Communication between doctors and patients is a crucial aspect of effective health care (Bensing & Verhaak, 2004; van den Brink-Muinen et al., 2000). Through communication, doctors and patients exchange information which is necessary for understanding health problems, creating a therapeutic relationship and managing diseases (Roter & Hall, 2006). In today’s multicultural society, medical communication increasingly involves intercultural medical communication, with doctors and patients from different ethnic backgrounds. In the Netherlands, almost two million non-Western migrants take up around twelve per cent of the total population (Central Bureau of Statistics, 2014). This percentage is expected to increase to 18 per cent in 2050 (Central Bureau of Statistics, 2014). Dutch doctors in the Netherlands will thus increasingly be confronted with intercultural medical communication.

Research has shown that intercultural medical communication is less effective than intracultural medical communication: it is characterized by more miscommunication and less mutual understanding between doctors and patients, lower satisfaction among patients and lower understanding of the information provided by the doctor, leading to undesired health outcomes such as non-compliance and different and often even incorrect health care usage (Harmsen, Bernsen, Bruijnzeels, & Meeuwesen, 2008; Schouten & Meeuwesen, 2006; Seeleman, Suurmond, & Stronks, 2009; van Wieringen, Harmsen, & Bruijnzeels, 2002). Among ethnic minority patients in the Netherlands, more prescribed medication use, higher use of the general practitioner (GP), and less usage of specialized care are found compared to the majority group (Stronks, Ravelli, & Reijneveld, 2001; Uiters, Devillé, Poets, & Groenewegen, 2006). These health disparities among ethnic minority patients do not seem to be explained by socio-economic factors but by a lower accommodation of their needs in health care (Yilmaz-Aslan, Brzoska, Bluhm, Aslan, & Razum, 2014), due to less adequate communication (Nierkens, Krumeich, de Ridder, & van Dongen, 2002). Improving intercultural medical communication thus seems crucial for enhancing communication outcomes and health care delivery to ethnic minority patients.

So far, the few interventions that are implemented to improve intercultural communication in GP practices have led to no or only small changes due to a lack of knowledge on explanatory factors of miscommunication between GPs and migrant patients (Schouten, Meeuwesen, & Harmsen, 2005; Schouten & Meeuwesen, 2006). Thus, before effective interventions can be designed, more knowledge is needed on factors underlying intercultural medical (mis)communication. Because intercultural medical communication is hindered by language barriers and differences between patients and doctors in values, preferences and expectations (Schouten & Meeuwesen, 2006; Suurmond & Seeleman, 2006), research is needed to understand how these differences affect medical communication and its outcomes in order to understand how intercultural medical communication can be improved.

Given the possible differences between ethnic minority patients and patients from the ethnic majority population, it is unclear whether existing models of medical communication can be applied to ethnic minority patients. Without more knowledge on the differences between ethnic minority patients and patients from majority groups, and on how these differences affect the communication and its outcomes, interventions to improve intercultural communication lack sufficient theoretical ground to be effective.
Given the importance of effective communication in intercultural medical encounters and the lack of knowledge on factors underlying intercultural medical communication, this dissertation aims to investigate differences between ethnic minority (non-Western) and ethnic majority (Western) patients in factors underlying medical communication to be able to better understand intercultural medical communication and understand how it can be improved.

**Target population**

The majority of non-Western migrants in the Netherlands are from Turkish and Moroccan origin. For both migrant groups, male workers were first recruited by the industries in the 1960s for cheap labor, their families followed later. Although Turkish and Moroccan migrants share their migration tradition, religious backgrounds and socioeconomic status, Dutch people with Turkish origin were the subject for this dissertation. They are the largest non-Western migrant group in the Netherlands, with almost 400,000 people in 2014 (Central Bureau of Statistics, 2014) and differ from Moroccan-Dutch people in terms of integration into Dutch society (Crul & Doomernik, 2003). Turkish-Dutch people (first- and second-generation) are more likely to adhere to the norms and values of their own ethnic community (regarding religion, marriage and gender roles) than Moroccan-Dutch people. Tightly knit social networks play an essential role in the Turkish community; people keep up with Turkish family in Turkey, watch Turkish news more often than Dutch news, and the majority regard themselves primarily as Turkish (Crul & Doomernik, 2003), even the second-generation Turks (Central Bureau of Statistics, 2013). Whereas adaptation to Dutch culture is more prominent in the public domain than in the private domain, Turkish-Dutch people prefer cultural maintenance in both domains (Arends-Tóth & van de Vijver, 2004). They also tend to have contacts with only Turkish people rather than with both Turkish and Dutch or only Dutch people (Central Bureau of Statistics, 2013). Moreover, they report poorer health status and more health problems (Lindert, Droomers, & Westert, 2004), visit their GP more often, and experience more miscommunication and less mutual understanding in health care (Uitewaal et al., 2004) than Dutch and other non-Western patients. Turkish-Dutch patients are thus found to be the most eligible group for this dissertation, because of its size and higher adherence to their culture of origin, which places a large cultural distance between themselves and their Dutch doctors.

