned to say. In ambulatory medical care encounters, Frankel (1984) noted that an overwhelmingly majority of the interruptions ended with the doctor holding the floor. Instead of simply identifying the abuse of interruptions by doctors, Marvel, Epstein, Flowers, and Beckman (1999) evaluated the extent to which family practitioners elicit patient concerns. Rather than analyzing the discourse on a turn-by-turn sequence, these scholars coded patient utterances as either 'completed' or 'not completed' and measured the time allowed for each patient to present his/her concerns. According to these scholars, a patient was allowed to talk without being cut off every 23.1 seconds. Apart from the universal observation that doctors interrupt more often than patients, the literature also reported marked difference between doctors and patients regarding how they organize their interruptions. For example, in an investigation of doctor-patient speech in internal medicine encounters, Irish and Hall (1995) found that patients normally interrupted with statements whereas doctors interrupted more with questions. Studies within the field of discourse analysis such as Menz and Al-Roubaie (2008) also identified that compared with patients, doctors in outpatient clinics produced more non-supportive interruptions. In their findings, these non-supportive interruptions usually include an abrupt change of

topic (or in the authors' notion: subject change) and/or recipient. Menz and Al-Roubie pointed out that interruptions in this fashion mostly reflect an asymmetrical encounter.

Questions. Many scholars have agreed upon the use of questions as a power-claiming tool upon the emerging discourse and other participants (e.g. Ainsworth-Vaughn, 1994a; 1998; Itakura, 2001). As Wang (2006: p. 532) rightly notes, questions are "endowed with inherent abilities to control and dominate". Common to earlier research examining the occurrence of questions in medical encounters are the preponderance of doctor-initiated questions (Ainsworth-Vaughn, 2001; Frankel, 1990; West, 1984) and doctors' strong preference of closed questions (Beckman & Frankel, 1984; Ibrahim, 2001; Roter & Larson, 2001). In an investigation of physician-elderly patient interactions, Gordon, Street, and colleagues (2005) observed that only a small proportion of doctors' information giving was prompted by patients' questions. More discussions on how doctors use questions to control the discourse will be presented in subsequent sections on doctors' communication behaviors.

While these language features are frequently noted as strategies through which doctor exert their power and control over the medical interaction, some studies report contradictory observations. For example, within the areas of medical sociology and anthropology, Li and colleagues (2004) described two types of interruptions in doctor-adult patient interactions in general practice: cooperative and intrusive interruptions. One feature that distinguishes cooperative interruption from intrusive interruption is whether it is produced for the facilitation or clarification of the content. According to Li and colleagues, while doctors make more intrusive interruptions than patients, both participants make some cooperative interruptions. Irish and Hall (1995) also challenged the notion of doctor's control through interruption by showing that patients made more interruptive speech than their doctors did in internal medical encounters. In additions, there are also interruptions produced to gain more details. This is particularly so in doctor-elderly patient interviews where patients normally have a combination of different medical symptoms. The doctor's interruption into the patient's speech therefore could possibly be an intention to "redirect" (Marvel *et al*., 1999: p. 283) the

patient's current talk to what he/she has previously mentioned with no precision. Therefore, while interruption is an important indicator of participants' attempt to control the discourse, treatment of interruption as a strategy of dominance should be cautious.

2.13 A patient-centered communication

On the other extreme of the continuum of autonomy is a relationship featuring patient-centeredness. While the paternalistic relationship features a power asymmetry with professional dominance, a patient-centered relationship features a balance of power and treats each party as an equal. Scholars have evidenced that this balanced power relation generates higher patient satisfaction and greater patient compliance with their recommended treatment (Bertakis & Azari, 2011; Saha & Beach, 2011; Street *et al*., 2008).

Although there is little uniformity in the literature in how patient-centeredness is defined, many of the earlier work overlap with each other in certain dimensions: (i) understanding the patient as a whole person; (ii) being attentive to the patient's psychosocial concerns; (iii) sharing power and responsibility, and encouraging mutual participation instead of one party being the dominant; (iv) seeking common ground in relation to illness management, e.g. treatment decision making; (v) establishing and maintaining a good doctor-patient relationship (Mead & Bower, 2000a; Saha & Beach, 2011; Stewart *et al*., 2003). Therefore, in a patient-centered communication, patients and professionals participate as a "joint venture" (Morgan, 2003: p. 54) in the medical consultation. The professionals lend their technical expertise and clinical experience to the patients, while the patients share with the professionals their understandings of their own illnesses. Each of the participants treats the other as an expert – the professionals as clinical experts due to their education and experience, the patients as experts of their own situations. Exchange of ideas, knowledge and clinical skills are realized. In addition, by mutually participating in medical interviews, both participants orient to a patient- and relationship-centered care (Silverman, Kurtz, & Draper, 2013), with a greater degree of empathy, friendship building and partnership collaborating (Kaba & Sooriakumaran, 2007).

Strong associations between a patient-centered relationship and older patient satisfaction were widely reported in the literature within the areas of medical sociology and clinical psychology (e.g. Saha & Beach, 2011; Williams *et al*., 2007). In a recent study of older women patients, Liang *et al*. (2006) explored the association between doctors' communication styles and patient satisfaction and potential compliance with recommended treatment. Their study is particularly intriguing as their sample characteristics of patients are quite similar to the samples in this thesis. Patients included in their study were older adults with an average age of 74.5 years and were all chronically diseased. All patients (n = 56) were recruited from the outpatient clinic in internal medicine practice. Doctor-patient interactions were audio-recorded and coded using the Multi-dimensional interaction analysis (will be discussed later in the methodology chapter). Patient satisfaction with care and communication were measured as well. In general, most of the interactions were considered as warm, deep, bonding, trustwothry, and collaborative in decision making. Strong associations between patient satisfaction and doctors' communication styles (i.e. deep, trustworthy, and bonding) were identified. In addition, their study also shows the likelihood, though insignificant as confessed by the authors, of patients to accept and comply with the recommended treatment. Liang *et al*.'s findings thus are particularly insightful in understanding the process of doctor-older patient interaction and the association between communication and patient satisfaction among patients who are chronically diseased.

In a more recent study of older cancer patients, Finkelstein, Carmel, and Bachner (2017) examined the correlations between doctors' communication styles and patient satisfaction in primary care setting. A total of 200 older patients with an average age of 75 years (SD = 6.57) participated in their study. Professionals' communication styles were measured in terms of three types of communication styles namely caring, collaboration, and interest. Communication behaviors considered as caring includes, for example, showing empathry and warmth, showing support, being attentive to patients' emotional disturbance. Collaborative communication informs the extent to which doctors and patients jointly work on medical communication practices, e.g. treatment

decision making. Doctors' interest in patients is measured by items such as 'whether the doctors shows interest in patients' lifeworlds' and 'whether the doctor is interested in the patient as a person'. All these three types of communication are considered as predictors of a patient-centered relationship. In general, patients rated their doctors as demonstrating more caring and collaboration than interst. Strong positive associations between patient satisfaction and doctors' communication in all these three aspects of communication were reported. Finkelstein *et al*.'s findings suggest that when interacting with older seriously-diseased patients, doctors tend to demonstrate caring and are also more likely to collaborate with patients in medical related agendas, although they may not be interested in patients' lifeworlds. Finkelstein *et al*.'s findings thus provokes further investigation of the content or topics included in medical interactions of this nature, which is one of the research goals of the present thesis.

A patient-centered relationship usually includes a shared decision-making (SDM), which is highly recommended by scholars as being beneficial to the overall medical outcome (Frosch & Kaplan, 1999). It maximizes the contribution of both the patient and the professional in the medical visit by coordination and therefore, facilitates patient adherence. Many studies have reported positive medical outcomes associated with SDM (Chao *et al*., 2015; Shay & Lafata, 2014; Smith *et al*., 2013; Wallen & Brooks, 2012). While widely advocated, the notion of SDM is loosely defined and lacks a conceptual clarity (see Makoul & Clayman, 2006 for review). Charles, Gafni, and Whelan (1997) advanced this notion by proposing the key characteristics of SDM. According to these scholars, SDM shall include at least 2 people in decision making, and that they shall all agree to the decision. They also noted that the achievement of SDM requires the doctor to (a) make the patient feel that his/her views regarding treatment are valued; (b) take into consideration patients' preferences of treatment given their different lifestyles and values; (c) use plain and neutral language in the negotiation of treatment options; (d) assist the patient in evaluating and weighing the benefits and risks of different treatment options and check patients' understanding; and (e) share with the patient what is preferred by the doctor him/herself and affirm patient preference (see also Charles *et al*., 2003).

While Charles, Gafni, and Whelan's study attempts to provide a conceptual clarity of SDM by identifying its key characteristics, Makoul and Clayman (2006) extends the knowledge by proposing an integrative model synthesizing the conceptual definitions provided in extant literature. Based on a review of 418 articles, they identified 31 individual concepts from a total of 161 definitions of SDM. However, they observed that only two concepts (i.e. patient values/preferences and options) appeared in more than half of the 161 conceptual definitions. This finding adds additional evidence to the lack of conceptual clarity in SDM. Makoul and Clayman thus proposed an integrative model by distinguishing esstential (e.g. problem explanation, presenting options, negotiation of benefits and weaknesses, and checking understanding) and ideal (i.e. unbiased information, role-taking, presenting evidence, and mutual agreement) elements of SDM. Despite some overlaps with the previous models, Makoul and Clayman's integrative model explicates the ubiquitous prerequisites that constitute the notion of SDM in different clinical contexts and additional qualities that could enhance the process of SDM but may be restricted to certain clinical encounters.

While the literature has suggested strong correlation between SDM and patient satisfaction, studies in older patients reported some contradictory findings. For example, in a US population-based survey of patient preference for SDM, Levinson, Kao, and their colleagues (2005) found that older people tend to prefer a doctor-directed style of care, deferring to their doctors to make treatment decisions. One earlier study particularly intriguing to the present one is Belcher *et al.*'s (2005) work on older adults' opinions on SDM. A total of 51 patients with multiple chronic conditions ranging from 65 to 89 years were interviewed. Their findings suggest a variation in patients' preferences in SDM. Reasons quoted most frequently by those who prefer a passive role in SDM include fear and anxiety of disease and less confidence in decision making given the short of expertise. On the other hand, those who prefer an active role in SDM recognized a need to understand the side effects of medication and acknowledged different ways through which information about medication can be accessed (e.g. obtaining information from the internet and actively asking questions during the

interview). Interesting to note here is that patients also indicated that one of the barriers and facilitators to patient participation is trust in their doctors. Stated differently, while trust precludes patient participation in SDM, the reverse is also true.Belcher et al.'s study thus not only suggests a variability in the perceptions of older patients with chronic conditions in SDM, but also reveals different themes in their perceptions on engaging or distancing in descision making.

Another universally agreed dimension of a patient-centered communication is the doctor's awareness of the patient as a whole person, focusing not only on his/her biomedical concerns, but also his/her lifeworlds. In this sense, a patient-centered communication deviates from the conventional authodox medical interaction which highlights biomedical communication. In a seminal publication within the areas of medical sociology, Mishler (1984) found a typical communication pattern in medical encounters, which he labeled the "unremarkable medical interviews" (p. 64). In his observation, Mishler identified two conflicting agendas between doctors and patients – while doctors give primacy to the medical agenda by concentrating on the assessment and treatment of medication-related problems, patients sometimes pursue the lifeworld agenda by discussing their psychosocial concerns and other problems they experience in everyday life. A patient-centered communication thus requires the doctor to be attentive to the patient's lifeworlds by engaging in, for example, psychosocial discussions and relational talk with the patient. This is particularly the case when interacting with older patients who might be psychologically more fragile than their younger cohorts. Understanding the issues of their lifeworlds could be pivotal for better treatment of their illness.

2.2 Instrumental and affective communication

The previous section has reviewed two types of doctor-patient relationships: doctor-dominated and patient-centered. One of the marked differences between these two types is the extent to which affiliation is indicated, for example, whether the patient is treated as a whole person (e.g. his/her lifeworlds, emotions, psychosocial concerns). As Peck (2011) notes, a doctor-dominated encounter features high levels of biomedical talk and

little psychosical discussions, while a patient-centered encounter features relatively lower levels of biomedical talk and more psychosocial communication. One widely used distinction to separate communication behaviors of different nature is the dichotomy beween instrumental (also called task-oriented) and affective (also called socio-emotional) communication.

The instrumental and affective behaviors reflect two dimensions of patients' need: the need for cure (instrumental) and the need for care (affective) (Ong *et al*., 1995). They also correspond to Cole and Bird's (2000) three functions of medical interviews (i.e. relationship building, patient problem assessment, and problem management): the instrumental behaviors are related to the patient problem assessment and management functions; the affective behaviors are related to the establishment of relationship. Review of these two communication styles aims at providing the theoretical foundations for the understanding of doctors' behaviors in the present data.

2.21 Instrumental behaviors

Instrumental (also known as task-oriented) behaviors are defined as "technically based skills used in problem solving, which compose the base of 'expertness' for which the physician is consulted" (Hall *et al*., 1987: p. 400). The key notion here is expertness. Behaviors such as asking questions, giving medical information, and providing medical advice are prototypical of this category. For the most part, prior studies in medical communication concentrate particularly on participants' instrumental behaviors such as questioning and information giving (e.g. Boyd & Heritage, 2006; Ford *et al*., 1996; West, 1993).

Questioning

Participants' questioning has addressed unimaginably furious interest among studies in both medical sociology and discourse analysis, focusing mainly on the role of questions in the management of medical discourse and of the social relationship between doctor and patient. Earlier sociological studies were particiularly interested in examining aspects such as the frequency, the type, and the functions of questions initiated by

participants in medical encounters. In a seminal study, West (1984) studied 20 dyadic interactions between family practice residents and patients (16 to 82 years). Some of the patients were repeated visits, while some were initial visits. Some of the patients saw their doctors for routine checks of a long-standing problem (i.e. chronic) while some came for new problems. In the study, she identified a marked disparity of doctor- and patient-initiated questions. Nearly 91% of the questions observed in her study were raised by doctors. The disparity also occurred in recipients' responses. While patients answered 98% of doctor-initiated questions, doctors only responded to 58% of questions raised by patients. West also noted an age-related difference in relation to the distribution of questions: while doctors asked all the questions generated in medical interactions in 80% of doctor-teenager encounters, they asked an average of 82% of all the questions. In terms of the design of questions, West found a preference for doctors to organize their questions in a chain "with no intervening slots for answers" (p. 82), which greatly constrained patient discourse. In additions, doctors' questions were also frequently phrased in a form that multiple choices were given, leaving little room for patient extension. West thus blames the doctor for the failue of effectively eliciting patient response. By contrast, West noted that many of the patients' question were left unanswered, and were sometimes interrupted by a doctor-inserted sequence. According to West, patients also displayed a dis-preference in intiating questions. Nearly half of their questions started with speech disturbances such as stutters, which indicates patients' uneasiness in asking questions. To West, this 'asymmetry' or disparity in questioning was co-constructed by both parties in interaction and is a natural product of social activity. The variation between doctors and patients in questioning is therefore influenced by their role differences in society (see also West, 1993).

West's findings on the disproportionate use of questions between doctors and patients are widely supported by studies in other medical conditions. For example, Ainsworth-Vaughn (1998) observed a similarly disproportionate distribution of participants' questions. Particpants in her study were mainly cancer patients. Some patients had other chronic diseases such as diabetes and bronchitis. Patients in her study asked a higher percentage of questions as compared with those in West's study: 324 out of the total 838

(38.7%) questions were initiated by patients. While being a dramatic contrast to West's findings and also findings of earlier studies (e.g. Frankel, 1990; Mishler, 1984), Ainsworth-vaughn attempted to explain participants' questioning by their socioeconomic and ethnographic differences (e.g. social status, ethnicity, and gender). In agreement with other sociologists (e.g. Silverman, 1987; Beisecker & Beisecker, 1990), she considered contextual factors as powerful indicators that could explain the variations in participants' behaviors. While her quantitatie study of the number of questions may suggest an asymmetry in participants' power (e.g. the power on the selection of the next-speaker and forthcoming topics), her qualitative study on rhetorical questions reveals the intracacies of participants' differences in questioning. As Ainsworth-Vaughn noted, doctors most frequently use rhetorical questions as a tool to mitigate commands and justify lengthy turns, while patients mainly use this type of questions to mitigate face-threatening acts (e.g. proposing a treatment or showing disagreement to doctor). Insights gained from both her quantitative and qualititave studies thus are two-fold: the power of context in explaining participants' behaviors (see also Ainsworth-Vaughn, 1994b) and the bias in the undersanding of professional control based on the number of questions *per se*.

Another observation in doctor-older patient encounters in relation to participants' questioning is the passivity of patients to seek information from their doctors compared with younger patients (Eggly *et al*., 2006; Zeguers *et al*., 2012), despite the fact that information seeking is particularly important for older adults with regular health visits. The most conventional and common method to seek information is asking questions to doctors. In an earlier study of the age-related differences in cancer patients' information seeking, Turk-Charles, Meyerowitz, and Gatz (1997) examined the age differences in patients's information seeking in two types of sources: medical professionals and online resources. Patients included in this study were repeated cancer patients with an average age of 53.95 (SD = 14.34). Self-reported patient information seeking from their health professionals was measured by the Krantz Health Opinion Survey. Patient desire for information was assessed additionally. Their findings suggest a negative correlation between age and patients' information seeking from their health professionals,

indicating that compared with younger patients, older patients were more 'reluctant' to actively ask questions to their doctors during medical consultations. Regarding patient desire for information, their study however reveals no correlation between age and patient information wants. Thus, Turk-Charles *et al.*'s findings suggest patient passivity in asking questions in spite of their desire for information. While their study concentrates on patients' information seeking, it is illuminative to other studies examing the strategies used by doctors to encourage patient participation.

As an extention of Turk-Charles *et al.*'s (1997) study, Xie (2009) interviewed a total of 20 older adults (aged 60 and above) for their opinions on the type of information they would expect in medical counsultations. Four themes were identified: general information about health conditions, detailed and specific information about health conditions and treatment, information relating to complementary / lifestyle treatment, and information related to health providers. Rather than generalizing older patients' information wants as high or low, Xie's study categorizes patient desire into different levels and reveals a variation of the amount required by patients. Xie's finding also reflects different doctor-patient relationships from being doctor-dominated to patient-centered.

One unique phenomenon in doctor-older patient interaction is the presence of the third party, usually the patient's family. As Rosland, Piette, Choi, and Heisler (2011) rightly stated, companion participation is particularly important to chronically ill patients given the complexity of their illness, the requirement on regular visits, and the need for self-management after visit. In their study, Rosland and colleagues surveyed patients with diabetes and heart disease. Their findings reflect a positive correlation between companion participation and patient satisfaction. Both doctors and patients indicate that the presence of a companion facilitate their understanding of each other.

Some studies reported that the presence of a companion impedes patients' information seeking. For example, Greene, Majerovitz, Adelman, and Rizzo (1994) compared triadic interactions with the dyadic doctor-patient interactions. Patients included in their study

were at least 60 years old and had multiple chronic conditions. Consultations were audio-recorded and coded. Their findings suggest that while the content and qualitity of doctors' communication was not affected by the presence of a companion, the patient raised fewer topics and were less responsive in questioning in triadic interactions than in dyads. Similarly, in a study of patient perceptions of companions' roles in doctor-older patient interactions, Ishikawa *et al*. (2006) reported higher intentions of companions to communicate than expected by patients, particularly at the level of information seeking. As an extension of these studies, Eggly *et al*. (2006) examined the questions asked by both patients and their companions in oncological outpatient settings. Their findings demonstrate that companions raised significantly more questions than patients in medical interactions. Most of the questions were related to treatment, diagnostic testing, and prognosis. No difference was reported in terms of the content of information sought by patients and companions.

Street and Gordon (2008) reported some contradictory findings in their study of lung cancer patients. The average age of patients with and without companions was 65.4 and 67.1 years, respectively. Medical consultations were recorded and coded. Their findings demonstrate companion passivity in nearly half of the recorded interactions. In addition, their study also reveals more active patient participation in questioning of patients accompanied with companions than those without, indicating a facilitative role of the companion in medical interactions. In a more recent review, Laidsaar-Powell *et al*. (2013) reviewed 52 studies of triadic medical consultations in different disease contexts and concluded that the presence of a companion can be both challenging and helpful. Discrepancies in relation to participants' communication were reported, including the information seeking behaviors. According to Laidsaar-Powell *et al*., the seriousness of the disease conditions may also affect the involvement of patients and companions in triadic interactions. The discrepancies in previous research thus provoke the need to examine participant communication beahviors in different disease conditions for the understanding of patient expectations and the effectiveness of the medical outcome.

Information giving

Another instrumental behavior widely examined in the literature is doctors' information giving on medical-related issues. Doctors' information giving relates to the third function of the Three-Function Model, which includes patient education, treatment negotiation, and the management of patient commitment to treatment plans (Cole & Bird, 2000). Street (1991) rightly states that informing the patient is the paramount responsibility of health professionals. This imparting of knowledge has been suggested by prior research as an important component of doing "collegiality" (Roter & Hall, 2006: p. 14), enhancing patient compliance to the recommended treatment (Davis, 1968; Hall *et al*., 1988), and improving patient satisfaction (Comstock *et al*., 1982; DiMatteo *et al*., 1980; Hall *et al*., 1988). Despite the key value of professionals' information sharing, a frequent criticism of health professionals is their under-estimation of patients' need for information (Frosch & Kaplan, 1999; Gordon, Smith, & Dhillon, 2007; Ong *et al*., 1995; Robinson & Thomson, 2001). In a survey of patient preference for doctors' information disclosure, for example, the majority of the participants stated that doctors were "never justified" in withholding any information (Ziegler *et al*., 2001: p. 706).

Doctors' information withholding is particularly observed and intensively discussed by studies in doctor-older cancer patient interactions (Chen *et al*., 2009; Houldin & Wasserbauer, 1996; Puts *et al*., 2012). In an earlier systematic review, Chouliara, Kearney, and colleagues (2004) summarized the findings of eighteen studies using various methodologies and concluded that while older patients were in general content with the information provided by their care-providers, they were not entirely satisfied with the amount and the quality of the information received during their medical consultations. These patients reported some unmet information needs such as information on diagnosis and treatment progress. In a more recent view of unfulfilled needs of older cancer patients, Puts *et al*. (2012) noted a high level of unmet needs in these patients and that the most common were psychological information needs as well as the needs in the physical domain.

Another pervasive finding in the literature is the variation of doctors' information giving to patients. Put differently, doctors are more informative with some patients than with

others (Street, 1991). One of the variables that might affect doctors' information giving is patient age. In an earlier yet widely-cited study of doctor-older patient interaction, Adelman, Greene, and Charon (1991) noted a marked age-related differenece in information giving. A total of 44 patients were recruited and divived into two groups: the older (65 years and over) and the younger (45 years and younger). Consultations were recorded and coded. Their findings demonstrate that compared with their older cohorts, younger patients received more comprehensive and complete information for several reasons. According to Adelman *et al*., younger patients were better at questioning than their older cohorts, which can be partially accounted for the better quality of information they received. In addition, the less assertiveness of older patients might mislead the doctor to consider those patients lack of interest or desire for information. In their study, Adelman and colleagues expressed their objection towards this conception. They argued that rather than desiring less information, older patients lack sufficient skills and abilities to "articulate" their desire for information (Adelman *et al*., 1991: p. 142). Adelman *et al*.'s argument, however, was not supported by many recent studies which have provided ample empirical evidence on the less information need of older patients than younger patients (e.g. Galloway *et al*., 1997; Giacalone *et al*., 2007; Morrison *et al*., 2012). For example, Giacalone and colleagues (2007) found that elderly cancer patients prefer not to be fully informed regarding their illnesses. Similarly, Zeguers, de Haes, Zandbelt, and other colleagues (2012) found that patients who were older wanted less information than those who were younger. The discrepancy in these findings invokes the consideration of the socio-contextual factors (e.g. individual characteristics, doctor-patienet familiarity, and cultural differences) in the interpretation and understanding of patients' desire for information.

2.22 Affective behaviors

Affective (also known as socio-emotional, psychosocial, or relational) behaviors mainly refer to statements that carry "explicit" socio-emotional content (Hall *et al*., 1987: p. 401). The notion of explicitness is highlighted because these scholars considered that for every statement produced, it carries more or less socio-emotional concerns. Affective behaviors thus refer to behaviors aiming at establishing a positive therapeutic

relationship between the doctor and the patient (Bensing & Dronkers, 1992), and directed by the speaker towards the recipient "as a person rather than a case" (Ben-Sira, 1982a: p. 1015). They are appreciated through different parameters like empathy, encouragement, chitchats and a range of non-verbal behaviors.

While the instrumental style, in which doctors concentrate solely on patients' biomedical concerns has long been the established clinical style in WM practices (Ragan, 2000), scholars from diverging disciplinary fields underscore the equal importance of affective behaviors in affecting medical outcomes (Ben-Sira, 1976, 1980; Cole & Bird, 2000; Roter & Hall, 2006; Smith & Hoppe, 1991). For the most part, these studies either posit or demonstrate a strong association between health professionals' expression of affection, care, and concern and medical outcomes at different levels including the immediate patient satisfaction (Venetis *et al*., 2009; Wanzer *et al*., 2004), patient compliance (Kim *et al*., 2004), and patient post-visit recovery (Stewart *et al*., 2000). On the one hand, mounting evidence suggests a relationship between psychosocial strains and the onset and exacerbation of various diseases (Al'Abadie, Kent, & Gawkerodger, 1994; Cohen, Janicki-Deverts, & Miller, 2007). Stress such as family upsets, work and study demands are all possible explanations that lead to patients' distress. Relief from psychosocial burdens is thus considered as a remedy (Ben-Sira, 1982a). On the other hand, patients come to see their doctors not only for physical diseases, but also for psychosocial reassurance. This is particularly the case when the patients are aged who are more likely to raise psychosocial issues than younger patients (Greene, Adelman, Charon, & Hoffman, 1986).

Prior studies on doctor-older patient communication are particularly illuminating to this thesis. Given the vulnerability of aging, growing evidence has suggested older patients' need for their doctors' care and concern, apart from the official task of cure (Greene & Adelman, 1996). Within the area of clinical psychology, Williams, Haskard, and DiMatteo (2007) discussed the nature and challenges of doctor-older patient communication and concluded that affective communication between doctors and patients are vital for the establishment of a therapeutic doctor-patient relationship, which

enhances patient adherence to the treatment plans. Within the areas of medical sociology and anthropology, Adelman and colleagues in a series of studies (Adelman, Greene, & Charon, 1991; Adelman *et al*., 1992; Greene & Adelman, 1996; Greene *et al*., 1986; Greene *et al*., 1994), for example, examined the topics raised in doctor-elderly patient interviews in primary care encounters. Their findings demonstrate a significant asymmetry between instrumental and affective communication. They also found that while doctors mostly initiate medical related topics, patients were more initiative in raising topics about psychosocial and relationship domains. Similar observations were also reported by Greene and colleagues (1986) in a comparative study. Their findings show that doctors communicated more affect when communicating with younger patients than they did with older patients.

Peck (2011), however, reported a reversed pattern. According to Peck, compared with doctor-younger patient interactions, doctor-older patient encounters feature more psychosocial talk. They concluded that older patients are more likely to engage in a patient-centered style of communication with their doctors than younger patients do. These contradictory findings could possibly be explained as a result of the employment of different research instruments in coding medical interviews as well as the differences in participant characteristics. In spite of this incongruence, one commonality consistently found in the literature is the smaller share of affective communication than instrumental communication in medical interviews.

Studies have consistently identified a positive correlation between patient satisfaction and doctors' affective communication behaviors (e.g. Aruguete & Roberts, 2000; Finkelstein *et al*., 2017; Greene *et al*., 1994; Hall, Harrigan, & Rosenthal, 1995; Ong *et al*., 2000; Wanzer *et al*., 2004). In a recent study, Kim, Kaplowitz, and Johnston (2004) examined the relationship between doctors' empathy and patient satisfaction and compliance in outpatient encounters including a wide range of disease conditions. Their findings suggest that compared with doctors' instrumental skills, patient compliance and satisfaction are more affected by doctors' empathy. Similar findings are also reported by

Ben-Sira in a series of studies (1980, 1982b), which suggested a correlation between patient perception of doctors' affective behaviors and patient satisfaction.

2.3 Doctor-patient communication and patient satisfaction in China

As noted, many early communication studies in relation to doctor-patient communication and patient satisfaction were conducted in US, Australia, and some European countries. In recent years, concern for medical communication in China has been fueled by an increasing realization of the sharp deterioration in doctor-patient relationship during the past decades (Liu *et al*., 2015). Medical litigations and violence have been constantly heard and reported. Many of the lawsuits were brought by providers' ineffective communication such as insufficient information provision (Ruan & Lambert, 2008). In a study investigating causes of medical litigations, Zheng, Deng, and Chen (2002) conducted a massive questionnaire survey in medical institutions of different levels over 326 cities and administrative regions in Mainland China. Their survey shows that more than 98% of hospitals have indicated that they had experienced medical dissensions with their patients. Causes of the increasingly unfriendly relationship between care providers and patients include, but are definitely not limited to, unfair allocation of medical resources, non-efficient doctor-patient communication, and lack of a sound policy and regulations (Liu *et al*., 2015; Wang, 2006; Zhang, 2011). The salient need to improve doctor-patient relationship has been widely acknowledged, therefore, by government, medical institutions, educational institutions, media, and general public. Many medical institutions have set up an independent doctor-patient communication office to deal with patient complaints and other related works. The appeal to build a harmonious doctor-patient relationship was also put on the agenda on the latest 13th Five-Year (2016-2020) Plan for Economic and Social Development of the People's Republic of China. To better understand this phenomenon, in this section, the topic of doctor-patient communication and patient satisfaction in China will be introduced.

2.31 Doctor-patient communication in TCM and WM practices in China

An influential study pertinent to medical communication in Mainland China is Gu (1996), which examined how doctors and patients attain their goals while building interpersonal relations over the discourse. By analyzing the recorded interactions and the follow-up interviews, Gu identified several differences between TCM and WM in relation to doctor-patient communication: (a) consultation processes – while both WM and TCM consultations have the four general stages of initiation, evaluation, decision-making, and prescribing, evaluation is not consistently observed in WM encounters; (b) continuity of care – the doctor-patient relationship in TCM encounters exhibit a continuity, as a TCM patient has to go through several continuous visits to the same doctor to finish the entire process; (c) coherent progression of treatment – TCM doctors tend to refer to previous consultation during a medical visit and subsequently base the current prescription on the modification of the previous one (see also Gu, 1999); and (d) more lifestyle information – TCM doctors tend to close the current visit with a piece of advice on patients' diet and lifestyle, which is absent in many WM interactions. One commonality between TCM and WM, as suggested by Gu, is the scarcity of small talk in medical interactions.

Chung and colleagues (2009) examined patient evaluations of medical communication in both western and traditional Chinese clinics in Hong Kong. Data was collected from a household survey conducted by the Census and Statistics Department of the local Government. People who were at least 15 years old and had received outpatient care within the past 30 days were considered eligible for the study. Questionnaires were distributed to collect patient perceptions about their doctors' communication behaviors in relation to attentive listening, information explanation, showing respect, and length of consultation. Their survey results indicate no marked differences between TCM and WM in patient assessment except in listening and showing respect. While TCM doctors are considered to have better listening skills, people complain that they have shown less respect to the patients compared with their WM cohorts.

In support of Chung and colleagues' (2009) observation, Wang (2010) reported similar findings in relation to the communication behaviors of both TCM and WM doctors in

Mainland Chinese hospitals. Through an interview of 26 adult patients, together with a three-month field observation of the medical encounter, Wang concluded that while WM interactions were featured by a lack of small talk, short visiting time (less than eight minutes), less doctor responsiveness to patient-initiated questions, and insufficient information provision, TCM visits demonstrate better doctor performance in attentive listening, information seeking, and patient observation.

While both Wang (2010) and Chung and colleagues (2009) reported high listening skills and low privacy of TCM doctors, their findings were built on patient recalls instead of observational data. Insights gained from these efforts are still limited. A more systematic analysis of the medical encounter is thus required to identify the subtle nuances in language features employed by both participants to construct the discourse and achieve their goals.

2.32 Doctor-patient relationships in China

Several studies have been conducted to investigate the doctor-patient relationship in China. Zhang and Sleeboom-Faulkner (2011) studied the tensions between care providers and patients in 60 hospitals across 10 provinces (about one third) in Mainland China. Around 80% of the medical care providers indicated a poor doctor-patient relationship. Half of the doctors had had the experience of being verbally insulted by patients or their families. Nearly 4% of the doctors reported personal experience of patient assault. Participants were also asked about their perceptions in relation to factors leading to the deteriorating doctor-patient relationship. Around 70% of the participants thought that it was the inadequacy of communication that should be blamed. Other factors include care-providers' malpractice, over-prescription and medical environment. Interesting to note here that, as stated by Zhang and Sleeboom-Faulkner, hospitals with higher rankings (Level 3 public hospitals) face the worst doctor-patient relationship. This finding is particularly inspiring to the present research. Given those better resources (e.g. well-trained medical staff, advanced instruments, and comprehensive care services), these hospitals are supposed to have better doctor-patient relationships. Threefore, it might be other factors that serve to explain the problem in these hospitals.

The present research extends knowledge in the nature of doctor-patient communication and patient satisfaction in one of such hospitals.

Lack of communication between doctors and patients was also observed by Wang (2010) in a cross-cultural study of doctor-patient communication between China and the United States. A total of 26 adult patients from different areas in Mainland China were recruited for a 40 to 60-minute interview. Analysis of the interview data suggested a lack of mutual trust between doctors and their patients. A scarcity of long-term doctor-patient relationship was identified and patient adherence to their recommended treatment was not consistently observed. The analysis also revealed that doctors in China lack good communication skills. Their interactions with patients are featured by (1) insufficient information exchange – they give perfunctory response to patient-initiated questions or even leave those questions unanswered; (2) a scarcity of shared decision-making in treatment regimen – it was found that one of the most frequently heard statements from the doctor was "Go get these done first" (p. 78); (3) absence of privacy and respect – doctors may ask private questions in front of a mass of patients; and (4) inadequacy of time – patients are dissatisfied with the time allowed to talk with their doctors. Whilst Wang's study is quite illuminating to the present research in understanding the similarities and differences between TCM and WM in relation to communication and patient satisfaction, one critique of his research is that the findings are based on self-reported surveys and interviews. While these measures are particularly useful in revealing patient perceptions, they are less effective in capturing the nuances of participants' communication behaviors. Also, since the WM data in Wang's study is collected in the United States, the differences between TCM and WM reported in Wang's study could be possibly a matter of cultural rather than clinical difference.

Wang, Zhang, and colleagues (2012) reported similar findings. These researchers investigated the doctor-patient relationship in a third-level referral general public hospital. They conducted a questionnaire study where 26 clinical departments were involved. Their findings reflect four predictors of patient dissatisfaction: length of visit, doctors' communication skills, doctors' ignorance of patients' needs, and the knowledge

gap between medical professionals and patients. A closer investigation suggested that nearly half of the patients thought that they had insufficient time talking with their doctors. One surprising finding of Wang and colleagues' study is the inconsistency between patient trust and doctors' perception of patient trust. According to Wang, only 5% of the doctors expressed their confidence in patient trust as opposed to the 96% of patient-indicated trust in their doctors. Wang's observation on patient trust is also inconsistent with prior studies which suggest a trust crisis between doctors and patients in Mainland China (Sun *et al*., 2008; Wang, 2009).

2.33 Patient satisfaction in China

While many studies on patient satisfaction have been carried out in the past three decades, there is a severe lack of investigation on patient satisfaction in China (Yan, Wan, & Li, 2011). One of the few exceptions is Wang (2010). According to Wang, patients in China are mainly dissatisfied with their medical care in three areas: high medical fees and charges, disparity in medical resources, and poor provide-patient communication (particularly in terms of respect, attitude, and privacy). Patients in Wang's study indicated a difference between general doctors and specialists in relation to communication. They commented that specialists are better communicators and more knowledgeable, although they spend less time on each patient. While Wang's finding on aspects of doctors' poor communication is indicative in understanding the nature of doctor-patient communication in China, the finding fails to provide real-life contextual evidence, e.g how respect is showed or avoided by the use of certain languages. Improvements on communication and subsequent patient satisfaction might be dewarfed without such investigations. The present thesis will thus extend knowledge in this area.

In a more recent study, Shi, Jiang, and colleagues (2015) carried out an online survey of public satisfaction on doctor-patient relationship. They surveyed more than one thousand general public. Their findings surprisingly showed that nearly half of the people surveyed were dissatisfied about the current doctor-patient relationship. Shi and colleagues' finding thus adds to the weight of previous argument for the need to improve doctor-patient relationship in China.

Yuan (2015) extended the investigation of doctor-patient relationship in China by identifying the domains of communication that Chinese patients are particularly critical. Their findings demonstrated that patients were particularly dissatisfied about the length of consultation, doctors' immediacy, and patients' attitude about their illness. The third dimension aimed to evaluate (i) doctors' information sharing and patient education and (ii) doctors' attentiveness to patients' psychosocial issues. Yuan's finding thus indicates that patient dissatisfaction was mostly related to the affective domain of communication.

2.4 A critique on current studies in doctor-patient communication and patient satisfaction

After a review of the literature, this section discusses two limitations of the literature in relation to doctor-patient communication and patient satisfaction: (a) insufficient understanding of doctor-patient communication and patient satisfaction in TCM and the clinical differences between TCM and WM and (b) a lack of a fine-tuned microanalysis of affective communication in medical encounters. At the end of this section, I discuss how the present research could extend knowledge in these areas.

2.41 Insufficient understanding of doctor-patient communication in TCM and and WM practices in China

While there is an extensive research on doctor-patient communication and patient satisfaction in the literature, most of these studies are situated within western medical practice. This leaves us with an unknown knowledge base about the communication in other medical practices that also exist in the broader healthcare market. Knowledge of the nature of provider-patient communication in these practices is equally important as patients seek healthcare from different providers.

Given the trend to combine TCM and WM in China and elsewhere, exploration of the differences in both types of interviews is thus necessary. Despite the few exceptional studies as reviewed in prior sections, little research is attempted to an exploration of the communication styles and language representations in TCM. For example, while Gu

(1996) discussed the medical discourse in TCM as a different goal-attaining routine from what is conventionally known in WM, the study provides no thick descriptions on participants' communication behaviors and their language features in TCM practice. Also, although the study discussed different ways through which doctors display an inclination to develop a positive relationship with their patients (e.g. tones and postures, and showing empathy), the study fails to provde evidence on either the language representations or the quantification of these behaviors.

Another exception is Wang (2010). This study is particularly insightful in relation to doctor-patient relationship and patient satisfaction in China. The study provides solid evidence, based on in-depth interviews, on patient evaluations of doctor-patient communication in both TCM and WM in China. Twenty-six participants of different age groups and professions participated in the interview. For a comparative purpose, Wang also conducted a questionnaire study among both Chinese and American participants. The survey includes 1097 Chinese and 1280 Americans in total. Wang's study provides a thoughtful analysis of the similarities and differences in relation to patient evaluations on various aspects of doctors' communication and the medical care. The study also provides evidence on the importance of professional affect in patient satisfaction. Despite these contributions, Wang's study is wholy based on self-reports with no attention to real-life communication. In addition, these self-reports were not collected immediately after medical visits. Thus, the reliability of these reports could be possibly thwarted by other factors such as incorrect patient recall and effectiveness of medical treatment. These critiques also apply to Chung and colleagues' (2009) population-based survey on the quality of communication in both TCM and WM practices in Hong Kong. While their study is particularly impressive in terms of the sample size, their findings on patient evaluations could possibly be influenced by other factors rather than communication.

Since exploration of patient satisfaction in doctors' communication is of limited value without an investigation of the language features of specific communication behaviors, there is a need of knowledge in this area in TCM practice. Also, clinical comparison in

relation to communication and patient satisfaction is less indicative without this knowledge. Understanding of the clinical differences in relation to communication styles may affect participant expectation and performance in clinical consultations and therefore patient satisfaction and adherence to the recommended treatment. The present research thus aims to gain better knowledge of the communicative styles in both TCM and WM encounters.

2.42 A lack of a fine-tuned microanalysis of affective communication in medical encounters

Studies have consistently demonstrated the importance of affective communication in patient satisfaction. Ben-Sira (1976, 1980) stated that since patients are not equipped with the necessary knowledge and expertise to evaluate doctors' instrumental skills, their evaluation of the medical care is largely dependent on their assessment of doctors' affective communication. Elsewhere (Ben-Sira, 1982a, b), he also noted that patients tend to seek alternative agent that satisfied their affective need when they are not satisfied with the instrumental skills of their current agent. Kim *et al*. (2004) also identified strong association between patient satisfaction and doctors' empathy. These studies clearly demonstrate the value of study on doctors' affective communication. However, compared with studies on instrumental communication, there are fewer studies on how affective communication is negotiated, encouraged, or avoided in medical interviews. Despite the few exceptions, these studies mostly use questionnaires or content analysis approach, with fewer efforts on the language representations of different affective behaviors. Knowledge of this area, however, is considered as indicative in understanding patient satisfaction and insightful for improvements in communication. The present research will thus concentrate on the negotiation of affective communication between doctors and patients in both TCM and WM and patient evaluations of their doctors' affective behaviors.

2.5 Chapter summary

The present review of research ultimately aims to identify the limitations of doctor-patient communication and patient satisfaction so as to provide soluations to overcome

the gaps in our knowledge. This chapter has discussed how types of doctor-patient relationships and communication behaviors affect patient satisfaction. The chapter also identifies limitations in current research, proposing the need to explore communication in other medical practices and comparing the clinical similarities and differences in relation to doctor-patient communication and patient satisfaction. The next chapter will address the research objectives, frameworks, and research questions underpinning the thesis.

Chapter 3 Analytical frameworks and methodological approaches

3.0 Chapter introduction

The broader area of communication, discourse, and sociological studies includes various theoretical paradigms and methodological frameworks that allow researchers to either thin-slice or broadly investigate human communication in different contexts. In the presence of the differences in the nature of inquiry, plus the variation in theoretical perspectives, the methodological approaches employed are equally varied from the fine-grained micro-analytic approaches such as ethnographic observation and the various types of discourse analysis to the more macro examination of communication e.g. meta-analysis of patient satisfaction. This chapter introduces the analytical frameworks based on which the present research is conducted and methodological approaches derived from these frameworks. The chapter also details the process of participant recruitment.

3.1 Research objectives

The primary research objective is to explore the similarities and differences between TCM and WM in relation to doctor-patient communication, and the impact on patient satisfaction. Three interdependent yet methodologically diverse studies will be conducted to:

(a) Explore the clinical similarities and differences in relation to participants' communication behaviors during medical consultations;
(b) Investigate how communication outside the biomedical domain is structured and enacted in different practices and how it may reflect the interpersonal relations between doctors and patients; and
(c) Examine patients' evaluations of doctors' communication styles and whether these evaluations correlate to global patient satisfaction.

3.2 Three studies

3.21 Study 1: Content analysis

A commonly used method to handle the interaction data is the application of certain content analysis schemes (also known as observation protocols or coding schemes) through which categorization of different communication behaviors is feasible (Koenig & Robinson, 2014). Studies within this methodological tradition collect authentic recordings (audio or video) of conversational interactions. Transcriptions may or may not be required.

Application of content analysis in healthcare studies was introduced by Barbara Korsch and her associates, whose early studies (Korsch, Gozzi, & Francis, 1968; Korsch & Negrete, 1972) furnish quantifiable evidence for medical interaction exchanges. Using Bales' (1950) Interaction Process Analysis, these scholars code the content of the interchanges between doctors and patients, and show evidence for patient reticence on raising questions despite the fact that they want much more information. As such, they had low satisfaction with their medical experience and tended not to comply with their doctors' recommended treatment. While it would be too biased to blame patients' non-compliance to low satisfaction as non-compliance could be a result of a complex interplay of different factors (e.g. patients' inability to understand the treatment regimen), these earlier scholarship by Korsch and associates provide empirical evidence on the applicability of interaction process analysis to the study of doctor-patient interaction.

