



Communication rules regarding support seeking in patients with a physical illness, according to people with a Surinamese or a Dutch cultural background

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ABSTRACT

Objective: People with different cultural backgrounds can evaluate the appropriateness of direct and indirect support seeking differently. In this study we explored how direct and indirect communication rules for verbal support seeking by patients with diabetes were perceived among Dutch and Surinamese female participants, and whether the appropriateness differed for the ingroup, outgroup and intercultural support seeker-support provider interactions.

Methods: The study applied a 2 (direct versus indirect support seeking) X 2 (Surinamese patient versus Dutch patient) X 2 (Surinamese support provider versus Dutch support provider)-design. Dutch and Surinamese participants ($N = 686$) were randomly assigned to one of the eight conditions in which they were provided with a depiction of the patient, the direct or indirect request for help, and the help provider. The main outcome was the rated appropriateness of the help-seeking request in the specific context.

Results: The results revealed a significant main effect of communication style: both, Surinamese and Dutch participants evaluated the direct help-seeking as more appropriate compared to indirect help-seeking, independent of patient or provider culture. This effect was particularly strong in participants who scored high on the individual difference in independent self, as shown by a significant interaction.

Discussion: Literature usually identifies that Surinamese and Dutch populations have different cultural backgrounds and values that express themselves in different attitudes, in general more collectivistic and more individualistic, respectively. However, with regard to help seeking preferences the study results did not verify this expectation. These findings underscore the importance of the support providers' role in assessing and understanding the individuals' communication style with regard to help-seeking, rather than assuming communication preferences on the basis of cultural background.

1. Introduction

'Can you bring me to the doctor today? Because I have such pain in my feet and I walk unsteadily', or

'I must go to the doctor today I have such a pain in my feet and if I walk by myself, I will walk unsteadily'.

Both are possible statements of a support seeker who is suffering physically, such as a diabetic type 2 patient, to a potential support provider. However, the first statement presents an explicit request for help and is therefore a direct help-seeking question, while the second statement is less clear and more suggestive, and therefore an indirect

help-seeking question. Indeed, support-seeking behavior, an "intentional communicative activity with the aim of eliciting supportive actions from others" (High and Scharp, 2015), may be either direct or indirect (Derlega et al., 2003). When people ask a direct question, the chances are increased that the goal of what they aim to achieve with their question is indeed accomplished (High and Scharp, 2015), thus, that their help-question is understood unambiguously and that they receive the help according to their need.

There are many factors that affect how people seek social support (Kim et al., 2006). One involves display rules, which are cultural norms that govern the management and modification of emotional expressions depending on social circumstances (Matsumoto, 1990; Nurullah, 2012).

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More specifically, display rules determine what verbal and non-verbal expressions within a specific context is perceived as socially acceptable and appropriate (Mortenson, 2009). Whereas *display* refers to the expressive behavior revealed, *rule* refers to the prescriptive or regulatory character that determines the expressive behavior shown (Feldman, 1982). The assumption of the present study is that support seeking as a communicative act is subject to such display rules.

A conceptual framework that helps to understand display or communication rules for support seeking, is that of low context versus high context communication. This framework proposes that different patterns of communication are inherent to individualistic and collectivistic cultures. In low-context communication, which is predominant in individualistic cultures (Gudykunst et al., 1996), the communication style follows a direct and explicit pattern (Muraya et al., 2011; Taylor et al., 2007). Examples are asking for help, giving details about one's problem, or openly displaying distress (Derlega et al., 2003; Mortensen, 2009; Mesquita, 2001; Kim et al., 2008). In high context communication, which is dominant in collectivistic cultures (Gudykunst et al., 1996), the communication style is more implicit, indirect and non-verbal, (Derlega et al., 2003; Mortensen, 2009; Mesquita, 2001; Kim et al., 2008), for example, implying an unmet need, but making no explicit appeal to the other person.

