



## UvA-DARE (Digital Academic Repository)

### "What do you think I should do?": Understanding intercultural medical communication in general practice

Schinkel, S.

**Publication date**

2015

**Document Version**

Final published version

[Link to publication](#)

**Citation for published version (APA):**

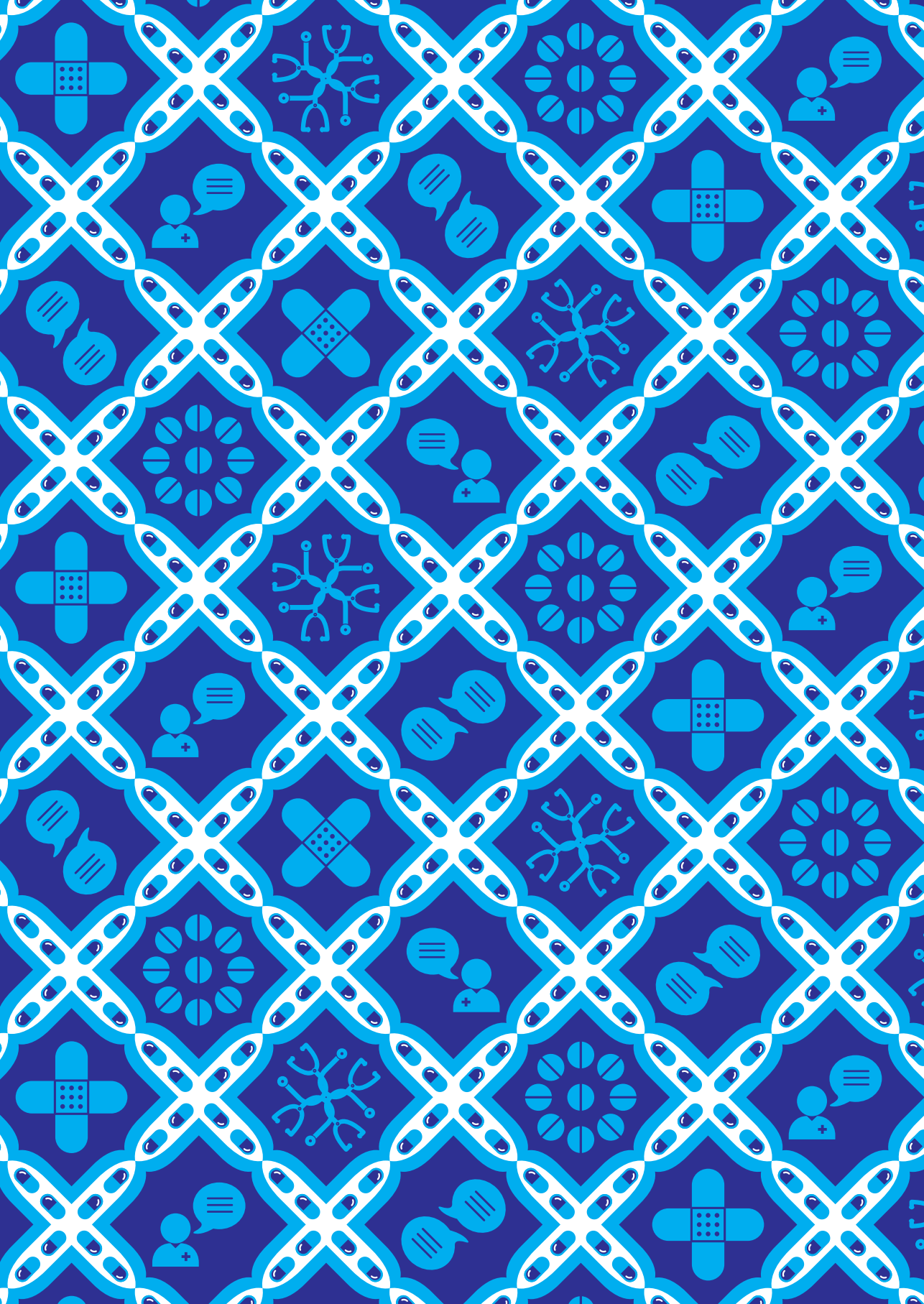
Schinkel, S. (2015). *"What do you think I should do?": Understanding intercultural medical communication in general practice.*