There exist several coding schemes to describe the dynamics of the medical encounter such as Bales' (1950) Process Analysis system, Roter's (1977) Interaction Analysis system (RIAS), Stiles' (1981) Verbal Response Mode (VRM) system, and the Multi-dimensional Interaction Analysis (MDIA) developed by Adelman, Greene, Charon, and their colleagues in a series of studies (Adelman *et al*., 1992; Adelman, Greene, & Charon, 1991; Adelman, Greene, & Ory, 2000; Charon, Greene, & Adelman, 1994; Greene *et al*., 1986). These coding schemes are widely applied to the investigation of doctor-patient communication. While the four observational schemes and others not cited here vary in their units of analysis (utterances, interpersonal intent, syntactic unit, and topic), exhaustiveness of the behavior categories, and target participants (care-

providers, patients, family members), a commonality between them is that they allow a quantitative calculation of qualitative data by classifying different role behaviors. The relevance of these approaches to the present research will be explained below.

The Balesian approach examines how communication processes reflect the different ways in which people within a group participate in interaction (Roter & Hall, 1989). Twelve mutually exclusive types of behavior are categorized into two dimensions: task-oriented behavior and socio-emotional behavior. Studies using this approach find a significant co-relation between the socio-emotional behavior of a doctor and medical outcomes, as well as between the information-giving behavior of a doctor and patient satisfaction (Carter *et al*., 1982; Stewart, 1984). However, as it is based on literal transcripts, this approach has been criticized for not taking account of the content of the interaction (Heritage & Maynard, 2006). The Balesian approach has fallen out of fashion in recent years and has been modified and developed into other new systems (Bell & Kravitz, 2014), including VRM and RIAS.

The VRM system is a derivative of the Balesian approach, the taxonomy of which is built on interpersonal intent. It aims to evaluate the effect of an utterance in communication (Meeuwesen *et al*., 1991). Under the VRM mode, the verbal responses are categorized into 8 groups (disclosure, question, edification, acknowledgement, advisement, interpretation, confirmation, and reflection), each of which has its unique grammatical form (see Inui *et al*., 1982). One feature of the VRM system is that rather than focusing on the content of utterances, it concentrates on the intention or relational aspect of communication (Meeuwesen *et al*., 1991). While the eight behavioral categories are particularly effective in identifying and interpreting the speech acts of talk in interaction, it might be less informative in terms of the content of communication.

One system that was originally developed to examine doctor-elderly patient communication is the MDIA system (see Greene *et al*., 1986). The system was later modified and applied to medical interactions of all types. Rather than working on transcripts, it allows coding on audio-recordings. Topics observed in the real-life

interaction can be fielded into one of its 36 content categories. These content categories are further grouped into five domains of communication – medical, psychosocial, personal habits, doctor-patient relationship, and others (Adelman *et al*., 1991). The quality of the communication is assessed in three dimensions of communication – questioning, information giving, and supportiveness – over a 4-point Likert scale by the coder. The coder also needs to assess participants' communication behaviors over a 5-point Likert scale. While the content codes of MDIA are very informative in capturing the various topcis of doctor-patient interaction (e.g. different symptoms, stages of consultation), they are less effective in indicating the speech acts of utterances.

In the current research I will use RIAS - a modification of the Balesian one. The rationale behind this choice comes from the fact that instead of coding from literal transcripts as the Balesian does, it deals directly with audiotapes, and therefore adds the tonal indicator in content analysis. Determination on coding audio-tapes by RIAS is based on its distinction between instrumental and affective behaviors (Roter, 1997b; Roter & Larson, 2002), which addresses equal weight to both the biomedical and relational aspects of communication. Also, by capturing specific verbal behaviors (e.g. doctor's information collection on medical condition), RIAS allows a detailed categorization and analysis of participants' interaction at both micro (comparison of specific behaviors) and macro levels (comparisons at a broader level). Heritage and Maynard (2006) contended that RIAS is by far the most influential and widely used coding scheme. Its reliability and content validity has also been examined broadly in different clinical settings including primary care (Roter & Larson, 2001), obstetrics and gynecology (Roter *et al*., 1999), oncology (Ong *et al*., 1998), emergency care (Wissow *et al*., 1998), and pharmaceutical care (Pelicano-Romano *et al*., 2013), and specific diagnostic categories such as asthma and diabetes (Roter and Larson, 2002). Detailed coding methods and illustration of examples will be discussed in Chapter 4.

In addition to the direct use of audiotapes, there are other reasons for using the system. A comparison of the three systems of the Bales' process analysis system, the VRM, and the RIAS was conducted by Inui *et al*. (1982). These researchers examined the

appropriateness, applicability, and explanatory power of the three systems across 101 clinical visits. While for Inui and colleagues, none of the three systems look ideal for the study of doctor-patient encounters, they concluded that among the three systems, RIAS is "best suited to clinical encounters" (p. 548), possibly because of its efforts in capturing different verbal behaviors within the instrumental domain of doctor-patient communication. Also, RIAS was found to be stronger in explaining medical outcomes such as patient knowledge and compliance. Despite its wide use among many sociological research, it is clearly deficient in considering communication as a dynamic, situated, and jointly accomplished activity. A more detailed discussion of RIAS as an observational tool and analytical framework including its strengthes and weaknesses in explaining what is going on in the medical encounter will be provided in Chapter 4.

Advantages of the content analysis approach include its applicability to both verbal and nonverbal behaviors, its effectiveness in understanding the process of interaction through the unfolding of behaviors (Bakeman, 2000), and its capacity to reduce a great amount of qualitative data into smaller and manageable segments that can be aggregated for generalization (Smith, 2000). A well-noted critique for this analytic approach concerns its lack of consideration about the contextual grounds of the communication behaviors, trade-offs of nuances (e.g. conversational pauses, cut-offs, and interruptions) in the process of quantification, and failure to clarify the deeper structures of spoken discourse (Waitzkin, 1990). To compensate these limitations, a more micro-level yet fine-tuned analysis employing discourse analytical approaches will certainly benenfit the understanding of the dynamics of talk in situated interactions. Insofar as this incapability to capture the richness of interpersonal interactions, this approach provides a fundamental basis for objective description of the medical encounters (Stiles & Putnam, 1995).

3.22 Study 2: Discourse analysis

While study 1 provides a macro-level yet systematic description of participants' communication styles in real-life medical encounters, the intricacies in participants' communication (e.g. the placement and functions of an utterance) are not spelt out.

Given the dyadic nature of medical consultation, analysis informed by various discourse analytic approaches could certainly benefit the understanding of medical communication as a process. Two types of communication behaviors (lifestyle communication and non-medical social talk), both belonging to the affective/relational domain of communication (See Roter, 1977), were examined in study Two. The motive to investigate behaviors at these two levels is based on findings of study One (to be discussed in detail in Chapter 4). This data-driven research design is made based on a consideration of the lack of knowledge of doctor-patient communication in TCM. Given the overarching aim of the thesis, plus the explorative nature of study One, this design could be possibly more informative in revealing the dynamics in participants' communication.

Communication at the level of lifestyle and non-medical small talk are further studied to examine their structures, sequential consequences, discourse and psychological functions, and most importantly how interpretations of these features and functions reflect the underlying interpersonal relationships between interlocutors. To attain this goal, different analytical frameworks and analytical tools must be applied. Examples were provided for illustration. In each case D is the doctor and P the patient.

3.22.1 Conversation analysis

Conversation analysis (CA) is one approach within discourse analysis that studies the "organization and orderliness of social interaction" (Liddicoat, 2011: p. 7). With a deep root in sociology, it is one of the most widely used approach among studies within the field of medical sociology (e.g. Heritage & Robinson, 2006; Robinson, 2011; West, 2006). Inspired by the work of Harold Garfinkel and Erving Goffman, Harvey Sacks and his collaborators developed CA in the early 1960s in their study of phone calls in a Suicide Prevention Center (Schegloff, 1995). Drawing from ethnomethodology, CA adopts a bottom-up approach to research and theorizing (Clayman & Maynard, 1995). As a study of talk-in-interaction, it is now one of the most influential approaches for the analysis of social interaction (Robinson, 2011).

From a social constructionist stance, CA considers communication as a joint activity that is co-constructed by interactants. The fundamental objective of CA is to explore the competencies of individuals to co-construct mutually intelligible social interaction (Heritage, 2003). Basic assumptions underlying this objective are that on the one hand, there is a common sense understanding of the social world that guides people to make sense of their experiences; and on the other hand, the employment of a CA approach requires the naturally occurring conversational data based on which orderliness of talk can be defined. With such a specimen approach (Alasuutari, 1995), it allows order to emerge from the data. The value of recorded materials has also been highlighted in an interview with Schegloff who stated that without audio recording, his idea of turn-taking would not have thrived (Čmejrková & Prevignano, 2003). Unlike other data collection methods (e.g. survey and field notes) that can involve some loss of potentially important information, recordings are primary data that can be listened to repeatedly.

Traditions of using CA to investigate medical interactions date back to the late 1970s when a group of scholars showed interest in studying the interactions in the medical encounter (e.g. Atkinson & Heath, 1981; Beckman & Frankel, 1984; West, 1984). These scholars offer a systematic way of analyzing medical encounters at three levels: (i) the overall structural organization of the medical encounter; (ii) the organization of sequences built upon which a particular medical activity is accomplished; and (iii) the turn-taking structure that forms the basis of the organization of sequence (Heritage & Maynard, 2006).

Seminal studies using CA in medicine includes Frankel's (1984) observation of the sequential organization of medical encounters. Frankel's study illustrates how CA could be applied to medical discourse for the examination of speech orderliness (e.g. speaker transition, question-answer pairs, conversational repair and restore, and third-turn assessments). According to Frankel, medical discourse features a consistent question-answer pair with the doctor taking the first pair part and the patient taking the second pair part. He also found that unlike casual conversation, where there is an equal opportunity for each participant to complete their utterances, patients more often

relinquish the floor to their physicians than do physicians to patients in overlapping talk. Apart from time orderliness, Frankel also explores a specific type of sequential component – the third turn option – added normally to a complete adjacency pair. In conversations, third turn options usually function as an assessment, a comment, or an acknowledgement of the previous content and can be initiated by both interlocutors in a dialogue. In his observation, Frankel identified a skewed distribution of the use of third turn options by doctors, frequently in the form of acknowledgement.

West (1984) nicely demonstrates the effectiveness of CA as an approach to understand the clinical visit as a socially organized interactive event. By focusing on the "systematics of producing utterances, sequences of utterances, and other nonverbal expressions" (West, 1984: p. 49), she aimed to uncover the way that participants manage their behaviors and understand those of others in medical encounters. In her analysis of medical discourse, she provided an elaborated account of the interactional organization of turn-taking, interruptions, question-answer pair, and social exchanges such as laughter. Drawing on Frankel's findings on the dispreference of patient-initiated questions, West analyzed how question-answer sequences were co-constructed by participants and finally concluded that the construction of the asymmetrical initiation of questions was the result of joint production by both participants in medical consultations.

Drawing on the conclusions of those pioneering studies, recent researchers have looked more closely at how conversationalists jointly orient to the social interactional organization of medical activities such as treatment decision-making and problem presentation. These studies aim to discover how participants mutually understand and are guided by a set of norms in the construction of different medical activities. For example, Robinson and Heritage (2006b) described how problem presentation is co-constructed by both doctors and patients, and how this activity is guided by the social interactional organization in several aspects of conversational features.

In a similar fashion, and in support of the view that both conversational activities are guided by the norms of social interactional organization, Koenig (2011) demonstrated

how both participants orient to patient acceptance before closing the current treatment decision-making practice. In his study, patient passive resistance (e.g. non-responding) to the recommended treatment was considered as a violation of the temporal and sequential orderliness of turn-at-talk. Therefore, this patient resistance was considered a resource built upon which more elaborated professional account was provided, and greater patient agency was negotiated on a turn-by-turn sequence over medical conversation.

In summary, previous medical CA studies have advanced our knowledge of the organization of medical encounters and conversationalists' conduct that are shaped by the institutional and interactional norms specific to medical activities. Given the differences between TCM and WM (Chapter 2), CA is considered particularly informative in analyzing the present data. As noted by Drew and Heritage (1992), the analytic approach of CA for the analysis of institutional talk focuses on the organization and accomplishment of social actions in situated settings. It allows, therefore, the institutionality to be substantiated through the sequential structures of talk.

Inspired by these earlier studies, in the qualitative analysis of both biomedical and affective domains of communication in both TCM and WM, CA was borrowed to (1) examine how various characteristics of talk (e.g. turns, sequences, lexical choices, overall structures, and sequential consequences) are accountably developed by both doctors and patients in the medical encounter (Clayman & Maynard, 1995; Sacks, Schegloff, & Jefferson, 1974); (2) discuss the various strategies used in information exchange; and (3) account for the social interactional norms in different clinical practices that guide participants' activities.

In my proposed research I will audio-record all medical interviews and transcribe them according to the CA convention developed by Gail Jefferson (1984, 2004). Given the differences between Chinese and English in syntactic structure, transcription notations will be made to the source language and the literal transcriptions, but not to the liberal transcriptions. The CA convention of transcribing conversational data transcends the

limitations of content analysis approaches by attending to the sequential context and conversational nuances such as interruptions, pauses, laughter, and speed.

3.22.2 Frame analysis

The concept of frame or framing was introduced by Bateson (1972) and later developed by Goffman (1986) to refer to the basic elements of experience for organizing and making sense of social events. According to Bateson, not only human beings but also animals use signals to interpret each other's behavior. To him, the notion of frame is a psychological concept that explains "how individuals exchange signlas that allow them to agree upon the level of abstraction at which any message is intended" (cited from Tannen, 1993b: p. 18).

Bateson's (1972) approach was quickly taken up and further developed by scholars in communication, psychology, and sociology including Goffman (1986). Goffman's study is a systematic work on the terms, concepts, and the different ways in which strips of experience are transformed to laminate frame. According to Goffman, the interpretation of social events reflects the primary frameworks that people adopt in their understanding of such events. Two broad categories of primary frameworks are natural frameworks and social frameworks. Natural frameworks, as the name suggests, help identify unguided and completely physical events with no human involvement, the occurrence of which are unperceivable and due to natural factors (e.g. weather). Social frameworks describe the intentions of social agents, of "guided doings" (Goffman, 1986: p. 22) (e.g. how the media reports the weather). In provider-patient communication, while a molecule change that causes the disease is natural, the way people undertand and interpret it is considered as a reflection of the social framework. By identifying frame, people answer questions such as "what is it that's going on here" (Goffman, 1986: p. 8). Frame thus describes the implicit rules that shape the meanings generated within the situational event (Berger, 1986). Berger noted that it is "a metaphor for what other sociologists have tried to invoke by words like 'background', 'setting', 'context', or a phrase like 'in terms of'" (p. xiii). For example, a person sitting on a chair with cola and popcorn in his hands might evoke the frame of a movie watching experience. In this

sense, frame is metacommunicative in that it provides the listener with instructions in his/her interpretation of the messages generated within the frame (Bateson, 1972). Frame not only shapes meaning but also organizes the involvement of individuals in the interaction (Goffman, 1986). For instance, frames like classrooms prescribe different involvement between teachers and students in terms of how deeply and fully they are to be carried out into classroom activities.

Frame can be identified by footing – the "alignment, or set, or stance, or posture, or projected self" that participants "take up" to themselves and others in the giving and receiving of messages (Goffman, 1981: p. 128). During the course of interaction, participants may change their footing and hence, they change the frame for the ongoing activity. In the chapter entitled 'footing', Goffman demonstrates how participants constantly change their footing (e.g. tones, postures, or giving up the floor in a conversation) and how such changes feature the nature of natural talk. Likewise, in medical talks, participants may change footing, through different "cues and markers" (Goffman, 1981: p. 157), and align themselves to different roles in talk. For example, Roberts and Sarangi (2005) demonstrated how the doctor's comment on the mother's young daughter, during a physical examination of the baby, introduces the frame of chat, and how this doctor-initiated chat also shifts the current footing to reflect a more equal doctor-patient relationship.

Frames can also be identified through contextualization cues – any linguistic feature such as code-switching, lexico-grammatical choices, and sequencing that signals the contextual presuppositions of a speech activity (Gumperz, 1982). This notion of speech activity is considered a type of frame. Therefore, the frame theory lies at the core of interactional sociolinguistics (Tannen, 1993a). In his theory of conversational inference, Gumperz (1982) shows that it is through these contextualization cues that conversationalists are able to make indirect inferences of what is going on here. Thus, the examination of contextualization cues could uncover the underlying frame of the medical encounter that guide participants' behaviors in interaction. For example, Beck and Ragan (1992) discussed how both nurse practitioners and patients repeatedly use

different cues such as verbal hesistations and laughter to indicate a temporary shift from the current medical frame.

Frame analysis has been successfully applied to studies in healthcare contexts and is highly applicable to the proposed research (e.g. Tannen & Wallat, 1993; Ribeiro, 1993; Walsh, 2007). Two widely explored frames are (a) institutional and biomedical and (b) interpersonal and psychosocial frames. Coupland and colleagues (1994) examined the negotiation between doctors and patients on entering a biomedical frame of talk in the opening phase of geriatric interviews, focusing in particular on sequences generated by doctors' 'how are you' -type elicitations. In their findings, they demonstrated differing framing priorities between geriatric professionals and patients. They noted that insofar as the holistic nature of geriatric medicine is concerned, health professionals tend to foreground the social-relational frame by encouraging patient disclosure over a wide range of aspects in their life during medical openings. The patients, however, are more prepared to develop talk on the biomedical agenda. Similarly, Sarangi *et al*. (2011) discussed how, in genetic counseling sessions, clients' psychosocial concerns are interactively accomplished by psychological and sociomoral frames. Their analysis exemplifies how genetic counselors invite their clients into decision making by "strategically interweaving" psychological and sociomoral frames over the course of the counseling session (p. 235). Insipired by these studies, I use this approach to examine participants' orientation and understanding of the talk in interaction.

Note that frame analysis also offers insights on and is illuminated by an investigation of the power relations between conversationalists, especially within the workplace. Unlike everyday conversation, the right to announce a shift in frame usually lies at the hand of those more powerful participants. For example, in workplace meetings, the right to declare the start of the meeting and the end of the social talk is determined by the meeting chair or the manager (Holmes & Stubbe, 2015). In clinical discourse, Ribeiro (2003) argued that while the institutional frame in a clinical consultation features asymmetry as all participants remain in the institutional frame pre-determined by the doctor, the interpersonal frame features more balanced power relations. She pointed out

that it is mostly the patient who proposes the interpersonal frame. In her analysis of frame shift over a discharge interview, Ribeiro illustrated how the patient uses various discursive strategies to (e.g. topic shift) propose a reframing from the asymmetrical institutional frame to a more balanced interpersonal frame. As such, the patient navigates a transition from the "sick" role (Parsons, 1951) to the role of a person (Mead & Bower, 2000a). The doctor, however, resumes his control by shifting back to the institutional frame. Similar to Ribeiro's observation, Walsh (2007) discussed how health professionals' institutional power is co-constructed by both the doctor and the patient: the doctor claims his power by gradually shifting from the socio-relational frame to the biomedical frame; the patient acknowledges the doctor's power by aligning himself to the frame shift. Another way to examine power is brought into focus by the critical tradition of communication.

3.23 Study 3: Questionnaire survey

While all the social research methods can be and have been used to measure patient satisfaction (Smith, Schüssler-Fiorenza, & Rockwood, 2006), the one most commonly adopted by researchers is perhaps questionnaires. As a standard method for data collection and the most widely used tool in quantitative studies (Rasinger, 2008), questionnaires are widely adopted in social science research. Three types of data can be generated through questionnaires: demographic, attitudinal (e.g. preference and judgment) and behavioral (e.g. habits and personal experience) (Dörnyei, 2007). In my proposed research, I use questionnaire to collect both demographic and attitudinal data for the investigation of patient evaluations about their medical visits.

Similar to studies in other fields, studies in health communication either adapt a standard questionnaire that has been tested in terms of validity and reliability or design their own. While questionnaires seem to be a valuable tool for many researchers, the design of a successful questionnaire is very complicated. Issues such as length, format, organization, validity and representativeness must be taken into account before distribution. In empirical research, the persuasiveness of questionnaire findings is to some extent contingent on researchers' sampling decisions (Dörnyei, 2007). One concern here is the

optimal sample size, which is dependent on various factors including the research aim, the sampling strategy as well as the research methodology (Guthrie, 2010). A widely quoted suggestion is 'the larger the better', which is in fact incorrect. Central here is the issue that the selected sample size should be sufficient enough to achieve a representative account of the population under research (Milroy & Gordon, 2003). Sankoff (1980) suggested three types of decisions to be made in sampling: (1) to define the social context which the researcher is interested in; (2) to assess the sociolinguistic, geographic, and social dimensions within this context – stratification of the context; and (3) to decide the number of participants and materials. Given the sensitivity of the hospital environment as well as the possible depressiveness of patients seeing doctors because of physical ailment, I will use a questionnaire restricted to one page in length. Participants will be distributed with questionnaires immediately after their medical consultations.

Once sample size has been decided, the next step is to determine an appropriate sampling strategy. Two broad types of sampling strategies are probability sampling (including random sampling, stratified random sampling, and systematic sampling) and non-probability sampling (e.g. quota sampling, snowball sampling, and convenience sampling) (Dörnyei, 2007). Probability sampling is preferred, as it can generate representative samples of the population of interest. However, one logistic question to be taken into account here is that sometimes researchers may not be able to access the data. In the present hospital setting, access to the target samples requires special approval from the hospital administration staff. Given the complexity of hospital access and the sensitivity of the data, it would be more appropriate to use convenience sampling in the proposed research.

3.23.1 Measurement of patient satisfaction

Despite the heterogeneity of questionnaires to evaluate patient satisfaction, most of them are fielded for one of the two purposes: (1) to evaluate health professionals' quality of services; and (2) to predict health and illness behaviors on the assumption that variation in patient satisfaction will lead to different behaviors (Ware *et al*., 1978). For the

purposes of this project, I will focus on questionnaires aimed to assess the quality of medical service.

The study will use Burgoon and Hale's (1987) Relational Communication Scale (RCS) to assess patient satisfaction from a broad perspective. RCS was developed by reviewing all the other measurements in prior studies and sifting from them concepts and wording appropriate to relational communication (Burgoon & Hale, 1984, 1987). The resultant scale contains initially 32 items scored on a 7-point Likert scale and ranged from 1 (strongly agree) to 7 (strongly disagree). Items were factor analyzed into 8 components: dominance, non-immediacy, honesty, formality, intimacy, similarity/receptivity, task or social orientation, and arousal and intensity of involvement. However, these investigators considered that these 32 items failed to cover all the dimensions of relational communication or to reflect the diverging themes of either positive or negative valence. Thus, they expanded the initial 32 items into a 68-item scale, with an addition of 4 new items and the polar opposites of the initial 32 items. The 68 items were factor analyzed into 9 components, with the omission of honesty, and an addition of composure and persuasion/ingratiation. In spite of the high reliabilities of each sub-scales of the 68-item scale, to reduce the items to a manageable size, these investigators eliminated items with weak loadings or communalities and recommended a 30-item scale. Items were factor analyzed into 8 components (see Burgoon & Hale, 1987). Strong validity and high reliability were reported. Gallagher, Hartung, and Gregory (2001) claim that the RCS is "the only extant instrument developed explicitly to measure the relational communication aspects of the doctor-patient interaction" (p. 212).

RCS has found wide applications and adaptations in subsequent studies. Burgoon *et al*. (1987) proposed a short form of RCS, which contains only 14 items. Items were fielded into 6 domains of relational communication: (a) immediacy – the extent to which closeness and distance are expressed, (b) dominance – the degree to which equality and mutuality is demonstrated, (c) formality – the extent to which medical interviews are either formal or informal, (d) receptivity – the extent to which openness is expressed and rapport is shown, (e) composure – whether the participant is anxious or composed, and

(f) similarity – the degree to which one feels similar or different in terms of values and attitudes. Wang (2010) applied this RCS-14 to a cross-cultural study of doctor-patient interactions, with both Chinese and American samples. Coefficient alpha for each sub-scales were reportedly high. Reliability assessments for both Chinese and American samples generate satisfactory results.

The applicability of RCS is also evidenced by Gallagher and colleagues' (2001). They used the scale as an observational instrument (RCS-O). The RCS-O contains the same sub-scales as the RCS. Internal consistency and construct validity were reportedly high, except the component of dominance. Similarly, inter-rater reliability scores were satisfactory except dominance. Explanations for the relatively poor performance of dominance are provided by the investigators: on the one hand, some of the scale items in relation to dominance are not measuring dominant behaviors but instead attempts at dominance; on the other hand, while dominance supposedly occurs with submission, none of the scale items examine patient submission. Gallagher and colleagues thus considered the relatively poor performance of dominance scale being attributable to the "nature of dominance in relational communication" (p. 216). They concluded that given the excellent performance of the RCS-O in general, and its consistence with the patient-centered model of doctor-patient relationship, the RCS-O effectively examines the affective aspect of the doctor-patient relationship. In addition, it also meets the challenges of transmitting from "conceptual underpinnings" of relational communication to "operational indicators" that can be observed and measured (Gallagher *et al*., 2001: p. 216; Roter, 2000: p. 8).

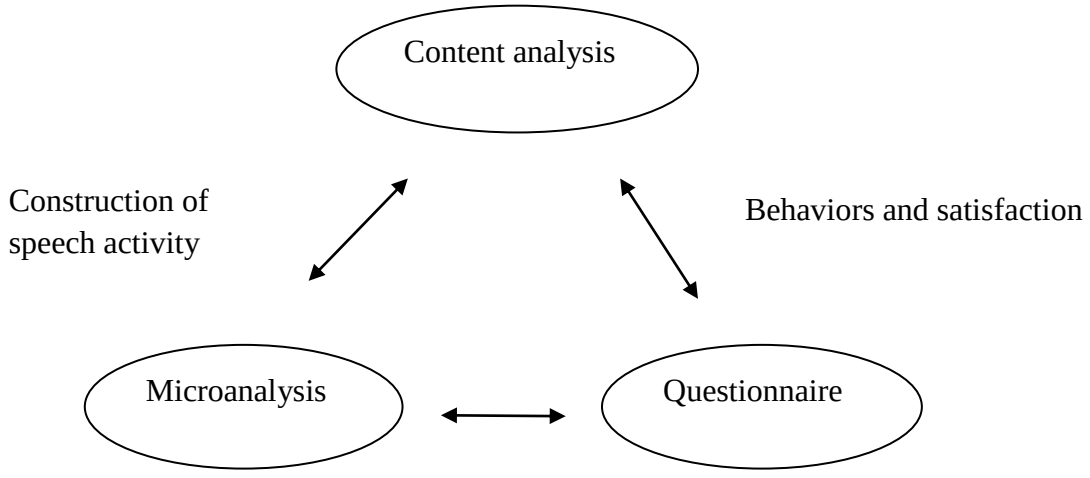
3.23.2 Social interaction theory

The proposed study will use Ben-Sira's (1976) social interaction theory (SIT) to explain any variations in patient evaluations and global satisfaction between TCM and WM visits. Ben-Sira's SIT highlights the importance of doctors' affective behaviors in patient evaluations of their medical care. Bne-Sira argues, drawing on prior presuppositions on the role of affective communication in doctor-patient relationship, that patients' evaluations of their medical care are highly contingent upon doctors'

affective communication. According to Ben-Sira, patients visit their doctors with two goals: a manifest biomedical goal (i.e. to have his/her physiological disturbance relieved) and a hidden affective goal (i.e. to have his emotional disturbance such as anxiety and upsets solved). This theory is later supported by empirical evidence on the role of affective communication in affecting patient satisfaction, as reviewed in Chapter 2. A more detailed discussion of this theoretical framework will be provided in Chapter 7.

3.3 Integrating different methods

Three different methods will be used: content analysis for a comparison of communication behaviors, qualitative analysis of medical consultations drawing on different analytical frameworks, and questionnaires on patient satisfaction over a range of relational dimensions in medical communication. The employment of different approaches aims to investigate the issues under discussion from different lenses. Also, taking stock of the strengths and weaknesses of different analytic approaches to medical discourse (e.g. a lack of contextual information for content analysis, a failure to generate sysmtematic and replicable results for qualitative discourse analysis), the methodological triangulation deployed here could possibly result in a richer description of the medical encounters.



Bearing the three research objectives in mind, the overarching aim of this investigation is to explore the similarities and differences between TCM and WM in relation to doctor patient communication. The combination of multiple methods thus allows us to investigate (1) how certain speech activities are co-constructed by both doctors and patients during the process of medical interview; (2) whether the (non-)occurrence of a particular communication behavior might be related to patient satisfaction; and (3) whether participants' ways of talking/communication styles could explain the variations in patient satisfaction.

3.4 Data collection

In this section, I address ethical issues and methodological concerns including sampling strategy, participant inclusion and exclusion criteria. Given the environment of hospital settings as well as the sensitivity of the data, a primary challenge for researchers is gaining access to both the hospital and the informants. Issues like patient willingness of participation and information disclosure and withholding also raise the complexities of the data collection process. The section begins with an introduction of the medical system in China for a general understanding of the broader social background of doctor-patient interaction. The final part of this section describes the key considerations and challenges in data collection.

3.41 Co-existence of TCM and WM

The healthcare system in Mainland China features a co-existence of two medical practices: TCM and WM. The classic bible of TCM – *Huangdi Nei jing* (translated as 'The Yellow Emperor's Classic of Internal Medicine' in some places) – was written thousands of years ago (Xu & Yang, 2009). As the earliest extant contribution of TCM, it describes extensive types of physical disorders including diagnosis and treatment and provides a range of dietary advices and lifestyle suggestions on disease prevention (Hesketh and Zhu, 1997).

TCM is based on a pathology, etiology, and philosophy that are drastically different from those of WM. Built on the Chinese philosophy of *Yin-Yang* and Five Elements (i.e.

wood, water, metal, earth, and fire[1]) (Xu & Yang, 2009), TCM treats the human body as a holistic unit, emphasizing thus the integrity of physical organs and their relationships with the outside environment (Luo, Xu, & Chen, 2013). Thus, a physical disorder in any part of the body could be caused by a combination of internal and external disturbances, and it could also further influence the rest of the body. As Lu and colleagues (2004) rightly put it, TCM highlights the "pathogenicity of social and natural factors" (p. 1855).

TCM features a distinct way of giving diagnosis. A typical TCM diagnosis involves five stages namely (a) *wang* (inspection), for example, by examining the patient's tongue color and countenance, (b) *wen(2)* (auscultation and olfaction), for example, by detecting the patient's breath and listening to the patient's vocal sound, (c) *wen(4)* (questioning) - a stage when patient information is elicited, (d) *qie* (palpating the patient's pulse rate), and finally *zhen* (diagnosis) (Gu, 1999). In the past, TCM diagnosis was solely based on these close interactions between doctors and patients with no reference to scientific reports. In recent years, TCM diagnosis may also, though optional, make reference to these scientific evidences. In addition, rather than making immediate treatment or cure of the disease, TCM highlights the role of *Tiaoli* – a slow recuperative process that is largely continent upon diet and exercise.

TCM also differs from WM in relation to the type of medicine. While WM medicines contain chemicals, typical TCM prescriptions are made of natural products including herbs, minerals, and some animal sources (Chan, 1995). Different natural products are combined *ad hoc* to individual symptoms. Thus, it could be possible for a patient to have TCM treatments of different combinations in several continuous visits, whereas patients visiting WM doctors for medication refills usually have the same medication as the one in prior visits. This is particularly so when patients are chronic-diseased.

[1] The five elements is a traditional Chinese philosophical theory used to explain the natural characteristics and changes. These five elements are categorized to represent the nature of natural phenomenon. The theory highlights the connection and interaction between each element. Readers are recommended to Chan (1995) for detailed discussions of the theory.

Given these differences between TCM and WM, while WM is most often used for identification of the cause of the disease and immediate treatment of the illness, TCM is more preferred for recuperation and clearing the cause of the condition – to "cut the tail of the illness" (Lam, 2001: 763). As no side effect is claimed, and with an increasing number of studies and news reports identifying the effectiveness of herbal medicine on illnesses such as cancer (Efferth, Konkimalla, & Kaina, 2007; Mori *et al*., 2003), it is fairly preferred by elderly patients.

3.42 Hospital settings in China

Hospitals in China are either state-owned or private-run. Most state-owned hospitals have adopted both TCM and WM practices. These hospitals also have independent dispensary for TCM, WM and patent medicine.

Given that state-owned hospitals are famous for their comprehensive medical care, advanced medical instruments for identifying the causes of disease, and well-trained and experienced medical staff, these hospitals normally have a heavy patient load. Doctors in these hospitals are quite busy. Patients have to spend a great amount of time waiting for their turn. According to Lei and Jiang (2006), hospitals in China feature a phenomenon of "三长一短" (p. 74) – lenthy registration, payment, and waiting and short consultation. Also, as noted by Wang (2010), doctors' salary in China is affected by the number of patients they see. This could possibly be one of the factors that lead to a cut back in the length of visit.

Unlike many other countries, there is no general practitioner in Chinese hospitals. Patients go directly to the hospital and decide, based on their own knowledge, an outpatient department suitable for them. The function of the outpatient department is therefore similar to that of general practitioner (Hougaard, Østerdal, & Yu, 2011). Each outpatient department provides both specialist and non-specialist services. Usually, the specialist has an independent consultation room. However, some doctors may share the same consultation room. In that case, patient privacy is low, as patients seeing different

doctors congregate into the same consultation room and talk about their medical experiences.

Another interesting phenomenon in medical interviews in China is that while there is a waiting area outside each clinical department, many patients prefer to wait inside the consultation room. Interesting to note here is that patients waiting for their turn talk with their families and other patients as well in the consultation room. In most cases, patients share their medical experiences and previous treatment regimen (see also Gu, 1996; Wang, 2010). Therefore, the environment within which the present medical interview is undergoing is noisy.

3.43 Population

The population in this study is older adults with chronic illness in Hangzhou, capital city of Zhejiang province, China. Chronic illness refers to illness that lasts more than three months and "are not self-limiting" (Institute of Medicine, 2001). The World Health Organization 2002 report estimated that by the year of 2020, the mortality rate caused by chronic disease is expected to reach 73 percent of all deaths (WHO http://www.who.int/chp/about/integrated_cd/en/). Care for chronic illness is therefore considered urgent (Thorne, 2006). In addition, patients with chronic illness tend to approach both TCM and WM, because they can visit WM for immediate treatment of the illness and TCM for further consultation to clear the cause of the condition – to "cut the tail of the illness" (Lam, 2001: p. 763).

According to the Health and Family Planning Commission of Hangzhou Municipality (n.d.), up until now the city has thirty-one state-owned hospitals including fourteen general hospitals, nine specialized hospitals, three Western-Chinese joint hospitals, three Chinese medicine hospitals, and two rehabilitative hospitals. Among these hospitals, there are eighteen third-level referral (first grade) hospitals. Hospitals are either under the administration of the Health and Family Planning Commission of Zhejiang Province or Hangzhou Municipality. Only six hospitals are found to be third-level (referral)

general hospitals administered by the Health and Family Planning Commission of Zhejiang Province, among which one is chosen for the current study.

3.44 Research context

The ranking of the hospital seriously influence daily patient visits and the quality of medical care. Bearing the central research question in mind, the hospital chosen for this study was chosen after careful selection which meets the criteria of (1) being a first-grade third-level referral hospital that provides comprehensive medical services and which includes both TCM and WM practices; and (2) offering particular services to elderly patients. This hospital was considered appropriate as it was initially built for providing preventive care for veterans, thus attracting many elderly patients. The Division of Gastroenterology (WM) and the Division of Internal Traditional Chinese Medicine were chosen as the specific disease condition because Gastroenterology, as the key discipline of this hospital, attracts a huge number of outpatients and inpatients. The study was approved by the Ethical Committee of the hospital as well as the Hong Kong Polytechnic University[2].

3.45 Sample, sampling, and ethical issues

For this study, authentic medical interactions were audio-recorded. Data were collected through convenience sampling strategy. Restricted by the hospital admission regulation for researchers, I am only allowed to approach participants at the waiting area of the outpatient department of the two selected divisions. Therefore, findings of the current study may only represent situations within a particular group of people instead of the entire population.

Participants in the present study involve both patients and doctors. Doctors were approached in advance at their offices and were recruited with the cooperation of the director of the Division of Gastroenterology. Six doctors (three from the Division of Gastroenterology and three from the Division of Internal Traditional Chinese Medicine)

[2] Reference No. HSEARS20161101001

participated in the study. Only one male doctor participated in the study from the Division of Gastroenterology. Patients were approached at the waiting area outside the outpatient department. While there was no threshold for doctors, patient participants were considered eligible if they are (1) no less than fifty years old (earliest legitimate age of retirement); (2) formally diagnosed with a clinical report of chronic illness; (3) capable of independent communication with no mental disease; (4) had both TCM and WM consultation experiences; and (5) the current visit to be recorded was not their initial visit. It was hypothesized that doctor-patient relationship between initial and non-initial visits can be quite different. Failure to meet any of these five criteria meant that a participant was considered ineligible. A total of 69 patients (32 male and 37 female) participated in the current study with a response rate of 32.9%. The mean age is 63 years (SD = 8.5). Among the thirty TCM visits, eighteen were males. Among the thirty-nine WM visits, sixteen were males.

Consent letter (Appendix I) was distributed to each participant at the waiting area, informing them of the nature and purpose of the study and their involvement. Participants were told in advance that their consultations would be audio-recorded. They were also reassured that the data were confidential and anonymous and would only be seen by the researcher. Names would not be recorded, and that there would be no penalty if they withdraw at any stage of the research. Since this research is a study of communication, no clinical tests were involved, and also no physical harm would be expected.

3.46 Transcription conventions

All 69 medical visits were audio-recorded and transcribed verbatim following the CA convention developed by Gail Jefferson (1984, 2004). Inspired by the interactional linguistic treatment of dialogues which considers communication as an on-going process of co-construction (Kern & Selting, 2013), this study uses the CA convention of transcribing so that the sequential context can be addressed for better understanding of the dialogic nature of doctor-patient communication.

Transcripts were then coded through Nvivo 11 Pro following the coding conventions of RIAS. Utterances were transcribed and analyzed as per the original language – Mandarin. English translations were presented for illustrative purposes.

3.5 Chapter summary

This chapter presents the three research objectives of the thesis. It also provides a tour of the analytical frameworks and methodological approaches applied to the present investigation of doctor-patient communication between TCM and WM consultations. The next three chapters constitute the major parts of findings for this investigation, with a more detailed illustration of the research methods employed.

Chapter 4 RIAS study of doctor-patient communication

4.0 Chapter introduction

This chapter aims to explore the similarities and differences between TCM and WM in relation to participants' communication beahviors at different levels. It mainly addresses one research question: what are the similarities and differences between TCM and WM in relation to participants' communication behaviors?

In the first half of this chapter, I first draw attention to the methodological issues for this quantitative study: the RIAS. I begin by briefly reviewing studies using this framework, addressing its strengths and limitations in analyzing doctor-patient speech, and explicating the reasons for using it to observe both TCM and WM consultations. Because the participants in the study were older adults with an average age of 63 years, I suggest on the one hand that older patients may be more emotionally interdependent and fragile due to their age-related physical impairments (Adelman *et al*. 1991), and therefore the explicit affect-related content of RIAS coding framework is desirable in capturing the psychological activities of the interlocutors during medical visits. On the other hand, although RIAS allows the coders to work directly with audio data so that nonverbal cues can be captured, it is considered less powerful in drawing the local sequential context within which a dyad is carried out (to be explained in Section 4.13), and therefore in the current study written transcripts were used and coded through Nvivo 11 Professional. Behaviors were compared and contrasted with SPSS Statistics 21. Next, I discuss the procedures of analysis. In the second half of this chapter, I report results and present discussions where communication behavior patterns grounded upon high test-retest reliability are interpreted and differences are explained. In explaining the differences in communication behaviors, I will focus on how differences between TCM and WM in relation to their nature and philosophy affect the behaviors of both doctors and patients during medical consultations.

4.1 Roter Interaction Analysis System

Over the years, a plethora of studies investigating doctor-patient communication have used content analysis approach to examine the content and process of interactions between interlocutors, using different content analysis systems. These systems vary in units of analysis, exhaustiveness of the behavior categories, and target participants. A more detailed description of these systems was given in Chapter 3. In this section, I will concentrate on the most widely used approach – the Roter Interaction Analysis System, addressing its usefulness and limitations in observing the current dataset.

4.11 Background of RIAS

Derived from social exchange theories concerning interpersonal influence, empowerment, reciprocity, and problem-solving (Ellington, Carlisle, & Reblin, 2014; Roter & Larson, 2002), RIAS views the interactional processes of medical consultations as a locus of human activity where resource exchange is realized through provider-patient dialogues (Roter, 2010). It holds the belief that this kind of dialogues shapes the relationship between care-providers and patients and reflects the social roles and responsibilities of both participants. For instance, patient responsibility to give an account of their symptoms and medical histories should be met with their rights to be well-informed by their care-providers and vice versa (Roter & Hall, 1991; Roter & Larson, 2002). A more elaborated account of the principle of reciprocity is given by Roter and Hall (2006) who suggest that "doctors and patients continually evaluate the adequacy of each other's performance, according to their own values and expectations, and respond in a way that they feel somehow matches with, or is deserved by, the other's behavior" (p: 17). It is this notion of exchange and interpersonal influence that determines the communication behaviors of the provider and the patient. Grounded on this theoretical orientation, RIAS distinguishes communication behaviors in medical visits into two domains: instrumental (task-based) and affective (socio-emotional) for both physicians and patients. The instrumental behavior is defined as "technically based skills used in problem solving, which compose the base of *expertness* for which the physician is consulted" (Hall, Roter, & Katz, 1987: p. 400). The affective behavior is defined as behaviors aimed at building a rapport between physicians and patients (Roter & Larson, 2002) including expression with "explicit socio-emotional content" (Hall,

Roter, & Katz, 1987: p. 401). Patient behaviors are defined in a similar fashion. This parallel treatment of both physician and patient behaviors allows the interpretation of how the behavior of one party affects the other's response and the building of a therapeutic relationship.

To measure participant communication behaviors, RIAS divides the two broad domains into different communication elements and subsequently uses the approach of cluster analysis to provide statistical evidence of the theoretical underpinning of physician and patient communication patterns. The unit of analysis is utterance, operationalized as "the smallest discriminable speech segment to which a coder can assign a classification and which expresses or implies a complete thought (Roter, Hall, & Katz, 1987: p. 440). In RIAS, utterance is also coded based upon pause. According to the RIAS manual, a sentence divided by a pause more than one second would be considered as being composed of two utterances (Sandvik *et al*., 2002). Therefore an utterance can be lengthy as a sentence or short as a single word (e.g. 'yeah'). Each utterance is assigned one of the 43 exclusive communication elements among which 29 are instrumental and 14 are socio-emotional (see Table 4.1) (Sandvik *et al*., 2002). These categories reflect both the form (i.e. the type of activities) (e.g. *questions*, *information-giving*, *counseling*, *giving directions*) and the content (*lifestyle*, *medical condition*, *therapeutic regimen*, and *others*) of the dyadic interaction. Apart from components that apply to both care-providers and patients, there are some elements that are either provider-exclusive (e.g. *counseling*) or patient-exclusive (e.g. *request for service*). In total, these communication elements capture both the cure and care-oriented behaviors, recognized as the two fundamental needs of the patient (Ong *et al*., 1998; Ong, de Haes, Hoos, & Lammes, 1995).