Previous studies have pointed out the importance of culture in relation to the appropriateness of seeking social support, and the impact of social norms (Matsumoto, 1990; Mortensen, 2009). For example, in a study among Korean elderly, asking for social support was perceived as shameless and talking about personal thoughts and feelings was felt to be embarrassing (Yoo, 2013). On the contrary, verbal expression and disclosure were found to be more important and beneficial for European Americans than for Asian Americans (Taylor et al., 2007); and it was evaluated more positively by members of individualistic cultures (Kim et al., 2008). Thus, culture can determine how patients present their needs and complaints, and how this presentation is being evaluated by potential support providers (Matsumoto, 1990; Safdar et al., 2009). In turn, this evaluation may influence the inclination of these potential support providers to actually provide the support that is needed. This is why it is not only of scientific value, but also socially relevant to understand help-seeking communication rules, and how this can support convergence between seeker and provider.

In the present study we aim to understand and test how direct and indirect communication in support seeking among Dutch and Surinamese female participants are perceived and how the rated appropriateness differs for the ingroup, the outgroup, and for intercultural interactions.

The general culture of Suriname can be identified as collectivistic (Mayo, 2004), whereas the Dutch culture can be identified as an individualistic culture (Mesquita, 2001). Although the Surinamese culture is a multi-ethnic population with roots in Africa, Asia, Europe and America (St-Hilaire, 2001), it can be regarded as a collectivistic culture. Similarly, although one-fifth of inhabitants of the Netherlands have an immigration background (Salentin and Schmeets, 2017), the Dutch culture can still be typified as individualistic. Despite immigration and diversity in both populations, it is valid to speak of generalised cultures (Safdar et al., 2009; Mesquita, 2001; Mesquita and Walker, 2003).

Cultural differences may also be understood from how people see, describe or construe themselves in relation to others (Singelis, 1994); as more independent from others or as more dependent on others. In individualistic cultures, people tend to endorse their independent selves more strongly, while in collectivist cultures, individuals typically endorse their interdependent selves more strongly (Uskul et al., 2004). When an interdependent self is endorsed and activated in communication, people feel more connected with others from their ingroup (Fischer et al., 2009), and they are more concerned with keeping the harmony (Matsumoto, 1990; Kim et al., 2008; Hofstede, 2011). Therefore, they are less likely to seek direct support, because they are concerned about negatively affecting their social network (Kim et al., 2006). In addition,

similar reasoning is found related to patients with a collectivistic background seeking support in an indirect way, in an attempt to not disrupt the ingroups' harmony (Mortensen, 2009). When an independent self is endorsed and activated in communication, interactions with others are more focused on the self as a unique, distinct individual (Fischer et al., 2009). Being unique and distinct is not seen as a threat to important social ties. This focuses on that the unique and independent individual is the core of the individualistic culture.

Based on the relation between collectivism and the preference for indirect communication, and the relation between individualism and the preference for direct communication, we can formulate expectations about the appropriateness of direct and indirect ways of support seeking in different contexts: In ingroup encounters (either collectivistic of individualistic), in outgroup encounter (either collectivistic of individualistic), and in intergroup or intercultural encounters (between collectivistic and individualistic). These expectations will be explained below in some more detail.

The ingroup is comprised of people with a similar cultural background as the individual. The outgroup are people from the 'other' culture. In the present study, for Surinamese individuals, the Surinamese are perceived as ingroup and the Dutch as outgroup, while for Dutch individuals this is the other way around. We expect that Dutch people will evaluate direct ingroup help-seeking questions as more appropriate and Surinamese people will find the indirect ingroup help-seeking questions a more appropriate way of seeking social support.

Besides perceptions of communication rules in their ingroup, people also have perceptions of communication rules in specific outgroups. These perceptions of the outgroup communication rules can be built on stereotyped expectations by the ingroup of individuals from the outgroup (Palomares et al., 2016). Based on shared realities and possibly the own experience, such expectation may predict that among Dutch people, thus among 'them', direct support seeking is appropriate, and among Surinamese people, among 'them', indirect support seeking is appropriate. On the other hand, studies also suggest that people build expectation based on a social projection (Kim et al., 2006; Palomares et al., 2016). They may generalize their ingroup rules on support seeking to also apply to the outgroup. On forehand it is unclear whether people follow their prejudices or whether they project their own cultural preferences.