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

**Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.



## CHAPTER 5

# The match between preferred and perceived patient participation and the role of the doctor-patient relationship

### Abstract

The aim of the study was to investigate differences between Turkish-Dutch and Dutch patients in the effects of the match between patient's preferred and perceived participation and doctor-patient concordance in preferred doctor-patient relationship (doctor-centered versus patient-centered) on communication outcomes. Pre- and post-consultation questionnaires were filled out by 136 Dutch and 100 Turkish-Dutch patients in the waiting room of 32 GPs, who also filled out a questionnaire. Outcome variables were patient satisfaction, fulfillment of information needs and understanding of information. Results show that a match between patients' preferred and perceived participation predicted more positive communication outcomes among both Dutch and Turkish-Dutch patients than a mismatch. Discordance in preferred doctor-patient relationship was related to worse outcomes, but only for Turkish-Dutch patients' who perceived themselves as highly participative during the consultation. Among Dutch patients, no effects were found on doctor-patient concordance. In conclusion, doctor-patient concordance in preferred doctor-patient relationship seems important for Turkish-Dutch only and the effect is moderated by perceived patient participation. The match between preferred and perceived patient participation seems important for all patients. In order to improve both intracultural and intercultural medical communication GPs should be trained to communicate in such a way that a good match between patients' preferred and perceived participation is created.

*This chapter is submitted as:*

*Schinkel, S., Schouten, B. C., Street, R. L. Jr., van den Putte, B., & van Weert, J. C. M. (submitted). Concordance in primary care: a good strategy to improve communication with migrant patients?*

## Introduction

In intercultural medical communication, more miscommunication and less mutual understanding have been found than in intracultural medical communication (Schouten & Meeuwesen, 2006). Ethnic minority patients are also less satisfied with their care, have more unmet information needs and lower understanding of the information given by their doctors than patients from majority populations (Mead & Roland, 2009; Schinkel et al., 2010; Schinkel et al., 2013). Several explanations have been offered for these findings, among which language barriers and culture-related differences in health and illness beliefs, and different preferences and expectations for information and participation (Helman, 2001; Levinson et al., 2005; Schenker et al., 2010; Scheppers, van Dongen, Dekker, Geertzen, & Dekker, 2006; Suurmond & Seeleman, 2006; Suurmond, Uiters, de Bruijne, Stronks, & Essink-Bot, 2011).

Because of these cultural differences, a recent trend in research on intercultural medical communication is to investigate whether doctor-patient concordance on certain attributes has a positive influence on the medical communication process and its outcomes. The majority of studies on concordance in this context involve race-concordance, referring to medical consultations with patients and doctors belonging to a (dis)similar ethnic/racial group. Although some studies have suggested that race-concordance leads to higher patient satisfaction compared to race-discordance (Cooper, Powe, & Fund, 2004; LaVeist, Nuru-Jeter, & Jones, 2003), a review on the effects of race-concordance has yielded inconclusive results. Only a third of the reviewed studies showed evidence of positive health outcomes; the remaining studies either found mixed effects or no effects at all (Meghani et al., 2009).

A more fruitful approach might therefore be to research the effects of other types of doctor-patient concordance, such as concordance in preferred doctor-patient relationship. Doctor-patient concordance in preferred doctor-patient relationship refers to the similarity between doctors' and patients' respective preferences for a more doctor-centered (e.g., physician in control, setting the agenda for the consultation, making decisions) or a more patient-centered relationship (e.g., participatory patient, patient and doctor setting the agenda together and engage in shared decision-making) (Kiesler & Auerbach, 2006; Krupat et al., 2000). Previous studies have shown that doctor-patient concordance in preferred doctor-patient relationship positively affected patient satisfaction and treatment adherence (Chan & Azman, 2012; Cousin et al., 2012; Jahng, Martin, Golin, & DiMatteo, 2005; Krupat et al., 2000; Krupat et al., 2001; Street Jr et al., 2009b; Williams & Ogden, 2004). However, ethnic minority patients value the doctor-patient relationship more than ethnic majority patients, while at the same time perceiving lower quality of the doctor-patient relationship in comparison to ethnic majority patients (Saha, Arbelaez, & Cooper, 2003; Schinkel, Schouten, van den Putte, Kerpiclik, & van Weert, under review). Doctor-patient concordance in preferred doctor-patient relationship could be more effective for ethnic minority patients than for ethnic majority patients in establishing positive communication outcomes such as patient satisfaction, fulfillment of information needs and understanding of information. As this has not been studied so far, the first aim of this study is to investigate possible differences between ethnic minority and majority patients in the effects of doctor-patient concordance in preferred relationship on medical communication outcomes.

A second goal of this study involves investigating the effects of the degree of match between patients' preferred participation and the level of their perceived participation during the medical encounter on communication outcomes. Although a good match can positively affect communication outcomes (Heyland et al., 2003), a review by Kiesler

and Auerbach (2006) showed that positive effects do not always emerge when there is a match between patients' preferred and perceived participation levels. More recent studies found support for positive effects of a mismatch between preferred and perceived participation. That is, patients who were more involved during the medical encounter than they preferred beforehand, were more satisfied with the consultation than patients whose perceived levels of participation matched or were lower than their preferred levels of participation (Brown et al., 2012; Cvengros, Christensen, Cunningham, Hillis, & Kaboli, 2009). Some research indicates that ethnic minority patients prefer less participation during the medical encounter and display less participation during the encounter than majority patients (Gordon, Street, Sharf, & Soucek, 2006; Schouten et al., 2007). Yet, it is unclear whether the effects of a match or a mismatch between preferred and perceived participation operate similarly for ethnic minority compared to ethnic majority patients on communication outcomes. The second aim of our study was thus to investigate possible differences between ethnic minority and majority patients in the effects of the match between patients' preferred and perceived participation on patient satisfaction, fulfillment of information needs and understanding of information.