Table 4.1: RIAS categories (Sandvick et al., 2002: p. 236)

Instrumental behaviors	Socio-emotional behaviors
Transition, orientation, bid for repetition, paraphrase, checking for understanding, asking questions, giving information, counseling (physician only), request for service (patient only)	Chitchats, personal remarks, laughs, jokes, compliment, agreement and disagreement, backchannels (mainly physician), showing worries, empathy, encouragement, optimism, criticism, seeking / giving reassurance, legitimacy, self-disclosure

4.12 Strengths and limitations of RIAS

Strengths of RIAS

RIAS has shown advantages over other coding systems with regard to its practicality, functionality, adaptability, and flexibility (Roter & Larson, 2002). Solid evidence of reliability and item validity has been shown in different settings such as USA (Alegria *et al*., 2013), Canada (Pahal & Li, 2006), Mexico (Kim *et al*., 2005), Australia (Grenness *et al*., 2015), and the UK (Ford *et al*., 1996).

RIAS coding frameworks reflect the three functions of medical consultation: data gathering, patient education and counseling, and rapport building (Cohen-Cole, 1991; Roter & Larson, 2002). In RIAS codes, data gathering, and patient education and counseling are both instrumental behaviors mainly realized through asking questions and giving declarative statements. Rapport building behaviors are considered as affective which include participant affect display behaviors such as *showing concern*, *showing encouragement* and positive and negative talk such as *agreement* and *disagreement*, and *criticism*.

Adaptability of RIAS is evidenced by its application to various contextual dimensions including palliative care (Detmar *et al*., 2001), primary care (Beach *et al*., 2006), geriatrics (Clayman *et al*., 2005), obstetrics (Roter *et al*., 1999), cancer (Eide *et al*., 2004b), general practice (Bensing, Verheul, & Dulman, 2008), cardiology (Pourhabib et al., 2016), and emergency medicine (Dale *et al*., 2008). In a systematic review article, Pires and Cavaco (2014) identified 455 independent articles across nine health

professions using RIAS to investigate communication behaviors between care-providers and patients. It is thus recognized as one of the most widely used systems (Heritage & Maynard, 2006).

A great strength of RIAS, among other things, is its flexibility in coding both dyadic and triadic interactions (Wissow, Roter, & Wilson, 1994). Though it was initially designed for dyadic interactions, it showed high adaptability and flexibility in multi-party interactions (Roter & Larson, 2002), which often occur in pediatric and geriatric settings. For the current dataset, participants were older adults who may visit their doctors accompanied by their families. And the families sometimes perform as their proxy speaking for the patient or at least contribute to the clinical consultation by either facilitating the patient talk or explaining the doctor talk to the patient. In case of talk involving the family, RIAS accommodates the coding of the third-party through additional communication components tailored to the third person e.g. *clarification for patient*, *clarification for physician*, and *discussing companion's health problems* (Ishikawa *et al*., 2005). The power of RIAS in analyzing triadic interaction has also been demonstrated by Wolff *et al*. (2012) by applying existing codes to family speech. Results of Wolff's study contribute to the understanding of how companions' facilitating behaviors increase the instrumental exchanges in medical visits. The flexibility of RIAS as a coding framework also lies in its viability for the coder to conduct cluster analysis by grouping behaviors of similar fashion for an in-depth understanding of the dynamic of medical communication. Ong *et al*. (1998), in their study of oncological consultations, explored four instrumental clusters (*giving information*, *giving directions*, *asking questions*, and *counseling*), and four affective clusters (*social behavior*, *verbal attentiveness*, *showing concern*, and *negative talk*).

Limitations of RIAS

One limitation of RIAS is that it, shared with other content analysis systems, fails to capture the sequential context within which a dyad is carried out. Despite its emphasis on reciprocity, the system is not designed to "assess what type of answer is typically given to a specific type of question" (Sandvik *et al*., 2002: p: 235). Stated in another

way, it fails to evaluate participant responsiveness to prior behaviors since the units of analysis is utterance instead of sequential unit. Inasmuch as conversation is sequentially organized and that meaning is decided upon the co-construction of interlocutors within the sequential context, the analytical power of RIAS in addressing the semantic functions of different communication behaviors is thus compromised. Therefore, the quantitative result drawn from RIAS, i.e. the number of utterances produced by speakers across a range of behavioral categories, should be integrated with a qualitative study focusing on the dialogic nature of the medical talk.

Another challenge is the analysis of interruptive speech, which is not included in the RIAS codes. A major feature of a conversation is its high frequency of simultaneous speech including overlapping talks and interruption. A key difference between these two types of simultaneous speech is whether the second speaker is intentionally "intruding" into the internal structure of the current speaker's utterance (West & Zimmerman, 1977: p. 523) and inhibiting the current speaker's further topical development (Beckman & Frankel, 1984). Overlapping talks usually occur at the possible completion of a turn constructional unit (TCU) or at the point of a transition relevance place (TRF). In their widely-cited study, Sacks, Schegloff, and Jefferson (1974) discussed three levels of possible completion: syntactic, intonational, and functional (i.e. complete as an action). In contrast, interruption usually occurs before the possible completion of a TCU. It is defined as a violation of the current-speaker-turn (West & Zimmerman, 1983). Thus, interruptive speech is produced with an attempt to grab the floor. This conversational feature is failed to be described through RIAS codes. Being aware of this limitation, this study also observes the interrupted speech by both doctors and patients.

4.2 Analytical units and tools

The focus of analysis in this study is the communication behaviors of both doctors and patients in medical visits. To quantify these behaviors, the verbal records of both doctors and patients were observed following the RIAS conventions of coding communication behaviors. The unit of analysis is utterance, defined as 'the smallest discriminable speech segment to which a coder can assign a classification and which expresses or

implies a complete thought' (Roter *et al*. 1987: 440). An utterance can thus be short as a word or as long as a sentence.

4.3 Procedures of analysis

Section 4.3 provides a detailed account of pilot study results, transcription conventions, and procedures of analysis.

4.31 Pilot study

To test reliability and content validity of the instrument, RIAS was piloted among forty-five older adults from both the Division of Gastroenterology and the Division of Internal Traditional Chinese Medicine. The average age was 64 years old (ranging from 50 to 84 years). Test-retest reliability (one-month interval) score was 0.9. With regard to content validity, most of the utterances can be classified with one of the RIAS codes. It is also worth noticing that in the original RIAS codes, statements in relation to medical conditions, diagnosis, previous tests, and test results are all coded as *medical conditions* (see Roter, 1977). It is noted that in this study utterances relating exclusively to physical tests and test results in WM visits far outnumber those in TCM visits. While these utterances usually reflect patients' medical conditions, I doubt that the inclusion of utterances at the level of physical exminations in the code of *medical conditions* will greatly limit the understanding of the similarities and differences in relation to utterance content between TCM and WM in this study. Therefore, the RIAS coding framework was modified with an addition of the content category *physical exams* (Figures 4.1 and 4.2). To avoid overlaps, utterances with explicit content of physical tests (e.g. tests which are recommended by the doctor at the time of consultation or discussions concerning the health indices on the patient's past physical test reports). The criteria to code an utterance as physical exams is the explicitness of the test or the health indices.

In addition, the pilot data suggested a great number of interruptive speech produced by both doctors and patients. In the widely-cited study by Beckman and Frankel (1984), they reported that on average, physicians' interruptive speech occurs 18 seconds after patient talk. The study contributed to our understanding of how physicians frequently

use interruptive speech to control the spontaneous flow of information from patients. Similar findings were also reported by a handful of existing studies (Irish & Hall, 1995; Marvel *et al*., 1999; West & Frankel, 1991). An examination of the pilot data shows that such speech behavior is not restricted to WM practices, but occurs in TCM as well. Since each of the interruptive speech carries its own semantic and pragmatic meaning (e.g. to ask information about medical conditions), utterances of this nature were coded based on the RIAS codes. In addition, these utterances were also observed additional to the RIAS reading of the data so that interruptive speech in different practices can be compared.

The pilot data also show an interesting phenomenon that clinical consultations in hospitals in Mainland China are not one-to-one consultations. Despite the queue management system, patients tend to crowd into the congested consultation room. *Unintelligible* utterances occur when those waiting patients start to talk with each other. Unfinished and unintelligible utterances were calculated as missing value. The category of *compliment* was never used. Categories which were rarely used are *joke, laughter, criticism, information-giving (psychosocial), legitimacy, empathy, patient giving directions, approval / disapproval,* and *unintelligible*. Final codes used for the current study will be discussed in detail in Section 4.36. The next section describes the participant recruitment for the current study.

4.32 Coding conventions

RIAS was used to code the 69 medial consultations (see Figures 4.1 and 4.2). While there is no difficulty in determining the content of each utterance (e.g. *medical condition*, *physical exam*, therapeutic regimen, and lifestyle) for the current dataset, challenges still exist in evaluating the functions of some utterances due to the multi-functional nature of talk-in-interaction, especially in deciding whether an utterance is produced mainly for an affect display or to present medical information. To facilitate understanding of different behavior categories, the rest of this section elaborates each category with examples. All the examples were extracted from the dataset. See Roter (1977) for more elaborated code explanations.

Questions in this study were defined based on adjacency pair principles, i.e., expecting an answer. However, questions phrased for the aim of repairs (e.g. asking for repetition due to hearing deficiencies) are excluded from this category and are treated as facilitation statements (to be discussed below). In the current study, questions were divided into both closed and open-ended forms. Difference lies in whether the question was raised for a short or elaborated answer. Both open and closed-ended questions may include topics including medical conditions *胃怎么不好* ('What's wrong with your stomach') or *有没有青霉素过敏* ('Will you be allergic to penicillin'), physical examinations *胃镜在哪儿做的* ('Where did you take your gastroscopic test') or *做过胃镜没有* ('Have you taken the gastroscopic test before?'), lifestyle *睡眠还可以吗* ('Do you sleep well') or *胃口怎么样* ('How is your appetite'), and therapeutic *你有没有在吃阿司匹林* ('Are you taking aspirin?'). Doctors' use of closed and open questions compose their data collection communication. Patient communication of this nature was conceptualized as information seeking (Roter, 1984), consisting of both question-asking behavior and statements requesting for service, which refers to explicit patient speech asking for medical services e.g. *医生你有没有中药帮我配一点* ('Doctor, may I ask for some herbal medicine').

The information-giving behavior includes declarative statements at four levels: medical condition *我老是觉得这里难受* ("I always feel uncomfortable here."), therapeutic regimen *培菲康是给你调节的* ('The Lactobacillus and Enterococcus Capsules will improve your gastrointestinal function'); physical exam *CT 做小肠* ('The Computed Tomography can only identify diseases in your small intestine'), and lifestyles *我现在都卡牢饭点吃饭* ('Now I have my three meals on time'). Such statements must not involve explicit direction of patient behavior.

Counseling is reserved for doctor speech. The counseling and the information-giving behavior together include statements that "assist patients in making sense of their condition and coping with the medical regimen and lifestyle demands of treatment"

(Roter & Hall, 2004: p. 501). The distinction between counseling and information giving is that the latter is mainly explanatory while counseling statements are persuasive and advisory in nature, e.g. *你啊你要做一个餐后两小时的血糖测试* (‘It would be better for you to do a blood test two hours after eating’).

Figure 4.1: RIAS categories for doctor speech

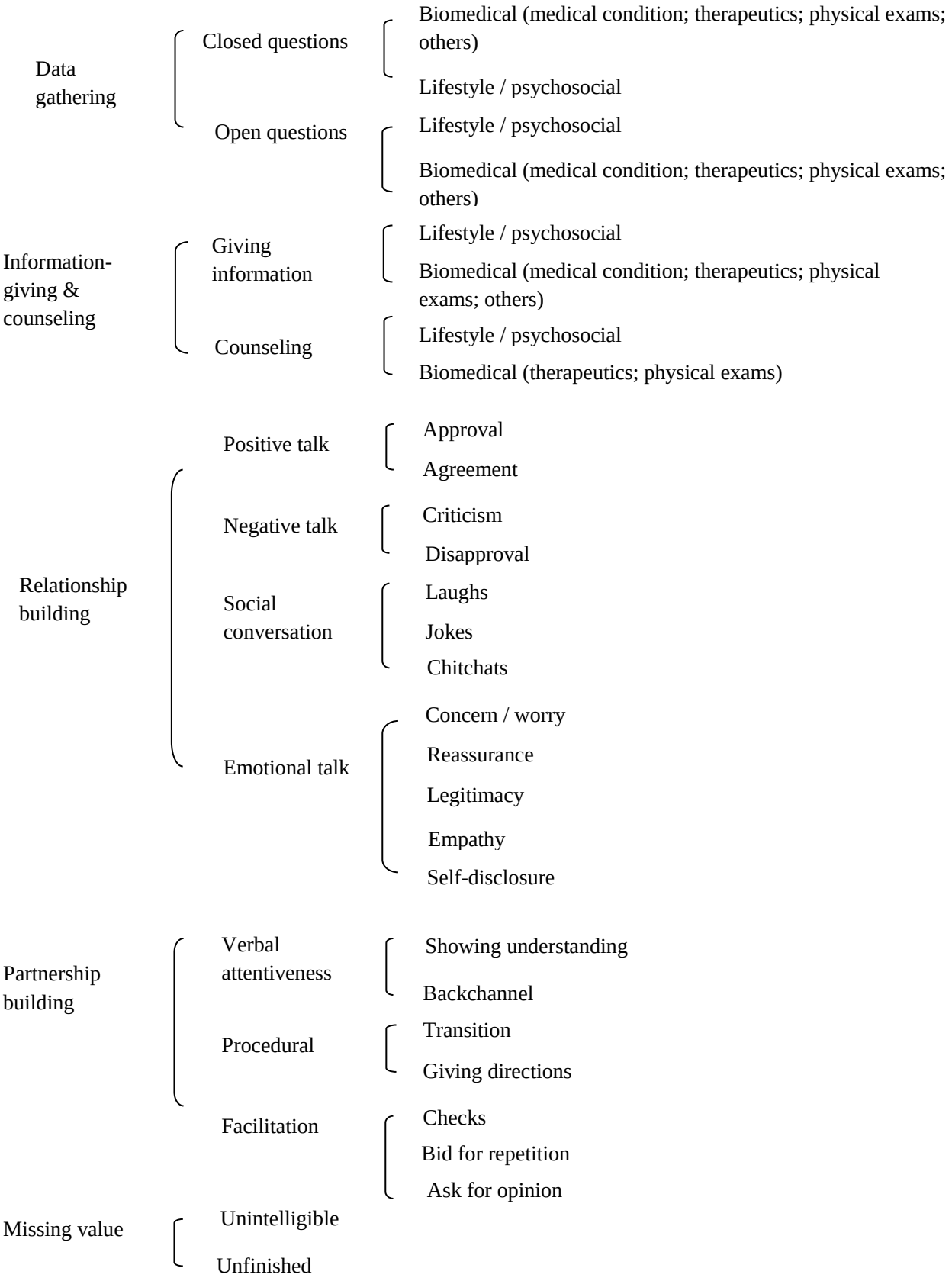
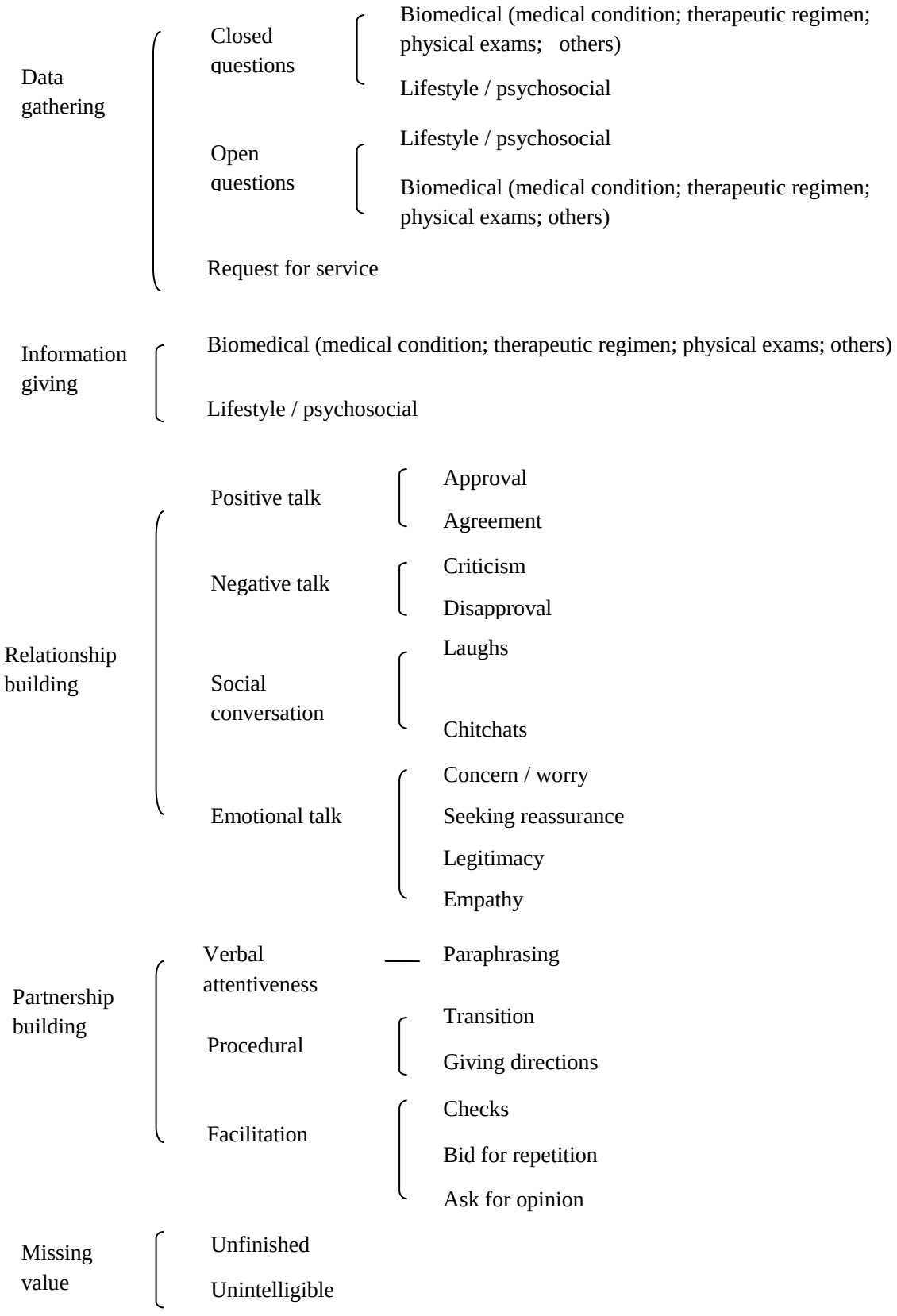


Figure 4.2: RIAS categories for patient speech



Relationship building communication consists of positive talk, negative talk, social conversation and emotional talk. Positive talk includes approval *你的努力还是有用的* (‘Your endeavor is rewarded’), and agreement *好的* (‘Okay’). Negative talk includes statements of disapproval *那不行的* (‘It is not allowed’) and criticism *早点不说* (‘Why you didn’t tell me just now’). Statements that are not at all related to the fundamental purpose for which the current medical talk is initiated, plus greetings that normally occur at the opening and closing of a visit were coded as social conversation (Roter. 1977; Roter and Hall, 2004), which includes chitchats *上次你说你家里有什么事* (‘Last time you told me that something happened in your family, what is it’), laughs and jokes. Emotional talk “conveys emotional content through explicit emotional statements” (Roter & Hall, 2004: p. 502), including concerns and worries *那你受不了* (‘You cannot tolerate it’); doctor giving reassurance *不要紧的* (‘It doesn’t matter’); patient seeking reassurance *这个要不要紧的啊* (‘Does it matter’); doctor self-disclosure *我也有的* (‘I also have this kind of gallbladder polyps’); legitimacy *这也正常* (‘It is normal’); and empathy *可怜啊* (‘You are so poor’).

Partnership building communication in this study included doctor statements that encourage patient participation and patient statements that demonstrate active enlistment. Partnership building behaviors describe doctors attempt to lessen their dominance and seek patient alliance within the relationship (Roter, 1977; Roter & Hall, 2004). It includes facilitation, procedural talk, and verbal attentiveness. Doctors’ facilitation communication is reflected through checks *好多了是吧* (‘It’s better, right?’), bid for repetition *什么啊* (‘What’), and ask for opinion *好不好* (‘Okay?’). It should be noted that while these facilitation statements are phrased in an interrogative form, and can be included as questions in a broad sense, given their communicative functions which is to repair the conversation rather than to request for new information, in this study they are distinguished from questions. Doctors’ procedural talk either indicates transition of speech *所以你就是说什么呢* (‘So what you should do’), or giving directions which refers to statements that “guide patient through the consultation” (Bensing & Dronkers,

1992: p. 286) such as *嘴巴张开* (‘Open your mouth’). While both procedural talk and facilitation can apply to patients as well, slight variations in relation to the coding of doctor and patient communication indicating their verbal attentiveness should be noticed. Utterances considered to be verbally attentive indicate how attuned the speaker is to the information that the other speaker decides to tell him/her. Doctors’ communication at this level is demonstrated through their use of backchannels *嗯* (‘Um’) and utterances that indicate understanding *我知道了* (‘I see’). It shall be noticed, however, that some backchannels can also be interpreted as agreements especially the expression *嗯* (‘Um’) in Mandarin conversation. One major criterion in disseminating a backchannel response from agreement is that it should never indicate a floor shift. Doctor’s Backchannel response, according to Roter (1977), is his/her “undertalk” embedded within the patient’s narration, functioning as an indicator of interest and encouragement of patient’s narration (p. 21). Therefore, doctor speech of *嗯* (‘Um’) produced at the initial position of doctors’ turn with continuing talk was not considered as backchannels, but agreements. In patient communication, the same speech sound *嗯* (‘Um’) was not considered as backchannels, but agreements. This coding is explained by Roter and Larson (2002). They pointed out that while such patient utterances are embedded within doctor speech, the primary function is to agree and accept, rather than encouraging an elaboration or narration.

Not all categories were consistently observed throughout the 69 interactions, particularly categories related to conversationalists’ socio-emotional behaviors, i.e. relationship building (*positive talk*, *negative talk*, *social talk*, and *emotional talk*) and partnership building (*giving directions*, *transition*, and *ask for opinion*), indicating a relatively lack of psychosocial communication between doctors and patients in both TCM and WM visits.

4.33 Test-retest reliability and content validity

To determine reliability, test-retest reliability was measured with the same order with a one month interval. Behaviors were grouped into clusters for calculation and

comparison. Kappa coefficient was measured for different communication behaviors by Nvivo, and were further averaged across different clusters through Excel worksheet. Table 4.2 is a modification of the output for illustration purposes.

Table 4.2 Kappa coefficient for different communication behaviors

Communication behaviors	Doctor speech	Patient speech
Data gathering	0.92	0.91
Information-giving and counseling	0.92	N/A
Information giving	N/A	0.93
Relationship building	0.96	0.87
Partnership building	0.92	0.83

Most of the items were consistently coded with high agreement, though minor disagreement was found on some utterances. Disagreeing utterances were further discussed with an experienced linguist within the English department before a consensus was achieved.

Content validity refers to the representativeness or relevance of the instrument items (Lynn, 1986). All utterances in the 69 interactions were coded exclusively to one of the RIAS categories except *compliment* which was not applicable to the current dataset. Detailed discussion of the content of the codes (e.g. codes that were rarely used in the current study) was presented in Section 4.34. It is also worth noticing that while utterances were coded exclusively with one of the categories, they can be multi-functional. For instance, the utterance from a TCM doctor *本来都挺好的* ('It was very good') can either be a statement showing empathy or a statement giving information about the medical condition of the patient. Prior to this utterance, the patient was complaining to the doctor that she was almost recovered ever since her last visit. However, she went for a physical exam and caught cold because of the congested space with no fresh air. Now, her sickness is intensified. The underlined expression *挺* ('very') was used to highlight the intensity to which the word "good" describes. The patient responded to doctor's expression by showing agreement *就是* ('Yes'). And the doctor continues to comfort the patient by saying *不要紧我们继续努力* ('No worries, let's

work hard'). Thus, in the utterance 'It was very good', the doctor was directly naming the patient's emotion, which received immediate agreement from the patient. The dilemma between coding an utterance as instrumental / biomedical or affective is noted in the RIAS manual, which suggests that when an utterance can be coded as either instrumental or affective, the rule of thumb is to code it as affective so that implicit affective messages can be sought (Ong *et al.* 1998). Therefore, the utterance in the example was coded as showing empathy. Multivariate analysis of variance (Hotelling's Trace) was used. For correlations, this study used both Pearson correlation and Spearman Rho based on their normal distribution.

4.34 Procedures of analysis

Participant utterances were calculated for all the 69 recordings, following two steps: Step One: For each interaction, the contribution of each participant in different RIAS categories was summed up and then calculated into rates. This step is explained by the following formula:

$$R = \frac{\mathrm{x}}{\mathrm{y}}$$

Here *R* represents the proportion of a participant's contribution at the level of one RIAS communication category; *x* represents the total counts of that participant's utterance in this category; and *y* represents the total number of utterances the speaker had made during the consultation. The use of proportion rather than raw frequencies minimizes the potential influence caused by differences in speed and the total number of utterances in each visit.

Step Two: Proportions were then averaged over all the interactions belonging to the same practice to determine the mean proportion of different speech behaviors in both TCM and WM encounters.

$$M = \frac{\sum_{i=1}^{n} R_i}{n}$$

In this equation, *M* represents the mean rates of a specific speech behavior within one practice. R_i represents the total proportion of this speech behavior over all the

interactions within one practice; and n represents the number of interactions in either TCM or WM.

4.4 Results

4.41 Visit duration and number of utterances

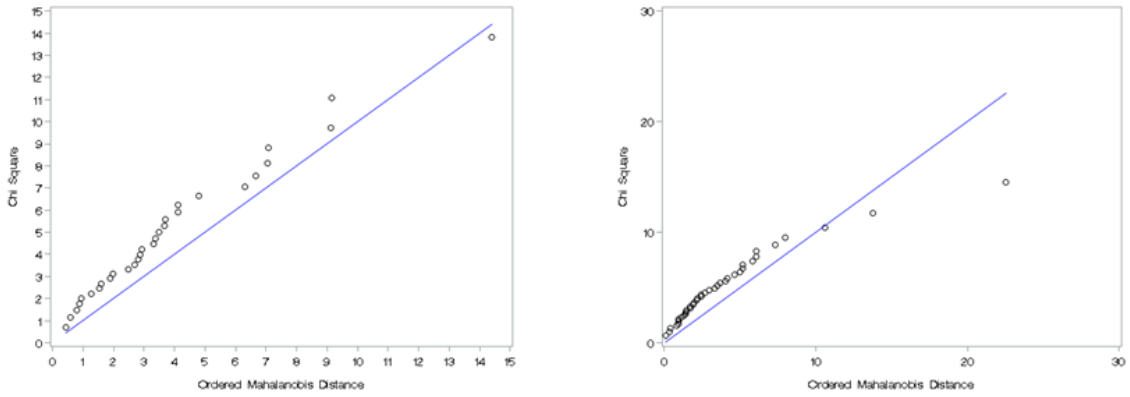
TCM consultations are noticeably longer than WM consultations. Mean length of visit per consultation is 5.5 minutes (SD = 1.75) for TCM and 3.0 (SD = 1.8) for WM, $p < 0.01$, $r = 0.6$. Because the TCM encounters are considerably longer, they tend to have more of every type of speech. Therefore, the number of utterances was adjusted as per time unit. An interesting phenomenon is that the mean number of utterances per time unit in WM (36.3) is higher than that in TCM encounters (20.9), $P < 0.01$. An explanation for this phenomenon is that the utterances in TCM visits are longer than that in WM visits. Thus, participants tend to give longer responses in TCM than in WM visits.

4.42 General patterns of doctor-patient communication

In TCM practice, patients accounted for the majority of the conversation (Mean = 66 utterances, SD = 37 utterances) compared to doctors (Mean = 49 utterances, SD = 23 utterances). In WM practice, the contribution of doctors and patients were on a relatively similar footing: average number of utterances is 53 (SD = 24) for doctors and 52 (SD = 32) for patients.

As can be seen (Figure 4.3), the RIAS codes at the level of behavior clusters (i.e. data collection or information-seeking, information-giving and counseling, relationship building, and partnership building) in doctors' speech were not multivariate normal because the points on the graph do not lie clearly on the line. Therefore, a more effective MANOVA model could not be applied to all variables. A closer investigation of the univariate normality showed that while doctors' behavior at the level of information-giving and counseling fails the meet the null hypothesis of normal distribution in WM, behaviors at the other three levels are normally distrbuited.

Figure 4.3: Multivariate normality of doctor's speech at the level of behavior clusters



TCM WM

For patient speech, since neither TCM nor WM are multivariate normal, each of the four behavior clusters was tested for normality. Only information-giving behavior was normally distributed in both TCM and WM visits. Non-parametric tests were used where appropriate.

Results of the Hotelling's T-sqaure were significant between TCM and WM for both doctor speech (T^2 = 106.26, F = 25.38, df = 4, 65; $p < 0.01$) and patient speech (T^2 = 29.95, F = 7.16, df = 4, 65; $p < 0.01$), indicating a difference in the level of behavior clusters. Results of univariate F tests are given below in the discussion of different behaviors. These behaviors were further observed at the level of different categories. Mean rates and standard deviations of doctor speech are reported in Table 4.3; patient behaviors are reported in Table 4.4.

Table 4.3 Doctor Communication Patterns

Behavior clusters	*Categories*	*TCM*		*WM*	
		Mean rates	*Std.*	*Mean rates*	*Std.*
Instrumental	Overall**	0.57	0.11	0.71	0.08
Data collection	Overall**	0.31	0.14	0.16	0.09
	Biomedical**	0.25	0.12	0.16	0.09
	Closed questions**	0.20	0.10	0.10	0.06
	Open questions	0.05	0.04	0.05	0.04
	Lifestyle / psychosocial**	0.06	0.05	0.01	0.02
	Closed questions**	0.04	0.04	0.00	0.01
	Open questions**	0.02	0.03	0.00	0.01
Information-giving / counseling	Overall**	0.26	0.13	0.55	0.12
	Biomedical**	0.19	0.12	0.52	0.13
	Medical condition	0.06	0.06	0.09	0.08
	Physical exam**	0.02	0.03	0.13	0.15
	Therapeutic regimen**	0.07	0.08	0.24	0.17
	others**	0.04	0.06	0.06	0.06
	Lifestyle / psychosocial*	0.07	0.09	0.03	0.05
Socio-emotional	Overall**	0.43	0.11	0.29	0.08
Relationship building	Overall**	0.19	0.11	0.12	0.06
	Positive talk*	0.06	0.04	0.09	0.05
	Agreement**	0.06	0.04	0.09	0.05
	Approval	0.00	0.01	0.00	0.00
	Negative talk	0.01	0.01	0.01	0.03
	Criticism	0.00	0.01	0.01	0.03
	Disapproval	0.00	0.01	0.00	0.01
	Social conversation**	0.08	0.10	0.01	0.02
	Laughs**	0.01	0.02	0.00	0.01
	Jokes	0.00	0.01	0.00	0.00
	Chitchats**	0.03	0.09	0.01	0.01
	Emotional talk**	0.05	0.06	0.02	0.03
	Empathy*	0.01	0.01	0.00	0.01
	Concern / worry**	0.03	0.04	0.00	0.01
	Reassurance	0.01	0.03	0.01	0.02
	Legitimacy	0.00	0.00	0.00	0.01
	Self-disclosure	0.00	0.01	0.00	0.00
Partnership building	Overall**	0.24	0.09	0.16	0.09
	Verbal attentiveness	0.12	0.08	0.09	0.06
	Backchannel	0.07	0.07	0.05	0.04
	Shows understanding	0.05	0.04	0.04	0.05
	Procedural	0.05	0.04	0.04	0.04
	Giving directions	0.04	0.03	0.04	0.03
	transition**	0.02	0.02	0.00	0.01
	Facilitation**	0.07	0.05	0.04	0.04
	Bid for repetition	0.01	0.02	0.01	0.01
	Checks**	0.05	0.04	0.02	0.03
	Asks for opinion	0.01	0.02	0.01	0.02
Missing value	Overall	0.01	0.01	0.01	0.01

*Notes: *=significant at P < 0.05 level, **=significant at P < 0.01 level, N = 69*

Table 4.4 Patient Communication Patterns

Behavior clusters	*Categories*	*TCM*		*WM*	
		Mean rates	*Std.*	*Mean rates*	*Std.*
Instrumental	Overall	0.63	0.14	0.57	0.10
Information seeking	Overall**	0.06	0.05	0.10	0.07
	Biomedical**	0.05	0.05	0.10	0.07
	Closed questions**	0.04	0.03	0.08	0.06
	Open questions*	0.01	0.01	0.02	0.03
	Request for service	0.01	0.02	0.01	0.02
	Lifestyle / psychosocial*	0.01	0.02	0.00	0.01
	Closed questions**	0.01	0.01	0.00	0.01
	Open questions	0.00	0.01	0.00	0.01
Information-giving	Overall**	0.57	0.14	0.47	0.13
	Biomedical	0.45	0.14	0.43	0.12
	Medical condition**	0.31	0.15	0.22	0.12
	Physical exam**	0.02	0.04	0.08	0.07
	Therapeutic regimen	0.08	0.07	0.09	0.09
	others	0.03	0.05	0.04	0.05
	Lifestyle / psychosocial**	0.12	0.09	0.04	0.06
Socio-emotional	Overall	0.36	0.14	0.39	0.11
Relationship building	Overall	0.33	0.14	0.34	0.11
	Positive talk**	0.21	0.12	0.29	0.11
	Agreement**	0.21	0.12	0.29	0.11
	Approval	0.00	0.00	0.00	0.00
	Negative talk	0.00	0.01	0.00	0.01
	Criticism	0.00	0.01	0.00	0.00
	Disapproval	0.00	0.00	0.00	0.01
	Social conversation**	0.09	0.11	0.02	0.02
	Laughs**	0.02	0.02	0.00	0.01
	Chitchats**	0.08	0.10	0.02	0.02
	Emotional talk	0.02	0.03	0.03	0.05
	Empathy	0.00	0.01	0.00	0.00
	Concern / worry	0.01	0.02	0.01	0.04
	Seeking reassurance	0.00	0.01	0.01	0.02
	Legitimacy	0.00	0.00	0.00	0.01
Partnership building	Overall*	0.03	0.03	0.05	0.05
	Verbal attentiveness*	0.00	0.00	0.01	0.02
	Paraphrasing*	0.00	0.00	0.01	0.02
	Procedural	0.01	0.01	0.00	0.01
	Giving directions	0.00	0.00	0.00	0.01
	transition	0.01	0.01	0.00	0.01
	Facilitation	0.02	0.02	0.04	0.04
	Bid for repetition	0.00	0.00	0.01	0.01
	Checks	0.02	0.02	0.03	0.03
	Asks for opinion	0.00	0.00	0.00	0.01
Missing value	Overall**	0.01	0.02	0.03	0.02

*Notes: *=significant at P < 0.05 level, **=significant at P < 0.01 level, N = 69*

Table 4.3 shows that doctor speech in both TCM and WM conversations was mainly instrumental, 57 percent of doctor utterances in TCM and 71 percent in WM. The largest amount of their speech was dedicated to data collection and information giving and counseling. In TCM visits, doctors devoted most of their talk (31 percent) during clinical consultations to data collection. The vast majority (25 percent) of doctors' data collection was asking questions concerning the biomedical aspects of the patient, including medical conditions, therapeutic regimen, physical examinations, and others, rather than lifestyle and psychosocial. Questions were predominantly closed-ended. In a similar vein, most of doctors' information giving and counseling talk was biomedical (19 percent) rather than lifestyle and psychosocial. In WM practices, doctors primarily focused on biomedical information giving and counseling (52 percent) rather than lifestyle and psychosocial (3 percent). Data collection by WM doctors comprised 16 percent of the conversation. It is interesting that almost all the questions raised by the doctor in WM consultations were biomedical, and they were mostly phrased as closed-ended.

Doctors' socio-emotional behaviors comprised 43 percent in TCM and 29 percent in WM conversations. In both TCM and WM visits, the least amount of doctor talk during the medical consultation was dedicated to relationship building: 19 percent in TCM conversation and 12 percent in WM conversation. Statements concerning negative connotations such as criticism and disapproval were almost rare (1 percent) with no probing. Most of doctor talk at the level of relationship building in TCM visits involved social conversation and statements showing agreement. In WM consultations, doctor talk of this nature primarily focused on giving agreement. Partnership building comprised 24 percent and 16 percent in TCM and WM doctor speech, respectively. Of these statements, half of the talk consisted of verbal attentiveness such as backchannels and statements showing understanding. In both practices, doctors scarcely demonstrated their concern for patients' opinions.

Similarly, patient talk was primarily instrumental rather than socio-emotional in both practices (Table 4.4). Their conversation was mainly focused on information giving (57

percent of patient utterances in TCM and 47 percent in WM) and most of these statements were describing their medical conditions. In contrast to doctors' communication behaviors, less than 10 percent of patient utterances were dedicated to information seeking. Not only did doctors demonstrate a strong preference for closed questions, patients also preferred using closed questions rather than open questions. Biomedical instead of lifestyle information giving and information seeking is also the priority concern in patient agenda. The second largest amount of patient talk was devoted to relationship building: 33 percent in TCM and 34 percent in WM patient conversation. Of these statements, a majority of patient talk was agreement giving. Partnership building was almost rare in patient talk and mainly focused on patient checks for understanding. The rest of this section describes the four behavior clusters in detail.

4.43 Data collection and information seeking

The mean number of doctor utterances at the level of data collection is significantly different between TCM and WM practices. TCM doctors asked more questions than their WM colleagues do, $F = 28.67$, $df = (4, 65)$, $p < 0.01$, $\eta^2 = 0.3$, indicating a large effect size.

Conversely, the mean number of patient utterances in information seeking is higher in WM than in TCM conversation, $F = 9.56$, $df = (4, 65)$, $p < 0.01$, $\eta^2 = 0.13$, indicating a medium effect size. Patients visiting WM visits raised more biomedical questions than their TCM counterparts, $U = 339.5$, $p < 0.01$, $r = 0.4$, indicating a medium effect size (Cohen, 1992). In contrast, those WM patients raised significantly fewer lifestyle and psychosocial questions than TCM patients, $U = 479$, $p < 0.05$, $r = 0.2$ suggesting a small to medium effect size. Compared with those visiting TCM doctors, patients seeing WM doctors used more closed questions in both biomedical and lifestyle and psychosocial information asking, $U = 394.5$, $p < 0.01$, $r = 0.3$. Those WM patients also used significantly more open questions in seeking biomedical information, $U = 430$, $p < 0.05$, $r = 0.3$.

4.44 Information giving and counseling

In this area, WM doctors made significantly more statements than did TCM doctors, F = 87.1, df = (4, 65), $p < 0.01$, $\eta^2 = 0.57$. Further analysis revealed that WM doctors provided markedly more biomedical information than did TCM professionals, F = 117.59, df = (4, 65), $p < 0.01$, $\eta^2 = 0.64$. Additionally, of all the biomedical statements, WM doctors were significantly more dedicated to information relating to physical examinations (U = 328.5, $p < 0.01$, r = 0.4), therapeutic regimen (U = 248.5, $p < 0.01$, r = 0.5), and others (such as appointment of next consultation and payment of consultation). With respect to lifestyle and psychosocial information, while both TCM and WM doctors demonstrated fewer interests in involving into conversation of this nature, TCM doctors were considerably more attentive than were WM doctors, U = 403.5, $p < 0.05$, r = 0.3.

In contrast, patients visiting TCM doctors gave more information than did those seeing WM doctors, F = 8.75, df = (4, 65), $p < 0.01$, $\eta^2 = 0.12$. While no difference was found in terms of the overall mean rates of patient statements in biomedical information giving, further analysis of the contents of those statements showed more patient disclosure of their medical conditions in TCM conversation than in WM conversation (U = 356.5, $p <$ 0.01, r = 0.3). WM patients, on the other hand, were found to be more devoted in giving information concerning their physical tests, U = 290.5, $p < 0.01$, r = 0.4. Corresponding to doctors' behaviors of this nature, more lifestyle and psychosocial information was disclosed by patients visiting TCM doctors than did WM patients, U = 196.5, $p < 0.01$, r = 0.6, suggesting a large effect size. There was no difference in terms of therapeutic information giving in patient speech between these two types of encounters.

4.45 ***Relationship building***

With respect to doctors' relationship building, TCM professionals were more responsive to their patients than their WM colleagues, U = 339, $p < 0.01$, r = 0.4. They engaged in significantly more social conversations than did WM professionals (U = 236, $p < 0.01$, r = 0.6), primarily at the level of laughs (U = 428, $p < 0.01$, r = 0.4) and non-medical chitchats (U = 256.5, $p < 0.01$, r = 0.5). These TCM doctors were also more verbally

attentive in emotional talks (U = 288.5, p < 0.01, r = 0.5), fundamentally in two areas: showing empathy (U = 464, p < 0.05, r = 0.3) and showing concern and/or worry to their patients (U = 277.5, p < 0.01, r = 0.6). On the other hand, WM professional gave more agreeing statements than did TCM professionals, F = 8.42, df = (4, 65), p < 0.01, η^2 = 0.11. No difference was reported regarding doctors' statement of negative talk between TCM and WM practices.

In a similar fashion, patients in WM consultations expressed more positive talk compared to TCM patients, U = 329, p < 0.01, r = 0.4. These positive statements comprised mainly expressions showing agreement to their doctors, U = 330.5, p < 0.01, r = 0.4. In contrast, and similar to WM doctors, the patient showed less social behavior than TCM patients (U = 217, p < 0.01, r = 0.5) both in terms of laughter (U = 369.5, p < 0.01, r = 0.4) and non-medical chitchats (U = 254, p < 0.01, r = 0.5). No difference has been found in patient statements with regard to negative talk and emotional talk.

4.46 ***Partnership building***

Regarding this cluster, TCM doctors provided significantly more partnership building statements than did WM doctors, F = 11.82, df = (4, 65), p < 0.01, η^2 = 0.15. It is noted that this difference mainly occur in doctor transitional talk (U = 409, p < 0.01, r = 0.3) and utterances aimed at checking for understanding (U = 272.5, p < 0.01, r = 0.5). No difference was revealed in relation to doctor talk at the level of giving directions, using backchannels and showing understanding.

While doctor talk regarding verbal attentiveness was not found to be different in the two practices, WM patients were more verbally attentive than were TCM patients, U = 455, p < 0.01, r = 0.3. There were no differences in patient procedural talk and facilitation statements between TCM and WM conversation.

4.47 Missing value

While no difference has been reported to doctor speech of this category, statistically higher mean rates of patient talk was revealed in WM conversation, U = 276.5, p < 0.01,

r = 0.5. There were more unfinished utterances in WM patient conversation than in TCM conversation, U = 221.5, $p < 0.01$, r = 0.5.

4.48 Verbal dominance and patient-centeredness

To calculate a verbal dominance ratio, the total sum of doctor utterance was divided by the total sum of patient utterance across each interaction. Ratio less than 1 indicates that doctors were less verbally dominant, and vice versa. As Table 4.5 illustrates, compared with TCM doctors, WM doctors were more dominant in terms of the total amount of doctor statements, U = 299.5, $p < 0.01$, r = 0.4. In TCM consultations, the average sum of doctor-patient statement ratio was 0.88 (SD = 0.56) compared with 1.11 (SD = 0.39) in WM consultations.