Besides expectations of appropriateness of specific communication rules regarding support seeking in their ingroup and in outgroups, people may also have ideas about appropriate ways of support seeking in intergroup encounters. Intergroup encounters are those where at least one communicator accesses a social category and applies it to the interaction (Palomares et al., 2016). In evaluating the appropriateness of support seeking, on the one hand, people may follow their own cultural inclination; they may just project their own rules to the intergroup situation. However, in these intercultural interactions, communication accommodation may take place; a process of changing or adapting one's verbal and nonverbal behavior in interaction (Gasiorek, 2016). This process can be triggered by previous knowledge or stereotypes applied to the interacting partner (Palomares et al., 2016). From this point of view, the question is whom of the interlocutors should adapt: The help seeker or the potential support provider. Should the help seeker adapt its communication style as he or she depends on the support giver, or should the support provider adapt its communication style as the seeker is in need? Thus, different communication rules may be applied to evaluate the appropriateness of support seeking in intercultural encounters. Again, on forehand it is hard to decide what people find the most appropriate way to accommodate in intercultural encounters, direct or indirect help seeking.

The present study

This study aims to understand how direct and indirect verbal support seeking communication messages from Dutch and Surinamese female patients and non-professional support providers are evaluated by Dutch and Surinamese female participants. Previous studies found differences

in both communication style and help-seeking behaviors between male and female participants (High and Scharp, 2015; Kim et al., 2008). Based on these findings different effects resulted from gender differences could be expected. Taking into account that gender differences would further complicate the present experimental design, reaching sufficient statistical power and the interpretation of the data, only female participants were included. To test our expectations an online vignette experiment was conducted with women from the general populations. The independent variables were communication style, and patient and provider cultural background. Help-seeking was presented through verbal indirect and direct help-seeking communication, patient and provider culture was presented using photos of women with Dutch or Surinamese looks, as an indicator of culture. The dependent variable was the perceived appropriateness of the support seeking. Judgements of appropriateness of communication behaviors can be regarded as indicators of communication rules (Matsumoto, 1990; Brantley-Hill and Brinthaupt, 2014). The experimental setup made it possible to test our expectations regarding the ingroup, outgroup and intercultural interactions.

2. Methods

2.1. Recruitment

Female participants of 18 years and older from the general female population throughout the Netherlands and Suriname were invited. The data were gathered using the online survey environment of Qualtrics. The recruitment took place over a period of seven weeks in Suriname and in the Netherlands, from October 18th to December 4th 2018. Three main recruitment strategies were employed. First Facebook invitations were sent out through 19 popular groups in Suriname and 30 groups in the Netherlands, mainly online marketplaces. Second, about 300 random females received a personal invite through their Facebook account to enter the study. Third, Facebook promotion took place through a dedicated study page, with parameters set at females living in The Netherlands and Suriname in the age group 18 to older than 65 years.

In the invitation, the participants were told that they would participate in an online study about help seeking and they were informed that they had a chance of participating in the drawing of one of ten €20 gift vouchers as a mean of incentive. The Ethical Committee of Psychology of the Faculty of Behavioral and Social Sciences of the University of Groningen provided the approval of this study that includes human subject research (nr. 18,053-O). 1206 women entered the study of which 56.8% ($N = 686$) was eligible for further analyses.

2.2. Procedure

Once people accessed the survey, they were first presented with a survey introduction where they received written information about the purpose, the nature, confidentiality and the duration of the research (10 – 15 min for completion). Next, people were asked for their consent by clicking on the button to continue with the questionnaire. Participants were referred to ten blocks containing questions on general demographics, a cultural assessment section, the experimental conditions and the closing. Each block was preceded with a brief introduction and contained not more than nine questions. In block nine, the participants were randomized to one of the eight experimental conditions, presented as vignettes. In block ten, the dependent variable and some remaining variables were assessed. The study used an experimental procedure into letting the participants believe that they viewed photos of real diabetes type 2 patients, to anticipate on participants' feelings towards patients. Therefore, the study closing included an honest and absolute debriefing, which explained that women portrayed in the pictures were figurants, and their medical status was not as described, but remained unknown.