In sum, our study aims to explore how doctor-patient concordance in preferred doctor-patient relationship and the match between patients' preferred and perceived participation are related to communication outcomes among ethnic minority and majority patients. In addition, a possible interaction effect between doctor-patient concordance and patients' perceived participation on communication outcomes will be studied. Patient participation during the encounter can influence communication outcomes (Street, 2001), which might interact with doctor's and patients' preferences beforehand. We focused on Turkish-Dutch general practice patients as ethnic minority group, because they form the largest migrant group in the Netherlands (Central Bureau of Statistics, 2014) and visit their GP more frequently compared to ethnic majority patients and other migrant groups (Uiters et al., 2006).

## Methods

### Procedure

Between September and December 2014, Turkish-Dutch and Dutch patients were recruited to participate in GP waiting rooms. Inclusion criteria for patients were: (1) having an appointment with the GP for themselves, (2) being at least 18 years old and (3) being able to read in Dutch or Turkish or being accompanied by someone who could read in these languages. We recruited both Dutch and bilingual Turkish-Dutch assistants for the data collection. The Turkish-Dutch patients were primarily recruited by the Turkish-Dutch assistants because they are known to lessen concerns among these patients about immigration status, mistrust of institutions, and lack of familiarity and distrust of research, leading to easier data collection (Hoopman, Terwee, Muller, Öry, & Aaronson, 2009). After signing the informed consent form in the waiting room, participants were given a pre-consultation questionnaire (available in Dutch and Turkish). Following the consultation, they were given the post-consultation questionnaire. GPs were given their questionnaire during data collection days and could return it to the assistants or email a copy to the first author.

The patient questionnaires were pilot tested twice among low-educated and low-literate Dutch and Turkish-Dutch people to ensure that all items were understood by the targeted population. The questionnaire was translated into Turkish by a professional translation service and the translation was checked on grammar and understandability by two Turkish-Dutch assistants. The study was approved by the Ethical Committee of the Amsterdam School of Communication Research (ASCoR), no. 2014-CW-68.

## Participants

In total, 32 GPs (18 men, 14 women) from ten different practices in multicultural cities in the Netherlands participated in the study. 107 GP practices (with multiple GPs) were asked to participate (response rate of 9.3%). Most common reasons for not participating concerned too little time to participate, a too busy practice, too many research projects during the year, or currently ongoing research projects in the practice. GPs were recruited based on their relatively large Turkish patient population: six practices consisted of a population of around thirty per cent Turkish patients, two practices of around fifteen per cent and two other practices of around ninety per cent. GPs participated with seven patients on average (range 1-14).

In total, 236 patients (136 Dutch and 100 Turkish-Dutch patients) out of 366 eligible patients participated (64% response). Figure 1 shows the flow diagram. Patients who were unwilling to participate had similar distribution of ethnicity as the participating patients ( $\chi^2(1) = .99; p = .320$ ).