Table 4.5 Verbal dominance

	Doctor/patient ratio	U	Sig.	Effect size
TCM	M = 0.88 (SD = 0.56)	299.5	$p < 0.01$	r = 0.4
WM	M = 1.11 (SD = 0.39)			

Table 4.6 Patient-centeredness score

	Patient-centeredness score	U	Sig.	Effect size
TCM	M = 1.23 (SD = 0.73)	231	$p < 0.01$	r = 0.5
WM	M = 0.7 (SD = 0.26)			

The patient centeredness score was computed by dividing the total sum of psychosocial and socio-emotional statements by the total amount of biomedical statements (McCarthy *et al*., 2013). The numerator consists of relationship building (both doctor and patient), doctor verbal attentiveness and facilitation, lifestyle and psychosocial information giving and counseling (doctor and patient), doctors' lifestyle and psychosocial questions, and all patient information seeking. These codes describe patients' lead of the conversation as well as doctors' non-instrumental behaviors in conversation. The denominator consists of doctor biomedical questions and information-giving and counseling, doctor procedural talk, and patient biomedical information-giving. This formula has been widely applied by RIAS studies (Cooper *et al*., 2003; Mead & Bower, 2000b; Roter, Larson, Beach, & Cooper, 2008). As Table 4.6 illustrates, in this study,

higher patient-centeredness ratio was reported in TCM (Mean = 1.23, SD = 0.73) than in WM consultations (Mean = 0.7, SD = 0.26), $U = 231$, $p < 0.01$, $r = 0.5$.

4.5 Discussion

The fundamental objective of this quantitative study was to explore the communication patterns of both doctors and patients in two different medical practices that co-occur in China. This is the first known study that has applied RIAS codes to evaluate doctor-patient speech behaviors in TCM encounters. Several informative findings have been identified. Communication behaviors between doctors and patients in different types of medical consultations have commonalities as well as differences across the four behavior clusters: data collection or information seeking, information-giving and counseling, relationship building, and partnership building.

4.51 Information exchange

4.51.1 Commonalities between TCM and WM

More doctor-initiated questions

The question-asking behavior is widely regarded as an indicator of speaker power in medical conversation for its predictability and control of the content and the sequential construction of the emerging discourse, and sometimes the actions afterwards (Ainsworth-Vaughn, 1998). One of the most outstanding features in doctor-patient speech in the current research, as consistent with many existing studies, is the asymmetrical distribution of doctor-initiated and patient-initiated questions. In TCM conversation, doctors asked 81 percent of the total questions and patients asked 19 percent. In WM conversation, doctors initiated 63 percent of the overall questions and patients initiated 37 percent. Researchers in other clinical contexts also reported similar disproportionate rates of patient-initiated questions in medical consultations (Ainsworth-Vaughn, 1998, 2001; Nakayama *et al.*, 2016; Robinson, 2003). In one of the most widely cited studies on question asking behaviors of providers and patients, West (1984) found that patients initiated only 9 percent of the questions in family practice resident-patient consultations. In a more recent study of similar medical context, Pahal and Li (2006) noted that residents asked four times of the questions than did patients. A higher

proportion, 38.7 percent, was reported by Ainsworth-Vaughn (2001) in her examination of oncological physician-patient encounters. This universal dis-preference of patient questions in medical conversation is even considered as becoming more serious. In a repeated observation study of communication behaviors between general practitioners and hypertension patients, Bensing and colleagues (2006) discovered a declining number of patient questions in 2002 than 16 years earlier. Insofar as this patient reticence being documented by empirical studies, some scholars assume that such dis-preferred status of patient-initiated questions is only salient in the history-taking phase of the clinical consultation and cannot be generalized as patient reluctance of initiating questions but rather an interactional outcome (ten Have, 1991). Interestingly, despite such low level of patient questioning behaviors, studies reported patients' strong-stated desire for information (Beisecker & Beisecker, 1990). According to these scholars, while patients demonstrated a strong desire for information relating to a wide range of concerns, it did not prompt them to actively engage in questioning. Beisecker and Beisecker also examined the factors that might be attributable for patient reticence in asking questions, and found that length of consultation, age, and other situational factors such as type of illness and presence of the third-party were associated with patients' questioning behaviors. Other scholars also tried to explore reasons for this lack of patient initiation in asking questions. Roter (1984) considered that patients tend not to bother doctors with too many questions or that the doctor might have already given the answer before the patient raised the question. She also stated that the doctor might use some hints to discourage patients' questioning. Robinson (2003) attributed patients' low level of information-seeking behavior to their psychological uncertainties. Mathews (1983) blamed the asymmetry in medical knowledge to which doctors and patients get access for patients' passive participation in communication. She pointed out that patients do not have the necessary means to negotiate their interests due to their unfamiliarity of the specialized nature of medical knowledge.

More closed questions in both practices

With respect to the format of questions, this study reinforces a common belief that doctors frequently use closed questions to limit patient disclosure and to control the

interactional processes. The literature is well-known about studies on professionals' strong preference of closed questions. Beckman and Frankel (1984) pointed out that physicians use closed questions as a linguistic device to "halt the spontaneous flow of information from patients" (p. 694). A recent study by Nakayama and colleagues (2016) examined the pharmacist-patient interactions, and found that the number of pharmacist-initiated closed questions was nearly three times more than that of open-ended questions. In an examination of audiologist-patient interaction, Grenness *et al*. (2015) reported that 86 percent of audiologist-initiated questions were closed in nature. Likewise, Roter and Larson (2001), in their investigation of primary care resident-patient communication, found that 80 percent of the resident questions were closed-ended. Reconciled with those findings, this study also found a preponderance of closed questions than open questions in doctors' speech. A total of 77 percent of the doctor-initiated questions in TCM consultations were closed-ended compared with 69 percent in WM consultations. No difference was found in terms of the total number of open questions used by doctors between these two practices. Roter and Hall (2006) interpret closed questions as doctors' tool of hypothesis testing: if hypothesis is supported, there is no need for further probing into the patient agenda, and therefore is less time-consuming. Pelicano-Romano and colleagues (2013) also posit that doctors' use of closed questions when soliciting elder patient agendas could be a result of patients' age-bearing impairment and thus guarantees more accurate information. Although closed questions greatly limit patient participation by "posing a restricted action agenda" and are therefore treated as a rough index of high doctor control over the interaction (Boyd & Heritage, 2006: p. 156), they nonetheless require a pre-existing knowledge of patient conditions (Robinson & Heritage, 2006a). In this study, given that all the patients were not initial visitors, interpretation of the large amount of closed questions should be treated with caution and not taken as an overstatement of doctor dominance.

Not only did doctors in the present data prefer the use of closed questions, patients used far more closed questions than open questions as well. Over 80 percent of patient-initiated questions were closed ended in either TCM or WM consultations. This suggests that in both practices, both doctors and patients regard the use of closed-ended questions

as the norm for information seeking or confirming. Alternatively, patients' less frequent use of open questions was the result of doctors' nonverbal hints, e.g. doctors' delay in answering open questions or giving short answers.

More biomedical and less lifestyle exchanges

Regarding the content of the questions, in both TCM and WM practices, biomedical questions account for the major proportion of all the questions raised in the encounter. 83 percent of doctor-initiated questions in TCM conversations were biomedical compared with 96 percent in WM conversations. According to Roter and Hall (2006), the greater amount of doctor biomedical questions indicates a greater level of doctor dominance in medical visits. The doctor is constrained by the biomedical interpretation of patient disease and loses sight of the underlying psychosocial concerns that bother the patient. The result is consistent with findings from previous studies in other parts of the world (Grenness *et al*., 2015; McCarthy *et al*., 2013; Roter & Larson, 2001). Exploring these doctor-initiated biomedical questions, most questions were related to patients' medical conditions in both TCM and WM practices (74 percent in TCM and 44 percent in WM). Similarly, Pelicano-Romano and colleagues (2013) also reported that more than half of the biomedical questions of the pharmacist were of this nature.

In a similar vein, most of the patient-initiated questions were biomedical in nature: 86 percent in TCM and 97 percent in WM. It is interesting to note that while most of the biomedical questions asked by the doctors were related to patients' medical conditions, patients themselves seemed to query more about the therapeutic regimen: 32 percent of all patient biomedical questions in TCM and 36 percent in WM.

In both TCM and WM encounters, lifestyle and psychosocial questions were least discussed: an average of 6 percent in TCM and 1 percent in WM. These results confirm findings from several other empirical studies that also show lower coverage of lifestyle-related questions during the medical consultation (Nakayama *et al*., 2016; Roter & Larson, 2001). Ford and colleagues (1996) demonstrated that in oncological clinician-

patient interaction, questions related to lifestyle and psychosocial topics were less than a quarter of those related to biomedical topics.

Similar to the data collection or information seeking behaviors, information giving behaviors by both doctors and patients were also more biomedical rather than psychosocial. For the most part, doctors' utterances (73 percent of overall doctor information-giving and counseling statements in TCM and 95 percent in WM) gave biomedical information and counseling advice to patients, split unevenly though between therapeutic regimen, medical conditions, physical examinations, and others. In addition, patient information-giving statements were also biomedical in nature: 79 percent on average of overall patient information-giving utterances in TCM and 91 percent in WM. These findings are not at odds with what has been reported by research published so far with reference to WM practice, which suggests that lifestyle and psychosocial discussions were far less frequently addressed than biomedical discussions in medical conversation (Ford *et al*., 1996; Pelicano-Romano *et al*., 2013; Sorjonen *et al*., 2006). Despite this commonality, communication at this level was also markedly different between TCM and WM, which will be discussed in detail in Section 4.51.2.

4.51.2 Differences between TCM and WM

There are some differences regarding the overall amount and the content of the questions by both doctors and patients. In total, the amount of doctor-initiated questions in TCM far outnumbered that in WM conversation. In contrast, the overall number of patient questions in WM visits greatly exceeded that in TCM visits. Differences also occur with respect to the specific content categories of the questions. Compared with TCM conversations, WM conversations included more questions by both doctors and patients in relation to physical tests: 25 percent of doctor-initiated biomedical questions in WM compared with 5 percent in TCM, 40 percent of patient-initiated biomedical questions in WM compared with 14 percent in TCM. TCM doctors were also found to ask more lifestyle and psychosocial questions than WM counterparts. In TCM, an average of 6 utterances in each 100 doctor statements were lifestyle and psychosocial quests. In WM, however, only 1 out of the 100 doctor's speech was related to topics of

this nature. In response to doctors' behaviors at this level, patients in TCM conversations also asked far more lifestyle and psychosocial questions than patients in WM conversations. Although the overall number of patient questions in WM encounters exceeded that in TCM encounters, most of these questions were biomedical instead of lifestyle and psychosocial. With respect to the form of the questions, it is interesting to note that while all doctors preferred the use of closed questions, when lifestyle and psychosocial discussions were involved, doctors in TCM conversations used more open questions than their WM colleagues.

As regards information-giving and counseling, WM doctors provided considerably more biomedical information than TCM doctors. Exploration of the information-giving and counseling cluster reveals that while there is no difference in the mean ratio of utterances about medical condition, WM doctors gave markedly more information on physical examinations, therapeutic regimen and others (e.g. next clinical consultation appointment or payment information). Seven percent, on average, of doctor information-giving and counseling statements in TCM was dedicated to physical tests compared with 27 percent in WM. Correspondingly, patients visiting WM doctors also gave more information on physical tests than TCM patients: 4 percent of overall patient information-giving statements in TCM were related to physical tests compared with 17 percent in WM. The higher ratios of doctor and patient exchanges on physical tests in WM might be due to the differences in the nature of these two approaches to medicine: WM diagnosis relies more on physical tests than TCM. To make a diagnose in WM, except medication refill, doctors sometimes may request that their patients have a physical test (e.g. a blood test) or the doctor may need to refer to patients' previous physical exam reports, particularly in the chronic illness setting when patients normally need to take regular physical examinations so that their medical conditions can be updated. In TCM consultations, however, though physical examinations may also be required in some cases, the conventional five-step diagnosis is still the major norm that guides the doctor and the patient. This also explains the reason that TCM patients gave more information about their medical conditions than WM patients: more than half of patient utterances at the level of information-giving focused on medical conditions in

TCM compared with 45 percent in WM. In TCM, patient problem presentation is the major way through which the doctor knows the biomedical agenda of the patient; whereas in WM, part of the medical conditions of the patient can be given through physical examinations. With respect to information concerning therapeutic regimen, less information was given by TCM doctors than by WM doctors. This might be because WM patients asked more therapeutic-related questions than did TCM patients: 36 percent of patient questions in WM were related to therapeutic regimen compared with 28 percent in TCM.

Another interesting finding is the greater number of lifestyle and psychosocial information giving and counseling in TCM than in WM conversation. Lifestyle and psychosocial talk emerged in 27 percent of all doctor information giving and counseling statements in TCM compared with 5 percent in WM. Similar findings were discovered in patient talk as well: 21 percent of the overall patient information giving statements pertained to lifestyle and psychosocial information compared with 9 percent in WM. Less doctor information giving and counseling of lifestyle and psychosocial topics in WM was correlated with fewer patient questions of this nature (r_s (67) = 0.6, $p < 0.01$). Likewise, less patient information giving of this nature in WM was correlated with fewer doctor questions (r_s (67) = 0.7, $p < 0.01$). An explanation of this greater amount of lifestyle exchanges may be that in a TCM consultation, the doctor relies heavily on inquiring about patients' symptoms and lifestyles before giving diagnosis. TCM views the patient as a holistic entity that is "comprised of and subject to elements and forces of nature as a whole" (Wang and Li 2005: 177). Therefore, doctors in TCM practice believe that the physical disorder of a patient cannot be solely attributed to biomedical causes, but rather a combination of biomedical and lifestyle and psychosocial inappropriateness. Despite the clinical similarity in relation to the rarity of lifestyle and psychosocial exchanges, the observation of the marked clinical difference in relation to the extent of how these topics are 'allowed' to occur in medical interviews invokes closer scrutiny of the dynamics of talk at this level (see Chapter 5).

4.52 Relationship building

4.52.1 Commonalities between TCM and WM

Cohen-Cole (1991) proposed three functions of the medical interview, the third of which is to build a relationship. This function is reflected through a series of behaviors including rapport building (e.g. positive and negative talk), social conversation, and giving responses to the other speaker's emotions (Roter & Hall, 2006). In the current corpus, doctors' relationship building was the least frequent kind of doctor talk in both TCM and WM conversation: 19 percent of doctor speech in TCM and 12 percent in WM. In contrast, relationship building was second most frequently observed classification of patient talk in both practices: 33 percent of patient talk in TCM and 34 percent in WM. In TCM consultations, patients engaged in nearly twice as much emotional response as did doctors. In WM, the patient-doctor ratio at this level was nearly 3:1. This observation indicates that patients were more attentive than their doctors in building relationships in medical consultations.

Regarding the content of emotional statements, in both practices, patient agreement was more than three times as much as doctor talk of this nature. The finding accords with results demonstrated by Ford and colleagues (1996) in an oncological setting. For the most part, patient agreement in this study occurs at a sequential next place to doctors' advice giving or questioning. Therefore, the higher occurrence of patient utterance of this nature could be explained by the rules of conversational turns and sequences. The second explanation is that this greater amount of patient agreement could possibly suggest that patients are more likely than their doctors to show agreement to what the other interlocutor has said. Doctors have the esoteric knowledge and years of experience in health, and therefore are treated as more authoritative in keeping healthy. A third possibility is the assumption of a less symmetrical doctor-patient relationship. Recall the huge amount of doctor-initiated questions (Section 4.51.1) in the sample population. It is possible that patients in this study are passive participants. With these minimal acknowledgement tokens, patients fail to capture the opportunity to raise their queries about the nature of the disease and the recommended treatment (Heath, 1992; Robinson, 2003).

As regards social conversation, parallel with West's (1984) study, both doctors and patients in the current corpus of 69 medical consultations indulged in extremely little laughter and jokes in the two types of encounters, and most of which was invited by the patient. Coser (1959) emphasized the role of laughter in medical consultation by saying "to laugh or to occasion laughter through humor and wit, is to invite those present to come close… it aims at decreasing social distance" (p. 172). The lack of laughter and jokes in both TCM and WM consultations could possibly reflect a hierarchical distance between the doctor and the patient.

An important aspect of relationship building is emotionally focused communication (Grenness *et al*., 2015). According to Degner and Sloan (1992), the patient is not only physically unwell, but also emotionally and cognitively laden. The responsibility of the doctor is, therefore, not restricted to the biomedical but psychosocial well-being of the patient. This concept of balancing between cure and care has been widely encouraged by recent studies on the provision of patient-centered care (Bertakis & Azari, 2011; Epstein, *et al*., 2005; Mead & Bower, 2000a). However, what the literature has widely reported is a universal lack of discussion on patient emotional states in medical consultations (Grenness *et al*., 2015; Roter *et al*., 1997). One way to discourage patients from emotional disclosure is to privilege biomedical discussions in consultations (Zimmermann, Piccolo, & Finset, 2007). In line with these findings, in the current study, with a predominance of their talk on biomedical discussions, doctors and patients engaged in less than 5 percent on average of their talk on emotional talk in either TCM or WM consultations. Some scholars believe that it is the patient, rather than the provider, who is less willing to engage in emotional discussions in clinical consultations, and that health professionals avoid emotional discussions with their patients for fear of inappropriate psychosocial probing (Eide *et al*., 2004a). Although this argument was supported by empirical evidence (Grenness *et al*., 2015; Okuyama *et al*., 2008) including the work of Wei and colleagues (2013) who identified the reasons for Chinese patients' reticence and reluctance on emotional disclosure to their doctors, it was not supported by the current observations. In the current corpus, patients and doctors

engaged in similar amount of emotional talk, and many of these talks were initiated by the patient through psychosocial information-giving or explicit emotional expression.

Furthermore, the high proportion of physician self-disclosure reported by Beach and colleagues (2004) in primary care and surgical settings was not supported by this study. In both TCM and WM consultations, doctor behaviors at this level were uncommon: in four out of the thirty TCM consultations and two out of the thirty-nine WM consultations did doctors disclose their personal experience which has either biomedical or psychosocial relevance to the patient.

4.52.2 Differences between TCM and WM

Differences exist when looking at the content of conversationalists' relationship building behaviors. Both doctors and patients in WM consultations gave more verbal responses showing agreement than did TCM doctors and patients. Further probing of the local context in which these agreeing statements occur suggests that the greater amount of doctor agreement in WM is strongly associated with the high frequency of patient questions in WM (r (67) = 0.5, $p < 0.01$). In addition, regarding patient speech, WM patients were also more verbally attentive in conveying their attitudes than were TCM patients.

It is also interesting to note that TCM doctors engaged in significantly more social conversation than did WM doctors: an average of 8 percent of doctor speech in TCM conversation compared with only 1 percent in WM. Laughter and non-medical chitchats were more expected in TCM than in WM consultations. In response to doctors' behaviors, patients in TCM encounters were also more attentive in social conversation than were WM patients: an average of 9 percent of patient talk in TCM conversation and 2 percent in WM. The importance of social conversation in relieving patient uneasiness and its positive association with patient satisfaction has been highlighted by many scholarly sources (Roter & Hall, 2006; Sandvik *et al*., 2002). This greater amount of social conversation in TCM therefore reflects a more relaxed, if not closer, relationship between the doctor and the patient. I posit hereby that the more frequent social talk in

TCM is, similar to the greater amount of lifestyle discussions, partially attributed to the nature of TCM diagnosis which guides doctors and patients engaging in discussions not only restricted to the biomedical agenda, but also the outside environment with which the patient interacts. Given the clinical differences, plus the consideration that participants' engagement in social conversation could reflect their interpersonal relationships, communication at this level will be further explored regarding how topics are initiated and developed (see Chapter 6).

Doctors also exhibit differences in verbalizing their concerns and empathy. One of the most important aspects of clinical consultation is the extent to which doctors showed their concerns about their patients (Watson & Gallois, 2007). In an examination of Dutch general practitioner-patient conversation, Bensing, Verheul and van Dulmen (2008) reported no single concern or worry in over half of the consultations recorded, both by doctors and patients. A somewhat similar phenomenon was found in the current WM consultations: no single doctor concern was expressed in 93 percent of the consultations. In this regard, TCM doctors made more statements than their WM counterparts: doctor concern was absent in 43 percent of the thirty TCM consultations. In the case of showing empathy, previous studies found that empathic responses by clinicians were few with a mean frequency of 1 (Ford *et al*., 1996; McCarthy *et al*., 2013), and these findings were reinforced by the current study with a mean ratio of 0.01 in TCM and 0 in WM consultations. Although in both practices doctors rarely used empathetic statements, TCM doctors gave more empathic responses to their patients than did their WM colleagues. Many scholars (Eide *et al*., 2004a; Maguire *et al*., 1996) have discussed how doctors' empathetic expressions can encourage patient emotional disclosure, which was also supported by the current data (r_s (67) = 0.2; $p < 0.05$). Furthermore, the length of consultation can also be a factor in determining the amount of emotional discussions. Eide and colleagues (2004b), in their examination of 36 cancer patient consultation and 79 hematology consultations, pointed out that time limit should be accounted for the lack of emotional discussions. Health professionals lack sufficient time to address both biomedical and emotional issues of the patient. In the current study,

a medium correlation was found between length of consultation and doctors' emotional talk using Cohen's (1992) guideline (r (67) = 0.3, $p < 0.05$).

4.53 Partnership building

4.53.1 Commonalities between TCM and WM

In addition to the three clusters of question asking, information giving, and relationship building, differences between doctor and patient speech also exist in their partnership building. For doctors, this speech cluster accounts for a quarter and less than one fifth of their overall speech in TCM and WM conversation, respectively; for patients, it comprised 3 and 5 percent of their overall speech in TCM and WM conversation, respectively. This higher frequency of partnership building behaviors in doctor talk can be regarded as doctors' behaviors in extending patient engagement in the current medical visit (Pelicano-Romano, *et al*., 2013), which is evidenced by doctors' frequent use of verbal attentiveness markers and facilitation statements. Many studies have documented a strong association between patient active participation and doctors' partnership building statements (Makoul, 1998; Street, 2001; Street *et al*., 2005), including Street (1991), which reported positive association between patient emotional disclosure and physicians' partnership utterances. Street believed that patients wait for physician cues that allow them to openly express their concerns.

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In addition, the frequent use of partnership building behaviors demonstrated by doctors also reflects doctors' efforts in facilitating the current consultation towards an efficient accomplishment: on the one hand, doctors navigated the medical consultation through their use of facilitation statements (bid for repetition, checks, asking for patients' opinion) and verbal attentiveness markers (backchannels, showing understanding) so as to achieve an effective collection of the necessary information based on which a diagnosis can be made; on the other hand, in cases of deviation from the expected course of consultation (e.g. when patients provided information that is unwanted by the doctor), doctors directed the conversation through directing statements. In both types of encounters, doctors directing statements accounted for an average of 4 percent of their total speech, almost same as what they have devoted to the overall emotional

discussions. By contrast, patients' low frequent use of statements of this nature may reflect their lack of voice in guiding and directing the medical conversation. It is this status difference – the doctor being the superior and the patient being the subordinate – that affects the use of directives (Holmes, 2013). The imbalance between doctor and patient status was also evidenced by the fact that expressions indicating doctors' consideration of patient opinions were rare in both practices: less than 1 percent on average of the total doctor speech during the consultation.

A closer examination of doctors' partnership-building behaviors revealed that for TCM doctors, backchannels, statements showing understanding, and checks for understanding dominated this talk, whereas statements made by doctors who asked for the patient's opinions were infrequent. For WM doctors, the most frequently occurred verbal behaviors showing attentativeness were backchannels, statements showing understanding, and giving directions. For patients, most of their speech at this level, though the proportion is quite marginal of their overall speech, was devoted to checking for understanding. Bearing in mind that the patient participants in the current study are older adults who might have age-related cognitive and auditory impairments, the relatively more frequent use of checking compared with other partnership-building behaviors is thus not unexpected.

4.53.2 Difference between TCM and WM

By encouraging patient participation, partnership-building behaviors are an indicator of doctors' less dominant stance in their doctor-patient relationship (Roter, 2000). Compared with WM doctors, TCM professionals demonstrated more partnership building behaviors, particularly at the level of making transitional speech and facilitation talk.

Facilitation speech (requests for repetition, checking for understanding, and asking for opinions) is one of the indexes of patient-centered communication (Mead & Bower, 2000b). Zandbelt and colleagues (2006) reported doctors' frequent use of facilitating speech when communicating with elderly patients in medical specialist encounter.

While the current finding corroborates with what has been reported by Zandbelt and her colleagues, the extent to which doctors' facilitation speech was expressed in different practices was found to be significantly different. In the current corpus, TCM doctors used more facilitation statements than did WM doctors, which suggests that doctors in TCM visits were more attentive in facilitating an efficient flow of information between themselves and their patients, and were more active in involving patient participation. Patients, on the other hand, were only different in the area of verbal attentiveness through paraphrasing doctors' talk. Most of these paraphrasing statements follow immediately after doctors' information-giving utterances. Therefore, the more frequent use of paraphrasing in WM patient speech was associated, although only weakly, with the greater amount of doctors' information giving and counseling ($r = 0.2$, $p < 0.05$).

4.54 Speech pattern differences between TCM and WM

Roter and colleagues (1997) proposed five different communication patterns in primary care consultations, including (i) narrowly biomedical encounters noted by an extremely uneven distribution of biomedical and psychosocial discussions and a dominance of doctors' questioning behaviors, (ii) expanded biomedical encounters in which there is a slightly more moderate distribution of biomedical and psychosocial discussions, (iii) bio-psychosocial encounters characterized by a relatively more balanced distribution of both biomedical and psychosocial exchanges plus a decreasing number of doctor-initiated questions, (iv) psychosocial encounters with an even distribution of psychosocial and biomedical discussions between doctors and patients, plus a small proportion of both doctor and patient-initiated questions, and (v) consumerist encounters in which doctor information giving behaviors are more pronounced and psychosocial discussions were less expected. The consumerist encounter is also featured by a combination of an increased number of patient-initiated questions and a decreased frequency of doctor-initiated questions. Apart from content evaluation, Roter and her colleagues also calculated the verbal dominance ratio and the patient-centeredness ratio for the evaluation of communication patterns between doctors and patients. It is worth noticing, however, that Roter's description does not generate consistent findings in the current corpus.

The doctor-patient verbal dominance ratio was 0.88 in TCM visits and 1.11 in WM visits, which are reflective of Roter's psychosocial encounters featured by an equal distribution of doctor and patient talk. However, the patient-centeredness ratio of 1.23 in TCM is reflective of Roter's consumerist encounter, and the ratio of 0.7 in WM is reflective of Roter's bio-psychosocial encounter. Evaluated from the content of the consultation, doctors' psychosocial talk (including lifestyle and psychosocial information-giving and counseling and emotional talk) comprised 12 percent, on average, of their overall speech in TCM visits, and 5 percent in WM visits. The doctor biomedical-psychosocial ratio is thus 1.6:1 in TCM and 10.4:1 in WM. Patient psychosocial speech accounted for 14 percent of their total speech in TCM visits, and 7 percent in WM visits. The patient biomedical-psychosocial ratio is thus 3.2: 1 in TCM visits and 6: 1 in WM visits. This content analysis suggests that the TCM encounter in the current study is more reflective of Roter's bio-psychosocial encounter, featured by a relative balance between conversationalists' biomedical and psychosocial exchanges, coupled with occasional social exchanges; and that the WM encounter is more reflective of the expanded biomedical encounter with a more skewed distribution of the biomedical and psychosocial discussions by both doctors and patients, plus a scarcity of social talk. In both practices, doctors actively engaged in partnership building, and patients frequently expressed positive talks. This observation also suggests that both encounters in the current study were not narrowly biomedical. Yet, the length of the consultation was markedly different from Roter's study. The average length of consultation is 5.5 minutes in TCM and 3 minutes in WM, far shorter than any of the encounter type noted by Roter and her colleagues. This might be attributable to the fact the current study was conducted in the outpatient department in a public hospital where the daily patient visit is terribly large. It is thus practically difficult for doctors to spend a large amount of time on each individual patient. Some consultations were found to be longer than the others when the patient was considered to be sicker.

4.6 Implications of findings

One implication of this quantitative study relates to the coding of physical examinations. In the original RIAS codes, utterances relating to physical examinations were not separated from medical conditions. Although the primary objective of physical exam discussions is either to seek or to provide information about patients' medical conditions, information disclosure of medical conditions sometimes can be delayed after several turns of physical exam discussions. In the current corpus, there were many occasions when patients were asking their doctors about the functions of different physical examinations. There were also instances when doctors gave advice to their patients in relation to the preparation work that the patient was required to do before taking the physical exam. Such exchanges are worth coded separately from the rest especially when this kind of discussions is only salient in one encounter but not the other, as in the present study.

One analytical implication relates to the application of RIAS to TCM consultations. While a wealth of studies have been conducted in WM practice, efforts applying RIAS codes to TCM encounters have not yet been tried before. Understandings derived from the analysis therefore have valuable implications in informing clinical practice and patients' decisions and expectations in China and elsewhere where the two medical approaches co-exist.

4.7 Chapter summary

This chapter has focused on the quantitative analysis of doctor-older patient communication behaviors in the outpatient chronic setting. Consistent with previous observations by most existing studies in the literature, results of this study also report a predominance of instrumental exchanges between doctors and patients. By using RIAS for the exploration of communication behaviors in both TCM and WM practices, this study demonstrates how RIAS can also be applied to a different medical practice that has not been investigated before. Comparisons were made at two levels: between doctors and patients, and between TCM and WM practices. Comparisons between doctors and patients demonstrate four major findings: first, doctors asked more questions than did their patients, and most of these questions were closed-ended; second,

patients engaged in more relationship building than did their doctors; third, both doctors and patients were less interested in emotional discussions; and finally, doctors were more verbally attentive in partnership building communication than their patients. On the other hand, the comparison between the two types of encounters suggests different patterns of doctor-patient communication (Roter *et al*., 1997). TCM doctors were less verbally dominant and more patient-centered than were WM doctors in their medical consultations with patients. In addition, lifestyle and emotional discussions were more frequently observed in TCM encounters. Discussions about physical tests, by contrast, occurred more frequently in WM consultations. Furthermore, while WM doctors engaged in markedly more instrumental talks than did TCM doctors, they were less involved in socio-emotional exchanges than were their TCM colleagues.

While this chapter only focuses on the comparison of different communication behaviors, it does not reflect how these differences might relate to patient satisfaction without which exploration of such differences would be less valuable. Chapters 5 and 6 constitute Study 2 which concentrates on the co-construction of two speech activities that are outside the biomedical domain of disease: lifestyle communication and social conversation. The decision to explore communication at these two levels in depth is based on the RIAS findings, which suggests a marked difference in TCM and WM interviews.

Chapter 5 Lifestyle communication in medical encounters

5.0 Chapter introduction

> "The general recognition that health problems to a considerable extent are generated by people's behavior with respect to food, sleep, drugs, physical exercise, etc., broadens in interesting ways the range of information that may be judged relevant in a clinical context" (Larsson, Säljö, & Aronsson, 1987: p. 1129).

Studies on health communication agree that issues of lifestyle have a marked influence on the health of the individuals and that promoting an appropriate lifestyle is one of the fundamental tasks of health professionals (Sorjonen *et al*., 2006). As proposed by Larsson and colleagues, as well as other scholars (Boyd & Heritage, 2006; Sorjonen *et al*., 2006), lifestyle information is closely related to patient health. Thus, medical consultation is not only an activity during which health professionals provide medical diagnosis and treatment, but also an interaction where they often deliver advice on a number of aspects. In spite of the importance of lifestyle communication, there is a gap in the literature on this area of communication. Previous studies, mostly conducted in North America and some Nordic countries, have been mainly concerned with the type of activity (e.g. advice giving, information giving, or questioning) through which lifestyle communication is exchanged (Larsson *et al*., 1987; Russel & Roter, 1993), the interactional patterns of lifestyle communication (Johanson *et al*., 1996; Sorjonen *et al*., 2006), and lifestyle advice and prevention (Stott & Pill, 1990). These studies have reported inconsistent findings in relation to the extent of lifestyle discussion in medical talks.

Based on findings reported in Chapter 4, while doctors in WM encounters may ask lifestyle-related questions, they rarely engage in advice giving. In contrast, doctors in TCM visits actively engage in information giving and counseling in relation to patients' lifestyles. This observation corroborates with Russel and Roter's (1993) study in which lifestyle talk accounted for 20% of the visit length between health professionals and

their chronic-disease patients. In general, doctors and patients in TCM visits engage more actively in lifestyle communication than do their WM counterparts. The research questions to be addressed in this chapter are (1) what are the sequential locations of lifestyle communication in medical visits; (2) how lifestyle is co-constructed by doctors and patients in different clinical practices; (3) how differences between TCM and WM affect participants' interpretation and expectation of the frame for the medical encounter; and (4) what might be the social relationship indexed in this kind of communication.

5.1 The concept of lifestyle

As noted, the literature is scarce about empirical studies addressing the weight of lifestyle communication in doctor-patient discourse (Johanson *et al*., 1995). A review of these studies shows that there is no clear-cut conceptualization of lifestyle. Within the area of medical sociology, it is used to refer to the individual patterns of behavior related to health (Abel, 1991; Cockerham, 2016; Grzywacz *et al*., 2012). In the literature of health and communication, Johanson, Larsson, Säljö, and Svärdsudd, in a series of studies (1995, 1996), used a post hoc strategy to define the concept of lifestyle. In their studies, lifestyle in medical discourse reflected a wide range of topics including diet, sleep, exercise, risk behaviors, stress management, and environment. Detailed dimensions of these topics can be found in their work published in 1996. In a recent publication, Hansen and Easthope (2007) systematically reviewed the rich landscape of the use of the term lifestyle in contemporary medical and lay contexts. They noted that the medical understandings of lifestyle vary in regard to varying medical fields. For example, within the area of epidemiology (i.e. the orthodox medical perspective), lifestyle is defined as isolated behaviors and practices that negatively affect health, and is mainly used for the identification of risk factors. Within the area of public health, lifestyle is regarded as individual behaviors and attributes that might cause certain diseases and therefore appropriate lifestyles should be educated and promoted. Within the mainstream medical fields, the notion of lifestyle is used for both risk factor identification and health promotion. Despite the ad hoc definitions, a common thread in the medical conceptions of lifestyle is an individual understanding of some non-biomedical and immediately social behaviors in the absence of a broader structural and

cultural considerations (e.g. gender, race, and ethnicity) (see also Shim, 2002). The medical understandings have been met with much sociological criticism for being moralistic, discriminatory, and even commodification-oriented. Rather, a sociological understanding of lifestyle, according to Hansen and Easthope, relates health to a diverging range of broader structural determinants such as social stratification, inequalities, and physical health (e.g. Abel, 1991; Cockerham, 2016).

Given that the study is located in the language/communication discipline, I used the same definition as Johanson and her colleagues to refer to a broad range of individual behaviors which might have either positive or negative impact on health. Also, this conceptualization of lifestyle in the present study is consistent with what has been described in the RIAS coding framework (cf. Roter, 1977). While lifestyle discussions may fall within the medical domain (e.g. as risk factors), in the present study, none of these health-related lifestyle topics constitute the major reasons for the medical visits. Put differently, these lifestyle topics are not raised to identify medical-related problems, but rather for the sake of health promotion and therefore communication of these topics could be interpreted as doctors' expression of their care and concern towards their patients.

5.2 Locations of lifestyle communication

In the observation of the 69 recordings, lifestyle communication was found to occur most frequently in the history taking stage – in all TCM visits and 17 (44%) WM visits. In addition, lifestyle discussion also occurs occasionally at the closing stage of TCM consultations, usually in the form of advice-giving (Extract 1).

Extract 1: TCM

1 D *你 自己 这个 米饭 哦 要 稍微 控制 一下*
you own this rice prt should a little control vm
(You have to keep an eye on your rice intake.)

2 P *哦 有数 了*
oh see prt
(oh I see)

While such sequence of lifestyle advice-giving is found in 20% of the TCM interviews, it is not observed in the WM encounters.

5.3 Elicitation of lifestyle information

Elicitation of patient lifestyle information is mainly realized through questions. Statistical comparisons presented in Chapter 4 demonstrated that TCM doctors ask significantly more questions (both closed- and open-ended) than WM doctors. In what follows, I start with a discussion of lifestyle topics observed in the current study. Thenceforward, I will illustrate different strategies used by doctors to elicit patient lifestyle information, including the design of the questions and the placement of lifestyle communication in medical talk.

5.31 Lifestyle topics

Table 5.1 charts the occurrences of different lifestyle topics in both TCM and WM consultations. The unit of analysis is medical visit.

Table 5.1: Lifestyle topic occurrence in medical visits

Topic	Number of visits in which topic occurrence has been observed	
	TCM	WM
Diet	21	12
Sleep	10	5
Exercise	7	Not observed
Bowel movement	2	Not observed
Smoking	1	Not observed

Five lifestyle topics were identified across the 69 medical consultations. Among these topics, diet is most frequently discussed in both TCM and WM consultations: in 70% of TCM visits and 31% of WM visits. The higher occurrence of diet in both TCM and WM visits suggest that doctors and patients in either practice regard diet information as more related to patient biomedical disease. Consider Extracts 2 and 3.

In Extract 2, a female patient came for a combination of symptoms. She told the doctor that she felt exhausted and that her hands were always cold.

Extract 2: TCM

1 D *你 阳气 不足*

you energy lack

(You lack energy.)

2 P *哦 是的*

oh yes

(Oh yes)

3 ((The doctor checked the tongue of the patient))

4 D *最近 柑橘 有没有 吃 多 啊? 就 是 柑橘 这一类 的*

lately orange whether eat many prt? just be orange this kind ASSC

(Have you eaten lots of oranges lately, things like oranges?)

5 P *柑橘? 我 南瓜 吃 得 很多*

orange? I pumpkin eat vcl very much

(Orange? I eat many pumpkins.)

6 D *南瓜 少 吃 一点 吧 我 感觉 你 吃 得 过量 了*

pumpkins little eat a little prt i feel you eat vcl too much prt

(Don't eat too much. I feel you're putting on a little too much on your stomach.)

Lifestyle discussion occurs at line 4 immediately next to physical examination (line 3). Doctor's question to elicit information on patient's diet displays her orientation towards diet as an important factor of physical health. The advice at line 6 also relates diet to patient symptoms, indicating that one of the possible causes of patients' lack of energy is her imbalanced diet.

In Extract 3, the patient told the doctor that she feels irritated when she drinks water in the morning.

Extract 3: WM

1 P *我 早晨 那个 喝水 哦 我 一个 习惯*

i morning that drink oh i a habit

(I have a habit. I drink water in the morning)

2 P *水 喝 下去 好像 这个 地方 难受*

water drink vm seem this place irritate

(I feel irritated here after drinking.)

3 D *那 你 喝 什么 水 呢?*

so you drink what water prt?

(So what kind of water do you drink?)

4 P *就 是 白开水 喽*

just be plain water prt

(Just plain water.)

5 D *就 是 白开水(.) 加热 的 吗?*

just be plain water(.) boil prt prt?

(Just plain water. Is that boiled?)

6 P *哎(.) 就 是 那个 温 的*

yep(.)just be that warm prt

(Yep just warm.)

7 D *那 你 吃 了 不舒服 你 把 这个 习惯 停一停*

so you eat prt uncomfortable you let this habit stop

(So if you feel uncomfortable, you stop doing that.)

Prior to line 1, the patient told the doctor that she has recently felt irritated in the stomach. Diet discussion was initiated by the patient, as a description of the symptom. Doctor's question on the temperature of the water also implies his attitude towards the relationship between diet and health. This attitude is further evidenced by doctor's advice at line 7.

Sleep is another frequently addressed issue in both visits. Consider Extracts 4 and 5.

Extract 4: TCM

1 D *你 自己 煎 的 还是 -*

you yourself concoct prt or-

(Do you prefer to concoct the herbs by yourself or?)

2 P *我 自己 煎 的*

i myself concoct prt

(I will do it by myself.)

3 D *睡眠 还可以 吧?*

sleep good prt?

(You have a good sleep?)

4 P *嗯 还可以*
um good
(Um good.)
5 (1.0) ((the doctor directs the assistant to prescribe))

Extract 4 occurs at the end of the medical interview, at a sequential place next to diagnosis. In Extract 4, the patient was diagnosed, in her last physical examination report, fatty liver disease and gallbladder polyps. Communication about sleep occurs in the treatment stage. At line 1, the doctor asks the patient how she prefers the herbs to be concocted, indicating a shift of the conversation into the treatment stage. After patient confirmation about her sleep (line 4), the doctor directs the assistant to prescribe. As such, communication about sleep is an action that makes treatment the next relevant activity in medical visits.

Extract 5: WM
1 D *睡眠 怎么样?*
sleep how?
(How's your sleep?)
2 P *睡眠 不 好*
sleep not good
(Not good.)
3 D *那 行 我 知道 你的 问题 在 这里*
so okay i know your problem be here
(So okay I know where your problem is.)

Extract 5 occurs at the history-taking stage. A female patient came to see the doctor for stomachache. She complained to her doctor that she had recently felt her stomach making noises. The doctor's question on sleep at line 1 indicates her stance towards sleep as one of the factors that cause patient biomedical disease.

It is noted that diet and sleep communication only occurs in a minority of the WM visits, demonstrating that most of the WM conversation is strictly biomedical. Topics such as exercise, smoking, work, and bowel movement were not observed in WM visits. The

inclusion of more lifestyle discussions in TCM visits reflects participants' understanding towards patient biomedical disease as caused by a combination of factors.

5.32 Design of questions

Table 5.2 shows the number of doctor-initiated lifestyle questions in both TCM and WM visits.

Table 5.2: Number of doctor-initiated lifestyle questions

	TCM		WM	
	Frequency	Percentage	Frequency	Percentage
Open lifestyle	24	34%	4	40%
Closed lifestyle	46	66%	6	60%
Total (doctor's lifestyle Qs)	70		10	

In general, the number of doctor-initiated lifestyle questions in TCM outnumbers those in WM visits (see Chapter 4 for statistical comparisons). Doctors in both practices switch between closed questions and open questions to elicit patient lifestyle information. While the sequential consequence generated by the doctor's open questions are parallel to one another (i.e. patient extension), an investigation of doctor's use of closed questions suggests a major difference between TCM and WM consultations.

In TCM conversation, doctors frequently start with an open elicitation of patient lifestyles and subsequently follow this with a series of closed questions in the form of a checklist to seek patient lifestyle information in a wide range of areas. In contrast, none of the doctor-initiated closed questions observed in WM visits start with an open elicitation. Also, the sequence generated is much shorter than that in TCM visits. Compare Extracts 6 and 7.

In Extract 6, the patient told her doctor that she had recently always felt dizzy, walking as if she was drunk.

Extract 6: TCM

1 D *胃口　　好吗?*

appetite how?

(How's your appetite?)

2 P *不想 吃饭(.) 想到 饭 就 想 吐*

don't want eat(.) think rice just want vomit

(I didn't want to eat. I felt sick with the idea of eating.)

3 D *现在 呢?*

now prt?

(what about now?)

4 P *现在 不会*

now not

(Not now.)

5 D *现在 不会*

now not

(Not now.)

6 P *嗯 不会=现在 就 是 头晕*

um not now=just be dizzy

(Um not now. I just feel dizzy now.)

7 D *嘴巴 干 不干?*

mouth dry not dry?

(Do you feel thirsty?)

8 P *干干的 也 想 喝 开水 就 是 这样*

thirsty also want drink water just be this kind

(Yes. And I want to drink water. Just this.)

9 D *开水 喝 得 多 吗? 一天 喝 多少?*

water drink PRT lot prt? a day drink how much?

(Do you drink a lot? How much water do you drink every day?)

10 P *现在 一天 么 喝 个 两 杯*

now a day prt drink vm two bottles

(I normally drink two bottles per day.)

11 D *这样的 杯子 两 杯 啊?* ((pointing to a bottle))

this kind bottles two bottles prt

(Like this?)