2.3. The manipulations using vignettes

2.3.1. The introduction

At the commencement of the manipulation, all participants were exposed to the same introduction to all eight conditions. It provided background information on the patient in the coming vignettes, including some typical health and psychological problems faced by type 2 diabetic patients: The illness, the experience and the type of support, which activates the participants' awareness of suffering that a diabetic patient can experience (See Appendix A).

2.3.2. The design

This study consisted of a between-subjects design with a 2 (direct versus indirect support seeking) X 2 (Surinamese patient versus Dutch patient) X 2 (Surinamese support provider versus Dutch support provider)-design, totaling to 8 experimental conditions. These conditions were offered to participants from Suriname or from the Netherlands.

2.3.3. Manipulations of culture

In all conditions participants were presented with five condition-specific photos with different models of Surinamese and/or Dutch women, supported by a presentation of either a direct or an indirect support question (See Appendix B). The viewing of the photos with either a Surinamese or a Dutch woman was meant to activate the sense of the social category (culture) to which a participant can identify herself with (Palomares et al., 2016). It can be expected to lead to experiencing the women on the photos as representing their ingroup or their outgroup. This provides a source for expectations and a context to evaluate the support question as more or less appropriate. Table 1 provides an overview of the 8 conditions, with sample sizes of participants per country.

2.3.4. Manipulations of communication style

The communication style applied in the manipulation follows two patterns. In low-context condition, which is predominant in the individualistic culture (Gudykunst et al., 1996), the communication style follows a direct and explicit pattern (Muraya, et al., 2011). In the high context condition, which is dominant in collectivistic cultures (Gudykunst et al., 1996), the communication style follows an implicit (Muraya et al., 2011) and indirect pattern. Therefore, direct communication was formulated with an explicit question on a tangible social support task, which is support by providing a service (Kim et al., 2008; Mortenson, 2009; Derlega et al., 2003), together with the reason, in the following format: "This is what I ask from you, and this is the reason why I ask you". The indirect communication may provide the basic goal, together with what might be perceived by the other as the reason, and an implicit "self-other" appeal, in the following format. "This is my goal... but this is the case" (See Table 2). The following elements are part of the support request, in the direct and the indirect: 1) the basic goal; 2) the social support task; 3) the reason. In addition, in the indirect communication,

Table 1

Overview of experimental conditions and sample sizes.

Patient	Communication style			
	Indirect		Direct	
	Provider		Provider	
	Surinamese	Dutch	Surinamese	Dutch
Surinamese	C1	C3	C2	C4
	$D n = 39$ $S n = 40$	$D n = 43$ $S n = 44$	$D n = 36$ $S n = 45$	$D n = 37$ $S n = 52$
Dutch	C7	C5	C8	C6
	$D n = 44$ $S n = 46$	$D n = 44$ $S n = 43$	$D n = 41$ $S n = 45$	$D n = 45$ $S n = 42$

Note: C=condition; D = Dutch participants; S = Surinamese participants.

Table 2
Excerpts of the direct and indirect support questions.

Direct support questions	Indirect support questions
(1) Can you bring me to the doctor today? Because I have such pain in my feet and I walk unsteady.	(1) I must go to the doctor today I have such a pain in my feet and if I walk by myself, I will walk unsteady.
(2) Can you read for me what is on the instructions for use of this medicine? Because, I am not seeing so well lately	(2) I have to know what is written on the instructions for this medicine..... Lately, I have difficulty seeing things clearly myself

4) a self-other appeal is included. In the potential reason that is given, the patient refers in some way to “the self”, to indirectly refer to the “the other”. Lastly, a 5) a silence, denoted by “.....” is included in the indirect communication (See Appendix A).

To determine the necessary number of participants needed to detect an effect size, Cohen’s criteria for power of 0.80 with $\alpha = 0.05$ was used. To test the effects of four independent variables of participant culture x patient culture x provider culture x communication style in a four-way ANOVA, a sample size of $n = 45$ is sufficient to detect medium effects sizes (Cohen, 1992). On the basis of studies done by Matsumoto (1990) and (Taylor et al., 2007), small to medium effect sizes can be expected with sample sizes ranging from $n = 39$ to $n = 52$.