**Focus of this dissertation**

Medical communication and its outcomes are suggested to improve when patients are stimulated to be more actively involved during the medical encounter. This active patient behavior during the medical communication process is also known as *patient participation* and is considered to form a key component of good medical communication (Street, 2001). Despite wide attention in the literature, patient participation is still ill-defined. The term is used for participation in decision-making and information-seeking, for actively adhering to treatment decisions and being involved in the management of care and in health care in general. The term is used interchangeably with *patient involvement*, *patient collaboration*, and *patient partnership* (Cahill, 1998), and is often operationalized in relation to *patient-centered care* and *patient empowerment* (Longtin et al., 2010). The focus of this dissertation is on patient participation in the communication during the medical encounter. Street’s definition of patient participation is central to this focus: “the extent to which patients produce verbal responses that have the potential to significantly influence the content and structure of the interaction as well as the health care provider’s beliefs and behaviors” (Street, 2001, p.62). Patient participation in this dissertation thus involves the patient’s verbal contribution during the medical encounter.

The most important elements of patient participation are asking questions, expressing concerns, and being assertive (Street, 2001). The more a patient displays these behaviors, the more active that patient communicates. Many beneficial outcomes of active patient participation have been found: actively participating patients receive more information from their doctor, experience more support from their doctor, understand the information better, and report more satisfaction with care and the communication process (Street, Voigt, Geyer, Manning, & Swanson, 1995; van den Brink-Muinen et al., 2006). More active patient participation might even have the potential to reduce medical errors and health care costs (Mavis et al., 2014).

The concept stems from the consumer movement in the 1960s, in which consumer’s rights were stressed and people got the right to be heard and informed before making choices (Longtin et al., 2010). The health care changed from employing a paternalistic approach, in which the patient passively received care from the doctor, to a more patient-centered approach (Cahill, 1998), in which a patient is regarded as active consumer. As a consequence of this movement, health care policy in the Netherlands changed with, for instance, the introduction of the Medical Treatment Act in 1995. Patient’s rights to be both informed and heard about his/her health were explicitly addressed in this act. The introduction of “informed consent” obligated doctors to obtain patients’ consent on the treatment, and to provide patients with understandable and relevant information about the treatment, to be able to give consent (Berg, Appelbaum, Litz, & Parker, 2001). Treatment decisions were no longer made for a patient, but with a patient. These changes in health care imply a large responsibility on the doctor to adequately inform the patient, for which patients’ preferences need to be elicited and addressed, but also on the patient to share decision-making about treatment options.

Simultaneously, the introduction of the Internet has given patients the opportunity to become more knowledgeable about their health. Using the web for health information-seeking by patients has the potential to enhance medical communication, because patients are able to acquire more knowledge and be better prepared for participation during the communication process (Wald, Dube, & Anthony, 2007). Both changes in health care policy and the introduction of the Internet led to a power-shift between patients and doctors (Goodyear-Smith & Buetow, 2001; Powell, Darvell, & Gray, 2003), underlining the importance of patient participation for effective communication. Although a shift towards more patient participation of Dutch patients was indeed found in current medical encounters in the Netherlands (van den Brink–Muinen et al., 2006), ethnic minority patients are generally found to display lower participation levels during the medical encounter; they ask fewer questions and give less information to the doctor than Dutch patients (Meeuwesen, Harmsen, Bernsen, & Bruijnzaels, 2006; Schouten, Meeuwesen, Tromp, & Harmsen, 2007).