12 P *嗯*

um

(Um.)

13 D *喝 冷 的 喝 热 的?*

drink cold prt drink warm prt?
(Cold or warm?)

14 P *喝 热 的*
drink warm prt
(Warm.)

15 D *喝 热 的 哦?*
drink warm prt prt?
(Warm?)

16 P *冷 的 不好 吃*
cold prt cannot eat
(I cannot drink cold water.)

17 D *冷 的 吃 了 会 怎么样?*
cold PRT eat pfv will how?
(What will happen if you drink cold water?)

18 P *冷 的 吃 了 胃 难过*
cold prt eat pfv stomach uncomfortable
(I will feel sick in my stomach.)

19 D *哦*
oh
(Oh.)

20 D *现在 大便 通 没 通?*
now stools smooth not smooth?
(Are your bowels functioning right?)

21 P *大便 通 了*
stools smooth CRS
(Yes.)

22 D *怎么样?*
how?
(How's that?)

23 P *开始 来 的 时候 大便 黑*
beginning come prt time stools dark
(It was dark when I first visited.)

24 P *现在 不 黑 了 越来越好 了*
now not dark prt getting better prt
(But now it's not, it's getting better.')

25 D *每天 有 吗?*

everyday have prt?
(Do you have a regular daily bowel movement?)
26 P *嗯 有 的 每天 有*
um have prt everyday have
(Um yes every day.)

This extract demonstrates an active co-construction of lifestyle discussions by both the doctor and the patient. Immediately prior to the current discussion, the two interlocutors were discussing the patient's recent dizziness. The patient told the doctor that she had previously been fitted with a pacemaker after a heart attack. At line 1, the doctor uses an open elicitation, inviting the patient's description on her appetite. As such, the doctor indicates a shift of frame from biomedical to lifestyle. The doctor's encouragement of patient lifestyle extension (including appetite, water drinking, and bowel movement) is also evident at lines 3, 9, 17, and 22, which successfully invites sequences of patient information giving. The doctor's open elicitations are followed by a series of closed questions, pronounced for information precision – a strategy used by the doctor to elicit more information from the patient. For example, at line 10, after patient information giving about how much water she drinks on a daily basis, the doctor seeks further information by pointing to the bottle at hand. Note that while these closed questions are produced in a form of checklist, they are not introduced abruptly. Each of these questions is actually built upon the previous one.

Compared with Extract 6, Extract 7 demonstrates a different pattern of lifestyle elicitation. In Extract 7, the patient came for gastroscopic examination.

Extract 7: WM
1 D *晚上 睡眠 还好 吗*
night sleep good prt
(Do you have a good sleep at night?)
2 P *不好 现在 疼 哪里 好 啊 烦死 了*
not good now pain where good prt frustrate prt
(No, I am suffering from pain these days, how can I have a good sleep? So frustrated)

3 D *哪里　　疼　　啊*
　where　pain prt
　(Where is the pain?)
4 P *这里　　一直　　到　　这里* ((the patient points to her stomach))
　here all the way to　here
　(Here, all the way to here)

Prior to line 1, the doctor and the patient were discussing different examinations and their costs. Discussion about sleep was introduced by the doctor at line 1 through a closed elicitation, indicating a shift to the lifestyle frame for the current discussion. At line 2, the patient reciprocates by giving more than just an answer. Three types of information are embedded with the patient's response: (1) lifestyle – bad sleep; (2) biomedical – the pain; and (3) psychosocial – the irritation. The doctor seems to concentrate more on the biomedical domain by immediately asking the place of the pain, projecting a shift back to the biomedical frame for the current talk. The patient also responds by giving more biomedical information. Sleep communication was not re-introduced in the ensuing talk. It seems that both the doctor and the patient in WM encounters foreground biomedical communication during medical interviews.

The argument that participants in WM encounters concentrate more on biomedical issues is more pronounced in Extract 8. Here, insofar as the doctor's initial question fails to receive an immediate preferred response, the doctor abandons the current lifestyle talk through topical shift, shifting back to the biomedical talk. In this extract, the patient had suffered gastric bloating.

Extract 8: WM
1 D *那么我 想　　问 你　　一下　　睡眠　怎么样?*
　so i want ask you　vcl　sleep　how?
　(So I would like to ask how's your sleep?)
2 P *啊?*
　huh?
　(Huh?)
3 D *胃镜…　　你 现在　什么　　时候　做　　过?*

gastroscopy… you now what time do pfv?
(About gastroscopy, when was your last time to have the gastroscopic examination?)

This extremely short lifestyle conversation closes within two turns (line 1 and line 2). Immediately prior to line 1, the patient was complaining to the doctor about his gastric bloating and indicating that he was nervous recently. Doctor's question concerning the patient's sleep at line 1 is not well-received by the patient, evidenced by the patient's response *啊* ('huh'), indicating a trouble source in the prior turn (Schegloff, 2000). Here, the patient's turn at line 2 is both an answer to the doctor's question, and a question of a question-answer sequence which however is left hanging. At line 3, instead of repairing the turn (line 1), the doctor announces a shift back to the biomedical frame by introducing the topic of physical examination, which subsequently lasts for several turns. And the topic of sleep is not reintroduced in subsequent talks. The frame shift at line 3 thus reflects the doctor's orientation towards the biomedical frame of the medical talk.

5.33 Sequential placement of lifestyle questions

One strategy used by TCM doctors to elicit patient lifestyle information is to introduce the lifestyle communication after the physical examination. Recall Extract 2. After examining the patient's tongue, the doctor introduced diet into the communication. The placement of lifestyle discussions after physical examination can be understood as an explanation of why communication in this area is introduced, and therefore a strategy used by the doctor to make lifestyle communication occur naturally in talk. Consider Extract 9, which is the subsequent talk of Extract 2.

Extract 9: TCM
1 P *哦 过量 了 是吧*
oh over prt right
(Oh, it's too much right?)
2 D *对*
yes
(Yes.)
3 P *黄黄的 哦*

yellow prt
(Yellow right?)
4 D *嗯(.)不要 吃 太多 了*
um(.)don't eat too much prt
(Um, don't eat too much.)
5 P *哦*
oh
(Oh.)
6 D *你 那个 你 对 它 已经 代谢 不 了*
you that you to it already metabolize not prt
(You cannot efficiently absorb and digest it.)

Consider the patient's question at line 3. Note that after the physical examination, the doctor did not describe the color of the patient's tongue. The judgment of the tongue color as yellow reflects the patient's acceptance and understanding of why in the prior talk (Extract 2), the doctor introduced diet discussions (i.e. oranges).

The second strategy used by TCM doctors is to introduce lifestyle communication at the beginning of a series of other questions to gain an overall medical and social background of the patient. Extract 10 occurs at the beginning of the history taking stage. The patient complained to his doctor that ever since his latest trip, he felt uncomfortable in his stomach and his eyes as well. He was unsure if he had a serious cold.

Extract 10: TCM
1 D *其他 的 话 睡觉 怎么样*
others prt situations sleep how
(Among other things, how's your sleep?)
2 P *睡眠 好 的*
sleep good prt
(It's good.)
3 D *大小便 呢*
bowels prt
(And your bowels?)
4 P *大小便 也 好 的*

bowels also good prt
(Also good.)
5 D 也 好 的
also good prt
(Also good?)
6 P 嗯 这些 都 好 的 就 是 一个 眼睛
um these all good prt just be a eye
(Um. These are all functioning right except my eyes)

The prior conversation concerns biomedical discussions of the patient's physical symptoms. At line 1, instead of asking directly the sleep situation of the patient, the doctor uses a transition 'among other things', which could be interpreted as the doctor's intention to gather as much information as possible about the patient's condition. The patient understands his doctor's effort by confirming that 'these are all functioning right' at line 6. The placement of lifestyle discussion in a sequential position within the overall investigation of patient problems might thus be a strategy used by the doctor to find out more potentially important factors that affect patient health.

The third strategy used by TCM doctors is to elicit patient lifestyle information at a sequential place next to patient problem presentation. Consider Extract 11. The patient came for a regular physical examination. The patient told the doctor that recently he has been feeling stomach irritation especially when having some food.

Extract 11: TCM
1 D 所以 人 要 靠 调 的
so people need depend on nursing prt
(So, it depends on careful nursing.)
2 P 就 是 靠 你 买 点 中药 炖 哦
just be depend on you buy some herbs cook prt
(I just cook the herbs you prescribed.)
3 P 但是 怎么办 呢 其它东西 没 的 吃 哎
but what to do prt other stuff no prt eat prt
(But, what can I do? Nothing else to eat.)
4 D 你 平时 自己 锻炼身体 吗 现在

you usually yourself exercise prt now
(Do you do exercise at usual times now?)
5 P *平常 我 走路 么 走 现在 还是 在 走路 喽*
usually i walk prt walk now still crs walk prt
(Usually I do some walking, and I keep walking now.)
6 P *早晨 走 一走 晚<下午 或者 晚上 走 一走*
morning walk vm eveni<afternoon or evening walk vm
(I walk in the morning, and also in the eveni<in the afternoon or evening.)
7 P *那 老是 躺 在家里 天天 也 不 是 一 回事*
so always stay at home everyday also not be a solution
(So, staying at home every day is not good.)

Prior to line 1, the patient was complaining to his doctor that his veins seem dark. The doctor told him that it was because of poor blood circulation. At line 1, the doctor persuaded the patient by saying that he needs careful nursing before he recovers. The patient reciprocates by complaining that he has nothing to do except taking some herbs advised by the doctor (lines 2-3). Lifestyle discussion was introduced at line 4 immediately next to patient problem presentation (line 3). Here, the doctor's question on exercise could be interpreted as her implication of the relation between exercise and the patient's physical problem (poor blood circulation). Thus, by posing a lifestyle question at a sequential place next to patient problem presentation, the doctor nicely connects lifestyle with physical health and naturally shifts between lifestyle and biomedical frames.

In contrast, lifestyle discussion in WM visits was introduced relatively arbitrarily. Consider Extracts 12. In Extract 12, a patient came for chronic gastritis.

Extract 12: WM
1 P *以前 我 没有 什么 的*
before i don't have what prt
(I was healthy in the past.)
2 P *今年 我 做 了 胃镜 吃 了 一个月 的 药*
this year i do pfv gastroscopy eat prt one month prt medicine

(I had my stomach gastroscopied this year, and had one-month's medicine.)

3 P *吃 了 以后 后来 呢 得 了 一个 肺炎*

eat pfv after later prt have prt a pneumonia

(After taking the medicine, I was diagnosed with pneumonia.)

4 D *睡眠 好 不 好*

sleep good not good

(Do you have a good sleep?)

5 P *睡眠 不 好*

sleep not good

(No.)

6 D *睡 不 着 还是 早 醒*

sleep not crs or early wake up

(You can't fall asleep or you wake up early?)

7 P *也 睡 不 着*

also sleep not prt

(I can't fall asleep as well.)

8 D *这个 跟 你 得 肺炎 是 两码事*

this with you have pneumonia be irrelevant

(This is irrelevant to your pneumonia.)

9 D *说明 你 整个 免疫系统 功能 下降 了*

mean you whole immune system function decline prt

(This means that your immune system declines.)

Prior to line 1, the patient was telling his doctor that he had been diagnosed with herpes zoster in 2014, which seriously affected his health. At lines 1 to 3, the patient doubts that his recent pneumonia is caused by his medications for the treatment of gastritis. The doctor's response to patient problem presentation is delayed until line 8, where the doctor disagrees with the patient by saying that his recent pneumonia is caused by a decline of his immune system (line 9). Lifestyle discussions (line 4-7) are inserted between patient problem presentation and doctor's response. However, as an inserted

sequence of talk[3], this communication about patient sleep is abrupt in its local context as the relationship between sleep and physical disease is not clear. Note the doctor's statement at line 8 which denies causation between sleep and the pneumonia. Also, never in the ensuing talk has the doctor explained to the patient why the topic of sleep is introduced.

In summary, the ways through which patient lifestyles are elicited differ between TCM and WM in terms of (a) the number of lifestyle-related questions, (b) the development of lifestyle sequences, and (c) the discourse strategies used by the doctor to relate lifestyles to physical problems. The propositions here are that TCM doctors are more engaged than WM cohorts in eliciting patient lifestyles and that TCM doctors seem to be more skillful in introducing lifestyle talk with a swift shift between biomedical and lifestyle frames.

5.4 Lifestyle advice

Studies vary in regard to doctors' lifestyle advice-giving behavior in medical consultations: while Russel and Roter (1993) reported doctors' active engagement in providing lifestyle advice to their patients, studies in many Nordic countries including Johanson and colleagues (1998), and Sorjonen and colleagues (2006) suggested a lack of doctors' counseling on the consequences of patients' lifestyles on their health status.

Findings from the current study suggest that both TCM doctors and patients engage more actively in lifestyle information giving and counseling than their WM counterparts (see Chapter 4). Germane to this finding is the consideration of where and how lifestyle advice is provided in medical visits. The data shows that while TCM doctors are more engaged in advice giving than their WM cohorts. For example, when patient lifestyles are treated as problematic, a longer sequence of advice-giving is observed in TCM visits. When patient lifestyles are treated as non-problematic, WM doctors proceed with either

[3] Inserted sequence here is different from Schegloff's (2007) insert sequence, which is placed between the base FPP and the base SPP. An insert sequence addresses issues related to the base FPP and projects the production of the base SPP.

biomedical communication or indication of a possible closing of the medical visit, while TCM doctors tend to build more knowledge on their patients with more lifestyle advices. Another important aspect of advice giving is the doctor's explicit statement of the reasons for advice, i.e. whether the doctor informs the patient with respect to the connection between his/her biomedical status and lifestyle habits (e.g. why certain food is not recommended). This observation is also only found in TCM data.

In the rest of this chapter, I will discuss the different environments within which doctors' advice towards patient lifestyles is provided. I will then explain the different ways through which patient education on the connection between health and lifestyles is accomplished. Thenceforward, I will illustrate patient receptions of doctor's advice.

5.41 Placement of lifestyle advice

Examination of the doctor's lifestyle advice suggests distinctive features in relation to where advice is presented by doctors in different practices. In WM visits, doctors' lifestyle advice is mainly provided at a sequentially next position to patient problem presentation during the history taking stage. In TCM visits, lifestyle advice also frequently occurs either next to patient lifestyle information giving during the history taking stage or at the end of the visit before patient leaves. In what follows, I will illustrate how advice is invoked at different sequential positions, and what are the discoursal and psychological purposes they achieve.

Advice next to patient problem presentation

In both TCM and WM visits, doctors' lifestyle advice occurs at a sequentially next position to patient problem presentation during the history taking stage. Advice in these cases is thus produced as a logical outcome (Sorjonen *et al*., 2006) of prior turns of talk. The placement also reflects the doctor's attempt to build connections between biomedical ailment and lifestyles. Consider Extracts 13 and 14.

In Extract 13, the patient came for breast swelling. She told the doctor that her amenorrhea occurred at the age of 55, which was quite a long time ago.

Extract 13: TCM

1 D *有时候　　会　　有　　点　　胀痛　　哦*

sometimes will have little mastalgia prt

(You are suffering mastalgia sometimes?)

2 P *嗯*

um

(Um.)

3 D *这个　可能　　是　因为　　你　　激素　　水平　　大*

this probably be because you hormone level high

(This is probably because of your high hormone level.)

4 D *它　　主要　　是　跟　　雌激素　　有　　关系　　的　哦*

it mainly be to estrogen have relation prt prt

(It is mainly related to estrogen level.)

5 D *那么 你　的　　话　　呢　　就　　是…*

so you prt case prt just be…

(So, for you…)

6 D *主要　　么　　一个　就　　是　吃　　东西　　的　　话　　要　　注意　　哦*

primarily prt one just be eat stuff prt situation must mind prt

(Most importantly, on the one hand, you have to watch your diet.)

7 D *使用　蜂胶　　蜂皇浆　　这 种　　东西　　不要　　多　吃　　哦*

use propolis royal jelly this kind stuff don't much eat prt

(Don't eat too much stuff like propolis or royal jelly.)

8 D *还有　　包括　　有些　　阿娇　　这种　　尽量　　慎重　　哦*

also include some *ejiao* this kind as far as possible careful prt

(And also you'd better be careful as far as possible in eating stuffs like *ejiao* (a kind of supplement made by donkey-hide gelatin).)

9 P *哦*

oh

(Oh.)

Active doctor's advice giving is observed here. After confirming with the patient about her medical problem (lines 1 and 2), the doctor provides an evaluation of the patient's biomedical ailment, followed by core lifestyle advice (lines 6 to 8). The placement of advice as a relevant next action to patient problems could thus be interpreted as the

doctor's implication of the relation between diet and patient problems. Information elaboration is observed in the doctor's attempt to specify the many kinds of nutrition supplements that might affect the patient's biomedical situation. In so suggesting, the doctor shows her care and concern towards the patient. Also notable here is the use of hedging in giving advice. The use of 'too much' (line 7) and 'as far as possible' (line 8) could be interpreted as the doctor's strategy to attenuate her power as a professional and make the advice more acceptable.

A similar pattern was also observed in WM visits. In Extract 14, the patient had recently taken a Nuclear Magnetic Resonance examination, and was reported to have a high amylase level.

Extract 14: WM

1 P *那个(.)医生 我 比较 关心 高血压 要 住院*
that doctor i more concern hypertension need hospitalization
('That(.)doctor, I am very concerned about my situation, if hypertension requires hospitalization.)

2 D *高淀粉酶血症 还 没有 嘞 真是的*
hyperamylasemia still no prt come on
('It's hyperamylasemia, not hypertension. Come on.)

3 D *吃 东西 啊 一顿 不要 吃 太 饱*
eat stuff prt one meal don't eat too full
('When you eat, don't eat too much every time.')

4 P *不要 吃 太 饱*
don't eat too full
('Not too much.')

5 D *然后 特别 高 脂肪 的 东西 要 注意*
then extremely high fat prt stuff need mind
(Then, you need to mind those food that are extremely fatty.)

6 P *高 脂肪 的 要 少点*
high fat prt must less
(Eat fewer fatty foods.)

7 D *哎*
yes

(Yes.)

Prior to line 1, the doctor was reading the patient's physical report. The patient describes her medical situation and delivers her concern at line 1. Similar to the observation in Extract 13, the doctor's advice is prefaced with a biomedical evaluation and is placed next to patient problem presentation. In so doing, the connection between diet and biomedical problem is salient, and advice for a change in lifestyle is built more naturally in sequence.

Advice giving on problematic lifestyles

Sorjonen and colleagues (2006) observed that in the majority of cases doctors' advice is provided next to patients' presentation of their problematic lifestyles. Sorjonen et al.'s observation however is only supported in two of the TCM and none of the WM visits. Consider Extracts 15 and 16. In both extracts, the patient's lifestyles were treated by the doctor as problematic.

In Extract 15, the patient told the doctor that recently he felt his stomach being sticky and a bit of provoking. He felt that there was some gas inside his stomach.

Extract 15: TCM

1 D *你 晚上 几点 睡觉*
you night when sleep
(When do you sleep at night?)

2 P *晚上 到时候 很 早(.)*
night sometimes very early(.)
(Sometimes very early in the evening.)

3 P *我 电视频道 没 调 好 嘞 就 睡着 了*
i tv channel not choose pfv prt just asleep prt
(I fall asleep before I even decide which program to watch.)

4 D *几点 啊 七八点钟 就 睡觉 了 啊*
when prt 7 or 8 pm just sleep prt prt
(When? 7 or 8 pm?)

5 P *哎 我 如果 在床上 看电视 马上 就要 睡着 了*

yes i if on bed watch TV soon will asleep prt
(Yes, if I watch TV on bed, I'll soon fall asleep.)
6 D *哦 然后 到 几点钟 醒 呢*
oh then till when awake prt
(Oh, when do you wake up then?)
7 P *不一定 11点 多 也 会 醒 12点 多 也 会 醒*
not definitely 11 pm more also will awake 12 pm more also will awake
(Not definitely. Sometimes at 11 and sometimes at 12 pm.)
8 P *反正 就 两三个 钟头*
anyway just two or three hours
(Anyway, just two or three hours.)
9 D *你 最好 就 是 说 你 不要 在床上 看电视*
you better then be say you don't on bed watch TV
(You'd better, say, not to watch TV on bed.)
10 D *这个习惯 我 觉得-*
this habit i feel-
(I feel this habit-)

At line 1, the doctor announces a lifestyle frame for the current talk by asking about the patient's sleep. The doctor's information-seeking lasts for several turns with a combination of both open and closed elicitations (lines 1, 3, and 6). Here, we can see at lines 4 and 6 how the doctor progressively pursues information precision through continuous requests for a specification of the length of sleep. In response, the patient provides detailed descriptions of his sleeping habits (lines 2-3, 5, 7-8). Lifestyle advice is provided at lines 9 and 10. The treatment of patient lifestyles as problematic is explicit through the use of negatives *不要* ('don't') (line 9) and the indicative tone of doctor's turn at line 10.

In Extract 16, problems in lifestyles are recognized by the patient. In this extract, the patient had recently had his blood tested. He showed to the doctor his physical report.

Extract 16: TCM
1 P *这个 可能 跟 抽烟 有 关系*

this probably to smoking have relation
(This is probably related to my smoking.)
2 D *那 你 不好 不要 抽烟 的 啊*
then you why not don't smoking prt prt
(Then, why don't you stop smoking?)
3 P *呃 不 抽 做 不到*
um no smoking do cannot
(Um, I can't do it.)
4 D *什么 叫 做 不到*
what mean do cannot
(What do you mean?)
5 P *我> 做 不到 做 不到< 像 这种 抽烟 是 0 至 10*
i >do cannt do cannot<like this smoking be 0 to 10
(I can't do it, can't do it. The item scores 0 to 10 if you smoke)
--- ((Lines omitted)) ---
6 P *酒 已经 不 喝 了*
wine already not drink crs
(No more drinking already.)
7 D *酒 已经 不 喝 了 觉得 再 不 抽烟 没法 做人 了*
wine already not drink crs feel again no smoking cannot live prt
(No more drinks, so you think if you stop smoking, you cannot live.)
8 P *哎 就就是*
yes exac-exactly
(Yes, exactly.)

Prior to line 1, the doctor and the patient were discussing the patient's physical examination report. Frame shift was initiated by the patient at line 1. By confessing that his biomedical problem might be related to his smoking, the patient displays recognition of his problematic behavior. After the patient's initial establishment of his problematic lifestyles, the doctor responds with advice giving. In so doing, the doctor aligns with the patient in a joint establishment of an orientation to patient's lifestyles as problematic. The doctor's alignment to the patient is also evident at lines 7 and 8, where by accommodating to the patient in the form of a joke, the doctor demonstrates her understanding of the patient. This strategy may serve the purpose of achieving common ground between interlocutors, as evidenced here at line 8.

Also note that, instead of directly asking the patient to stop smoking as observed in most other cases, the doctor's advice was formulated in a form of rhetorical question (line 2), which could be interpreted as the doctor's intention to mitigate her command regarding the modification of the patient's lifestyles and encouraging a co-construction of the decision.

A balanced power relation could also be observed when considering the initiation of frame shifts. Note that with repeated patient declination of the doctor's advice (lines 3 and 5), the conversation shifts to a biomedical discussion as the patient starts to talk about his physical examination report (lines omitted). At line 6, the patient picks up the lifestyle communication with an introduction of wine drinking. The three frame shifts (lines 1, 5, and 6) in this extract were all initiated by the patient, suggesting the indication of more balanced power.

Advice giving on non-problematic lifestyles

In many cases, patients reciprocate doctors' questions with answers that indicate non-problematic lifestyles (Sorjonen *et al*., 2006). In the present data, this is particularly the case when lifestyle communication occurs in the history taking stage. There are two ways through which patients describe their lifestyles as non-problematic. Consider Extracts 17 and 18.

Extract 17: TCM

1 D *胃口　怎么样*

appetite how

(How's your appetite?)

2 P *胃口　还好*

appetite good

(It's good.)

Extract 18: TCM

1 D *胃口　好　的　哦*

appetite good prt prt

(You appetite is good?)

2 P *嗯　胃口(.)　我 现在 都 卡牢时间 吃饭 的 吃饭 都　卡牢　的*

um appetite(.)i now all regular eat prt eat all regular prt

(Um. My appetite(.)now I have regular meals, regular.)

In Extract 17, the patient displays her understanding towards her lifestyle as non-problematic by directly claiming that her appetite is normal. In Extract 18, the patient describes her lifestyle and informs the doctor in detail the regularity of her diet. In both cases, given the orderliness of the patient lifestyle, the doctor's advice is not provided in a sequentially next position.

While treatment of lifestyle as non-problematic may sequentially not encourage doctors' advice giving (Sorjonen *et al*., 2006), the present observation suggests that in some cases in TCM conversations, patients' non-problematic lifestyle giving may also invite doctors' advice giving. And for the most part, such advice is normally prefaced with the doctor's alignment with the patient in relation to his/her appropriate lifestyles. Consider Extract 19. In Extract 19, the patient visited for breast swelling.

Extract 19: TCM

1 D *你　自己 平常　补品　吃　得　多　不　多　的 啊*

you own normal supplements eat vm many not many prt prt

(Do you normally take lots of supplements?)

2 P *我　不吃　的　因为　我[子宫 有　肌瘤　叫　我　不要　吃　的*

i don't eat prt because i[womb have myoma tell me don't eat prt

(I don't. I have uterine fibroids. My doctor told me not to eat supplements.)

3 D *[哦　不吃　的 哦*

oh don't eat prt prt

(Oh, you don't eat it.)

4 D *↑对　对　对　那　子宫肌瘤　也 是 一回事情*

↑right right right then uterine fibroids also be one aspect

(Right, the uterine fibroids is a consideration as well.)

5 D *跟　雌激素　也　有　关系*

to estrogen also have relation

(It is also related to estrogen.)

6 D *就 像 吃 补品 要 慎重*

just like eat supplements must careful

(Just like you have to be careful about taking supplements.)

7 D *一般 中药 在 调理 的话*

normally TCM crs treatment in case

(Normally, when you have the TCM treatment,)

8 D *自己 一般 就 不需要 特别 去 吃*

own normally then don't need especially go eat

(you don't need to take those supplements in particular,)

9 D *特别 是 有些 你 说 国外 买 来*

especially be some you say overseas buy pfv

(especially those, let's say, products that you bought from overseas,)

10 D *或者 有些 你 说 生物生产公司 生产*

or some you say biochemical company manufacture

(or those manufactured by some biochemical companies)

11 D *这种 含量 和 成分 都 不 是 很 明确 的 产品*

this kind content and ingredient all not be very clear prt product

(that do not mention clearly about the ingredients or content of the foods.)

12 D *都 尽量 不要 吃 哦*

all as far as possible don't eat prt

(You'd better keep such products away as far as possible.)

13 P *哦*

oh

(Oh.)

In response to the doctor's question concerning the patient's supplement-taking behavior (line 1), the patient responded with extensive information giving: denying her use of supplements and giving reasons for not using it. This response indicates that there is no problem in the patient's supplement-taking behavior and also implies the patient's awareness about the impact of supplement taking on her physical problems. Note that at line 4, the doctor initiated a progression of agreement *对对对* ('right, right, right') with an increased intonation which, on the one hand, serves to give an authoritative

agreement on the patient's behavior; and on the other hand, displays the doctor's alignment with the patient with respect to her understanding of the supplement taking behavior as non-problematic. Therefore, the doctor readily claimed common ground between herself and the patient. This alignment building is extended at lines 4 and 5, where the doctor suggests both uterine fibroids (previous diagnosis) and high estrogen level (diagnosed in the current visit) are related to supplement taking, thus building knowledge between what the patient had known and what the patient should know. In so doing, the doctor lays the foundation for an intensification of lifestyle advice on supplement taking. In the immediate next turn (line 6), the doctor reintroduces the topic of supplements, and uses several turns to suggest the need for a careful diet. As such, the doctor strategically invokes a relevancy of advice-giving to non-problematic lifestyles.

Advice giving at the end of the visit

A special location only observed in TCM visits is at the end of the medical visit before patients leave. This is particularly so when doctors reintroduce the lifestyle topic mentioned previously in a form of advice, providing more details on how to live healthily. Earlier studies in the literature have documented that patients very likely forget information given by their doctors within a short time after their leave of the consultation room (Ley *et al*., 1973), thus the placement of doctor's advice at the end of the visit serves to increase patient recall. Consider Extract 20. In Extract 20, the patient came for stomach bloating.

Extract 20: TCM

1 D *这个　冬天　凉拌的菜　不能　吃　哦*
this winter cold dish can't eat prt
(Don't eat cold dishes this winter.)

2 P *现在　很　少　吃*
now very rarely eat
('I seldom eat it now.)

3 D *哎*
right
(Right.)

4 P *尽量　吃　热　的　东西*

as far as possible eat hot prt stuff

(I eat hot foods as far as possible.)

5 D *水果 你 比如 吃 点 橘子 啊 什么 的 问题 不 大*

fruit you e.g. eat some orange PRT such prt problem not big

(You can also eat some fruits like oranges, it would be fine.)

6 D *香蕉 啊 苹果 啊 这种- 梨 都 尽量--*

banana PRT apple prt this kind- pear all as little as possible-

(but, fruits like banana, apple, and pear, eat as little as possible.)

7 P *碰 都 不 碰*

touch all not touch

(I never eat them.)

8 P *就 提子 到时候 吃 中药 的 时候 吃 一点*

only grape sometimes have herbal medicine prt when eat some

(I only eat some grapes when I have the herbal medicine.)

--- ((Lines omitted)) ---

9 D *自己 煎 的 还是 代 煎 的*

own concoct prt or help concoct prt

(Do you prefer to concoct the herbs by yourself or we do it for you?)

10 P *代 煎 没时间 煎*

help concoct no time concoct

(You do it for me, I don't have the time.')

11 (4.4)((the doctor writes the prescription))

12 D *在家里面 你 烧菜 的 时候 像 这种 胡椒 啊 什么东西-*

at home you cook prt when like this kind pepper prt such things-

(When you cook at home, things such as pepper)

13 P *不要 放 啊?*

don't add prt?

(Do not add those seasonings?)

14 D *可以 吃*

can eat

(You can.)

15 P *可以 吃 啊*

can eat prt

(I can?)

16 D *可以 吃 辣椒 也 可以 吃 一点点 辣 没有 关系*

can eat chili also can eat a little hot don't matter

(You can, you can also eat chili, a small amount does not matter.)

17 P *哦*

oh

(Oh.)

18 D *羊肉*

mutton

(Mutton.)

19 P *羊肉 我 不吃*

mutton i don’t eat

(I don’t eat mutton.)

20 D *牛肉*

beef

(Beef.)

21 P *牛肉 羊肉 我 都 不要 吃*

beef mutton i all don’t like eat

(I don’t like beef and mutton.)

22 D *哦 都 不 吃 那 没 办法 了*

oh all don’t eat then no method prt

(Oh, you don’t like them, then never mind.)

23 P *不喜欢 这个 味道*

dislike this flavor

(I don’t like this flavor.)

24 P *辣 可以 吃 一点 我 倒是 ((happy))*

spicy can eat a little i would be ((happy))

(But if a little spicy is allowed, I would be ((happy)))

25 D *微 辣 一点点*

little spicy a little

(A little spicy.)

26 P *哦 好的*

oh fine

(Oh, fine.)

27 D *不要 吃 的 稀里哗啦 的*

don’t eat vm onoma prt

(Not like too spicy, making you cry and your nose running.)

28 P *辣椒 我 是 喜欢 吃 的*

chili i be like eat prt

(I like eating spicy food.)
29 D *喜欢 吃 你 就 是 不要 有 那种 辣 的 感觉*
like eat you just be don't have that kind spicy prt feeling
(You like eating spicy, then just don't eat that spicy.)
30 D *放 一点 它 这个 是-*
add a little it this be-
(Add a little to make it)
31 ((the doctor passes the prescription to the patient))
32 P *嗯 好 谢谢*
um okay thanks
(Um, okay, thanks.)
((The patient leaves the consultation room))

It is noted that lifestyle advice is provided both at the history-taking stage (lines 1-7) and the closing stage (lines 12-30). Prior to line 1, the doctor found that the patient's hands were quite cold. Lifestyle topic on diet was first introduced at line 1, produced as a relevant action next to patient problem presentation. Communication on diet then continues for several turns until line 8. A key point raised by the doctor in relation to the patient's diet is that he should eat more hot foods[4]. Lifestyle topic was reintroduced at line 12 in the form of advice giving. In subsequent turns, the doctor gives a specification on a variety of foods (pepper, chili, mutton, and beef) that are recommended. Note that all these foods have a hot property. Thus, lifestyle advice at the closing stage of this extract serves as a reminder and an extension of what has been communicated in prior talk.

In addition, instead of indicating what the patient should do, the doctor gives a detailed list of different dietary options. Recall Extract 14 in which the doctor provides a general advice on lifestyles by saying that 'mind those foods that are extremely fatty', the behavior of giving different options could be interpreted as more detailed and specific. For example, at line 27, the use of onomatopoeia (*稀里哗啦*) distinguishes the

[4] The concept of hot and cold in healthcare is commonly found in Latin American, Asian, and African cultures. It is widely applied to foods, medicines, and illnesses (Manderson, 1987). Readers may also refer to Lee and Shen (2008) for a discussion of the dietary patterns under the culture of TCM.

difference between ‘a little spicy’ and ‘too spicy’ (line 25) by invoking the patient’s feeling. General advice summarizing the characteristics of these foods (i.e. foods that are spicy and hot) is also provided (lines 1, 15, and 24).

In terms of power relation, while all the frame shifts were initiated by the doctor (lines 1, 8, 11, and 30), the doctor’s information giving on patient education could be interpreted as a demonstration of a more balanced doctor-patient relationship in which the doctor shows care and concern. Also, in response to the patient’s continuous decline of the doctor’s advice (lines 18 and 19), the doctor displays understanding by saying ‘never mind’ (line 21) and proceeds to give more advice. Power attenuation is also suggested by the doctor’s use of diminutives such as ‘a little’ (lines 15, 24, and 29). In so expressing, imposition on recipient behavior is reduced.

5.42 Explanations for advice

An important aspect of lifestyle advice is whether the doctor explicates the reasons for why advice is provided. In an empirical study of 42 primary care consultations, Johanson and colleagues (1998) reported that physicians avoid sharing their knowledge with patients in relation to the connections between medical symptoms and lifestyles. Johanson and colleagues’ observation is also evidenced among the WM sample population in this study.

In Extract 21, the patient had recently had a diarrhea.

Extract 21: WM

1 P *我 酸奶 没 吃 好 不好 吃*
i yogurt don’t eat can cannot eat
(I am not drinking yogurt these days, is it fine for me to drink it?)
2 D *好 吃 的*
can eat prt
(You can.)
3 P *好 吃 啊(.)哦*
can eat prt(.)prt

(I can? Oh.)

4 D *好 吃 的 好 吃 的 好 吃 的*

can eat prt can eat prt can eat prt

(You can, you can, you can.)

5 P *我 有 个--*

i have a --

(I have a)

6 D *没问题 可以 的 饮食 没问题*

no problem can prt diet no problem

(No problem, you can, no problem in your diet.)

7 P *没问题 啊*

no problem PRT

(No problem?)

8 D *哎*

yes

(Yes.)

9 P *那么 我 买 的 野山参 好 不好 吃 参 好 不好 吃*

then I buy prt wild ginseng can cannot eat ginseng can cannot eat

(Then how about wild ginseng? I bought some. Can I eat ginseng?)

10 D *你 现在 不好 吃*

you now cannot eat

(Not now.)

11 P *哦*

oh

(Oh.)

Frame shift is initiated by the patient at line 1, displaying the patient's awareness of the potential relation between diet and his diarrhea. While the doctor evaluates the patient's lifestyle as non-problematic (lines 2 and 4), the patient seems to be worried as he tries to raise more concerns (line 5). The doctor's repeated assurance of the patient's non-problematic lifestyle is provided at line 6. However, at line 10, next to the patient's new diet consultation (ginseng consumption), the doctor responds with disagreement – a contradiction of her prior turn (line 6). No explicit explanation for ginseng consumption is provided in the ensuing talk. No shared knowledge between ginseng and patient health is built in prior talk, and therefore, the absence of doctor's explication of the

relation between diet and health in this conversation could be interpreted as the doctor's failure of knowledge sharing. The exchange between the doctor and the patient in this conversation therefore reflects a typical biomedical relationship, featured by the doctor's reticence in information giving.

Power asymmetry is observed in the sequential flow of this conversation. While the questions are mostly raised by the patient, the doctor's responses are phrased in a way which displays no interests in information provision. Note the patient's interrupted turn at line 5 (marked by --). The unfinished utterance 'I have a' indicates that the patient was about to present more information, either a biomedical problem or a psychological concern, which the patient considers might be related to his diet. The doctor's interruption is initiated before the patient announces his concerns. The justification of the patient's lifestyle as non-problematic could thus be interpreted as an indicator of 'no further questions on diet'.

In some cases, however, this absence of explanation for lifestyle advice is a result of the shared understanding between the doctor and the patient in relation to how lifestyles might affect physical health. This absence of explanation is especially so when lifestyle advice is provided next to patient problem presentation. Recall Extract 14 in which case the patient was diagnosed with hyperamylasemia. After patient problem presentation, the doctor advised him to eat fewer fats and also to reduce the amount of food in his everyday diet. The absence of the doctor's knowledge building in Extract 14 is not interpreted as the doctor's failure of patient education, but rather a result of the shared knowledge between the doctor and the patient in relation to diet and health.

Compared with WM conversations, explicit explanation of advice giving and the connection between advice and patient's biomedical problem or health status are more observed in TCM conversation. In Extract 22, the patient was diagnosed with high estrogen.

Extract 22: TCM

1 D *您 生活 当中 像 咖啡 浓茶 这种 喝 得 多 吗*
you life during like coffee strong tea this kind drink vm much prt
(Do you drink a lot of coffee or strong tea?)
2 P *呃: 咖啡 有 喝*
um: coffee have drink
(Um, I drink coffee.)
3 D *咖啡 有 喝 啊*
coffee have drink PRT
(You drink coffee?)
4 P *哎*
yes
(Yes.)
5 D *那 就 不要 喝 太 多 嘛 哦*
then so don't drink too much prt prt
(Then, do not drink too much.)
6 P *哦*
oh
(Oh)
7 D *也 不一定 说 一定 有 影响*
also not definitely say definitely have influence
(I'm not saying that it definitely affects your health.)
8 D *但 也 不能 排除 会 影响 你的 内分泌系统 啊*
but also cannot exclude will affect your endocrine system prt
(But also we cannot exclude the possibility that it might affect your endocrine system.)
9 P *哦*
oh
(Oh.)

After an exchange of patient lifestyle information on coffee drinking and tea drinking, the doctor suggests the patient cut down on her coffee consumption. By locating the advice (lines 7 and 8) in a sequential place next to question, the doctor naturally explained patient knowledge on the relationship between coffee drinking and the functioning of the endocrine system while at the same time politely pointing out the patient's problematic lifestyles. In so doing, shared knowledge is achieved.

In terms of power, the force of imposition in advice giving is weakened through the use of hedging (*不一定* 'not definitely', *不能排除* 'cannot exclude the possibility'). By keeping reservations and lowering the certainty in claiming the influence of drinking too much coffee (lines 7 and 8), the doctor avoids challenging the patient's lifestyle and causing threats to the patient's face (Brown & Levinson, 1987).

Similarly, in Extract 23, patient education is achieved through the doctor's explicit announcement of the reason for diet suggestion. In this extract, the patient was diagnosed with chronic gastritis.

Extract 23: TCM

1 P *医生 我 胃 不 好 什么 东西 不 好 吃 的 啊*
doctor i stomach not good what stuff not good eat prt prt
(Doctor, given the poor performance of my stomach, what kind of stuff that I shall not eat?)

2 D *胀气 的 东西 冷 的 东西 少 吃*
bloat prt stuff cold prt stuff less eat
(Eat less food that cause bloating and also those cold stuff.)

3 P *羊肉 不好 吃 的 哦*
mutton cannot eat prt prt
(I can't eat mutton, right?)

4 D *羊肉… 少 吃 点 可以 的 可以 的*
mutton little eat little can prt can prt
(You can eat a little mutton. You can.)

5 D *你 只要 吃 了 不 难受 你 就 可以 吃*
you as long as eat prt not uncomfortable you then can eat
(You can as long as you don't feel sick.')

6 D *=因为 你这人 偏 寒 的 羊肉 还 是 对 你 不错 的*
=because you more cold prt mutton still be to you good prt
(Because your body constitution is cold, mutton would be good for you.)

7 P *哦*
oh
(Oh.)

8 D *但是 你 不能 吃 太多 吃 下去 不 消化*
but you cannot eat too much eat down not digest
(But don't eat too much, otherwise you find it difficult to digest.)
9 P *嗯(.) 就 硬 吃 下去 不 消化*
um(.)just manage to eat down not digest
(Um(.)I won't able to digest with that much.)
10 D *哎 对的 所以 你 要 少 吃 一点 哦*
yes right so you have to less eat a little prt
(Yes, right. So don't eat too much.)
11 P *嗯 谢谢*
um thanks
(Um. Thanks.)

Active flow of lifestyle education can be observed in this conversation. Lifestyle discussion is initiated by the patient at line 1. A general piece of advice on diet is provided by the doctor describing the nature of the food that the patient should exclude from his diet. The patient's information request on mutton is possibly because of the cultural convention in China to eat mutton in winter – a belief that mutton is a 'hot' food and thus a preferable diet in cold seasons. In response, the doctor maximizes lifestyle advice including the amount proper (line 4) and the physical criteria (line 5). The doctor continues her turn immediately (marked by =) by explaining why a small amount of mutton is considered appropriate (lines 6 and 8). By evaluating the patient's physical condition as 'cold', the doctor not only builds connection between health and diet, but also justifies her advice. Information exchange at lines 9 and 10 reflects a mutual alignment by the doctor and the patient to each other's understanding of the relationship between lifestyle and health, and marks an achievement of shared knowledge. Also note the doctor's concluding statement *所以* ('so') at line 10, an indicator of the causative relationship between mutton and health. After the doctor's continuous explication, the patient indicates his acceptance with gratitude (line 11).

5.43 Reception of advice

The most frequently observed response to doctors' lifestyle advice is a minimum patient agreement or a repetition of the advice. Recall the previous extracts included in this

chapter. Two alternative ways to respond to doctors' advice are (1) patient explicit compliment and (2) declination, which are only observed in TCM encounters.

Recall Extract 16. In response to the doctor's advice on smoking, the patient explicitly declines the advice by announcing his inability to quit smoking (line 3). This decline is even more pronounced at line 5, where after the doctor's request for explanation, the patient highlights the impossibility by a continuous production of rejection with an increase of speed (marked by > <). This explicit declination also projects a shift from the current lifestyle frame to a biomedical frame for the current conversation (lines omitted). The topic of lifestyle was reintroduced by the patient at line 6 through an explanation of his declination of the doctor's advice. This explanation could serve the function of mitigating the potential negativity of declination and thus relationship-building.