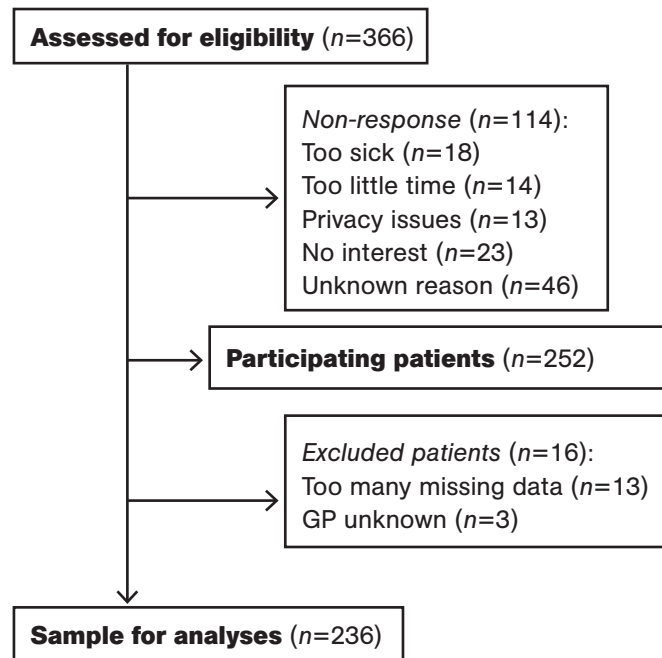


Figure 1. Flow diagram of the patient sample

## Measures

### Pre-consultation patient questionnaire measures

#### Socio-demographic variables

The ethnicity definition of the Dutch Central Bureau of Statistics was used to assess the respondents' ethnicity. Respondents born in the Netherlands and with both parents born in the Netherlands were categorized as Dutch; respondents born in the Netherlands or Turkey and having at least one parent born in Turkey were categorized as Turkish-Dutch. For Turkish-Dutch patients, group identification and language proficiency were assessed. Group identification was measured by Stevens et al.'s ethnic identity measure (Stevens et al., 2004). Patients could indicate their group identification answering two questions on the extent to which they felt they belong to either the Dutch and Turkish culture on a 5-point

scale, ranging from (1) *totally disagree* to (5) *totally agree*. Dutch and Turkish language proficiency was assessed by patients' self-reports on a 5-point scale, ranging from (1) *not at all* to (5) *excellent*. For both the group identification and language proficiency measure, first the score on Turkish culture and Turkish language was subtracted from that of Dutch culture and Dutch language, respectively. Second, both scores were divided into three subgroups (Harmsen et al., 2008; Schinkel et al., 2013): (1) more Turkish identification/Turkish language proficiency than Dutch identification/Dutch language proficiency (-4 to -2), (2) equal Turkish and Dutch identification/language proficiency (-1 to 1) and (3) more Dutch identification/Dutch language proficiency than Turkish identification/Turkish language proficiency (2 to 4). Because only three patients were present in the third group, these patients were excluded from the regression analyses and dummy variables for both group identification and language proficiency were included (i.e. more Turkish versus equal) in the regression models. For the total sample, gender, age, educational level and health status were assessed, the latter being measured with a single item assessing how patients perceived their health, with a 5-point scale, ranging from (1) *poor* to (5) *excellent*.

### Preferred patient participation

To measure patients' preference for patient participation, we used the eight items of the *Patient information scale* and *Patient decision making scale* of the *Patients' perceived involvement in care measure* (Lerman et al., 1990). Patients could indicate the importance of the items for the upcoming consultation on a 4-point scale, ranging from (1) *not important* to (4) *very important* (with a *not applicable* option for items not relevant to that consultation). Items were simplified for low-literate patients to statements such as "I find it important to ask the GP many questions", "...propose a certain treatment" or "...express concerns about the GP's advice". The scale had good reliability:  $\alpha = .83$  (Dutch group .80; Turkish-Dutch group .84).

The preferences scores were divided into high (3 and 4=1) or low (1 and 2=0) preference for participation. To take into account the applicability of the preferences in that consultation, we first determined the number of answers that were applicable. Next, the number of highly important items was divided by the number of applicable items and this was multiplied by the total number of items of the scale (8). By performing this imputation, patients who reported to highly prefer six of the eight behaviors and scored two items as non-applicable received the same participation preferences score as patients who reported to highly prefer all eight behaviors. Preferred patient participation thus ranged from 0 to 8, with higher scores reflecting higher participation preferences.

### Preferred doctor-patient relationship

To measure the extent to which patients preferred a patient- versus doctor-centered consultation, we used nine items from the *Patient-Practitioner Orientation Scale* (Krupat et al., 2000). We used only those items that reflected previous findings on communication barriers among Turkish-Dutch patients, concerning how doctors and patients should treat each other and the importance of taking into account patients' cultural background, based on Schinkel et al. (under review). Items were simplified for low-literate patients to statements such as "The GP should decide what is being said", and "It is disrespectful to disagree with the GP". Higher scores represented a higher preference for doctor-centered consultations (with two reversed items). Patients could indicate their agreement with the statements on a 5-point scale, ranging from (1) *totally disagree* to (5) *totally agree*. Reliability analyses suggested to remove two items, "Patients should be treated as equals" and "Warm and

open GPs are better than distant GPs”, from the scale. The remaining seven items had satisfactory reliability:  $\alpha = .73$  (Dutch group: .75; Turkish-Dutch group: .65).

#### Post-consultation patient questionnaire measures

##### *Perceived patient participation*

To measure the perceived participation of patients, we used the items of the preferred patient participation scale in the pre-consultation questionnaire. Patients could indicate on the same 8-item scale whether they (0) *did not perform* or (1) *did perform* the behavior during their consultation, with a *non-applicable* option for every item. To calculate patients' perceived participation, we used the same procedure as was done for preferred patient participation. Perceived participation also ranged from 0 to 8, with higher scores reflecting higher perceived participation.