This difference in communicative behavior between ethnic minority and majority patients is unfortunate, given the beneficial outcomes of active patient participation. By actively participating, patients can enhance the information provision they receive during the encounter, which results in better fulfillment of information needs, more satisfaction and better understanding of the information and, consequently, of their health (Street, 2001). In order to improve these communication outcomes, patients thus need to participate in the conversation with the doctor, reflecting the importance of patients’ active participation. Increasing patients’ participation—to be able to achieve better fulfillment of information
needs, higher satisfaction and better understanding of the information—thus seems crucial for enhancing medical communication. Because of the lower participation levels among ethnic minority patients, increasing their participation seems even more necessary to enhance their communication outcomes. Given the importance of patient participation during the consultation to increase the communication outcomes and the lower participation levels found among other ethnic minority patients, this dissertation focuses on two specific research questions underlying the general aim of the dissertation: (1) to what extent do Turkish-Dutch and Dutch patients differ in the factors underlying patient participation and (2) how is patient participation related to communication outcomes such as fulfillment of information needs, patient satisfaction and understanding of information among these patient groups?

Dissertation outline
Figure 1 illustrates the relationships that represent the research questions and shows in which chapter the relationship is investigated. As discussed before, patient participation is central in this dissertation, with the potential to improve the communication outcomes of intercultural medical communication. The extent to which a patient participates is, according to Street's linguistic model of patient participation (Street, 2001), dependent on predisposing factors, enabling factors and doctor's responses. Predisposing factors are patient demographic characteristics such as ethnicity, gender, age and education, but also involve patients' willingness to participate. Generally, ethnic minority patients, male patients, older patients and lower educated patients are found to be more passive communicators compared to ethnic majority, female, younger and better educated patients (Kiesler & Auerbach, 2006; Levinson, Kao, Kuby, & Thisted, 2005). According to the model, higher willingness to participate is said to increase a patient's participation. Enabling factors are those factors related to a patients' ability to participate, such as having knowledge about the health issue(s) and sufficient communication skills. Less health knowledge and insufficient communication skills are said to decrease a patient's ability to participate with lower participation as a result. The doctor's responses refer to a climate in which a patient is enabled and stimulated by the doctor to be participative.

In short, patients need to be able and willing to become active communicators and their doctors need to stimulate participation among their patients. Based on Street's model, this dissertation focuses on the influence of patient's willingness and ability to participate on their participation levels and consequent communication outcomes. In addition, it is investigated how patients' match between their preferred and perceived participation during the encounter and doctor-patient concordance (i.e. level of similarity) in preferred doctor-patient relationship influences the communication outcomes. The different relationships and aims of the chapters will be discussed below in more detail.

A patient's willingness to participate is determined by their information needs and participation needs (Street, Krupat, Bell, Krvavitz, & Haidet, 2003), with higher needs generally associated with higher patient participation. Because those needs are determined by a patient's cultural background (Helman, 2001), lower participation levels of ethnic minority patients could be explained by lower needs among these patients. Scarce evidence showed lower information needs (Kumar et al., 2004) and participation needs (Levinson et al., 2005) among ethnic minority patients compared to the majority population. In the Netherlands, no differences were found in participation needs between Turkish-Dutch and Dutch patients, but the groups reported different information topics as important to discuss with their GP (Schinkel, Schouten, & van Weert, 2010). The question is thus whether during encounters with Turkish-Dutch and Dutch patients, in which patients prefer to discuss different topics with their GP, the information provision by the GP fulfills the information needs of both patient groups to the same extent. To answer this question, Chapter 2 aims to examine the differences in information needs, information provision and fulfillment of information needs between Dutch and Turkish-Dutch patients.

The results of Chapter 2 revealed that GPs' information provision during the encounters better fulfilled Dutch patients’ information needs than those of Turkish-Dutch patients. Because it was assumed that this result could partly be explained by Turkish-Dutch patients’ lower levels of participation during the consultation compared to Dutch patients, the aim of Chapter 3 was to investigate differences between Turkish-Dutch and Dutch patients in their health information-seeking behaviour prior to their consultation and how this information-seeking behavior is related to their participative behavior during the encounter and communication outcomes. The rationale behind this aim is that previous research has indicated that patient participation can be increased by obtaining health knowledge prior to the medical appointment (Cahill, 1998; Henwood, Wyatt, Hart, & Smith, 2003; Street, 2001). Patients’ information-seeking behavior is dependent on health-related factors, such as their experience with diseases, their beliefs about control and information-carrier factors, such as the utility of media (Johnson & Meischke, 1993). Because ethnic minority patients differ in their beliefs about diseases (Helman, 2001) and control (Levinson et al., 2005), often report lower health literacy (Sudore et al., 2009), and are less active searchers for information (Dickerson et al., 2004) than ethnic majority patients, it was assumed that Turkish-Dutch and Dutch patients differ in their information-seeking behavior before the consultation, which might explain differences in their participation.