Extract 24 illustrates how patient acceptance of professional advice on lifestyles is made explicit through compliments, and how such complimentary statements also serve the function of relationship building. In Extract 24, the patient had an unknown pain near his left thigh ankle and always felt thirsty these days.

```
Extract 24: TCM
1 (1.5)((the doctor writes the prescription))
2 D 别    弄    得    太忙    了
    don't make vm too busy prt
   (Don't make yourself too busy.)
3 P 好 好 好
    ok ok ok
   (Ok, ok, ok.)
4 D 有的时候    啊    有些事情-
    sometimes PRT something-
   (Sometimes, for something-)
5 P 好 好 好    主任    的    话    最    听    了
    ok ok ok director prt advice most listen prt
   (Ok, ok, ok, your advice is the best.)
```

6 D *呵呵*
hehe
(Hehe)
7 P *哈哈*
haha
(Haha)

This conversation occurs at the closing stage of the medical interview. In the prior talk, the patient told the doctor that he was busy these days and that he had a poor sleep pattern. A frame shift was announced by the doctor at line 2 in the form of advice giving. This advice seemed well accepted by the patient, evidenced by the patient's continuous production of agreement (lines 3 and 5). Explicit patient deference is evidenced at line 5, where the patient not only clearly stated his adherence but also complimented the doctor by acknowledging her advice as a professional. The sequence of advice giving and reception interwoven with the patient's compliment thus could be considered as achieving both biomedical (reminding the patient about the relation between health and lifestyles) and socio-relational goals (the doctor showing care and concern toward the patient and the patient showing respect and trust toward the doctor). This mutual effort on relational work was extended at the conversational closing with the recirporal laughter.

5.5 Chapter summary

This chapter has mainly discussed the co-construction of lifestyle communication in medical interviews. Examples in this chapter suggest a less biomedical-oriented interaction in TCM conversations. Both doctors and patients regard lifestyles as valuable resources of health, and therefore communication in this area is equally as important as communication about medical problems. The findings supported prior studies (Sorjonen *et al*., 2006) in the observation that participants in WM interviews seldom engage in patient lifestyle education. In contrast, active advice giving was observed in TCM conversations. Investigation of these differences mainly focuses on where and how lifestyle discussion is introduced. I began by discussing the different locations where lifestyle communication is invoked, and how the placement reflects the doctor's

understanding of lifestyles as resources of health. I then illustrated how the design of questions and the placement of lifestyle communication could achieve different sequential consequences of lifestyle talk. In analyzing doctors' advice-giving behavior, I have explained the strategies used by TCM doctors to achieve an intensification and specification of appropriate lifestyle habits. Finally, I discussed how the doctor's advice is received by patients in TCM encounters. The contribution of this chapter lies in its elaborated account of how lifestyles are treated differently in TCM and WM consultations.

In the next chapter, I will describe how non-medical small talk is negotiated. I will detail the strategies used by doctors to initiate and close small talk in medical interviews. A major thrust of analysis will be to illustrate how the social-relational dimension of the medical interview is developed and how that might indicate the interpersonal relationship between doctors and patients in different practices.

Chapter 6 Non-medical small talk

6.0 Chapter introduction

> "Patients and staff sometimes engage in off-task "social talk" in health-care interactions. Indeed this might even be encouraged by the staff, as part of "patient-centered medicine" […] so as to promote patient participation and allow the "voice of the lifeworld" to coexist with the "biomedical" perspective" (Benwell & McCreaddie, 2016: p. 258).

This chapter is a qualitative discourse analysis of how non-medical small talk is encouraged or discouraged in medical consultations. The importance of small talk has been well documented in the literature in relation to doctor-patient communication (e.g. Burnard, 2003; Coupland, Coupland, & Robinson, 1992). For example, in the seminal collection on small talk, Coupland (2000) posits that given the nature of geriatrics, discussions of family and social connections might "trigger" discussions of issues that are relevant to doctors' expertise (p. 22). This conception has been widely supported by scholars within the field of medical discourse analysis (Coupland, Robinson, & Coupland, 1994; Maynard & Hudak, 2008; Walsh, 2007). The bulk of socio-relational themes could be important resources of health, especially for patients whose physical problems are related to social environmental factors (Coupland, 2000).

Prior studies have suggested various ways in which participants "do power" (Holmes & Stubbe, 2015: p. 1), one of which is the engagement or disengagement in social conversations that are not directly related to the instrumental talk. In the data to be discussed, it is normally the doctor who has the right to license non-medical social talk and to decide the extent to which talk of this nature is allowed within the situational event (see also Holmes & Stubbe, 2015).

The main issue to be explored in this chapter is the ways in which small talk is discussed by participants in both TCM and WM practices and in particular how the treatment of

small talk reflects the social relations between participants. The research questions to be addressed in this chapter are (1) where does small talk occur in TCM and WM visits?; (2) what topics are included?; (3) what are the functions of small talk?; and (4) how the treatment of small talk could possibly reflect the doctor-patient relationship in different clinical practices? The chapter begins with an explanation of what is referred to as small talk in this thesis. Using a context-based approach of defining small talk, I then analyze small talk at the boundaries of interaction (i.e. conversational openings and closings), to show how talk of this nature is initiated and closed, and how it serves various functions in discourse. At the latter part of this chapter, I include a typical case in TCM consultations where small talk is highly interwoven with core instrumental talk, and where talk on non-medical issues serves as a complimentary description to the medical problems, and thus facilitating the achievement of the instrumental task. The conversational data for this chapter include extracts from 39 WM and 30 TCM consultations. The analysis details how small talk is initiated, constructed, and closed in two types of medical practices. By using the conversational analytical tool and drawing on notions of turns and sequences (Sacks, Schegloff, & Jefferson, 1974) and frame (Goffman, 1981; 1986), the location, form, content, and functions of small talk are explored.

6.1 Defining small talk

Scholarship on small talk has yielded varying definitions. Dictionaries define small talk as unimportant, trivial, and peripheral talk (Schneider, 1988). Early formulations of small talk as a mode of action were developed from Malinowski's conception of *phatic communion* (Coupland, 2000). The term *phatic communion* was coined by Malinowski (1923) to describe the function of language as a mode of action instead of a reflection of thought. In his initial interpretation, Malinowski describes *phatic communion* as a form of small talk, the function of which is not for the transmission of thought but rather to achieve a companionship. According to Malinowski, this kind of utterance is produced to bind the speaker and the hearer by "a tie of some social sentiment" (p. 315). This understanding of *phatic communion* as a form of small talk has been widely applied (Burnard, 2003; Laver, 1975; Walsh, 2007). In a later edition of this seminal work,

Malinowski also borrows the notion of politeness to explain the function of *phatic communion*:

> "A mere phrase of politeness…fulfills a function to which the meaning of its words is almost completely irrelevant. Inquiries about health, comments on the weather…all such are exchanged, not in order to inform, not in this case to connect people in action, certainly not in order to express any thought...there is in all human beings the well-known tendency to congregate, to be together, to enjoy each other's company." (Malinowski, 1946: p. 313)

Drawing on Malinowski's view, Laver (1975, 1981) characterized small talk as a way to manage interpersonal relationship within the psychosocial realm of interaction. A major contribution of his work is his interpretation of how small talk functions in discourse. In his observation, apart from the relationship building function, small talk also has an indexical nature that shapes the relationship during an interaction. In his thoughtful analysis of conversational openings and closings, Laver (1975) posited *phatic communion* in conversational openings to fulfill a propitiatory function, i.e. to prevent or break silence. There is also an exploratory function that allows participants to work together towards an interactional consensus. In the closing stage of a conversation, Laver considered *phatic communion* to have a mitigating force so that interlocutors consent and cooperate in terminating the conversation. *Phatic communion* in conversational closings also has a consolidatory function, realized by a delivery of respect and appreciation, and an indication of a continuation of relationship. According to Laver, a prime function of *phatic communion* is the "communication of indexical facts about the speaker's identities, attributes, and attitudes, and that these indexical facts constrain the nature of the particular interaction" (1975: p. 217). In so understanding, Laver points to the relevance and value of small talk to the whole interaction.

While these earlier efforts provide illuminating insights in understanding small talk, a well-rehearsed criticism for such a rigid definition is that it underestimates the various functions of small talk in a broader social context (Coupland, 2000). Holmes (2000) advances this understanding by suggesting a context-based perspective, i.e. to describe small talk by evaluating its status and functions within the whole interaction. According to Holmes, the functions of discourse emerge and change as the conversation flows. To Holmes, there is no ironclad definition of small talk and that it may extend along a "continuum" (p. 38) from the ritualized greeting and parting exchanges to social conversation and to some point of the instrumental talk (see below):

Cited from Holmes (2000: p. 38)

A similar range is covered by RIAS – the widely adopted interaction coding scheme (Hudak & Maynard, 2011). According to the RIAS manual (Roter, 1977), small talk includes those parts of interaction "not directly related to the discussion of general health" (p. 10). This approach to describe small talk is also supported by Coupland and colleagues (1992):

> "The function of particular sequences of talk as phatic or otherwise should not be preconceived. Relevant analytic questions are whether, how, and when talk is oriented to as phatic or not, contingent upon its local sequential placement in particular contextualized episodes and on the momentary salience of particular interactional goals." (p. 215)

Drawing from Holmes' (2000) and Coupland *et al.*'s (1992) conception of small talk, this chapter adopts a context-based approach to describe the emergence and functions of small talk in medical interactions, taking participant goals and topics of talk into

consideration. I suggest in this chapter that small talk in medical interactions serves the functions of (a) seamlessly filling the silence; (b) facilitating the accomplishment of core medical tasks; and (c) shortening the interpersonal distance and building rapport. The central argument in this chapter is that no talk in medical interactions is smaller than others. Given the multi-tasks in medical interviews (e.g. solving problems, relieving patient anxiety, and building interpersonal relationship), talk of different nature serve different purposes. This use of small talk to serve various functions is especially the case in doctor-elderly patient communication where patients normally have a combination of various physical and psychological concerns and where relational communication is tantamount to core medical communication. The next section discusses the (non-)occurrences of small talk at the interactional boundaries of medical conversation in both practices.

6.2 Occurrences of small talk at interactional boundaries

Consistent with what has been documented in the literature (e.g. Pelicano-Romano *et al*., 2013; Roter & Larson, 2001; Wissow *et al*., 1998), small talk is less common than core medical talk in both TCM and WM conversations. Table 6.1 charts the differences between TCM and WM in relation to the occurrences and non-occurrences of small talk at medical openings and closings. The unit of analysis is medical visit.

Table 6.1: Occurrences of small talk at the interactional boundaries of medical conversation

	TCM	WM
Opening	10	2
Closing	27	17
Total number of visits	30	39

A commonality between TCM and WM is that in both practices, talk of this nature mainly occurs at the boundaries of interaction. In both TCM and WM consultations, small talk mainly occurs at the closing stage: in 90% of the TCM closings, and 44% of the WM closings. In contrast, it appears much less frequently in the opening stages (33% TCM openings and 5% WM openings), which is at odds with previous research (e.g. Coupland *et al*., 1994) suggesting that medical consultations normally start with some form of small talk. This rarity of small talk in the opening stage shows that most of

the medical conversations in this research open with an "on-topic" talk (Holmes, 2000: p. 37), which can be a doctor-initiated inquiry such as 'what's your problem' or a patient-initiated statement directly describing his/her major biomedical concerns.

6.3 Small talk at medical openings

Formulaic exchange of 'hello'

As illustrated in Table 6.1, although the majority of consultations reported here open without small talk of any kind; compared with WM conversations, a markedly active engagement of participants in small talk is observed in TCM openings. In contrast, both doctors and patients in WM visits demonstrate a highly instrumental orientation. Most of the WM consultations open with on-topic talk that directly addresses the instrumental agenda of the current consultation. Consider Extracts 25 and 26 – the only two cases in WM visits that involve a minimum phatic exchange at the opening stage.

In Extract 25, the patient came for medication refill. She was diagnosed gastric erosion.

```
Extract 25: WM
1 D 你好
    hello
   (Hello.)
2 P 我 那个    配    药
    i that refill medicine
   (I come for medication refill.)
3 D 哦   配    药
    oh refill medication
   (Oh, medication refill.)
```

In Extract 26, the patient had a serious acid reflux symptom. Her recent endoscopy had discovered some polyps in her stomach.

```
Extract 26: WM
1 P 医生
    doctor
```

(Doctor.)

2 D *嗯:*((downward intonation))*怎么 不 好*

um: what not good

(Um. What's wrong?)

In both extracts, response to the initial phatic orientation is directly related to the general health. Extract 25 occurs when the patient enters the consultation room. The doctor begins the consultation by the prototypical 'hello'. While a preferred response to a greeting usually takes the form of "hello" in return, the patient reciprocates by pronouncing on-topic talk, stating the main purpose of her current visit. In so responding, the patient projects a shift to the instrumental medical frame for the current talk. Similarly, in Extract 26, in response to the patient's addressing, the doctor indicates her presence with a minimum acknowledgement token 'um'. And this acknowledgement is immediately followed by an inquiry asking the patient's general health, displaying the doctor's preference to foreground the instrumental agenda of the talk. In terms of power relations and social distance, the doctor's expertise is co-constructed by both participants. The patient's initial addressing of the doctor's clinical position contains some sort of deference (Goody, 1972) and therefore reflects her respect towards the doctor as an expert. In return, the doctor's pronunciation of a downward 'um' is a distanced way of acknowledging the presence of the patient (see Extract 27 for comparison). In so responding, the doctor builds herself as a professional.

In Extract 27, the patient was diagnosed chronic gastric disease. The conversation just happens when the patient walks in.

Extract 27: TCM

1 D *嘿(upward intonation)你好*

hey hello

(Hey, hello.)

2 P *医生*

doctor

(Doctor.)

3 D *你好(.) 最近 还好 吧*

hello recently good prt

(Hello(.)How are you doing?)

4 P *嗯 还好*

um good

(Um good.)

5 D *胸痛 啊 这 方面 怎么样*

chest pain prt this area how

(How about your chest pain?)

Familiarity between the doctor and the patient can be observed in Extract 27. Compared with the distant um, the phatic sequence here reflects a more positive interpersonal relationship. At line 1, the doctor opens the conversation by greeting the patient with a marked 'hey' – indicating her unexpectedness to see the patient. The pronunciation of a 'hey' with upward intonation also reflects acquaintance between the doctor and the patient. The patient, in return, addresses the doctor as a way of showing deference and respect. Participants' orientation to evoke the socio-relational frame for the current openings is mostly evidenced at line 3 when the doctor re-initiates her greeting. In so doing, the doctor explicitly displays her kindness and politeness to the patient and shortens the interpersonal distance. Doctor's 'how are you doing'-type inquiry can be both a form of small talk asking the patient about her general situation and indicating acquaintance and a form of core instrumental talk requesting patient elicitation of her biomedical symptoms. The patient obviously interprets this 'how are you doing' inquiry as a form of small talk. Instead of describing specific medical concerns, the patient reciprocates with a positive description of her general situation. Therefore, the socio-relational frame for the current activity is co-constructed within four turns by both participants.

Social talk

Apart from the formulaic greeting exchange, social talk is also observed in TCM openings, normally related to some "non-controversial" topics (Holmes, 2005" p. 353) such as weather and work. By contrast, this kind of relational communication is not observed in any of the WM openings. Consider Extracts 28 and 29.

In Extract 28, the patient was diagnosed with lung cancer. His WM doctor advised him to take a biopsy.

Extract 28: TCM

1 D *好像　冷　起来　了　哎*
　seems cold prog prt prt
　(Seems that it's getting cold.)
2 P *冷　起来 ↑　你　穿得　少　哎［(h)呵呵］*
　cold prog ↑ you wear few prt[(h)eh heh
　(Getting cold. That's because you wear too few. Heh heh.)
3 D　　*[(h)呵呵]*
　　[(h)eh heh]
　(Heh heh.)
4 P *我 呢:　没　做　手术*
　i prt: not do operation
　(I didn't do the operation.)

At the beginning of this conversation, the doctor certainly does not intend to comment on the weather change. Rather, the initiation of weather talk can be interpreted as a form of relational talk (Holmes & Woodhams, 2013), functioning as a transition to the instrumental medical talk by showing friendliness. The patient, in response, displays his concern towards the doctor by commenting on the doctor's dress. Thus, by engaging in talk on weather and dress, the participants co-construct the socio-relational frame for the current opening stage and display an orientation towards current talk as a talk between friends. The co-laughter at lines 2 and 3 indicates the possible closing of the current talk and projects a frame shift (line 4). Thus, talk on weather in this medical opening has two main functions: doing collegiality (Holmes, 2000) and relationship building (Laver, 1975).

In terms of power relations, the conventional doctor's power is greatly attenuated by the weather talk at the opening stage of the medical conversation. Also, note the patient-initiated frame shift at line 4. Since it is normally the person in power who has the right

to “cut off” small talk and announce the beginning of instrumental medical talk (Holmes, 2000: p. 53), this patient-initiated frame shift demonstrates a more balanced doctor-patient relationship.

In Extract 29, the patient had had a tumor in her stomach. She had an operation four years ago.

Extract 29: TCM

1 D *你 啊 好久- 6月份*
you prt very long- june
(It’s been quite a long time since June.)

2 P *是的*
yes
(Yes.)

3 D *半年 喽 [半年 没 吃 中]药 了*
half a year prt [half a year no eat herbal] medicine prt
(It’s half a year, you stopped taking medicine for half a year.)

4 P *[哎 是的 是的]*
[yes yes yes]
(Yes.)

5 D *现在 都 还好 吧?*
now all good prt?
(Everything is fine?)

6 P *嗯*
um
(Um.)

7 D *最近 忙 不 忙*
recently busy not busy
(Are you busy these days?)

8 P *现在 不 怎么 忙*
now not very busy
(Not really.)

9 D *咳嗽 啊 什么 都 没有 哦*
cough prt what all no prt
(Do you cough?)

This extract illustrates how work related talk is introduced at the beginning of a medical conversation and how it functions both as an indicator of friendliness and a transition to the instrumental medical discussion. After an initial lamination of instrumental medical and small talk (Holmes & Woodhams, 2013) (lines 1 to 4), the doctor asks the patient if 'everything is fine' about her and if she is busy recently. The patient seems to treat the doctor's inquiry as a kind of courtesy and has no intention to conduct a detailed discussion in relation to her work, evidenced by the short response 'not really' without extension. Thus work related talk in this extract serves, similar as weather talk, as a bridge to naturally and politely lead the consultation to the instrumental medical agenda (line 9), while at the same time demonstrate rapport between the interlocutors. Familiarity between interlocutors is also evidenced by the doctor's correct recalling of the time gap between the patient's prior and present visits (lines 1 and 2).

A special case in TCM openings is illustrated in Extract 30. In this extract, the patient had recently had a low appetite. Before the conversation starts, she was waiting in the consultation room with her family. She was in a low mood.

Extract 30: TCM

1 D *今天　怎么　了　啊?*
today what prt prt?
(What's wrong with you today?)

2 D *又　　不　高兴　啦?*
again not happy prt?
(You are unhappy again?)

3 D *啊?*
ah?
(Ah?)

4 D *今天　　看 上去 好像　精神　不　　太好　　么?*
today look vm seem mood not very good prt?
(It seems that you're not in a good mood today?)

5 (0.2)

6 D *啊?*

ah?

(Ah?)

7 (0.4)

8 D *呵呵(.)　怎么　啦?*

heh heh(.)what prt?

(Heh heh. What's wrong?)

9 (0.5)

10 D *你　自己　来　的　啊?*

you own come prt prt?

(You come alone?)

11 (0.2)

12 D *啊?　是　自己　来　的　吗?*

ah? be own come prt prt

(Ah? Do you come here alone?)

13 ((the doctor turns to the patient's family))

14 D *今天　好像　不对经 么?*

today seem wrong prt

(Something wrong with her today?)

15 F *没有 啊*

no prt

(No.)

16 D *没有 啊?*

no prt?

(No?)

17 D *好　不　好　啊?(.)　和 我　说　两句话　嘞*

good not good prt?(.)to i say two words prt

(Are you ok?(.)Say something.)

18 D *呵　呵　呵*

heh heh heh

(Heh heh heh.)

19 (0.5)

20 D *来(.)　舌头　看　一下*

come(.) tongue look vm

(Come, show me the tongue.)

Although this is a non-typical case of an uncooperative patient, this extract fully illustrates how by initiating a topic that is not related to the core instrumental agenda of the medical conversation, the doctor seems to kill the deadly silence and oil the atmosphere. At the beginning of this conversation, the doctor notes the 'unusualness' of the patient and tries to discover the source of her unhappiness. Here, small talk is actually integrated into the core instrumental talk. Lines 1 to 8 could be interpreted as both instrumental and relational. Questions asking the patient's mood could either invite biomedical information or psychosocial information. After a continuous failure to encourage patient extension, the doctor turns to a more phatic-oriented frame by asking the patient if she comes alone. Note that, the patient's family is sitting next to the patient. The doctor obviously knows that the patient is not coming alone, as she discusses with the patient's family after receiving no patient response (lines 13 and 14). Therefore, the inquiry at lines 10 to 12 could be understood as the doctor's intention to build rapport with the patient and ease the 'awkwardness' of the silence (lines 5, 7, 9, and 11).

Small talk outside the phatic domain

There is one case in the TCM openings in which small talk operates outside its phatic domain. This is when it is initiated by the speaker as a form of explanation to the listener for his/her unpleasant experience. In Extract 31, while the doctor's initial turn appears to be overtly related to the instrumental topic, the utterance is pronounced to achieve relational rather than transactional goals (see Chan, 2005; Drew & Heritage, 1992).

In Extract 31, the patient used to have high blood pressure. She came with her family. They waited for a long time before their turn.

Extract 31: TCM

1 D *他们 都 是 先 预约 的 号子*
they all be first book prt number
(They booked in advance.)

2 P *对的 对的*
right right
(Right.)

3 F *我 下次 也 网上 挂(.)↑ 网上 可以 挂 的 哦?*
i next time too online book(.)↑online can book prt prt
(I will book online next time as well(.)Can I book online?)
4 P *没事 没事(.) 我们 下次 也 网上 挂*
no problem no problem(.) we next time too online book
(Never mind, never mind, we book online next time.)
5 D *今天 就 去 约*
today just go book
(Do it today.)
6 P *今天 就 去 预约 啊?*
today just go book prt?
(Do it today?)
7 D *到 服务台 马上 去 预约 去*
to customer center immediately to book to
(Go to the customer center and do the booking.)
8 P *哦(.) 网上 没有 挂 的 专家 哦?*
Oh(.)online no book prt expert oh?
(Oh. No booking for specialists online?)
9 D *这样 <u>快</u>= 你 到 网上 的话 更慢*
this fast=you to online if slower
(That's faster. It is much slower to do it online.)
10 P *哦*
oh
(Oh.)
11 D *有的时候 还 容易 满 掉 [没 得 挂*
sometimes still easy full pfv [no prt book
(Sometimes the booking will be full. No enough quota.)
12 P *[我 是 记得 1.30 挂*
i be remember 1.30 pm book
[I remember it starts from 1.30.]
13 D *不 一定 的(.)[他们 有时候 说不定 已经 约 满 了*
not definitely prt(.)they sometimes maybe already book full pfv
(Not absolutely. Sometimes it might be already fully-booked.)
14 P *[不 一定 的 啊?*
not absolutely prt prt?
(Not absolutely?)

15 P *这样 的 啊*
this prt prt
(I see.)
16 D *你 还是 这个 服务台 去 看一看*
you better this customer center to watch
(You'd better consult at the customer center.)
17 P *哦*
oh
(Oh.)
18 D *要不 一会儿 我 这里 帮 你 看一看*
or later i here help you watch
(Or I can check it for you later.)
19 (0.2)
20 D *舌头 给 我 看看*
tongue to me see
(show me the tongue.)

Scholarships on the quality of care have suggested a strong association between medical qualities with the physical environment in which care is delivered (Sitzia & Wood, 1997; Ware *et al*., 1983). One of the factors that affect patient perception of the service environment is timeliness (Dagger, Sweeney, & Johnson, 2007). Extract 31 nicely illustrates how the explanation for patient's long waiting at the beginning of medical conversation before getting down to the core medical talk serves to repair patient's negative emotions, minimizes potential hostility, and display the doctor's orientation towards the forthcoming interaction as a service encounter within which the patient is the client. Put differently, the doctor's explanation at the conversational opening serves a "propitiatory" function, i.e. "defusing the possiblely hostile attributions" (Coupland *et al*., 1994: p. 93).

The doctor opens the conversation by making the case for the patient's waiting. She might be conscious about the potential hostility caused by the long waiting time. Contextualization cues indicating doctor's relationship building behaviors include her suggestion on immediate appointment (line 5), the recommendation on an in-hospital

appointment rather than online booking (lines 7, 9, 11, 13, 16), the offer to provide a service to the patient (line 18), and the organization of these activities in a progressive manner, which could be indicators of the doctor's attentiveness to the patient's potential negative feelings. Notice that it is the doctor – conventionally considered as the 'power' and 'superior' in medical conversations – who explains to the patient, rather than the reverse. Thus, in so explaining and offering, the asymmetry of the conventional doctor-patient power is attenuated.

The patient also contributes to this relationship building by showing understanding to the doctor. Contextualization cues indicating the patient's relational work include patient agreement (line 2) and understanding (line 4), and the use of backchannels after the doctor's advice (lines 15, 17). These cues reflect the patient's treatment of the potentially unpleasant experience as a result of her own fault: the patient should have made the appointment online in advance. Thus, both participants are working together on relationship building and hostility avoiding.

6.4 Small talk at medical closings

As noted small talk more frequently occurred at the closing stage of medical visits as compared to the opening stage. A closer inspection of the texture of talk suggests that while this kind of communication is mainly represented in the highly scripted thank-you-my-pleasure in WM conversation at the closing phase, it is occasioned by active co-construction of both TCM doctors and patients on a range of topics relating to patient families, work, express service, and local specialties.

Thank-you-my pleasure phatic parting

Small talk in medical closings is mainly a phatic parting exchange showing politeness. This is particularly so in WM encounters. Consider Extracts 32 and 33.

Extract 32: WM

1 D 好
ok
(ok.)

2 P *好　　谢谢　　哦*
　ok thank you prt
　(Ok. Thank you.)
3 D *哎*
　um
　(Um.)

Extract 33: TCM
1 D *这个　拿　去* ((the doctor gives the patient the prescription))
　this take go
　(Take this.)
2 P *好的(.)谢谢*
　ok　thank you
　(Ok. Thank you.)
3 D *走　好　哦*
　go good prt
　(Goodbye and take care.)
4 P *嗯　好*(.)byebye
　um　ok(.)bye bye
　(Um ok. Bye bye.)

In both extracts, patient gratitude is pronounced next to doctor's indication of possible pre-closing (Schegloff & Sacks, 1973) of the current talk. In Extract 32, the pre-closing is announced through the production of the prototypical 'okay'. In Extract 33, the doctor's passing over of the prescription is also an indicator suggesting that she has nothing more to say. Note the difference of doctors' response to patients' gratitude. While the WM doctor in Extract 32 responds with a distanced 'um' – pronounced as if the doctor approved the patient departing, the TCM doctor in Extract 33 responds with a polite goodbye reflecting what normally occurs in everyday conversation.

In some WM closings, the doctors do not respond to the patients' parting exchange. Consider Extract 34.

Extract 34: WM

1 D *26号 下午 ((the doctor is making the next-appointment))*
26 afternoon
(26th afternoon.)
2 P *好*
ok
(Ok.)
3 ((the doctor calls the next patient))
4 P *谢谢 医生 啊*
thank you doctor PRT
thank you doctor

In Extract 34, the patient-initiated parting exchange in the form of showing gratitude does not receive a reciprocated response from the doctor. Instead, the doctor even starts calling the next patient before the current one is actually leaving. In terms of power relations, this absence of a reciprocated goodbye reflects a power asymmetry between the doctor and the patient.

Social talk

In the widely-cited study on conversational openings and closings, Laver (1975) found that topics of small talk at the closing stage are mostly related to personal topics. He argued that non-controversial topics seldom occur in the closing stage. Findings of the present TCM data is at odds with Laver's observation: doctors and patients in TCM closings also actively engage in social talk of varying topics, both personal and non-controversial. Consider Extract 35 where non-controversial topic is involved.

In Extract 35, the patient came for a combination of physical symptoms. She has recently felt thirsty and fragile. She used to have diabetes. The patient has taken traditional herbal medicine for quite a long time. Instead of concocting the herbs by himself, the patient would like the hospital to do it and then deliver the herb packs through express service.

Extract 35: TCM
1 ((the doctor writes the prescription))

2 P *送送　　也　蛮　厉害　的　呢?*
deliver also very great prt prt?
(So many packs to deliver.)
3 D *这些　都　是　那个:　快递　　送　的*
these all be that: express service deliver prt
(These will be delivered by the express service.)
4 P *↑都　　快递　　啊?*
all express service prt?
(All of them?)
5 D *是的*
yes
(Yes.)
6 P *哦(.) 有一天　　送　到　我家　已经　7点　多　了*
oh one day deliver to my home already 7 pm more prt
(Oh. There was one time when I got the packs, it was already over 7 pm.)
7 P *=上一次　　十点　都　没　到*
=last time 10 pm until not arrive
(Last time I waited until 10 pm.)
8 D *它　是　邮政　　送　的　还是　那个:*
it be post express deliver prt or that:
(Is it delivered by the post express or the?)
9 P *哎(.)<　不是　邮政快递*
yes(.)<not post express
(Yes, no, not post express.)
10 (0.4) ((the doctor signs on the prescription))
11 D *好*
ok
(Ok.)

In Extract 35, talk on express service mainly serves to fill the dead silence before the doctor finishes prescribing (line 1 and line 9). Frame shift was announced by the patient (line 2). By commenting on the amount of the packs, the patient indicates her orientation towards the socio-relational frame for the current talk. This initiation then generates sequences of social talk concerning the patient's experience on receiving herbal packs

from the express service. The patient continues to recount or possibly complain about the low efficiency of express service (lines 6 and 7). The doctor also co-constructs the small talk by accommodating to the patient – building patient knowledge on herbal delivery (line 3) and showing interest to the patient's experience (line 8).

Both participants here seem to regard small talk as time filler: consider the partially responded doctor's inquiry at line 8. The patient's non-pronouncement of the name of the express company could be possibly because that he saw the doctor signing on the prescription – an indicator of the possible pre-closing of the current consultation (line 10). The doctor also gives up asking the name of the company and projects a possible pre-closing (line 11).

In terms of power relations, small talk serves to attenuate the conventional asymmetry between the doctor and the patient by allowing interlocutors to engage in trivial and unserious topics (as compared to the instrumental medical talk). Also, the "license" (Holmes, 2000: p. 52) of small talk on postal service by the patient rather than the doctor is an indicator of a more balanced relationship between the doctor and the patient. According to Holmes (2000), it is normally the person in power who has the right to announce and close small talk.

Extract 36 includes small talk on personal topics. In Extract 26, the patient did not have a good sleep.

Extract 36: TCM

1 ((sound of the printer: printing the prescription))

2 D *你 要 老板 做 的 大 一点 你 就 心态 很好 了*

you if boss do prt big a little you just mentality very good prt

(You will have a good mentality if you have a larger business.)

3 P *嗯*

um

(Um.)

4 D *你 反正 一直 想 做 个 大 老板*

you anyway always want do a big boss

(You've always wanted to have a larger business.)

5 P *做 大 老板 也 没 这么 好 做 啊*

do big boss too not this easy do prt

(It's not that easy to run a larger business.)

6 D *呵呵*

heh heh

(Heh heh.)

7 P *做 大 老板 都 是 毛病*

do big boss all be illness

(People who have large businesses have lots of illnesses.)

8 P *我们 那些 老板 都 是 毛病*

we those boss all be illness

(Those who I know have lots of illnesses.)

9 (1.6)((the printer finishes printing, the doctor signs on the prescription))

10 D *哎呀 可以 下班 了*

onoma can get off work prt

(My, it's time to get off work.)

11 P *嘿嘿(.) 下午 呢? 下午 病房?*

heh heh(.)afternoon prt? afternoon ward?

(Heh heh. What about this afternoon? In the ward?)

12 D *嗯 好 了*

um ok prt

(Um ok.)

13 P *嗯 谢谢 哦*

um thank you prt

(Um, thank you.)

14 D *哦 走 好*

oh goodbye good

(Oh, goodbye and take care.)

In Extract 36, topic on the patient's psychological wellness mainly serves two functions: time filling and relationship building. At line 1, the sound of the printer marks a shift to the closing phase of the medical conversation. The doctor's initiation of small talk immediately next to the beginning of the printing work and her indication of a possible

pre-closing (line 12) suggests that the talk serves to "fill a gap" (Holmes, 2000: p. 48) between two planned activities: printing the prescription and closing the consultation. At line 2, rather than blaming the patient for his poor mentality, the doctor legitimates his current status by attributing to the scale of his business. In so doing, the doctor displays her understanding and friendliness to the patient, and thus relationship building. The doctor then continues to display her understanding and knowledge about the patient by saying that 'you've always wanted to have a larger business'. The patient also engages in this small talk by sharing with the doctor the shortcomings of having a larger business. The function of the current talk as time filler is particularly evidenced since line 9. The doctor's explicit announcement of a possible pre-closing (line 10) and the use of the unmarked 'ok' could be interpreted as the doctor's indication to close the current talk.

In terms of power relations, while the doctor's correct identification of the patient's dream (line 4) and the patient's knowledge of the doctor's schedule (line 11) are indicators of their acquaintance, it is the doctor who has the decisive power to initiate and close the small talk and the current medical conversation.

6.5 Rarity of small talk at conversational openings and closings in WM

From Table 6.1 and from the extracts illustrated in the prior sections of this chapter, it was noted that in WM visits small talk was rare when compared with its occurrence in TCM visits. This finding is consistent with what has been presented in Chapter 4 – a quantitative analysis of participants' verbal behaviors using RIAS. The lack of a scripted 'hello' at the opening stage and the absence of a phatic parting exchange at the closing stage could possibly be an indicator of (a) the high instrumentality of the WM encounter, (b) the heavy clinical load of the hospital in the WM practice, or (c) a lack of familiarity and acquaintance between the doctor and the patient. Many patients visiting their WM doctors enter the consultation room by directly stating their major concerns (such as physical pains) or purposes for current visiting (e.g. to take a test or for medication refill). Also, doctors tend to open the conversation by directly asking the patient's primary concerns. At the closing phase of most WM conversations, patients leave with the doctor's prescription or treatment advice without a minimum courteous exchange of

goodbye. An interesting phenomenon observed in current WM data is that the doctor normally calls the next patient before the current patient leaves the room. Therefore, the absence of a parting exchange could be possibly explained as participants' co-awareness of the doctor's heavy clinical load and the mutual foregrounding of the instrumental goal.

Compared with WM, one possible explanation for the frequent occurrence of small talk at TCM closings is the consideration to fill the silence during the doctor's prescription. Different from WM prescriptions, TCM prescriptions include many different kinds of herbs and normally take a longer time than WM prescriptions. Also, TCM doctors frequently change patients' prescriptions according to their current status (e.g. if the patient is recently diagnosed as 'hot', the doctor might add more herbs which are considered as 'cold'), whereas WM doctors normally ask the patient to continue taking their previous medicine if it works. Another possible explanation is that TCM diagnosis is highly based on the belief that various socio-environmental factors affect patient health, and therefore discussions of these factors could possibility reveal the source of physical diseases.

6.6 A special case in TCM

While small talk in medical conversations predominantly occurs at the opening and closing phases of medical conversations, in one of the TCM consultations, it is highly interwoven with core medical talk, serving as a complimentary description of the social factors that potentially affect the patient's general health. The negotiation of small talk in this case serves to facilitate the achievement of the instrumental goal of the current consultation. In this section, I include a special case to (a) suggest the equally important role of small talk in medical encounters, (b) demonstrate the instensive engagement of TCM doctors and patients in small talk for the achievement of both relational and instrumental goals, and (iii) consolidate the argument on the remarkable clinical differences in talk at this level.

Extract 37: TCM

1 D *有　　文化　　也　不　好 ((the doctor commented on the former patient))*

have education too not good

(It's not always good to be well-educated.)

2 P *嘿　嘿　嘿*

heh heh heh

(Heh heh heh.)

3 D *你　怎么样　了*

you how prt

(How're you?)

4 P *我 现在　就　是　那个　哦*

i now just be that prt

(Now I am just that)

5 D *嗯*

um

(Um.)

6 P *每天　　做梦　　天天　　做梦*

every day dream every day dream

(I dream every day, every day.)

7 D *=你们　家里　　的　事儿　　有　　没有　　解决　掉*

=your family prt issues have not have solve pfv

(Have your family problems solved?)

8 P *↓没　呢(.)　　哪有　　那么　快*

↓no prt(.)how come that fast

(Not yet. How can that be so fast?)

9 D *上次　　是　说　　你家里　　什么　事儿? 我 都　　忘　　了*

last time be say your family what issue? i all forget prt

(What's the problem you mentioned last time? I forgot it.)

10 P *我　小孩*

my child

(It's my child.)

11 D *啊?*

Ah?

(Ah?)

12 P *我　小孩*

my child

(It's my child.)

13 D *小孩 怎么 了*

child how prt

(What's wrong with your child?)

14 P *我小孩 失恋(.) 呵呵*

my child broke up with someone(.)hehe

(My child broke up with someone, hehe.)

15 D *哦*

oh

(Oh.)

16 P *呵呵(.)↑ 哎呦 反正 我 今天 还在 劝 他*

hehe(.)↑onoma anyway i today still persuade him

(Hehe. Ei, I am persuading him today again.)

17 P *他 跟 我 说 他 没事 了 么*

he to me say he fine prt prt

(He told me that he is fine.)

18 D *好的*

ok

(Ok.)

19 P *说 他 不 懂事 也 挺 懂事 的*

say he not sensible actually very considerate prt

(Sometimes he is not sensible, but sometimes he is.)

20 D *=那 他 没事 了 你 有 事 了*

=so she fine prt you have issue prt

(So now she is fine but you have a problem.) ((By now, the doctor does not realize that the patient is talking about her son. She thought the patient is talking about her daughter))

21 P *没有*

no

(No.)

22 P *其实 他 真的-*

actually he really-

(Actually he is really)

23 P *我 觉得 没有 那么 快*

i think not that fast

(I don't think he can come over in such a short time.)

24 P *哪有 那么 快*

how that fast

(How can that be so fast?)

25 P *一个 多 星期 过 了 对 不 对? 说 实在 的 哦*

one more week pass prt right not right say truth prt prt

(It's been more than one week right? To tell the truth.)

26 D *那 他 只要 不 要死要活 么 你 就 随 他 去 喽*

so he as long as not die prt you just let him go prt

(So you just let him go as long as he did not want to die.)

27 P *他 现在 就 这样 啊*

he now just this prt

(That is just what he is now.)

28 P *因为 我们 这里 有 时差 嘛*

because we here have time difference prt

(Because of the time difference)

29 D *嗯*

um

(Um.)

30 P *他 现在 就 跟 我 说 妈妈 我 没 <我 睡不着*

he now just to me say mom i not <i can't sleep

(He says that mom I am not, I can't fall asleep.)

31 P *你 说 我 睡得着 睡不着 对不对 啊?*

you say i asleep can't sleep right prt?

(How could I fall asleep then, right?)

32 P *我 大白天 的 他 应该说 是 晚上*

i daytime prt he should be evening

(It is the daytime here and should be the evening there.)

33 P *妈妈 我 睡不着 你 好 不 好*

mom i can't sleep you good not good

(He is like, mom I can't fall asleep, how are you?)

34 P *问 我 好 不好*

ask me good not good

(He asks me if I am fine.)

35 P *我 说 我 好 的*

i say i good prt

(I say I am fine.)

36 P *我 说 你 好 么 就 好 了*

i say you good prt just good prt

(I say as I'm fine as long as you are fine.)

37 P *这 怎么 弄 啊 我 也 没 办法*

this how deal prt i too no way

(What shall I do?)

38 P *我 就 劝 他*

i just persuade him

(All I can do is to persuade him.)

39 P *他 说 你 不 用 劝 我 的*

he say you no need persuade i prt

(He says you don't need to persuade me.)

40 P *你 不要 那么 焦虑*

you not that anxious

(He says don't be that anxious.')

41 D *是 啊(.) 你 这 脉搏 里面 满满 的 焦虑*

yes prt(.)you this pulse inside full prt anxious

(Yes. I can feel your anxiety from your pulse.)

42 P *我 说- 呵呵(.) 我 说 你 不 焦虑 我 就 不 焦虑 了*

i say- hehe(.)i say you not anxious i then not anxious prt

(I say, hehe, I say I won't if you are not.)

43 P *是 在 国外 发生 这种 事*

be in abroad occur this kind issue

(These things happen when he was abroad.)

44 P *他 只要 一 说 什么 事情 哦*

he as long as once say what issue prt

(As long as he says something)

45 P *我 脑袋 就 会 嗡 的 一下*

my head just will buzz prt vm

(my head will buzz.)

46 D *你 上班 吗(.) 你 现在 还 在 上班 吗*

you work prt you now still at work prt

(Do you work? Are you still working now?)

47 P *不 上班 啊*

no work prt

(No.)

48 D *不 上班 么 跑 一趟 不 就 行 了 嘛*

no work prt go once not just okay prt prt

(If not, then just go there, that's it.)

49 P *到 哪里 啊*

to where prt

(Where?)

50 D *去 看 他 啊*

to see him prt

(To visit him.)

51 P *看 他 么 我 让 他 给 我 开 证明 他 不 肯*

see him prt i ask him give i provide testimonial he not agree

(To visit him? I asked him to write a testimonial for me and he rejected.)

52 D *旅游 呢*

travel prt

(How about as a traveler?)

53 P *旅游 就 很 难 啊 ((visa application))*

travel then very hard prt

(That's very difficult.)

54 P *然后 他 说 你 不要 来*

then he say you don't come

(Then he says don't come.)

55 P *你 来 了 我 更 不 好*

you come prt i more not good

(If you come I will be worse.)

56 P *我 又( ) 我 现在(.)呵呵呵*

i again( ) i now(.)hehehe

(Again, I( ), now I hehehe.)

57 P *现在 是 儿女-*

now be children-

(Now the children)

58 P *他 说 什么 我 不要 刺激 他*

he say what i don't stimulate he

(He asked me not to stimulate him.)

59 D *头痛 呢 头 还 痛 不痛*

headache prt head still pain not pain

(How about your headache, do you still feel painful?)

60 P *头痛 有 一点点 还 有 一点 痛*

headache have a little still have a little pain

(A little still a little.)

…

85 P *我 就 是 我儿子 不 给 我 发 微信 我 自己 挺好*

i just be my son don't to i send wechat i myself very good

(I just, I am very well if my boy does not send me messages.)

86 P *他 一 给 我 发 微信 我 就-*

he once to i send wechat i just

(Once he did, I just)

87 D↑*是 个 儿子 啊*

↑be a son prt

(That's your boy?)

88 P *对 啊*

yes prt

(Yes.)

89 D *我 还以为 是 女儿 嘞*

i think be daughter prt

(I thought you were talking about your girl.)

90 D *儿子 么 更加 了(0.2) 儿子 你-*

son prt more prt(0.2)son you-

(Then you should be more, boys, you)

91 P *现在 儿子 女儿 差不多 的*

now son daughter similar PRT

(No much difference between boys and girls.)

92 D *那 是 你 管 得 太 牢 了*

that be you control prt too tight prt

(You are controlling too much.)

93 P ↓*那 倒是 事实*

↓ that be fact

(That's true.)

94 D *管 得 太 牢 干什么*

control prt too tight why

(Why do you control him that much?)

95 D *儿子 么 更加 放手 了*

son prt more let go prt

(He's a boy, you should let him go.)

96 P *我 怕 他--*

i worry he--

(I worry that he)

97 D *我 一直 以为 你 是 女儿 呢*

i all the time think you be daughter prt

(I've always thought you were talking about your girl.)

98 P *呵呵 我 把 他 当 女儿 一样 宝贝 的*

hehe i treat he as daughter same dear prt

(Hehe, I treat him as if he was my dear daughter.)

99 D *那 不行 那 不行*

that can't that can't

(That's not right, that's not right.)

100 D *儿子 怎么 可以 当 女儿 养*

son how can as daughter raise

(How could you raise a boy as if he were a girl?)

101 D *女儿 当 儿子 养 是 没有关系 的*

daughter as son raise be no matter PRT

(You could raise your girl as if she were a boy, it doesn't matter.)