##### *Satisfaction*

To assess how satisfied patients were with the communication and their doctor, we used five items of the *Patient Satisfaction Scale* (Poulton, 1996). Patients could indicate their agreement on items such as “I am satisfied with the conversation I just had with the GP” and “There was enough time to discuss everything” on a 5-point scale ranging from (1) *totally disagree* to (5) *totally agree*. Reliability was high:  $\alpha = .93$  (Dutch group .96; Turkish-Dutch group .88).

##### *Fulfillment of information needs*

Fulfillment of information needs was measured by a single item on which patients could indicate their agreement with: “I have discussed everything I wanted to discuss”, on a 5-point scale ranging from (1) *totally disagree* to (5) *totally agree*.

##### *Understanding of information*

Patients could indicate to what extent they had understood the information discussed during the consultation with a single item, measured on a 5-point scale ranging from (1) *totally disagree* to (5) *totally agree*.

#### GP questionnaire measures

Besides background characteristics such as age, gender, practice experience and having received intercultural training, GPs were asked to report their preferred doctor-patient relationship using the same scale as in the pre-consultation patient questionnaire. The scale score was computed similarly to the patient's score. In addition, GPs' intercultural orientation was measured by combining items from the *Cultural Sensitivity Scale* and *Intercultural Communication Effectiveness Scale* (Ulrey & Amason, 2001). GPs could indicate to what extent they agreed on eight items regarding intercultural orientation, ranging from (1) *totally disagree* to (5) *totally agree*. Reliability of the scale was good:  $\alpha = .81$ .

#### Calculation of doctor-patient concordance scores

Concordance between patients and GPs in their preferred doctor-patient relationship was calculated by first subtracting standardized GP scores from standardized patient scores. The doctor-patient concordance in preferred doctor-patient relationship ranged from -3.89 to 3.68. Higher positive or negative discrepancy scores represented lower concordance between GPs and patients. Patients were then divided into two groups: concordant or discordant with their GP, with a cut point of 1.5, resulting in around 25 per cent of patients in the discordant group.

#### Calculation of the match between patients' preferred and perceived participation

To calculate the match between patient's preferred and perceived patient participation, the perceived participation scores were subtracted from the preferred participation scores. These discrepancy scores ranged from -7 to 8. To take into account that patients' participation never exactly matches their preferences (Kiesler & Auerbach, 2006), we used half of the items as cut off point for discrepancy scores; patients with discrepancies of lower than -4 or higher than 4 had unmatched preferences (score 1), patients with discrepancy scores between -4 and 4 had matched preferences (score 0).

#### **Analyses**

Differences between the groups in socio-demographic characteristics and pre- and post-consultation scores were assessed with chi-square tests and t-tests. Relationships between communication outcomes and, respectively, doctor-patient concordance, perceived patient participation and match between patient's preferred and perceived participation were assessed by separate multilevel regression models for Turkish-Dutch and Dutch patients, with the GP as random effect to account for the nested nature of patient data. In addition, an interaction term between perceived patient participation (continuous scale) and doctor-patient concordance (dummy variables) was included. All models were controlled for health status, age and education. For Turkish-Dutch patients, we also controlled for language proficiency and group identification.

## Results

### GP sample

As shown in Table 1, the majority of participating GPs was male, they varied in their age and years of working as GP, and reported a relatively high intercultural orientation ( $M = 3.56$  on a 5-point scale,  $SD = .42$ ). In addition, a majority of GPs reported to be trained in intercultural communication (68.8%). 29 GPs were Dutch, one GP was from Turkish and two were from European origin (Germany and Slovenia).

### Patient sample

Table 2 provides an overview of the patient sample. Dutch patients were significantly older ( $t(227.62) = 5.24$ ;  $p < .001$ ; range 18-89), higher educated ( $\chi^2(2) = 6.41$ ;  $p = .041$ ), and perceived their health status as better ( $\chi^2(2) = 17.67$ ;  $p < .001$ ) than Turkish-Dutch patients. The groups did not differ in gender and having company during the consultation. The Turkish-Dutch patients reported significantly higher Turkish language proficiency than Dutch language proficiency ( $t(89) = -9.29$ ;  $p < .001$ ) and higher identification with Turkish culture than with Dutch culture ( $t(94) = -8.07$ ;  $p < .001$ ). As shown in Table 3, Turkish-Dutch patients reported a preference for a more doctor-centered relationship ( $t(232) = -2.27$ ;  $p = .024$ ), higher preference for patient participation ( $t(232.56) = -3.88$ ;  $p < .001$ ), higher perceived participation ( $t(223.54) = -3.37$ ;  $p < .001$ ), lower satisfaction ( $t(225) = 2.55$ ;  $p = .011$ ), lower fulfillment of information needs ( $t(224) = 1.87$ ;  $p = .063$ ), and lower understanding of the information ( $t(223) = 2.83$ ;  $p = .005$ ) than Dutch patients.