The results of Chapters 2 and 3 suggested that Turkish-Dutch patients’ ability and willingness to participate does not seem to be hindered by their health information-seeking behavior and information needs. Considering the research model of intercultural medical communication (Schouten & Meeuwesen, 2006), cultural values might explain their lower patient participation better. As discussed before, the ability to participate is partly dependent on patients’ communication skills (Street, 2001). Due to different cultural values among ethnic minority patients, the communicative repertoire of ethnic minority patients could be different from that of ethnic majority patients. That is, cultural values (such as individualism versus collectivism; Hofstede, 2001) and patients’ self-construal (independent versus collectivism; Markus & Kitayama, 1991) affect people’s (preferred) communication styles (Schouten, 2008). As Western doctors are generally more individualistic oriented than their non-Western patients, adequate communication might be hard to achieve. When doctors and patients do not share similar communication styles, the ability of the patient to participate could be hindered. In addition, due to different cultural values such as higher power distance and more identification with collectivistic values than with individualistic values (Hofstede, 2001), ethnic minority patients’ willingness to participate can be affected too. A study among Chinese patients showed that higher identification with collectivistic values is indeed related to more negative beliefs about patient participation (Kim et al., 2000). Chapter 4 therefore aims to understand differences between Dutch and Turkish-Dutch patients in their perceived barriers regarding their willingness and ability to participate, specifically regarding cultural values between the groups.

The results of Chapter 4 indicated differences between Turkish-Dutch patients and their Dutch doctors in their preferences for the way doctors and patients are oriented towards each other. Research has shown that concordance between doctors and patients in their preferences for the doctor-patient relationship results in more positive
communication outcomes and better health outcomes than discordance (Cousin, Mast, Roter, & Hall, 2012; Krupat, Bell, Kravitz, Thom, & Azari, 2001; Street Jr, Makoul, Arora, & Epstein, 2009). Because Turkish-Dutch patients value a good doctor-patient relationship more than Dutch patients, doctor-patient concordance in preferred doctor-patient relationship seems to be more important for Turkish-Dutch patients than Dutch patients for establishing positive communication outcomes. In addition, when doctors stimulate patients to participate in the conversation, patients can more easily participate to the level they desire. This consequent match between patients’ preferred and perceived participation is suggested to positively influence communication outcomes (Heyland et al., 2003; Kiesler & Auerbach, 2006). Because Turkish-Dutch patients seem to experience more unfulfilled information needs and display lower participation levels, it is unknown whether this match between preferred and perceived participation can be achieved by Turkish-Dutch patients and how it influences the communication outcomes. **Chapter 5** therefore aims to study the effects of doctor-patient concordance in preferred doctor-patient relationship and the match between patients’ preferred and perceived participation on communication outcomes among both Turkish-Dutch and Dutch patients.

In addition, medical communication with migrant patients is also influenced by their language proficiency in the GP’s language and acculturation levels. Patients can be willing and have sufficient health knowledge to participate, but if their language proficiency is insufficient their ability to participate will still be low. A study among ethnic minority patients indeed found that patients who reported poor language proficiency were less participative than patients with better language proficiency (Meeuwesen et al., 2006). Moreover, patients with sufficient language proficiency might still be hindered to be participative due to having lower acculturation levels in Western society. Higher acculturation levels among ethnic minority patients might be related to better adoption of values and preferences of the country of residence concerning patient participation (Tortolero-Luna et al., 2006), suggesting lower willingness to participate for lower acculturated migrant patients. Because it is unclear how language proficiency and acculturation are related to the factors underlying patient participation and its outcomes for Turkish-Dutch patients, both concepts are taken into account in every chapter.

As illustrated in Figure 1, ethnicity was assumed to influence the determinants of patient participation and higher patient participation was assumed to result in more positive communication outcomes. For Turkish-Dutch patients, language proficiency and acculturation were assumed to influence the determinants of patient participation as well. In Chapters 2 to 5, the studies addressing the assumed relationships are described. In **Chapter 6**, the research questions are answered by elaborating on the findings. In addition, the concept of patient participation in intercultural context as well as methodological and clinical implications are discussed.

**Figure 1. The conceptual framework of this dissertation**

![Diagram of the conceptual framework of the dissertation](image-url)