102 P *前面 他 都 不 跟 我 说*

in the past he all not to me say

(He didn't tell me in the past.)

103 P *我们 要 跟 他 做 朋友 他 才 跟 我们 说 心里话*

we need to he make friend he will to we say secrets

(He will only share with us his secrets when we try to be his friends.)

104 D *这个(.) 你 这种状态 是 做 不 了 朋友 的*

this(.)you this status be make no prt friend prt

(This, you cannot be his friend in your current status.)

105 D *他 永远 是 依赖 你 的*

he forever be dependent you prt

(He will always be dependent on you.)

106 P *对*

yes

(Yes.)

107 P *他 很 拽 在家里*

he very cocky at home

(He is very cocky at home.)

108 P *都 不 理 我 的*

all no talk me prt

(He doesn't talk with me.)

109 P *↑烦死 了 烦死 了(.)真的 就 这么 对 我 的*

↑annoying PRT annoying PRT really just this to i prt

('You're so annoying, so annoying', he behaves like this.)

110 ((the doctor writes the prescription))

… ((the doctor gives the patient some diet information))

119 D *好*

ok

(Ok.)

120 P *谢谢 哦*

thank you prt

(Thank you.)

121 D *走 好 哦*

bye good prt

(Goodbye and take care.)

Small talk in this consultation emerges throughout the whole conversation: at the opening stage, at the medial stage when it is tightly knitted into the core instrumental medical talk, and at the closing stage in the form of a parting exchange. Two social functions of small talk are observed in this conversation: to facilitate the achievement of instrumental goals and to construct and maintain interpersonal relationship. In this extract, the social-relational frame is given more weight to the instrumental frame for the consultation. Several of the participants' utterances imply that family concerns are the major concern of the patient, and thus the principle rationale for the forthcoming encounter. At first, there seems to be a lack of acquaintance between the doctor and the patient. The cues that mark this acquaintance include the doctor's failure to recall the patient's family problem (line 7) and the lack of knowledge about the patient's work (line 46) and family (line 89). However, the discussion on the patient's family issues

(e.g. that the patient's son wants to die) indicates the patient's trust on her doctor both as a health professional and a friend.

The topic on the patient's child opens with an ongoing socio-relational frame to which both the doctor and the patient align. The doctor's immediate pronouncement of the patient's family issues (line 7) next to patient problem presentation displays her orientation to develop talk within the socio-relational frame. This orientation is continued in her next turn (line 9). By asking the patient her specific family problems, the doctor delivers her interest towards the patient as a person. This probing is continued at line 13 where the doctor asks detailed information about the patient's child. The patient co-constructs the socio-relational frame by giving an account of her child (lines 10, 12, 14, 16, and 17). At line 18, the use of the unmarked 'ok' could be interpreted as a possible pre-closing of the current small talk and a projection of frame shift to the instrumental medical talk. The cues marking the doctor's frame shift include the doctor's immediate pronouncement of the utterance (marked by '='), the lexical choice (from 'she' to 'you'), and the syntactic choice (the 'so'-prefaced utterance to indicate a summary). Also, note that the doctor's turn at line 20 is actually a delayed response to the patient's turn at line 17. However, the doctor's orientation to shift the conversation to the instrumental frame is 'declined' by the patient, where at line 21 the patient continues her narration about her child. The doctor appears to 'give up' her prior effort in frame shift, and aligns with the patient to the socio-relational frame by giving suggestions (line 26) – thus a continuation of the current frame. The doctor's suggestion then evokes more patient narration of her child (lines 27 to 40). At line 41, the doctor resumes a shift to the instrumental frame by describing the medical conditions of the patient. The doctor's second move for a frame shift is successful, as the patient starts to describe her health situations – that the patient feels head buzz (line 45). By correlating the medical symptom with the son (lines 44 and 45), the patient constructs talk on her child as an activity that is also instrumental. In the next turn, the doctor re-evokes the socio-relational frame by asking the patient if she is still working (line 46) and suggesting her to visit her child (lines 48 and 50). While the talk on the child continues, at line 59 there is a shift to the instrumental frame indicated by the doctor. At line 85,

the patient again attributes her general health to her child by saying that she is good before she receives a message from her son. Not until line 85 had the doctor realized that the patient is actually talking about her son instead of her daughter, the realization of this then evokes a new round of heated small talk concerning about the way to raise a child (lines 87 to 109). In this extract, small talk is nicely interwoven with core instrumental medical talk – on the one hand, the son is the, or at least one, source of the patient's physical disease; on the other hand, discussions about the son's recent negative experience and the right way to raise a child is relational as it demonstrates the doctor's interest and concern towards the patient as a person rather than a client.

In terms of social relations, this conversation features a more balanced doctor-patient relationship. Both participants have equal rights to announce frame shift: the doctor constantly evokes shifts between instrumental and socio-relational frames, while the patient declines such a shift by continuing the previous talk on socio-relational themes. This balanced relationship is also evidenced by the doctor's floor giving to allow patient narration (lines 18, 29). When eliciting patient information about her family, the doctor frequently uses open questions, giving the patient full freedom of extension. In the latter part of the conversation, however, evidence of the doctor's institutional power seems to emerge out of the unfolding discourse. For example, at line 92, the doctor directly blames the patient for having too much control on her son. This asymmetry of power is intensified at lines 99 to 101, where the doctor criticizes the patient for her inappropriate way of raising her son. At line 104, the doctor explicitly articulates the patient's failure to make friends with her son. The patient also contributes to the doctor's institutional power by constantly agreeing the doctor (lines 93, 106). In so doing, the patient is not only "acquiescing" (Walsh, 2007: p. 32) to the doctor's critique – an indicator of the power asymmetry, but also displaying her respect.

6.7 Chapter summary

Drawing on Holmes' (2000) and Coupland *et al.*'s (1992) notions of conceptualizing small talk as a type of talk that extends along a continuum, the discourse analysis provided in this chapter addresses how small talk emerges differently in two types of

medical practices through the analysis of turns and sequences, frames, and power relations.

The first part of the chapter concentrates on small talk at conversational openings and closings. Several features of small talk were addressed including its sequential locations, forms, and functions. In medical openings, small talk serves to make co-presence of participant, mainly in the form of addressing – hello sequence. It also serves to lubricate the transition to the core instrumental frame by filling the silence between talk. In cases when non-pleasant experience occurs, it serves to build, repair, or maintain a positive interpersonal relationship. The second part of this chapter focuses on one of the TCM interviews in which small talk emerges throughout the consultation, and is tightly interwoven with the core instrumental talk. By examining how small talk can function 'big' – to the accomplishment of instrumental talk, I argue the importance of small talk in medical conversations.

The extracts included in this chapter yield different patterns in TCM and WM encounters. First, participants in TCM encounters engage more actively in small talk than their cohorts in WM encounters do. The scarcity of small talk in WM thus reflects a conventional instrumental style of medical consultation. Second, while WM opening characterizes an absence of small talk, TCM openings may involve some phatic exchange, ranging from the 'addressing-hello' greetings to more social conversations. Third, different from WM closings where small talk emerges only in the conventional form of an exchange of thank-you, small talk in TCM closings involve topics of both personal and neutral values.

The next chapter reports patient evaluations about the affective domains of their doctors' communication and global satisfaction about their medical experience. A questionnaire adapting the Relational Communication Scale-14 was used to collect patient assessment of their TCM or WM visits.

Chapter 7 Patient evaluations and global satisfaction

7.0 Chapter introduction

> "If social perception is grounded in what people say and how they behave toward one another, then a key to understanding social perception processes is the nature of the messages that are exchanged" (Burgoon & Le Poire, 1999: p. 106).

This chapter is a survey-based study of patient satisfaction about their doctors' communication behaviors in medical consultations. Patient satisfaction is one of the most widely studied domains of medical outcomes in relation to doctor-patient communication. For decades, researchers have been interested in how various aspects of communication might influence patient satisfaction. A summary of what has been reviewed in Chapter 2 on patient satisfaction is that scholars are interested in either/both the content of the conversation (verbal and explicit) or/and the relational and interpersonal aspects of conversation (non-verbal and implicit). While Chapters 4, 5, and 6 mainly focused on the verbal content of medical conversations, this chapter reports patient satisfaction on the non-verbal and implicit messages during their interactions with doctors in different practices. It begins by reviewing existing scholarship in relation to the factors affecting patient satisfaction and measurements of patient satisfaction. It then introduces the theoretical framework that drives the present discussion.

Those who participated in Study One also participated in this study. In total, sixty-nine questionnaires were collected. Survey results were discussed based on Ben-Sira's (1976, 1980) theoretical framework of social interaction. One analytic value of Ben-Sira's theory is its consideration of the knowledge gap between professionals and layman patients in the instrumental domain of medical talk and thus a highlight on the interpersonal or affective aspect of communication.

7.1 Factors affecting patient satisfaction

Numerous studies on patient satisfaction have suggested a strong association between patient satisfaction and professional communication. Chapter 2 has reviewed communication-related factors such as information seeking and provision (Ainsworth-Vaughn, 1998; Boyd & Heritage, 2006), medical interview style (e.g ten Have, 1991; Cousin *et al*., 2012; Stewart, 1984). Other factors also include socio-demographic characteristics (e.g. Christen *et al*., 2008), and some organizational factors (e.g. Dugdale, Epstein, & Pantilat, 1999).

One of the widely reported and perhaps the most consistent correlate of patient satisfaction is age (e.g. Cohen, 1996; Jaipaul & Rosenthal, 2003; Peck, 2011; Rahmqvist & Bara, 2010; Young, Meterko, & Desai, 2000). Many scholars have suggested that older patients are more likely to be satisfied with their consultation than younger patients (Adelman *et al*., 1991; Jackson *et al*., 2001; Sitzia & Wood, 1997). A commonly cited study is Linn *et al*. (1982), which examined the determinants of patient satisfaction with ambulatory care and patient compliance with medical regimen among both young and elderly patients. Satisfaction was assessed across a 45-item scale. All patients involved were male. Comparisons of patient evaluations suggest greater patient satisfaction among older patients. Younger patients were particularly more dissatisfied with providers' personal qualities and convenience of care.

Similarly, Williams and Calnan (1991) examined patient satisfaction with general practices across four domains: accessibility and availability of medical care, doctor-patient relationship, technicality of doctors, and other organizational matters. Rather than grouping patients into young and old, patients were categorized into three age groups: the young (aged 18 to 39), the middle-aged (40 to 59), and the older (60 and above). Survey results demonstrated a higher satisfaction score in most aspects of health care in older patients than in the young and the middle-aged groups. Almost all the older patients were satisfied with the amount of information given by their doctors. One limitation of their studies is, as well as many prior studies, that patient satisfaction is not collected immediately after medical consultation. Rather, satisfaction is indicated based

on patients' recent medical experience. It could be possible, however, that other factors (e.g. long-term medical oucome and patient recall) affect the survey result.

One study particularly illuminating to the presnt one is Greene, Adelman, Friedmann, and Charon's (1994) post-visit survey among old chronic patients. They identified a number of variables that associate strongly with older patients' satisfaction, for example, doctors' questioning, supportive statements, and affective behaviors. The patients in their study were generally positive about their doctors' communication. Greene and colleagues' work thus contributes to the understanding of older patient satisfaction by examining patient satisfaction across a range of communication behaviors with the minimum trade-off of information loss due to patient recall or post-visit recovery. Their findings also confirm prior observations on the likeliness of older patients to have higher patient satisfaction about their medical experience.

Whilst many studies reported greater patient satisfaction by older patients than younger patients, Hall and Dornan's (1990) meta-analysis of the literature invited us to look more closely at the predictive power of age in explaining the variance in patient satisfaction. They contended that while age is the most powerful correlate among other socio-demographic variables to patient satisfaction, the association between age and satisfaction is still weak ($r = 0.13$). A similar observation was also reported in a recent study by Peck (2011). Patient satisfaction was collected both before and after the medical visit. According to Peck, while patients aged no less than 65 were more satisfied with their doctors' communication, the magnitude of age in explaining the variance in patient satisfaction is small (odds ratio = 1.29).

While the strength of age and health status in predicting patient satisfaction is inconsistently reported in the literature, a more complex interplay of these factors was reported by Jaipaul and Rosenthal (2003). These investigators examined age differences on patient satisfaction among 64,900 patients. Patients were divided into five age groups from 18 to 80 plus. Consistent with prior studies, their observations also demonstrated higher patient satisfaction in older patients. However, a closer investigation reflects the

intervening role of health status in explaining the variance in patient satisfaction. According to Jaipaul and Rosenthal, while the satisfaction score among patients who considered their health as poor to fair peaked at age 65 before declining, it kept increasing until age 80 among patients who perceived their health as very good to excellent. Jaipaul and Rosenthal's findings thus reflect a complex link between patient satisfaction and age. Jaipaul and Rosenthal's finding is insightful in the sense that it provides an understanding of the relationship between patient satisfaction and patient age as porous and could be possibly intervened by other factors (e.g. continuity of care and length of visit). Therefore, evaluation of patient satisfaction could be biased without controlling other co-variates. This understanding is built into the design of participants (see Chapter 3) and is also considered when interpreting the findings.

7.2 Social interaction theory

In social interactions, the interactants' satisfaction towards each other is based on their perception of the extent to which the recipient's response could further the speaker's interactional goal achievement (Ben-Sira, 1976). In medical consultations, the fundamental goals of both doctors and patients are instrumental task accomplishment. However, patients not only suffer physical disturbance but may also experience psychological and emotional stress due to their inability to solve their physical problems.

Ben-Sira's (1976, 1980) Social Interaction Theory (SIT) on doctor-patient communication posits that due to the technical knowledge and skills of the doctor which is of limited access to the patient, the judgment of the doctor's technical competence is to a large extent based on their affective behaviors. The SIT holds the belief that the mode of interaction (i.e. the affective domains of communication) rather than the content (i.e. the instrumental domain of communication) is the predominant factor that affects patient evaluation. Central here is the concept of affect, which describes the type of behavior that treated the patient "as a person rather than as a ""case"" (Ben-Sira, 1976: p. 7). Thus behaviors such as empathy, attentive listening, showing concern, showing interest, and social talk are all included in the affective domains of communication. The importance of affect is also supported by studies in the psychotherapy literature (e.g.

Horvath & Luborsky, 1993; Tay, 2013). Many studies have suggested a correlation between positive therapeutic alliance and success in therapy (e.g. Horvath *et al*., 2011; Martin, Garske, & Davis, 2000).

The notion of mode or affective communication is quite similar to what is called communication style in the literature. According to Buller and Buller (1987), communication could be described by one of the nine styles: "dominant, dramatic, contentious, animated, impression-leaving, relaxed, attentive, open, and friendly" (p. 375). In medical interactions, the most frequently described styles are paternalistic/doctor-dominant, consumerist/patient-dominant, balanced, and patient-centered or relationship-centered. Accordingly, doctors' interview styles are generally described as displaying either control or affiliation (Buller & Buller, 1987; Ong *et al*., 1995). The control style includes behaviors such as conversational dominance, being argumentative, and verbal exaggeration. The affiliation style describes affective behaviors aimed at establishing and maintaining a positive relationship between medical conversationalists.

Based on the SIT, scholars have highlighted the importance of doctors' affective behaviors in affecting patient satisfaction (e.g. Ben-Sira, 1982b; Kim *et al*., 2004). Many of these studies address how doctors' affective non-verbal cues of interaction such as gaze and touch could affect patient perceptions of the medical interview (DiMatteo *et al*., 1980; Mast, 2007). In their meta-analysis, Henry *et al*. (2012) examined the associations between doctors' nonverbal communication and patient outcomes. A total of 26 observational studies were included. Their findings suggest that doctors' nonverbal communication such as warmth and listening are highly related to patient satisfaction. Drawing on the theoretical considerations of SIT and findings of the prior studies, the research questions to be addressed in this study are (a) do TCM and WM differ in terms of patient evaluations about their doctors' communication styles; (b) do TCM and WM differ in terms of global patient satisfaction; and (c) whether patient evaluations about doctors' communication styles correlate with global patient satisfaction?

7.3 Measurement

7.31 Instrument

Questionnaires (Appendix II) were administered to assess patient attitudes and satisfaction towards doctors' communication styles. The questionnaire consists of three parts. The first part collects the demographic information of patients. The second part uses the 14-item Relational Communication Scale (RCS-14) (Burgoon *et al*., 1987). RCS is based on the SIT (Ben-Sira, 1976, 1980) and models of relational communication. Items were fielded into 6 domains of communication: immediacy (3 items), similarity (1 item), receptivity (3 items), composure (3 items), formality (1 item), dominance (2 items), and equality (1 item). RCS-14 is the short version of the original RCS-32. All dimensions were factor analyzed (see Chapter 3, section 3.23.1). As noted by Burgoon *et al*. (1987), given that some of the dimensions contain only contain 1 item, the reliability of the resultant scale might be influenced. However, in a study of cultural differences between TCM and WM in relation to doctor patient communication, Wang (2010) reported good reliabilities of the overall scale and each of the sub-scales.

The immediacy scale attempts to address issues of professional involvement and doctor-patient intimacy. The similarity scale reflects the similarities between doctors and patients in terms of values and attitudes. The receptivity scale measures rapport and openness. The composure scale provides messages on doctors' ways of communication, examining expressions such as relaxation or tension, anger, and anxiety. The formality scale informs the extent to which medical communication is formal or informal, businesslike or causal. And the dominance scale examines patient perceptions about the various degree of conversational equality and control, power relations, persuasiveness, and submissiveness (see Burgoon & Le Poire, 1999). Items are worded both positively and negatively. A list of the 14 items is presented in Table 7.1. The third part of the questionnaire consists of a scale examining global patient satisfaction.

Table 7.1: Domains of RCS-14 (Burgoon et al., 1987)

Immediacy	
Item1	The doctor was intensely involved in our conversation.
Item 2	The doctor found the conversation stimulating.

Item 3	The doctor communicated coldness rather than warmth.
Similarity	
Item 4	The doctor made me feel he/she was similar to me.
Receptivity	
Item 5	The doctor was interested in talking with me.
Item 6	The doctor was willing to listen to me.
Item 7	The doctor was open to my concerns.
Composure	
Item 8	The doctor was bothered while talking with me.
Item 9	The doctor was calm and poised with me.
Item 10	The doctor felt very relaxed while talking with me.
Formality	
Item 11	The doctor made the interaction very formal.
Dominance	
Item 12	The doctor attempted to persuade me.
Item 13	The doctor didn't attempt to influence me.
Item 14	The doctor considered me as an equal.

The reliability and content validity of RCS-14 among the Chinese population was piloted among 45 older adults (15 male and 30 female) from both the Division of Gastroenterology and the Division of Internal Traditional Chinese Medicine. The average age of participants in the pilot study was 64 years old (ranging from 50 to 84 years). Using a Chinese version of the RCS-14 (see Wang, 2010), all patients can understand the questions with no difficulty. Items with negative wordings were reverse scored. Assessment of the normality of data is conducted using Shapiro-Wilk tests. The scale is not normally distributed, and therefore non-parametric tests will be used. The reliability after reverse scoring for the 14 items was acceptable ($\alpha = 0.78$). Content validity was based on whether items correlate significantly. Spearman's rho (non-parametric) tests reported significant correlations across the six dimensions at a significance level of $p < 0.05$. All dimensions were also significantly correlated with patient overall satisfaction. In the main study, the reliability after reverse scoring among 69 patients was acceptable ($\alpha = 0.7$).

7.32 Main study recruitment and response rate

Those who participated in study 1 also participated in the questionnaire (see chapter 4 for participant description).

7.33 Procedures

Questionnaires were distributed immediately after patient consultation so that the accuracy of patient recall could be maximized (Brace, 2008; Neuman, 2011). Given that participants in the study were older adults who may not be able to see the words on the questionnaire clearly, the questions were read to the patients using standard Mandarin. Patients were required to rate the 14 items of relational communication from 1 (strongly agree) to 5 (strongly disagree). Patients who scored the items "strongly agree" and "agree" were categorized as "very satisfied" and "satisfied", while patients who rated the items using "disagree" and "strongly disagree" were categorized as "dissatisfied" and "very dissatisfied". Patients scoring "not sure" were categorized as "neutral". The categorizations of items with negative wordings were reversed. Global patient satisfaction is measured on a scale from 1 (very satisfied) to 5 (very dissatisfied). Additional patient comments were also added on the margin of the questionnaires. All questionnaires were numbered so that they could be paired later. SPSS 21 for windows was used to perform statistical analysis.

7. 3 Results

7.31 Demographic characteristics

Table 7.2 describes the socio-demographic characteristics of the patient participants. Thirty-two (46%) patients of the study were male. The mean age of the sample population was 63 (SD = 8.5). None of the patients were initial visitors: 42 (61%) patients had visited the same doctor at least 4 times, 24 (35%) had visited the same doctor for two to three times, and 3 (4%) had visited the doctor once before. All patients had the experience of seeing both TCM and WM doctors.

Table 7.2: Characteristics of patients

Gender	
Male	32
Female	37

Age	
Mean	63
Standard deviation	8.5
Minimum	50
Maximum	82
Practice	
TCM	30
WM	39
Number of prior visits	
1	3
2	12
3	12
More than 4	42

7.32 Correlations between relational domains of communication and global satisfaction

Correlations between different relational dimensions and global satisfaction were examined both generally and separately. Table 7.3 charts the correlation output among the 69 patients in both TCM and WM visits.

As depicted in Table 7.3, relational domains at the level of similarity and receptivity were significantly correlated with each of the other domains. Communication at the level of immediacy, formality, and dominance, however, was significantly correlated to each of the other domains except composure. The magnitude of the effect size for associations between these items reached from medium to large ($-0.323 \leq r_s (67) \leq 0.853$).

Table *7.3: Correlations between relational dimensions of communication and global satisfaction*

Correlations

			immediacy	similarity	receptivity	composure	formality	dominance	satisfaction
Spearman's rho	immediacy	Correlation Coefficient	1.000	.656**	.853**	.187	-.617**	-.540**	.744**
		Sig. (2-tailed)	.	.000	.000	.124	.000	.000	.000
		N	69	69	69	69	69	69	69
	similarity	Correlation Coefficient	.656**	1.000	.729**	.248*	-.571**	-.323**	.585**
		Sig. (2-tailed)	.000	.	.000	.040	.000	.007	.000
		N	69	69	69	69	69	69	69
	receptivity	Correlation Coefficient	.853**	.729**	1.000	.260*	-.683**	-.474**	.735**
		Sig. (2-tailed)	.000	.000	.	.031	.000	.000	.000
		N	69	69	69	69	69	69	69
	composure	Correlation Coefficient	.187	.248*	.260*	1.000	.022	-.103	.170
		Sig. (2-tailed)	.124	.040	.031	.	.861	.400	.162
		N	69	69	69	69	69	69	69
	formality	Correlation Coefficient	-.617**	-.571**	-.683**	.022	1.000	.365**	-.622**
		Sig. (2-tailed)	.000	.000	.000	.861	.	.002	.000
		N	69	69	69	69	69	69	69
	dominance	Correlation Coefficient	-.540**	-.323**	-.474**	-.103	.365**	1.000	-.382**
		Sig. (2-tailed)	.000	.007	.000	.400	.002	.	.001
		N	69	69	69	69	69	69	69
	satisfaction	Correlation Coefficient	.744**	.585**	.735**	.170	-.622**	-.382**	1.000
		Sig. (2-tailed)	.000	.000	.000	.162	.000	.001	.
		N	69	69	69	69	69	69	69

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

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

Note duplicates above and below the diagonal

All the six relational domains of doctors' communication except composure were markedly correlated to patient satisfaction, with a medium to large magnitude of effect size ($-0.382 \leq r_s\ (67) \leq 0.744$). Doctors' behaviors belonging to immediacy, similarity, and receptivity were positively related to patient satisfaction, while dominance and formality were negatively associated with patient satisfaction. Among all the relational domains, immediacy ($r_s = 0.744$) and receptivity ($r_s = 0.735$) was most strongly related to global satisfaction.

7.33 Doctors' communication styles

Shapiro-Wilk tests rejected normal distribution for the six relational domains (w = 0.87 for similarity, 0.95 for receptivity, 0.94 for immediacy, 0.93 for composure, 0.59 for formality, and 0.9 for dominance) and global patient satisfaction (w = 0.78) among the sample population. Therefore, the data were analyzed with non-parametric procedures. *Mann-Whitney U* tests for independent samples were performed, using practice type (i.e. TCM or WM) as the independent variables and different relational domains of

communication (i.e. immediacy, similarity, composure, formality, and dominance) as the dependent variables, to analyze clinical differences in relation to patient satisfaction about medical care, along with a calculation of the effect size *r*. A summarization of the SPSS outputs is illustrated in Table 7.4.

Table 7.4: Results of U-tests for the RCS-14 and global patient satisfaction

	Immediacy	Similarity	Receptivity	Composure	Formality	Dominance	Global
Mean rank							
TCM	16	21.08	16.95	31.6	48.15	46.38	17.83
WM	49.62	45.71	48.88	37.62	24.88	26.24	48.21
Sig.	0.00*	0.00*	0.00*	0.21	0.00*	0.00*	0.00*
Z	-7.01	-5.4	-6.66	-1.26	-5.92	-4.41	-0.71
Effect size	-0.84	-0.65	-0.8		-0.71	-0.53	-0.84

*Notes: *=significant at P < 0.01 level, N = 69.*

Table 7.5 describes the mean differences on each item of the six relational aspects of communication.

Table 7.5: Mean differences on relational items

	TCM		WM	
	Mean	SD	Mean	SD
Immediacy				
Item 1	2.33	0.71	3.74	0.59
Item 2	2.8	0.48	2.92	0.35
Item 3*	3.83	0.46	2.23	0.48
Similarity				
Item 4	2.77	0.68	3.82	0.64
Receptivity				
Item 5	2.43	0.82	3.49	0.68
Item 6	1.87	0.43	3.64	0.63
Item 7	2	0.45	3.23	0.81
Composure				
Item 8*	4.1	0.76	4.08	0.87
Item 9	1.97	0.49	2.08	0.77
Item 10	2.17	0.38	2.54	0.51
Formality				
Item 11	2.7	0.47	2.03	0.16
Dominance				
Item 12	3.13	0.43	2.05	0.22
Item 13*	2.67	0.48	3.64	0.54
Item 14	2.03	0.41	2.92	0.9

*Note: * indicates negative wording.*

As indicated in Table 7.4, significant differences were found in five out of the six domains of relational communication with medium to large effect size except composure. Readers may refer to Table 7.1 for item specification. On each of the five relational aspects (i.e. immediacy, similarity, receptivity, formality, and dominance), TCM doctors received greater patient satisfaction than their WM cohorts do:

a) Greater doctor-patient immediacy – reflected on doctors' intensity of involvement (item 1), sensory stimulation (item 2), and affect (item 3);
b) More receptivity – a higher degree of interest on patients (items 5 & 6) and openness to sensory stimulation (item 7);
c) Lower dominance in medical dyads – fewer attempts at persuasion (item 12) and influence (item 13) and therefore more interpersonal equality (item 14);
d) Greater similarity sharing between doctors and patients (item 4); and
e) Less formality in organizing medical talks (item 11).

7.34 Global patient satisfaction

As indicated in Table 7.4, greater global patient satisfaction was observed in TCM consultations than WM consultations ($p < 0.01$, Z = - 7.01, r = - 0.84). An independent sample *t*-test was used to calculate the mean scores and standard deviations of global patient satisfaction. The mean scores of global patient satisfaction were 1.9 (SD = 0.25) in TCM practice and 2.9 (SD = 0.42) in WM practice.

7.4 Discussion

The three research questions were (a) do TCM and WM differ in terms of patient evaluations about their doctors' communication styles; (b) do TCM and WM differ in terms of global patient satisfaction; and (c) whether patient evaluations about doctors' communication styles correlate with global patient satisfaction? All the three questions were solved.

As has been reported in several previous studies (Kim *et al*., 2004; Venetis *et al*., 2009), the results reported here indicate that doctors' relational communication (or affective behaviors) is one of the important factors for explaining variations in patient satisfaction. In many ways, the present study of patient satisfaction about different relational aspects of doctors' communication can best be thought of as both an exploration of patient perceptions of the communication styles in different medical practices and an investigation into the association between doctors' affect and patient satisfaction in the chronic setting.

The results of the survey supported Ben-Sira's (1976, 1980) SIT model of doctor-patient interaction – patients' assessment of medical care is highly related to their evaluation of doctors' mode of interaction. Different modes of interaction or communication styles are indicated by patients visiting TCM and WM doctors: immediacy and distance, similarity and dissimilarity, receptivity and non-receptivity, formality and informality, dominance and equality. In general, TCM doctors demonstrate a style that reflects intimacy and empathy, while WM doctors demonstrate a style that reflects more detachment, dissimilarity, and non-receptivity (see Burgoon *et al*., 1987). As indicated by many of the patients, TCM doctors are rated as 'better' than WM doctors in terms of openness:

> Patient 43 (TCM): *中医比西医好，先问后查。西医不问直接查，不问你的意见的。*('TCM doctors are better than WM doctors. TCM doctors will ask your opinions before they check your body. In the opposite, WM doctors never ask your opinions.')

> Patient 47 (TCM): *中医会采纳你的意见，西医他说了算。*('TCM doctors will take your advice, but WM doctors decide for you.)

Compared with WM doctors, patients indicated better listening of TCM doctors:

> Patient 17 (WM): *医生总是打断我说话。* ('Doctors always interrupt me while I am talking.')

Patient 26 (WM): *感觉医生质量不行，全是检查，说话也不听。* (‘I feel that the doctor is not well-qualified. It’s all about physical examination. The doctor does not pay attention to what I am saying.’)

Patient 59 (WM): *人太多了，医生没法仔细听我说话。*(‘There are too many people. The doctor could not listen to me carefully.’)

Patient 61 (WM): *医生没空听我说话，都听他的。*(‘The doctor does not have time to listen to me talking about things. Just listen to him.’)

TCM doctors are also considered as ‘better’ than WM doctors in terms of attitudes:

Patient 10 (WM): *等了一个钟头看看三分钟不到，一句话不说，单子开出来检查，不关照，不耐烦，好医生少，医生态度好的话病也少。*(‘I waited for like one hour to have this less than three-minute-consultation. Without asking me anything, she just passes me the form and asks me to do the physical examination. No care and no patience. We are losing good doctors. Our health could be improved if doctors have a better attitude.’)

Patient 13 (TCM): *中医比西医好，西医不耐烦。* (‘TCM doctors are better than WM doctors, WM doctors are more impatient.’)

Patient 14 (WM): *医生年纪轻烦躁一点。* (‘The doctor is young, and thus easily to get irritated.’)

Patient 54 (TCM): *中医态度好一点，比较平和一点。西医急躁一点。*(‘TCM doctors have a better attitude, more gentle, but WM doctors are more irritable.’)

> Patient 64 (WM): *西医态度太差，表情语气差，特别是对老人，直接开报告，应付了事，不关心我们，不耐烦*。('WM doctors' attitudes are so poor. They are poor in terms of facial expressions and verbal tones, especially to the elderly. They just ask you to do physical examinations, so scripted. They don't care us. They are impatient.')

Insights gained from patients' comments thus include that they perceive (a) more openness and better listening of TCM doctors than WM cohorts, (b) the foregrounding of scientific evidence (e.g. physical examination) over patient self-account in WM visits; and (c) greater doctor-dominance in WM than in TCM encounters. These findings also support what has been described in previous chapters – TCM interviews demonstrate a more patient-centered style of doctor-patient communication.

In terms of the associations between global patient satisfaction and doctors' communication styles, positive associations were found between patient satisfaction and immediacy, similarity, and receptivity, while negative associations were found between patient satisfaction and dominance, and formality. The results thus are in line with what has been reported in the literature that higher patient satisfaction is associated with more frequent patient-centered behaviors, for example, attentive listening, showing interest, being open to patients' opinions, being patient, encouraging patient extension, and showing care and concern (Ong *et al*., 1995). It is interesting to note that immediacy ($p < 0.01$, $r = 0.744$) and receptivity ($p < 0.01$, $r = 0.735$) are most closely associated with global patient satisfaction, reflecting their prominence in assessing doctors' communication. This finding suggests that patients refer to doctors' immediacy and receptivity more than other interpersonal skills when evaluating their doctors' performance in medical interactions. Pertinent to this finding, in a meta-analysis of patient satisfaction literature, Hall and Dornan (1988) concluded that doctors' humanness (i.e. warmth, respect, attentive listening, and other non-verbal behaviors), similar to what are included in receptivity and immediacy here, ranked highest among

all the other variables that affect patient satisfaction. Likewise, in a systematic review of the literature on patient priorities to primary medical care, Wensing and colleagues (1998) summarized that doctors' humanness for which they conceptualize as "respect and personal interest for the patient as an individual" (p. 1574), similar to what is included in immediacy here, were rated by patients as most important in over 50% of the studies under review.

A strong and positive association is also found between similarity and global satisfaction ($p < 0.01$, $r = 0.585$). This finding provides empirical evidence to earlier suggestions that congruence in preference between the doctor and the patient might be associated with better patient outcomes (Sewitch *et al*., 2004). As indicated by Krupat and colleagues (2000), patients are more likely to have greater satisfaction with well-matched doctor-patient orientations. In a more recent study, Cvengros and colleagues (2007) expanded prior studies in exploring whether symmetry in attitudinal preferences between doctors and patients is related to better patient outcomes in primary care. Similar to what has been reported here, their findings reflect that greater similarity between attitudes held by doctors and patients on role orientations in primary care is associated with greater patient satisfaction.

Formality is also strongly, though negatively ($p < 0.01$, $r = -0.622$), associated with global patient satisfaction, as has been found in other studies (Ong *et al*., 2000). Note that while this aspect of communication is salient in relating to global satisfaction, it is measured here as a general concept rather than focusing on specific behaviors as other variables. Studies focusing on particular behaviors of this nature include Bertakis and colleagues' (1991) observation, which shows that psychosocial discussion in medical interactions is the only one variable among all the aspects of doctors' communication that is consistently related to patient satisfaction.

It is interesting that dominance is ranked lowest, though moderately ($p < 0.01$, $r = -0.382$), among the five domains of doctor's communication that are significantly associated with patient satisfaction, reflecting that patients may refer to doctors'

dominance less than immediacy, receptivity, formality, and similarity when evaluating medical interactions. The domain of dominance describes a control style, as depicted in Buller and Buller's (1987) study (see Chapter 2). Note that while ranked lowest, the association between dominance and global satisfaction is still much greater than what has been reported in the literature. For example, in the path-breaking studies of doctor-elderly patient interactions, Greene and colleagues (1994) found that doctors' egalitarian was weakly associated (r = 0.08) with patient satisfaction. Bertakis *et al*. (1991) identified a small association (r = -0.12) between doctors' dominance and patient satisfaction. In a more recent study of cancer patients, Ong and colleagues (2000) reported no associations between doctors' dominance and global patient satisfaction.

The failure to find associations between patient satisfaction and composure ($p > 0.05$) suggests that compared with the other interpersonal skills, composure is weaker in explaining the variations in patient satisfaction. This finding challenges results reported by prior studies. For example, Inui *et al*. (1982) identified lower patient satisfaction when doctors communicated in a tone of tension. In an analysis of 50 routine medical interactions in chronic settings, Hall, Roter, and Rand (1981) reported strong associations between patient satisfaction and doctor's expression of anger and anxiety. Fifty medical interactions in chronic illness setting were rated by 144 students. A total of three clips were selected from the middle of the first one-third, the second one-third, and the last one-third of each interview. These speech clips were filtered so that words cannot be understood, but vocal features (e.g. intonation) remain. Patients' contentment was obtained from their responses to 8 rating scales. Both doctors and patients were rated on four of the rating scales, among which two were related to anger and anxiety. Their findings demonstrated a positive association between doctors' negative affect and patient satisfaction. More specifically, when doctors sound more irritated and anxious, patients were more satisfied with the medical visit.

Regarding the difference in patients' contentment with medical care in TCM and WM encounters, global patient satisfaction was higher in TCM consultations than WM consultations, as rated by patients. The domains of doctors' communication for which

patients are particularly critical are immediacy and receptivity (see Table 7.4). Patients are generally more satisfied with doctors' communication style in TCM encounters that reflects more attentive listening, greater intensity of engagement, greater affect showing, and more openness to sensory stimulation. This finding is partly in line with Chung *et al.*'s (2009) observation in a population-based survey in Hong Kong. A total of 33,263 individuals aged more than 15 years who had received medical care during the past one month participated in that survey. The results of their survey show that while participants visiting WM doctors were dissatisfied with all aspects of the survey items (listening, explanation, respect, time allocation, and global assessment), TCM patients expressed greater satisfaction of their doctors in terms of listening skills. Similar finding was also reported by Wang (2010), showing better doctors' performance in attentive listening in TCM clinics in China. The finding also reflects some additional insights into the understanding of communication styles in TCM and WM practices and their impact on patient satisfaction. As indicated by some patients (patients 10, 26, 43, and 64), doctors in WM encounters demonstrate a preference to directly arrange physical examinations before acquiring detailed patient information. In the opposite, there appears to be a consensus among patients that TCM doctors spend time listening to patients.

Patients are also more satisfied with the aspect of formality in TCM than in WM interactions. This finding is consistent to what has been discussed in Chapter 4 to Chapter 6. Compared with WM, TCM consultations demonstrate a less instrumental style of interaction. Zhang (2007) makes a fine-tuned microanalysis of TCM interactions and suggested that doctor-patient interactions are less structured as both participants could bring their personal experience into the interaction. Zhang points out that TCM is a "slow and carefully managed process", which is based on an integration of both medical and nonmedical perspectives and different experiences (p. 77). Given the various sources of illness, conversations in TCM encounters are thus likely to be less formal when compared with WM conversations which foreground physical examinations.

Patients in this study indicate a greater extent of similarity, with a large magnitude, in TCM than in WM interactions. This could also be explained by the lower immediacy and receptivity of WM conversations, as evidenced by the large correlations ($p < 0.01$, $r = 0.656$ between similarity and immediacy; $p < 0.01$, $r = 0.729$ between similarity and receptivity). A thorough search of the literature suggests that this is the first study that reports findings on patient attitudes towards doctor-patient congruence in TCM encounters.

TCM also significantly differs from WM with a moderate magnitude of power in terms of professional dominance. Compared with TCM, WM conversations were considered as more doctor-dominant. As indicated by patients that doctors in WM encounters don't ask about their opinions, interrupt their speech, and decide for them. In a thoughtful analysis of the structure of professional dominance in medical care, Freidson (1970) suggested two representations of dominant behaviors: lack of information giving and informed decision-making. Thus, the finding of lower patient satisfaction in WM encounters lends support to Freidson's description of professional dominance. As reported by patients, doctors in TCM encounters show attempts to acquire patient information by asking questions, while WM doctors do not. Also, TCM doctors may accept patients' opinions, while WM doctors decide for patients. This finding accords with observations reported in Chapter 4: compared with TCM, WM consultations feature a greater extent of patient-centeredness.

No difference was found between TCM and WM in relation to patient satisfaction on composure. One possible explanation is that patients in this study do not perceive a difference in doctors' composure (see Table 7.5). In general, both TCM and WM patients perceive their doctors as calm, relaxed, and appear to be comfortable when talking with patients.

Of special interest is the finding that while patients reported complaints about their doctors in WM encounters, and while they indicated greater satisfaction in almost all domains of doctors' communication except composure, the average rating of their global

satisfaction reflects a neutral stance. This finding provides some additional insights into patient satisfaction. First, patients may avoid rating their doctors' behaviors negatively. They might fear potential negative impact on both themselves and doctors. This finding is also supported in the literature (e.g. Larsen *et al*., 1979). Second, in this study the selection criteria (older adults with chronic illness who have seen the same doctor at least once before) created a population with an average age of 63. Previous studies have either suggested or observed that older patients tend to have a higher satisfaction about their medical care (Adelman *et al*., 1991; Jackson *et al*., 2001). One of the patients surveyed argued that due to the heavy load of hospitals, doctors do not have time to communicate carefully with each patient. She indicated that it is the hospital administration that should be blamed. Last but not least, there might be other factors rather than the affective domains of communication that affect global satisfaction.

7.5 Chapter summary

While there is much literature concerning patient satisfaction on both instrumental and affective communication in medical care, there has been a severe dearth of studies focusing on patient satisfaction in both TCM and WM encounters. The primary aim of this chapter thus has been to explore patient attitudes towards various aspects of doctors' communication and their impacts on global satisfaction in different clinical practices. The findings pose both agreements and challenges on what has been known on patient satisfaction. First, consistent with what has been reported in the literature, doctors' affective behaviors such as warmth, listening, showing interest, and extensity of engagement are positively associated with global satisfaction. Conversely, behaviors indicating dominance and formality are more likely to be related to lower patient satisfaction. Second, in contrast to prior observations (Hall *et al*., 1981), doctors' composure is not powerful in explaining the variations in patient satisfaction in the sample population. The results presented here thus add empirical evidence to Ben-Sira's (1976, 1980) SIT that patient assessment of medical care is largely associated with their evaluation of the interpersonal aspects of medical interactions.

The findings also confirm with what has been reported in Chapters 4, 5, and 6. Compared with WM, TCM conversations feature a greater extent of patient-centeredness (e.g. attentive listening, extensity of involvement, informality, and less dominance). For example, the more attentive listening of TCM doctors and the greater extensity of participants' mutual involvement are evidenced by the greater number of doctor-initiated questions and the larger amount of patient information giving in TCM than in WM visits (see Chapter 4). One possible explanation for the fewer questions in WM visits is that WM doctors rely much on scientific reports. As indicated by some patients in the survey, medical interactions in WM visits are all about physical examinations. The less formality and dominance in TCM visits than WM visits are evidenced by the more active engagement of TCM doctors and patients in lifestyle communication and non-medical small talk (see Chapters 5 & 6). By inviting patients into talk which is not directly related to the core biomedical agenda of the visit, doctors temporarily step away from their role as a professional. As such, the interactional asymmetry is attenuated. This difference in communication style is strongly associated with patient contentment of the medical care. The next chapter provides more discussions on how findings using different research methods could be triangulated to explain the clinical differences in doctor-patient communication and patient satisfaction.

Chapter 8 Discussion and conclusion

8.0 Chapter introduction

In this final chapter of the thesis, I revisit the research objectives to demonstrate the validity of the research design and the effectiveness of this research thesis in achieving the proposed objectives. Then, I offer a synthesized summary of my findings, by reviewing what has been described and discussed in Chapters 4 to 7. The major findings are divided into three parts: similarities between TCM and WM in relation to doctor-patient communication, differences between TCM and WM in relation to doctor-patient communication, and associations between communication styles and patient satisfaction. In the second half of this chapter, I discuss the limitations and contributions of this research, and implications for future studies before I close the thesis with a brief conclusion.

8.1 Revisiting research design

8.11 Research backgrounds

Doctor-patient communication and patient satisfaction has been of interest since 1950s. A large corpus of prior research of this nature investigated participants' communication behaviors that are indicative of their communication styles (e.g. information seeking and provision, interruption, and some nonverbal behaviors) and the impact on patient satisfaction. Some studies have focused on exploring the occurrences and non-occurrences of participants' behaviors and the impact on patient outcomes such as satisfaction and adherence (e.g. McCarthy *et al*., 2013; Roter & Hall, 2006). Other studies have attempted to disclose the underlying information such as individual experiences, institutional backgrounds, and social relations that inhabit the medical consultation (e.g. Heritage & Maynard, 2006; Wang, 2010). While these issues in doctor-patient communication have been extensively studied in the practice of western medicine, much less is known about medical interactions in TCM practice. To remedy that lack of knowledge about the clinical similarities and differences in relation to doctor-patient communication and the impact on patient contentment, I draw together in this thesis what is known about such understandings by demonstrating empirical

evidence. This project extends prior research by (a) exploring issues of doctor-patient communication and patient satisfaction in both TCM and WM practices, (b) examining the communicative patterns, the social relations and institutional backgrounds of the medical discourse, and the impact on patient satisfaction.