**Table 1**  
GP Sample

GP characteristics	(N=32)
<i>Gender</i>	
Men	18 (56.3%)
Women	14 (43.7%)
<i>Age</i>	
Mean age (SD, range)	47.78 (11.65, 31-65)
<i>Practice experience</i>	
Mean years working as GP (SD, range)	15.80 (11.88, 2-37)
Having own practice	23 (71.9%)
<i>Intercultural experience</i>	
Intercultural orientation, 5-point scale (SD)	3.56 (.42)
Received intercultural communication training	22 (68.8%)

**Table 2**  
Patient Sample

Patient characteristics	Dutch (N=136)	Turkish-Dutch (N=100)
<i>Gender</i>		
Men	49 (36.0%)	35 (35.0%)
Women	87 (64.0%)	65 (65.0%)
<i>Age**</i>		
Mean age in years (SD)	53.46 (19.85)	41.90 (13.62)
<i>Educational level*</i>		
Low	42 (31.3%)	43 (43.9%)
Intermediate	66 (49.3%)	46 (46.9%)
High	26 (19.4%)	9 (9.2%)
<i>Perceived health status**</i>		
Bad/very bad	43 (31.6%)	59 (59.0%)
Moderate	81 (59.6%)	35 (35.0%)
Good/excellent	12 (8.8%)	6 (6.0%)
<i>Company during consultation</i>		
No companion (alone)	108 (80.6%)	66 (66.0%)
Partner	13 (9.7%)	12 (12.0%)
Child	7 (5.2%)	14 (14.0%)
Parent(s)	2 (1.5%)	3 (3.0%)
Other	4 (3.0%)	5 (5.0%)
<i>Mean language proficiency</i>		
Dutch language (SD)		3.34 (1.33)
Turkish language (SD)		4.57 (0.69)
<i>Mean identification</i>		
Dutch culture (SD)		2.65 (1.39)
Turkish culture (SD)		4.39 (1.06)

\*  $p < .05$ ; \*\*  $p < .001$

**Table 3**  
Patient Scores on Pre- and Post-Consultations Measures per Group

Patient means (SD)	Dutch (N=136)	Turkish-Dutch (N=100)
<b>Pre-consultation:</b>		
Preferred patient involvement (0-8 scale)	5.63 (2.45)	6.72 (1.89)***
Preferred doctor-centered relationship (versus patient-centered, 1-5 scale)	3.01 (0.74)	3.24 (0.82)**
<b>Post-consultation:</b>		
Perceived patient involvement (0-8 scale)	5.37 (2.12)	6.26 (1.89)***
Satisfaction with communication (1-5 scale)	4.43 (0.68)	4.21 (0.61)*
Discussed everything as wanted (1-5 scale)	4.34 (0.72)	4.15 (0.74)†
Understanding information (1-5 scale)	4.41 (0.65)	4.13 (0.80)**

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ ; †  $p < .10$

#### Predictors of communication outcomes: Dutch patients

Among Dutch patients, matched preferred and perceived participation was found to positively affect all communication outcomes (see Table 4). Dutch patients with matched preferences regarding patient participation reported higher satisfaction ( $M_{\text{matched}} = 4.47$ ,  $M_{\text{unmatched}} = 3.92$ ;  $p = .021$ ), better fulfillment of information needs ( $M_{\text{matched}} = 4.34$ ,  $M_{\text{unmatched}} = 3.69$ ;  $p = .009$ ) and better understanding of the information than patients with unmatched preferences ( $M_{\text{matched}} = 4.42$ ,  $M_{\text{unmatched}} = 3.79$ ;  $p = .007$ ). No main or interaction effects on any of the communication outcomes were found for the other predictors.

**Table 4**  
Effects of Matched Preferences, Concordance, and Perceived Participation on Communication Outcomes among Dutch Patients

Predictor	Dutch (N=136)					
	Satisfaction		Fulfillment information needs		Understanding	
	Estimate (SE)	P	Estimate (SE)	P	Estimate (SE)	P
Match patient's preferred-perceived participation (ref=matched)	.55 (.23)	.021	.65 (.24)	.009	.63 (.23)	.007
Doctor-patient concordance in preferred relationship (ref=concordant)	.71 (.47)	.131	.62 (.49)	.207	.54 (.46)	.237
Perceived patient participation	.07 (.07)	.355	.05 (.08)	.541	.06 (.07)	.364
Perceived patient participation x concordance in preferred relationship	-.12 (.08)	.155	-.08 (.08)	.335	-.08 (.08)	.328

Note. Model controlled for age, health status and education, which not significantly influenced any communication outcomes.