2.4. Measurements

2.4.1. Demographics, cultural variability and self-construal

This study gathered demographic information such as age, gender, country of residence, number of years living in the current country of residence, the ethnicity to which the participants identifies herself with, and the main language spoken. A 22-item self-construal scale was applied with measurements of independent and interdependent selves (Singelis, 1994; Markus and Kitayama, 1991; 2010). The independent self (10 items), assessed the extent to which a person perceives oneself as unique and especially promoting one’s own goals ($\alpha = 0.71$); and an interdependent self (12 items), assessed the extent to which a person perceives oneself as more connected to, and less differentiated from others ($\alpha = 0.67$). Next, cultural variability was assessed with 15 of the 16-items of the cultural orientation scale (Triandis and Gelfand, 1998), 8 items were combined to form an individualism score ($\alpha = 0.63$) and 7 items were combined to form a collectivism score ($\alpha = 0.48$). Both instruments were translated earlier into Dutch with a 5-point answer scale ranging from totally disagree (1) to totally agree (5). Although the reliability coefficients are only low to moderate, this study is not unique in this finding as it seems to be caused by the phenomena that are measured: they measure multiple underlying constructs (Cozma, 2011) and features informed by participants’ culture (Oppenheimer, 2004; Lacko et al., 2021). Therefore, we find them acceptable for assessment of the phenomena of individualism and collectivism.

While participants were only offered visual stimuli with a reading task in each condition, we included a set of 6 questions ($\alpha = 0.80$) to test whether they evaluated the help-seeking questions on the lingual content or in the context of help-seeking.

2.4.2. The dependent measure

The extent to which the patients’ request for help is evaluated as “appropriate” is the dependent variable. The measure of appropriateness refers to the extent to which the communication style is perceived as in line with the display rules or communication norms in the particular situation of help-seeking, involving people from the ingroup, the outgroup or both. After viewing each vignette, participants were asked to evaluate the level of appropriateness of the portrayed support-seeking question to the support provider. The measure was adapted from Tominaga and Gudykunst (2003), and the 5-point scale ranged from “not appropriate” (1) to “totally appropriate” (5), where higher scores

indicate higher evaluation of the level of appropriateness. Floyd validated the use of this measurement scale in 1997, in his study including perceptions of behavioral appropriateness (Brantley-Hill and Brinthaup, 2014). This dimension of appropriateness was also used in several former studies assessing communication norms (Brantley-Hill and Brinthaup, 2014; Matsumoto, 1990; Mortenson, 2009).

3. Results

3.1. Participant characteristics

A total of 1206 people entered the online study program, and 686 (56.8 %) were included in the final analyses of which 357 (52.0 %) Surinamese participants and 329 (48.0 %) native Dutch participants. A total of 520 participants were excluded from the study; 411 participants completed less than the minimum necessary completion rate of 87 %, 7 participants were younger than 18 years of age, 5 participants were excluded because of double participation, 1 participant with extreme outlying scores was excluded. For the main hypotheses another 96 participants were excluded; 5 participants who self-identified as non-Surinamese were excluded from the Surinamese sample and likewise 91 non-native Dutch women were excluded from the native-Dutch sample, which totaled $N = 686$ for the main analyses. For the moderation analyses, we made no distinction in the participants’ cultural background and all participants from Suriname and from the Netherlands were entered in the analyses with an eligible sample size of $N = 782$. The participants’ age ranged from 18 to 79 years ($M = 44.95$, $SD = 15.14$). The majority of participants mainly spoke Dutch (96.1 %).

3.2. Randomization check

Three tests were conducted to check the randomization of participants into the eight conditions. Firstly, analysis of variance revealed that in each of the conditions the Surinamese participants were on average younger ($M = 37.93$, $SE 0.697$) compared to the Dutch participants ($M = 52.75$, $SE 0.726$). $F(7386) = 2.244$, $p = .029$. However, there was no significant correlation between the participant’s age and the dependent variable appropriateness of help-seeking $r = -0.015$; $p = .69$ and therefore age was not included as covariate in the interaction models. Secondly, a Chi-square test indicated no significant main effect of condition on speaking language of participants, meaning that Dutch is the main speaking language in all eight conditions for both Dutch and Surinamese participants, $\chi^2(7, N = 686) = 8.92$, $p = .258$. Thirdly, all Dutch participants in each of the conditions were residing in the Netherlands and all Surinamese participants were residing in Suriname, ($ps < 0.001$).