Against this backdrop, the overarching aim of the thsis is to examine the clinical similarities and differences in doctor-patient communication and patient satisfaction. Three sub-objectives are (a) to explore participants' communication behaviors in different clinical practices; (b) to investigate how communication outside the biomedical domain is structured and enacted in different practices and whether it might possibly reflect the interpersonal relations between doctors and patients; and (c) to examine patients' evaluations of doctors' communication styles and whether these evaluations correlate to global patient satisfaction. To attain these goals, a methodological triangulation including content analysis, discourse analysis, and questionnaire survey is deployed.

8.12 Research design

This study uses different analytical frameworks and methodological approaches to analyze the medical interactions in both TCM and WM encounters.

Table 8.1: Summary of research design

<table>
<tr><td></td><td>Study 1</td><td>Study 2</td><td>Study 3</td></tr>
<tr><td>Objectives</td><td>(a)</td><td>(b)</td><td>(c)</td></tr>
<tr><td>Focus of research</td><td>Occurrences and non-occurrences of participants' behaviors</td><td>Sequential locations of the non-biomedical domains of communication;

Topics of talk;

Functions of talk;

Doctor-patient relationship</td><td>patient evaluations about their doctors' affective communication;

Global satisfaction;

Correlation between patient evaluations and global satisfaction</td></tr>
<tr><td>Methods</td><td>Content analysis</td><td>Discourse analysis</td><td>Survey</td></tr>
<tr><td rowspan="3">Integrating different methods</td><td colspan="2">Construction of speech activity on the non-biomedical domain of communication which were found to be different between TCM and WM</td><td></td></tr>
<tr><td></td><td colspan="2">Communication styles and patient satisfaction</td></tr>
<tr><td colspan="3">Doctors' communication behaviors and patient satisfaction</td></tr>
</table>

While results generated from RIAS in Chapter 4 provide a skeleton of doctor-patient interactions, it is weak in explaining the meaning in context and has the risk of excluding meanings that do not fit into the codes (Waitzkin, 1990). For a deeper understanding of the medical interactions, two chapters (chapters 5 and 6) are devoted to building up the contextual information in clinical practices. Note that, in order to better explain the similarities and differences between TCM and WM in relation to doctor-patient communication, I chose lifestyle discussion and non-medical social talk (the non-biomedical domain of communication) as the areas for close examination. The foci of these two chapters are also decided according to what has been found in the RIAS study to be significantly different between TCM and WM. Having identified lifestyle discussions and non-medical social conversation as significantly different aspects of communication between TCM and WM, I investigate these activities in greater detail by using different discourse analytical approaches in chapters 5 and 6. Chapter 5 focuses on lifestyle discussions and chapter 6 concentrates on non-medical small talk. Prior studies have also suggested more lifestyle discussions (Gu, 1996) and small talk (Wang, 2010) in TCM than in WM conversations. While the literature primarily takes these two aspects of medical communication as a data source, the qualitative study here examines lifestyle and non-medical social conversation as a locus of investigation. Findings generated from the analysis, therefore, could possibly contribute to a better understanding of the nature of medical encounters and the social relations between participants. Drawing on different frameworks, the qualitative studies of lifestyle and social discussions addressed research objective two.

Having explored the clinical differences in relation to doctor-patient communication, the possible influences of clinical context on the shaping of conversation, and the social relationship indexed in the conversation, my next intention was to focus on patient evaluation of their medical care and the correlation between communication and patient evaluation (chapter 7). To achieve that goal, I adapted the RCS-14 (Burgoon *et al*., 1987; Burgoon & Hale, 1984; 1987) among the Chinese population (see also Wang, 2010). I

intentionally chose RCS-14 for both theoretical and practical considerations. Theoretically, RCS-14 was originally developed by reviewing all the other measurements in prior studies and sifting from them concepts and wording appropriate to relational communication (see Burgoon & Hale, 1984, 1987). Items were factor analyzed by these researchers into different domains that reflect varying styles of doctors' communication, e.g. dominance, immediacy, and receptivity. It is regarded as "the only extant instrument developed explicitly to measure the relational communication aspects of the doctor-patient interaction" (Gallagher *et al*., 2001: p. 212). Bearing in mind the results from the RIAS study that a major difference between TCM and WM in relation to doctor-patient communication is the extent to which socio-relational communication is involved, RCS-14 is thus treated as an appropriate instrument for the assessment of patient evaluations. Practically, given the sensitivity of hospital environment as well as the possible depressiveness of many patients seeing doctors because of physical ailment, the 14-item scale is easier to operate than those containing pages of questions. This quantitative study addressed research objective three. The instrument was also piloted to test reliability and content validity.

With such a methodological triangulation, I attempt to disclose the similarities and differences between TCM and WM in relation to doctor-patient communication and the impact on patient satisfaction.

8.2 A summary of major findings

In this section, I will unpack the key findings of Chapters 4 to 7. While clinical similarities and differences were explored in the previous 4 chapters, the thesis highlights the clinical differences in relation to doctor-patient communication and patient satisfaction.

8.21 Differences between TCM and WM in relation to doctor-patient communication

In spite of the similarities, marked differences are observed between TCM and WM in terms of participants' communication styles. These differences can be summarized with the following statements:

Statement 1: Issues on patients' lifeworlds are more frequently discussed and better organized in TCM than in WM interviews.

As reviewed in Chapter 2, concerns of patients' lifeworlds (i.e. doctors' understanding of the patient as a whole person rather than a case) are pivotal in patient-centered care. Hansen and Easthope (2007), in their publication of *Lifestyle in Medicine*, provide a thoughtful discussion on how lifestyle is understood as a determinant of disease in epidemiological research and how it is related to public health. They suggest that lifestyle discussions in medical interviews provide "explanatory narratives" (p. 94) of everyday practices that might be related to disease.

The RIAS study in Chapter 4 shows a marked difference between TCM and WM in terms of the extent to which the concept of lifestyle is applied into the explanation of patient disease. Compared with WM, more discussions of patient lifestyles are involved in TCM interviews (see Tables 8.2 and 8.3):

Table 8.2: Doctors' communication of lifestyle / psychosocial concerns

Doctor behavior	*Categories*	*TCM*		*WM*	
		Mean rates	*Std.*	*Mean rates*	*Std.*
Data collection	Lifestyle / psychosocial**	0.06	0.05	0.01	0.02
Information giving and counseling	Lifestyle / psychosocial*	0.07	0.09	0.03	0.05
*Notes: *=significant at P < 0.05 level, **=significant at P < 0.01 level, N = 69*					

Table 8.3: Patients' communication of lifestyle / psychosocial concerns

Patient behavior	*Categories*	*TCM*		*WM*	
		Mean rates	*Std.*	*Mean rates*	*Std.*
Information seeking	Lifestyle / psychosocial*	0.01	0.02	0.00	0.01
Information-giving	Lifestyle / psychosocial**	0.12	0.09	0.04	0.06
*Notes: *=significant at P < 0.05 level, **=significant at P < 0.01 level, N = 69*					

Tables 8.2 and 8.3 are summarized from findings in Chapter 4 (please refer to Tables 4.3 and 4.4). As the tables illustrate, compared with doctors in TCM encounters, WM doctors raised far fewer questions that are related to patients' lifestyles or psychosocial

concerns. These RIAS findings reflect a difference in participants' attitudes towards the value of lifestyles in explaining disease.

Support for the notion of more lifestyle discussions in TCM than in WM was further garnered through a qualitative discursive analysis of lifestyle communication. In Chapter 5, instances of lifestyle talk in both practices were examined and compared in terms of distribution, content, and various discourse strategies deployed by doctors to introduce lifestyle discussions. The analysis suggests that the content of lifestyle communication in TCM tends to be related to five areas – diet, sleep, exercise, bowel movement, and smoking, while in WM it is only restricted to the first two aspects. This finding could possibly reflect a difference in participant's understanding about the everyday causes of biomedical disease.

As reviewed in Chapter 2, differences in the design of doctors' questions could lead to different sequential consequences, for example, a further extension of the current talk or a short response. In Chapter 5, I examined how differences in the design of questions and the placement of lifestyle communication lead to different sequential consequences of lifestyle talk in TCM and WM interactions. The analysis shows that while lifestyle conversation in WM usually starts with doctors' closed questions, in TCM it usually begins with an open elicitation and subsequently followed by a series of closed questions in a form of checklist. Additionally, each of the subsequent questions is developed based on the previous one. As such, while patient lifestyle information giving in WM is usually short and closes within one turn, it is more extensive in TCM. This exploration explains the observation of higher frequency of lifestyle talk in TCM than in WM interactions (Chapter 4). Regarding the sequential placement of lifestyle communication, the analysis suggests that while lifestyle topics are introduced quite arbitrarily in WM, they usually occur at a sequential next place to patient problem presentation and physical examination in TCM. In so doing, patients in TCM conversations could possibly have a better understanding of why lifestyle is introduced and how it might be related to their medical disease. Another difference between TCM and WM in the activity of lifestyle advice-giving is whether doctors state explicitly the

reasons for which advice is provided. Findings in the WM population accord with Johanson and colleagues' (1998) observation that doctors avoid sharing their knowledge with patients in relation to the connections between medical symptoms and lifestyles. Unlike WM, TCM interviews feature an active flow of doctors' explanation, building connections between advice and patients' biomedical problems. Thus, lifestyle communication is better organized in TCM than in WM.

One possible explanation for the differences between TCM and WM in relation to lifestyle communication is based on the consideration of the clinical differences in their philosophy and etiology. While WM highlights scientific evidence in identifying the cause of disease and giving diagnosis, TCM treats human body as a holistic unity so that the dysfunction of any part of the body could be caused by and further affects the rest (Luo, Xu, & Chen, 2013; Wang & Li, 2005). Therefore, issues concerning patients' lifestyles are more frequently negotiated in typical TCM consultations. A second possibility is based on the notion of medical drugs. One feature particular to TCM is that doctors are required to 'make' the medical drugs themselves, i.e. to decide on the types and dosage of different herbs. To make sure that the cure of the current disease will not result in another physical imbalance, a TCM doctor has to fully understand the health status of the patient from varying perspectives. This also explains the reason that more lifestyle topics are generated in TCM encounters than in WM encounters.

Statement 2: There is relatively more communication at the level of non-medical small talk in TCM than in WM interviews.

Another aspect of difference is the communication of non-medical small talk, which includes talk that is conventionally considered as peripheral to the core instrumental talk. Roter and Hall (2004) describe such talk as statements that are unrelated to the fundamental purpose for which the current medical talk is initiated, plus some greetings (in Malinowski's (1923) sense, phatic communion) which usually occur at the boundaries of conversation. In Chapter 4, a notable difference was observed between TCM and WM in relation to non-medical talk (See Tables 8.4 and 8.5):

Table 8.4: Doctors' communication of non-medical small talk

Doctor behavior	*Categories*	*TCM*		*WM*	
		Mean rates	*Std.*	*Mean rates*	*Std.*
Relationship building	Social conversation**	0.08	0.10	0.01	0.02
*Notes: *=significant at P < 0.05 level, **=significant at P < 0.01 level, N = 69*					

Table 8.5: Patients' communication of non-medical small talk

Patient behavior	*Categories*	*TCM*		*WM*	
		Mean rates	*Std.*	*Mean rates*	*Std.*
Relationship building	Social conversation**	0.09	0.11	0.02	0.02
*Notes: *=significant at P < 0.05 level, **=significant at P < 0.01 level, N = 69*					

Tables 8.4 and 8.5 are summarized from findings in Chapter 4 (please refer to Tables 4.3 and 4.4). As the tables illustrate, 8 percent of doctor speech and 9 percent of patient speech in TCM are pertinent to non-medical small talk, while in WM only 1 percent of doctor speech and 2 percent of patient speech are related to talk of this nature.

Chapter 6 further explores this issue by investigating the ways in which small talk is engaged by participants in both TCM and WM practices and in particular how the treatment of small talk reflects the social relations between participants. In this study, small talk mainly occurs at the interactional boundaries of medical interviews. Instances of small talk were examined and compared in terms of location, content, and sequence. The analysis suggests that while the content of non-medical small talk in WM is mainly restricted to phatic exchanges, it also includes some form of social talk in TCM. The social talk in TCM mainly serves the functions of filling the silence, oiling the transition between core medical talk, and relationship building.

As reviewed in Chapter 2 and discussed in Chapter 6 as well, the extent to which small talk is involved in institutional talk and the form in which it is developed could be indicative of the power relations between conversationalists. In WM, the rarity of small talk and the exclusiveness of its representation in the form of phatic communion could possibly reflect a highly instrumental style of doctor-patient communication. The

analysis of the sequences also suggests that while in WM small talk usually finishes within one turn, it takes several turns before closing in TCM. Also noticed in Chapter 6 is that both doctors and patients in TCM interviews have an 'equal' opportunity to announce the opening and closing of small talk, reflecting a relatively balanced interpersonal relationship.

To address the clinical differences in this relational domain of doctor-patient communication, I use a case study of a TCM interview in which non-medical small talk overwhelm the core medical talk. The analysis of this case study corroborates with Ragan's (2000) observation that talk irrelevant to the major agenda of the current visit could also facilitate the achievement of core instrumental task. According to Regan, by engaging in discourse that otherwise might be considered as peripheral or subordinate to the core medical talk, the interactional asymmetry might be mediated. The findings here thus suggest a more patient-centered style of doctor-patient communication in TCM visits. This suggestion is further supported by the survey findings. As indicated by patients, WM conversation is more doctor-dominant than TCM conversation ($p < 0.01$, $Z = -4.41$, $r = -0.53$).

In line with what has been suggested when explaining the clinical differences in terms of lifestyle communication, one possibility for how small talk is constructed differently in TCM and WM is the clinical differences in philosophy and etiology. The concept of holism in TCM highlights that each individual is "comprised of and subject to elements and forces of nature as a whole" (Wang and Li 2005: 177). Thus, exchanges of information outside the domain of patients' physical health – for example, talk about weather, work, and family – are much more expected in TCM conversations.

Another understanding of this difference is based on the assumption of a more balanced doctor-patient relationship in TCM than in WM encounters. As discussed in Chapters 5 and 6, doctors in TCM demonstrate acquaintance with their patients and an orientation towards relationship building through various discourse strategies such as the employment of different contextualization cues, shifts between frames, and the

sequential placement of talk that may not be directly related to the biomedical agenda of medical interviews.

Statement 3: TCM doctors listen more attentively than their WM cohorts do.

As indicated by patients (Chapter 7), while doctors in WM interviews 'do not listen' to their patients, their cohorts in TCM interviews report a better listening of patients' story. This notion is supported, to some extent, by the differences in doctors' questioning behaviors. Results of the RIAS study provide statistical evidence on the higher frequency of doctors' questions in TCM interviews than in WM interviews (see Table 8.6): 31 percent in TCM and 17 percent in WM.

Table 8.5: Doctors' data collection and physical exam information giving

Doctor behavior	*Categories*	*TCM*		*WM*	
		Mean rates	*Std.*	*Mean rates*	*Std.*
Data collection	Biomedical	0.25	0.12	0.16	0.09
	Lifestyle / psychosocial**	0.06	0.05	0.01	0.02
Information giving and counseling	Physical exam**	0.02	0.03	0.13	0.15
*Notes: *=significant at P < 0.05 level, **=significant at P < 0.01 level, N = 69*					

The more questions doctors ask, the greater opportunities patients are provided to give an account of their medical experience. While some scholars might argue that doctors skillfully use questions as a linguistic device to control the orientation of the medical interview, questions could also function as a stimulus to encourage patient extension, depending on their design. Therefore, a lack of doctors' questions might also result in a lack of patient information giving. In addition, the argument of lacking attentiveness in doctor's communication in WM consultations is also evidenced by the observation of higher frequency of participants' utterances in relation to physical examinations in WM than in TCM encounters (see Table 8.6). The RIAS finding on the differences in doctors' communication at the level of physical examination information giving is also supported by findings from the patient survey. As presented in Chapter 7, some patients complained that WM interviews are all about physical examination and that their WM doctors seldom ask questions or listen to their acconts.

One explanation for this observation is based on a consideration of the diagnostic steps in these two approaches to medicine. As described in Chapter 1, listening is one of the four key steps in TCM before a diagnosis can be given. It regards patients' own account of their medical experience as a valuable resource for an appropriate treatment. This attitude of treating patients as experts of their own diseases could thus be indicative of an interpersonal relationship that is more patient-centered. Unlike TCM, WM diagnosis highlights the value of scientific evidence. As discussed in Chapters 4 and 7, much of the discourse in WM interviews is related to physical examination. Patients complained that their doctors in WM encounters prefer to arrange physical examinations even before acquiring the basic patient information. Thus, the poorer performance of WM doctors in listening to patients' stories could possibly reflect their attitudes towards patients as non-expert of their disease and patients' understanding of their illness as less reliable resources than scientific reports.

8.22 Association between doctors' communication styles and patient satisfaction

To address the third research objective, the findings from Chapter 7 were analyzed in relation to the association between patient satisfaction and evaluation of their doctors' communication styles. Patients generally had a higher satisfaction with doctors in TCM than in WM encounters in aspects of dominance, immediacy, receptivity, similarity, formality, and global satisfaction. Two of the most widely criticized aspects in WM interviews, as suggested by patients, are doctors' performance in relation to immediacy and receptivity. The analysis suggests that compared with WM, TCM features more openness, better listening of doctors, and less doctor dominance. These findings provide support to what has been described in previous chapters – TCM interviews demonstrate a more patient-centered style of doctor-patient communication.

Chapter 7 also explored how patients' understanding of doctors' communication styles might predict global satisfaction by examining the association between patient assessment of doctors' relational communication and global satisfaction. Five out of the six domains of relational communication (immediacy, receptivity, dominance, similarity,

and formality) were significantly associated with global satisfaction, suggesting that patients' understanding of doctors' communication styles in these aspects could be an indicator of their overall assessment of medical care. The analysis poses challenges to prior observations (e.g. Hall *et al*., 1981; Inui *et al*., 1982) in terms of the association between composure and global satisfaction. In this study, patient evaluation of doctors' composure fails to explain the variations in global satisfaction.

One insight gained from these findings is that patients in this study appear to prefer doctors with more questions. Unlike Bertakis *et al*.'s (1991) observation on a negative association between patient satisfaction and doctors' question asking about biomedical topics, patients seeing WM doctors complained their doctors for not asking questions but directly arranging them for physical examinations. It might also reflect patients' expectations for more engagement in medical interviews.

The findings also provide empirical evidence to Ben-Sira's (1976, 1980) social interaction theory in explaining doctor-patient communication and patient satisfaction – due to patients' inability to judge doctors' instrumental skills, their evaluation of the medical care is to a large extent based on their assessment of the affective aspect of doctors' communication.

8.3 Contributions

This thesis research draws on the literature in relation to doctor-patient communication and patient satisfaction. The contributions of this research on knowledge of these areas are thus summarized in two aspects: contribution to doctor-patient communication and contribution to patient satisfaction.

8.31 Contribution to doctor-patient communication

This research examined medical discourse in one Level-3 general public hospital in Mainland China, concentrating on the clinical differences in relation to doctor-patient communication and its impact on patient satisfaction. Particular attention was given on the relational aspects of doctor-patient communication. The findings from the three

studies demonstrate that TCM features a more patient-centered style of communication than WM does.

The RIAS study provides a systematic analysis of recorded exchanges in medical interviews in both TCM and WM practices. To my knowledge, this is the first study to apply RIAS to TCM consultations, and also the first attempt to use content analysis approach to investigate interactions in TCM encounters. Understanding derived from the analysis reported in this study therefore has practical implications in informing clinical practice and patient expectations and decisions for medical care in China and elsewhere where the two clinical practices co-exist. The study also provides empirical evidence on the adaptability of RIAS in its application to an explored clinical context – the internal traditional Chinese medicine. The RIAS study also provides a good field research for exploration of the relational non-medical aspects of doctor-patient communication and the adaptation of a relational communication scale to evaluate patient satisfaction.

Theoretically, findings from the three studies confirm but also challenge existing knowledge on doctor-patient communication. Take lifestyle communication as an example. On the one hand, while the existing literature on medical communication in both TCM and WM has suggested more lifestyle discussions in TCM than in WM practice (Gu, 1996), little is known about the distribution and negotiation of lifestyle in both practices. The qualitative discursive study on lifestyle communication provides knowledge in this area.

In Chapter 5, I adapt the conceptualization of lifestyle to what has been described in the RIAS codes to refer to a wide range of issues that are health-related, but do not constitute the major reasons for which medical visits in the present study were conducted. Domains of lifestyle concept in this study include diet, sleep, exercise, bowel movement, and smoking. While prior studies have suggested that lifestyle discussion in WM practice also include topics such as stress, housing, and sexual habits (cf. Johanson *et al*., 1996), my data suggests that lifestyle communication in WM interviews only involves diet and sleep. Moreover, the study also explored lifestyle communication in

two types of activities: lifestyle information elicitation and lifestyle advice giving. The existing literature of lifestyle information elicitation has suggested doctors' strategies placement of questions when collecting patient lifestyle information (e.g. Sorjonen *et al*., 2006). However, my study suggests that while questions related to patients' lifestyles are usually introduced arbitrarily in WM interviews, they are not so in TCM interviews. In TCM interviews, these questions usually occur at a sequential place next to patient problem presentation, physical examination, and at the beginning of a series of other questions to gain a general social and medical ground of the patient. This placement may index a link between lifestyles and individual health. The existing literature on lifestyle advice giving in WM practice seems to agree that doctors seldom engage in this activity. My data suggest that lifestyle advice in WM interviews occurs but only at a sequential next place to patient information giving on inappropriate lifestyles. In TCM interviews, however, lifestyle advice also occurs at a sequential place next to patients' non-problematic information giving in a form of knowledge building or as a gentle reminder. These discourse features suggest a variation in the weight of lifestyle in TCM and WM interviews.

The study on non-medical small talk explored the ways in which small talk is engaged by participants in both clinical practices. Drawing on the existing literature concerning small talk in institutional discourse (Coupland *et al*., 1992; Holmes, 2000), Chapter 6 adopts a context-based approach to describe the emergence and functions of small talk in medical interviews. Given the nature of geriatrics, it was expected that discussions of issues that are not related to the biomedical agenda of the current visit (e.g. patients' family and social connections) could possibly "trigger" issues of the biomedical agenda and thus revealing useful information about patient health (Coupland, 2000: p. 22). While the literature suggested less small talk in WM than in TCM interviews, none of these studies as far as I am aware has ever examined the discourse features of talk of this nature in both practices. The analysis provides empirical evidence on Holmes' (2000) definition of small talk in institutional discourse: small talk extends along a continuum from the ritualized greeting and parting exchanges to social conversation and to some point of the instrumental talk. One salient difference between TCM and WM is that

small talk in WM interviews typically takes the form of phatic exchanges at the boundaries of conversation, while in TCM interviews such talk also takes the form of social talk and peripheral talk that to some point related to the core instrumental talk. These features show that on the one hand, a rigid definition of small talk is not appropriate in medical settings. Understanding of the context within which talk is negotiated is important when defining small talk and describing the functions it serves in its sequential local and global context. As Gumperz (1982) notes, in his pioneering work on the interactional sociolinguistic method of interpersonal communication, understanding of an utterance should be contextualized. The extracts included in Chapter 7 have demonstrated that participants' engagement in small talk could be possibly influenced by the sequential local context, the discourse context, and the clinical context as well. On the other hand, the various dimensions of non-medical small talk in TCM interviews and the scarcity of small talk in WM interviews also add weight to previous suggestions of a biomedical style of interviews that has long been established in WM practice (Ragan, 2000).

In terms of topic selection, while the literature on small talk suggests that small talk at the closing stage is mostly related to personal topics, analysis in Chapter 6 shows that small talk at TCM closings could be related to both personal and non-controversial topics. On the opposite, small talk at TCM openings is only related to non-controversial topics such as weather and work. These talk function as time filler, a transition to core medical talk, and an attempt at relationship building. Moreover, I also explored the power relations indexed by participants' talk on small talk. Research on discourse and institutional interaction would agree that investigation of small talk could reveal much of the interpersonal relationship and the workplace culture (see Coupland's (2000) edited publication on small talk). As Holmes and Stubbe (2015) put it, one of the ways in which power is demonstrated in workplace discourse is the extent to which participants in workplace engage or disengage in small talk. Comparisons of TCM and WM interviews suggest a more balanced relationship between doctors and patients in TCM interviews.

The study on patient evaluation of their medical care also contributes to knowledge on the similarities and differences between TCM and WM in relation to doctors' communication behaviors. While the previous two studies (the RIAS study and the qualitative discursive studies on lifestyle and small talk) contribute to the understanding of participants' verbal behaviors, Chapter 7 has implications on doctors' non-verbal communication. Findings of Chapter 7 add more weight to the argument that TCM features a more patient-centered style of medical interviews.

The comparative study on doctor-patient communication benefits from a theoretical and methodological triangulation. As discussed in Chapter 3, the analysis throughout the research thesis aims at exploring participants' communication behaviors at different levels, from a more macro content analysis (by using RIAS) to a more micro discourse analysis (by using CA and frame analysis). These analytical tools and frameworks complement each other to provide better knowledge of doctor-patient communication in both TCM and WM practices.

8.32 Contribution to patient satisfaction

While the literature is replete with studies on patient satisfaction in WM practice, it is under-explored in TCM practice which leaves us ignorant of patient perceptions of their medical care, particular in terms of the relational domains of communication. Drawing results from the previous two studies in this research thesis, the relational communication scale-14 (Burgoon *et al*., 1987) was adapted to the Chinese population to evaluate patient assessment and satisfaction towards their medical care. The reported high reliability and inter-item correlation provides evidence on the adaptability of RCS-14 among the Chinese population.

The variations in patient assessment of doctors' relational communication and the global satisfaction lend empirical support to Ben-Sira's (1976, 1980) social interaction theory on doctor-patient interaction. In the lack of the esoteric knowledge and skills required to judge doctors' expertness, patients evaluate their medical care largely based on how the interpersonal domains of medical interviews are attended to. Drawing patients'

comment on their doctors' communication behaviors, it appears that doctors in TCM practice are more patient, have a better attitude, and more open in taking patient opinions. These findings accord with what has been suggested from the previous two studies that TCM interviews feature a more patient-centered style of doctor-patient communication.

The findings from Chapter 7 reveal that patients are particularly critical of doctors' attitude and listening skills in WM encounters. While this finding is consistent to what has been generally reported by the literature, the current study also provides a possible explanation for this observation. As observed in Chapter 4 and also commented by patients in Chapter 7, it appears that WM doctors prefer to arrange physical examinations for patients before the diagnosis. This finding might possibly suggest that doctors in WM practice trust scientific evidence more than patients' own description of their medical experience. As noted patients in this study are older adults, it could be thus possible that they might be less efficient in describing their own illness. Understanding of this finding thus has implication for both clinical practice and patient expectation.

In terms of the associations between relational communication and global satisfaction, the findings from this study show that global satisfaction is strongly related to doctors' immediacy, receptivity, similarity, formality, and dominance. Examination of the magnitude of the association provides insights to knowledge of patient expectations of their doctors' behaviors in medical interviews. The moderate correlation between dominance and global satisfaction in this study suggests that patients in China, particularly older adults, might be less critical to interactional dominance compared with other aspects of relational communication. As Kaba and Sooriakumaran (2007) rightly put it, the conventional paternalistic approach of medical interviews still dominates in some Asian cultures such as China.

Another contribution to the knowledge of patient satisfaction is the impact of doctors' composure (e.g. expression of tension and anxiety) on medical outcomes. While prior studies have suggested that doctors' composure is likely to influence patient satisfaction

(e.g. Inui *et al*., 1982), this study seems to suggest a weaker power of composure in explaining the variations in global patient satisfaction.

The comparative study on patient satisfaction contributes to our knowledge of patient expectations of what is considered as important and less important in patient assessment of their doctors' communication. The clinical differences found in the study both confirm and challenges what has been observed in the literature. The findings have clearly implications for medical staff when communicating with older adults, so as to facilitate effective doctor-patient communication.

8.4 Limitations and future directions

8.41 Limitations

Although findings of this body of research shed insights on the understanding of doctor-patient communication and patient satisfaction in different clinical practices that co-exist in China, this study had a few limitations. First and foremost, the broad research design inevitably leads to a thin analysis of participants' communication at specific levels. Instead of focusing on one particular communication behavior, the study attempts to identify first the communication behaviors that are noticeably different in two practices and then narrow down to communication at specific levels. One cost of this design is that the findings on specific communication levels are diluted with extra information (e.g. the different communication behaviors presented in the RIAS study). Second, as only one hospital is involved in this study, it could be possible that what is observed and presented here is, to some extent, a matter of institutional order. Thus, it could be possible to expect variations when explaining doctor-patient communication with more hospitals involved. Next, the representativeness of the data might be dwarfed by the non-randomized sampling strategy, the moderate response rate of patients (32.9%), and the relatively small survey sample size. In addition, while the short survey was selected to avoid any possible patient uneasiness, the small number of survey items necessarily results in a limited range of information. Also, due to the unavailability of some medical staff, doctors participating in this study are mostly female. Many studies have suggested a gender difference of doctors in the interpersonal aspects of medical interviews (Mast,

Hall, & Roter, 2007; Roter, Hall, & Aoki, 2002). Therefore, interpretation of the findings reported in this study should be done with caution. These limitations notwithstanding, the findings provide insights on the clinical differences in relation to doctor-patient communication and patient satisfaction. The following section discusses some implications of the current study for future research.

8.42 Future directions

In this final section, I wish to offer some suggestions for future research on doctor-patient communication and patient satisfaction which lie beyond the scope of this research thesis. These suggestions hopefully could extend findings reported in this study to a better understanding of the clinical similarities and differences in medical encounters and medical outcomes.

An ethnographic approach to investigate TCM practice

One possible extension to the current research is to use an ethnographic approach to study the TCM encounters. As a much less-explored area of research, TCM practice certainly needs more immersed investigation for a thick description of the clinic culture and conventions and participants' beliefs attached to the various clinic activities (see Dörnyei, 2007 for more discussions of an ethnographic approach). As Dörnyei (2007) suggests, a prolonged engagement of six to twelve months could possibly help the observers to understand the subtleties of what has been observed.

One particular way to do an ethnographic research is through participant observation which could be supplemented by video or audio recordings. While video recording is widely used to investigate doctor-patient interviews in WM practice, it is by far not applied to the TCM practice including this research. Video-recorded data could be valuable resources to reveal both verbal and nonverbal messages during medical interviews. As reviewed in Chapter 2, much of the relational messages are conveyed through nonverbal cues during interpersonal interactions. For example, the findings reported in Chapter 7 suggest that relational messages in areas of immediacy, dominance, receptivity, similarity, and formality highly affect the global patient

satisfaction. Building on these findings, future research could compare and contrast doctors' nonverbal behaviors in these areas in the two medical practices.

Another way to do ethnographic research is to explore participants' interpretation of their own behaviors (Dörnyei, 2007). For the most part, research in doctor-patient communication concentrates on the observers' interpretation of participants' behaviors at medical encounters. It could be possible that participants have a different interpretation of their own behaviors. By sharing data with the participants and inviting those participants to the interpretation of their own utterances could be thus revealing for a better understanding of the meaning underlying the utterances.

One area of research that warrants further investigation is the consideration of the continuous progression of treatment in TCM practice. As Gu (1996) and Randel and Soong (1983) put it, a complete TCM treatment usually takes several continuous visits to finish the whole process. Insofar as the nature of this continuity of treatment, future research could be possibly directed at recruiting patients from their initial visit to their last visit for which the current diagnosis counts as a complete one. Put differently, future studies could take a diachronic investigation of doctor-patient interviews, so as to have an extensive knowledge on how participants in TCM encounters progressively collect information, build knowledge, and establish interpersonal relationship. Building on the current findings of more relational communication in TCM practice (e.g. non-medical small talk), an examination of several continuous visits could possibly reveal how intimacy and acquaintance between doctors and patients are established.

Inclusion of more medical institutions

Another possible extension to this research would be the size of the study. As mentioned in Section 8.3, with only one hospital included, the findings could be possibly a matter of institutional order. Due to the constraint on hospital access, I narrow my research on this particular hospital. However, until the year of 2013, there were 1079 first-grade third-level referral hospitals (hospitals in China that are considered to be better than others) nationwide. An inclusion of more hospitals therefore could possibly reflect a

different picture regarding the medical practice and its influence on participants' communication and patient satisfaction.

Future research focusing on TCM practices could also consider investigations in specialty clinics that are directed at providing traditional Chinese medical care. These institutions normally have a distinct clinical environment from those general public hospitals. As reviewed in Chapter 2, the physical environment in which medical consultation is underway could greatly influence the quality of care and patient satisfaction. As further investigations, it would be also interesting to compare the communicative patterns and their influence on patient satisfaction between TCM practices in general public hospitals and in those specialty clinics. Findings from such studies could extend prior knowledge on the relation between clinical environment and the quality of medical care to TCM practices.

A reversed design

As acknowledged in the limitation, rather than providing an in-depth investigation of communication at one specific level, the design of the present research leads to a broad yet thin analysis of participants' behaviors. The design, however, benefits the understanding of doctor-patient communication in different clinical practices, particularly to the extent that both TCM and WM practices in China are less explored. Future research could take a reversed design, for example, by studying first patient evaluation of their doctors' communication. While such a reversed study has strict requirements on the design of the questionnaire, it could narrow down the focus by identifying the key aspects of communication that are considered to be 'significant'.

8.5 Conclusion

To conclude, this research thesis has provided useful information on the clinical differences in relation to doctor-patient communication and patient satisfaction among the Chinese older adults diagnosed with chronic illness. As far as I am aware, this is the first study examining participants' communication behaviors in both TCM and WM interviews using a blend of content analysis and micro discourse analysis. Although

future research is needed to expand the scope of the current research, findings of this research make original and timely contribution to the understanding of clinical practices and patient expectations in both China and other places where the two medical practices co-exist. The findings reported in this study demonstrate different communication styles between TCM and WM interviews, and also underscore the importance of doctors' communication style in patient assessment of their medical care.

Appendix I: Consent form

知情同意书•告知页

尊敬的先生/女士：

我们将邀请您参加一项“中西医患对话差异分析”的研究。

在您决定是否参加这项研究之前，请尽可能仔细阅读以下内容，它可以帮助您了解该项研究内容、为何要进行这项研究以及本研究可能给您带来的益处、风险和不适等。本次研究已通过浙江医院医学伦理委员会审查，是遵从中国相关法规和赫尔辛基宣言等保护受试者权益的伦理原则的。

研究介绍

1. 研究背景

近年来大量研究表明医患会话对于提升病人满意度以及医疗成果，建立良好医患关系起到至关作用。有部分研究表明，中医医患关系对比西医医患关系更为和谐持久。由于我国存在中西医共存现象，通过比较中西医医患交流模式差异，能有助于我们更好了解医患关系。

2. 研究目的

此项研究旨在分析中西医医患会话的差异，着重于语言层面的比较，如用词，结构等。

3. 如果参加研究，我将需要做什么？

1. 问卷调查，调查病人对于医患沟通模式的满意度

2. 录音，录制现场医患咨询过程

3. 受访，对于刚刚完成的医患咨询的感想

如果您符合入选标准并同意参加，将 按以上步骤进行试验研究：

4. 纳入条件和排除条件是什么？

纳入条件：(1)患有慢性消化疾病（2）中老年人；（3）能独立沟通，没有精神疾病；（4）自愿参加。任何一项不符合均不考虑纳入本研究

5. 我参加研究的风险有哪些？

无。此项研究不涉及任何药物，只是意见收集，因此不存在任何潜在风险

6. 参加此项研究，是否会增加我的医疗费用？

不会。此项研究由于不涉及任何药物，不会增加医疗费用

7. 参加此项研究，将有哪些补偿？

本着自愿参加原则，加上不会增加医疗费用，所以暂定没有经济补偿

8. 个人信息是保密的吗？

您的信息**完全保密**。**您的名字不会出现**在任何公开刊物中，所有受试者都会给予一个编号，在任何将来可能产生的公开刊物中只会出现该编号。

9. 我必须参加此项研究吗？

是否参加本研究完全取决于您的自愿，您可以拒绝参加此项研究。

10.是否中途可以退出此研究？

在研究过程中的任何时间，您都有权退出此研究。如果您选择退出次研究，您的受益将不会受到影响，也不会因此而受到歧视或报复。如果您选择参加本项试验，我们希望您能够坚持完成全部试验过程。

11. 现在该做什么？

是否参加本项试验研究由您自己决定。您可以和您的家人或者朋友讨论后再做出决定。在您做出参加试验的决定前，请尽可能向您的医生询问有关问题，直至您对本项试验研究完全理解。

12. 研究者联系方式

金赢：1471501　　/ 1064890747@

13. 伦理委员会

如果您在研究中有任何不满，请联系浙江医院医学伦理委员会。

伦理委员会办公室： 5 号楼 116 房间 伦理委员会办公室

联系电话：8159

联系人：李卫

感谢您阅读以上材料。如果您决定参加本项试验研究，请告诉您的医生，他/她会为您安排一切有关的事务。

请您保留这份资料。

知情同意书•同意签字页

同意声明

1. 我已经阅读了本知情同意书，项目相关责任人已经将此次试验的目的、内容、风险和受益情况向我作了详细的解释说明。

2. 我已经讨论并询问了有关本研究的相关问题，这些问题的解答令我满意。

3. 我有充足的时间作出决定。

4. 我是自愿同意参加本文说介绍的临床研究。

5. 我同意药品监督管理部门、伦理委员会或课题资助部门代表查阅我的研究资料。

6. 我将获得一份经过签名并注明日期的知情同意书副本。

最后，我决定同意参加本项试验研究，并保证遵从医嘱。

受试者签名：　　日期：____ 年 ___ 月___日

我确认已向受试者解释了本研究的详细情况，包括其权利以及可能的受益和风险，并给其一份签署过的知情同意书副本。

医生签名：　　日期：____ 年___ 月___日

研究人员联系方式： 1064890747@

（此页为受试者知情同意书的必要部分，每一份“受试者知情同意书”必须有受试者或法定代理人及研究医生的签字和日期，方为有效. ）

THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

參與研究同意書

中西医患对话差异分析

本人_____同意參與由_____開展的上述研究。

本人知悉此研究所得的資料可能被用作日後的研究及發表，但本人的私隱權利將得以保留,即本人的個人資料不會被公開。

研究人員已向本人清楚解釋列在所附資料卡上的研究程序，本人明瞭當中涉及的利益及風險；本人自願參與研究項目。

本人知悉本人有權就程序的任何部分提出疑問，並有權隨時退出而不受任何懲處。

參與者姓名 _____

參與者簽署 _____

家長或監護人(如適用) 姓名 _____

家長或監護人(如適用) 簽署 _____

研究人員姓名 _____

研究人員簽署 _____

日期 _____

THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

(English translation)

Consent to participate in research:

Doctor-patient communication and patient satisfaction in China: Exploratory Study of the Similarities and Differences between Traditional Chinese Medicine and Western Medicine Practices in Mainland China

I _____ hereby consent to participate in the captioned research conducted by _____.

I understand that information obtained from this research may be used in future research and published. However, my right to privacy will be retained, i.e. my personal details will not be revealed. The procedure as set out in the attached information sheet has been fully explained. I understand the benefit and risks involved. My participation in the project is voluntary.

I acknowledge that I have the right to question any part of the procedure and can withdraw at any time without penalty of any kind.

Name of participant _____

Signature of participant _____

Name of Parent or Guardian (if applicable) _____

Signature of Parent or Guardian (if applicable) _____

Name of researcher _____

Signature of researcher _____

Date _____

Hung Hom Kowloon Hong Kong 香港 九龍 紅磡

Tel 電話 (852) 2766 5111 Fax 傳真 (852) 2784 3374

Email 電郵 polyu@polyu.edu.hk

Website 網址 www.polyu.edu.hk

Appendix II 问卷调查

请在合适的选项后面打√。 如有不明之处，请及时向调查者询问。

第一部分: 个人信息

1. 性别： 男 女

2. 年龄： _____

3. 寻医类别： 中医 西医

4. 是否曾经挂过该医生的号：

否,此乃首次 （ ）

1 次（ ） 2 次 （ ）

3 次（ ） 4 次以上 ( )

第二部分：医患关系交流

请为医生的交流行为打分，1 (强烈同意) 2 (同意) 3 (不确定) 4 (不同意) 5 (强烈不同意), 请在合适的选项后面打√。

1. 医生在我们的谈话中很积极?

（1） （2） （3） （4） （5）

2. 医生觉得我们的谈话是有启发性的?

（1） （2） （3） （4） （5）

3. 医生说话比较冷漠而不热情?

（1） （2） （3） （4） （5）

4. 医生让我觉得我和他某方面是有相似性的

（1） （2） （3） （4） （5）

5. 医生有兴趣和我交谈

（1） （2） （3） （4） （5）

6. 医生愿意听我说话

（1） （2） （3） （4） （5）

7. 医生愿意接受我的考虑和建议

（1） （2） （3） （4） （5）

8. 医生觉得和我谈话很紧张

（1） （2） （3） （4） （5）

9. 医生对我镇定而自然

（1） （2） （3） （4） （5）

10 . 医生和我说话时非常放松

（1） （2） （3） （4） （5）

11. 医生和我的交流很正式

（1） （2） （3） （4） （5）

12. 医生试图说服我

（1） （2） （3） （4） （5）

13.医生没有试图影响我

（1） （2） （3） （4） （5）

14. 医生对待我的方式是平等的

（1） （2） （3） （4） （5）

第三部分：整体满意度

请对此次你和医生的咨询打分：1 (非常满意), 2 (满意), 3 (一般), 4 (不满意), 5 (非常不满意).

（1） （2） （3） （4） （5）

非常感谢您的参与!

时间 年 月 号

Patient Questionnaire Survey

Please tick √. For any queries, ask the researcher please.

Part A: Demographic information

1. Gender： M F 2. Age__

3. Encounter：TCM WM

4. Please indicate whether this is your initial visit:

Initial visit（ ） 2nd（ ）
3rd （ ） 4th（ ） 5th and more ( )

Part B: Relational Communication Scale

Please indicate whether you are satisfied with your doctor's communication behaviors by √. 1 means strongly agree, 2 means agree, 3 means not sure, 4 means disagree and 5 means strongly disagree.

1. The doctor was intensely involved in our conversation

(1) (2) (3) (4) (5)

2. The doctor found the conversation stimulating

(1) (2) (3) (4) (5)

3. The doctor communicate coldness rather than warmth

(1) (2) (3) (4) (5)

4. The doctor made me feel he/she was similar to me.

(1) (2) (3) (4) (5)

5. The doctor was interested in talking with me.

(1) (2) (3) (4) (5)

6. The doctor was willing to listen to me.

(1) (2) (3) (4) (5)

7. The doctor was open to my concerns.

(1) (2) (3) (4) (5)

8. The doctor was bothered while talking with me.

(1) (2) (3) (4) (5)

9. The doctor was calm and poised with me.

(1) (2) (3) (4) (5)

10. The doctor felt very relaxed while talking with me.

(1) (2) (3) (4) (5)

11. The doctor made the interaction very formal.

(1) (2) (3) (4) (5)

12. The doctor attempted to persuade me.

(1) (2) (3) (4) (5)

13. The doctor didn't attempt to influence me.

(1) (2) (3) (4) (5)

14. The doctor considered me as an equal.

(1) (2) (3) (4) (5)

Part C: Global satisfaction

Please indicate your satisfaction about your medical experience: 1 (very satsified), 2 (satisfied), 3 (neutral), 4 (dissatisfied), and 5 (very dissatisfied).

(1) (2) (3) (4) (5)

Thank you for your participation!

Day Month Year

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