#### Predictors of communication outcomes: Turkish-Dutch patients

Among Turkish-Dutch patients, matched preferred and perceived participation positively affected all communication outcomes (see Table 5). Turkish-Dutch patients with matched preferences regarding patient participation reported higher satisfaction ( $M_{\text{matched}} = 4.21$ ,  $M_{\text{unmatched}} = 3.65$ ;  $p = .052$ ), higher fulfillment of information needs ( $M_{\text{matched}} = 4.30$ ,  $M_{\text{unmatched}} = 2.07$ ;  $p < .001$ ) and higher understanding of information ( $M_{\text{matched}} = 4.30$ ,  $M_{\text{unmatched}} = 2.41$ ;  $p < .001$ ) than patients with unmatched preferences. In addition, Turkish-Dutch patients reporting better health status were more satisfied ( $p = .030$ ) and reported better understanding of the information ( $p = .012$ ), and those with equal language proficiency in Turkish and Dutch language were more satisfied ( $M_{\text{equal}} = 4.16$ ,  $M_{\text{moreTurkish}} = 3.71$ ;  $p = .005$ ) and reported better fulfillment of information needs ( $M_{\text{equal}} = 3.38$ ,  $M_{\text{moreTurkish}} = 2.99$ ;  $p = .040$ ) than patients who reported more Turkish language proficiency than Dutch language proficiency. Cultural identification did not affect any of the communication outcomes.

For Turkish-Dutch patients, an interaction effect between perceived patient participation and doctor-patient concordance in preferred doctor-patient relationship was found on all three outcomes (although marginally significant on understanding of the information). For Turkish-Dutch patients who were concordant with their GP in the doctor-patient relationship, perceived patient participation was not related to the communication outcomes. However, for patients who were discordant with their GP in the preferred doctor-patient relationship, higher perceived participation was related to lower satisfaction, worse fulfillment of information needs and worse understanding of the information. Subsequent analyses among patients who were discordant with their doctor regarding their preferred doctor-patient relationship revealed that the Turkish-Dutch patients were discordant on both sides: 16% of patients scored higher than their doctor, 13% of patients scored lower than their doctor. In both discordant groups higher perceived patient participation was related to worse communication outcomes (sample sizes were too small to test for significance).

**Table 5**

*Effects of Matched Preferences, Concordance, and Perceived Participation on Communication Outcomes among Turkish-Dutch Patients*

Predictor	Turkish-Dutch (N=97)					
	Satisfaction		Fulfillment information needs		Understanding	
	Estimate (SE)	P	Estimate (SE)	P	Estimate (SE)	P
Match patient's preferred-perceived participation (ref=matched)	.57 (.29)	.052	2.23 (.35)	.000	1.88 (.37)	.000
Doctor-patient concordance in preferred relationship (ref=concordant)	-1.66 (.54)	.003	-1.60 (.66)	.018	-1.32 (.69)	.059
Perceived patient participation	-.24 (.07)	.002	-.19 (.09)	.040	-.06 (.09)	.519
Perceived patient participation x concordance in preferred relationship	.23 (.08)	.005	.22 (.10)	.027	.17 (.10)	.088
Language proficiency (ref=more Turkish)	-.45 (.15)	.005	-.39 (.19)	.040	-.27 (.19)	.176
Identification culture (ref=more Turkish)	-.02 (.12)	.874	-.07 (.15)	.664	.02 (.16)	.883

Note. Model controlled for age, health status and education. Health status significantly influenced satisfaction and understanding of information (estimates: .17 [.08],  $p = .030$ ; .26 [.10],  $p = .012$ , respectively). The main effects of doctor-patient concordance in preferred relationship are only present after including the interaction term with perceived patient participation.

## Discussion

The first aim of this study was to investigate differences between Turkish-Dutch and Dutch patients in the effects of doctor-patient concordance in preferred doctor-patient relationship on patient satisfaction, fulfillment of information needs and understanding of information independently and in relation to perceived patient participation. The second aim was to investigate how the match between patients' preferred and perceived participation affect those communication outcomes among Turkish-Dutch and Dutch patients. To our knowledge, this is the first study that combines effects of doctor-patient concordance with perceived patient participation, and the match between patient's preferred and perceived participation. In line with other research suggesting more negative communication outcomes among ethnic minority patients (Mead & Roland, 2009), the results overall show that Turkish-Dutch patients reported lower satisfaction, worse fulfillment of information needs and worse understanding of information than Dutch patients. The findings further indicate that the match between preferred and perceived patient participation relates more strongly to communication outcomes than doctor-patient concordance, which only showed an interaction effect with perceived patient participation on the communication outcomes among Turkish-Dutch patients (see below for a discussion of these results).