3.3. Effects of participant culture, patient culture, communication style and provider culture

Before testing the specific hypotheses, we conducted an overall, saturated four-way interaction in a 2 (Surinamese versus Dutch participant) x 2 (Surinamese versus Dutch patient) x 2 (direct versus indirect communication style) x 2 (Surinamese versus Dutch provider)-analysis, with appropriateness of help-seeking as dependent variable. Besides interpreting p-values, a measure of effect size was computed for all tests: the partial eta squared (η_p^2), which measures the total variance explained in the dependent variable, while accounting for the effects of other independent variables and interactions, interpreted against the Cohen’s classification of 0.01 as small effect size, 0.06 as medium effect size and 0.14 as a large effect size (Cohen, 1992; Norouzzian and Plonsky, 2018; Pallant, 2020).

The results showed no significant interactions including the central condition “communication style” among the independent variables $ps > 0.05$ (see Table 3). There only was a significant main effect of communication style on level of appropriateness of the help-seeking question, F

Table 3
Four-way ANOVA on appropriateness of help-seeking.

Source	<i>p</i>	η_p^2
Participant culture (A)	.000	.020
Communication style (B)	.000	.026
Patient culture (C)	.189	.003
Provider culture (D)	.028	.007
A x B	.132	.003
A x C	.924	.000
A x D	.214	.002
B x C	.538	.001
B x D	.835	.000
C x D	.726	.000
A x B x C	.601	.000
A x B x D	.685	.000
A x C x D	.025	.008
B x C x D	.529	.001
A x B x C x D	.762	.000

(1670) = 17.45, *p* = .000, η_p^2 = 0.026.

Participants evaluated the direct help-seeking question as more appropriate (*M* = 3.76, *SD* = 0.72) compared to the indirect help question (*M* = 3.48, *SD* = 0.97); *t* (684) = -3.313, *p* = .000, *CI* [-0.41, -0.15]. Fig. 1 shows the mean scores of appropriateness of the preferred communication style for seeking help from a non-professional support provider.

3.4. Appropriateness of seeking help regarding ingroup, outgroup and intercultural interactions

The overall saturated four-way interaction does not reveal the hypothesized differences and contrasts within the groups of interest. Hence, to test our hypotheses with regard to differences in appropriateness among ingroup, outgroup and intercultural level, four one-way ANOVA's were conducted with contrast analyses to test differences within each group and presented in the following four subparagraphs, with supporting tables C1 to C4. The effect size within subjects based on the contrast analyses is reported in tables C1 to C4 with effect size measure Cohen's *d*, which is an appropriate effect size measure for differences between two means, with Cohen's criteria of *d* = 0.2 as small effect, 0.5 as medium effect and 0.8 as large effect (Cohen, 1992; Field, 2018).

3.4.1. Ingroup evaluations

To test how help-seeking among the ingroup was evaluated, a variable (ingroup) representing four levels was developed (see Table C1):

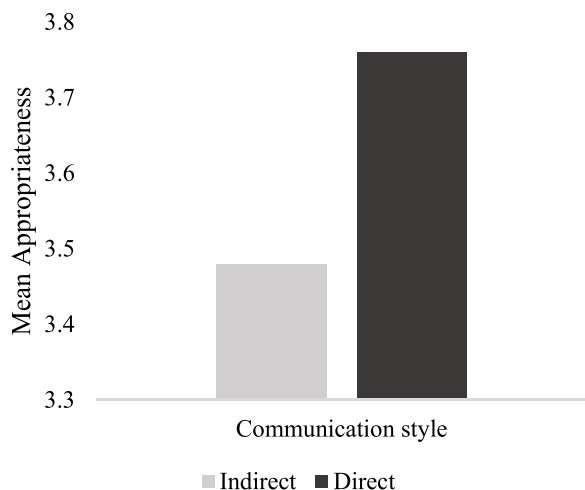


Fig. 1. Mean scores for appropriateness of help-seeking for indirect and direct communication.

with Surinamese participants who evaluated the indirect (level 1) and direct (level 2) support seeking between Surinamese patients and Surinamese providers, and with Dutch participants who evaluated indirect (level 3) and direct (level 4) support seeking between Dutch patients and providers.