The match between patients' preferred and perceived participation was found to positively affect all communication outcomes among both Dutch and Turkish-Dutch patients. A match between patients' preferred and perceived patient participation enhanced patients' satisfaction, fulfillment of information needs and understanding of information. Hence, by accommodating patients' preferences for participation, GPs can improve crucial communication outcomes for both ethnic majority and ethnic minority patients, thereby enhancing the quality of care (Carlson & Aakvik, 2006). By accommodating migrant patients' preferences for participation—i.e. low or high level of patient participation during the consultation—GPs can overcome the differences between doctors and patients in intercultural encounters and improve the communication process and its' outcomes (Flocke, Miller, & Crabtree, 2002).

Although doctor-patient concordance did not independently affect the outcomes in our study, there was an interaction effect between doctor-patient concordance in preferred doctor-patient relationship and perceived patient participation among Turkish-Dutch patients. This interaction effect is in line with other findings indicating that patients' communicative behavior during the encounter moderates the effect of patient preferences on communication outcomes (Golin, Matteo, Duan, Leake, & Gelberg, 2002; Kiesler & Auerbach, 2006; Lee & Lin, 2010). The more negative communication outcomes among Turkish-Dutch patients who are discordant with their doctor in preferred relationship when perceived participation is high are in line with the results from a qualitative study that revealed that Turkish-Dutch patients felt discomfort with being highly involved when their preferred relationship was not met by the GP (Schinkel et al., under review). In this previous study, Turkish-Dutch patients explicitly mentioned frustration when their GP stimulated them in a direct manner to become more involved (with questions such as: What do you think I should do?). Thus, when a GP prefers patient-centered consultations more than the patient, that GP might stimulate the patient to become more involved than Turkish-Dutch patients actually prefer, leading to higher perceived patient participation, but worse communication outcomes. In case a Turkish-Dutch patient prefers patient-centered consultations more than their GP, that patient will be more involved than the doctor prefers, also leading to high perceived patient participation but worse communication outcomes. Future studies should investigate the effects of doctor-patient concordance in preferred relationship among ethnic minority patients further in relation to perceived



patient participation. In addition, investigating the actual communication process between GPs and ethnic minority patients, using observational data, will give more insight in what happens during the encounter and might explain the interaction effect of doctor-patient concordance in this sample.

Doctor-patient concordance in preferred doctor-patient relationship is calculated with doctor scores that were reported once, not for every patient, following the procedure of Krupat et al. (2000). Because there is a possibility that there is some variation in GPs' preferences depending on the individual patient, future research could measure concordance by means of separate doctor scores per patient. In addition, measuring patients' perceived concordance with the GP (Street Jr et al., 2008), instead of measuring concordance using doctor and patient scores, might be an interesting avenue for future research too.

Although Turkish-Dutch patients report relatively positive communication outcomes, they still experienced worse communication outcomes than Dutch patients. Considering that GPs in our study were relatively high interculturally orientated and trained in intercultural communication, communication outcomes among patients consulting GPs who are less aware of or trained in cultural differences will probably be worse. Therefore, our findings are hard to generalize to all GPs. We expect that future studies will have similar samples because GPs who are less aware of cultural differences will less likely take part in intercultural communication studies. It could therefore be interesting to develop a more experimental study that uses video vignettes in which GPs' behavior is simulated to be more doctor- or patient-centered and investigate how those behaviors impact communication outcomes among migrant patients.

The higher preference for patient participation and higher perceived participation among Turkish-Dutch patients were surprising findings, because most studies report lower preference for participation and lower participation levels among ethnic minority patients (e.g., Johnson et al., 2004; Levinson, Kao, Kuby, & Thisted, 2005; Meeuwesen et al., 2007; Street Jr et al., 2005). The higher scores in our sample could be explained by measurement differences (Say, Murtagh, & Thomson, 2006). We asked patients to indicate (the importance of) their communicative contribution during the encounter, whereas most other studies focused on different aspects of patient participation, such as shared-decision making or communication symmetry. Ethnic minority patients might more strongly prefer to participate in the discussion rather than the decision-making itself. Ethnic minority patients' preferences for participation in both the communication and decision-making should therefore be investigated further as separate concepts.

In conclusion, the match between preferred and perceived patient participation was a stronger predictor of communication outcomes than doctor-patient concordance. Doctor-patient concordance in preferred doctor-patient relationship was found to influence the communication outcomes among Turkish-Dutch patients but only for patients with high perceived patient participation. Future research should thus include perceived patient participation in models investigating doctor-patient concordance among migrant patients. Doctors need to become more aware of cultural differences in patients' preferences and trained in overcoming these differences in order to enhance the communication process and its outcomes for migrant patients. Stimulating more patient participation will not automatically enhance communication outcomes among Turkish-Dutch patients. These patients need to be stimulated to be as participative as they prefer. Training doctors to elicit patient's preferences and accommodate them, will shape an environment for ethnic minority patients in which matched preferred and perceived preferences will be established, leading to more positive communication outcomes.