First, a one-way ANOVA was conducted with ingroup as independent variable and appropriateness as dependent variable. While it was expected that Surinamese would rate the indirect style as more appropriate, and the Dutch would rate the direct style as more appropriate, the model showed no significant differences on appropriateness between the 4 levels; *F* (3170) = 2.34, *p* = .075, η_p^2 = 0.04. This suggests that Surinamese or Dutch do not differ significantly in their expectations for indirect or direct help-seeking, when it concerns their ingroup. Next, contrast analyses were conducted to compare the mean scores of appropriateness of indirect and direct help seeking in the Surinamese (level 1 vs 2) and in the Dutch (level 3 vs 4) participants. The results showed that among Surinamese participants, the direct help-seeking was rates as significantly more appropriate compared to indirect help-seeking (*M* = 3.84, *SD* = 0.74; *M* = 3.44, *SD* = 1.08; *p* = .028), within their ingroup. In the Dutch the difference was not significant (*p* = .531).

3.4.2. Outgroup evaluations

To test how help-seeking towards the outgroup was evaluated, a variable (outgroup) representing four levels was developed (see Table C2): with Surinamese participants who evaluated the indirect (level 1) and the direct (level 2) support seeking between Dutch patients and Dutch providers, and Dutch participants who evaluated the indirect (level 3) and the direct (level 4) support seeking between Surinamese patients and Surinamese providers.

First, a one-way ANOVA was conducted with outgroup as independent variable and appropriateness as dependent variable. While it was expected that the Surinamese would find the direct style more appropriate in the Dutch, and the Dutch would find the indirect style more appropriate among the Surinamese, the effect only approached significance; *F* (3156) = 2.60, *p* = .054, η_p^2 = 0.048. This suggests that Surinamese or Dutch do not differ significantly in their expectations of what help-seeking style is appropriate in the outgroup. Next, contrast analyses were conducted to compare the mean scores of appropriateness of indirect and direct help seeking in Dutch (level 1 vs 2) and Surinamese (level 3 vs 4) participants. The results showed that in the Dutch participants the difference was not significant (*p* = .169). Surinamese participants evaluated direct help-seeking significantly more appropriate among Dutch patients and providers compared to indirect help-seeking (*M* = 3.89, *SD* = 0.68; *M* = 3.42, *SD* = 1.10; *p* = .017).

Further results showed that Surinamese had more frequent contact with the outgroup, the Dutch then the Dutch did with Surinamese (*M* = 3.02, *SD* = 0.87; *M* = 1.77, *SD* = 0.71; *t* = 20.390, *p* < .001). To test whether contact with the outgroup had an effect on the interaction between communication style and outgroup, an ANCOVA was conducted which did not show an effect of contact with the outgroup on this interaction (*F* (1135) = 0.05, *p* = .816, η_p^2 = 0.000).

3.4.3. Intercultural evaluations; patient from ingroup

To test how help-seeking between the intercultural patient and provider was evaluated from the perspective of a participant with similar cultural background as the patient, a variable (intercultural-patient) with four levels was developed (see Table C3): with Surinamese participants who evaluated the indirect (level 1) and direct (level 2) support seeking between Surinamese patients and Dutch providers, and Dutch participants who evaluated indirect (level 3) and direct (level 4) support seeking between Dutch patients and Surinamese providers.

First, a one-way ANOVA was conducted with ingroup as independent variable and appropriateness as dependent variable. It was expected that participants would have a preference for a direct or indirect style based on projection of their ingroup rules or accommodation to the outgroup rules. However, the model showed no significant effect of this

intercultural evaluation on appropriateness of indirect and direct help-seeking; $F(3177) = 2.19, p = .091, \eta_p^2 = 0.036$. Next, contrast analyses were conducted to compare the mean scores of appropriateness of indirect and direct help seeking in the Surinamese (level 1 vs 2) and in the Dutch (level 3 vs 4) participants. The results showed that Surinamese participants evaluated direct help-seeking as significantly more appropriate for Surinamese patients with Dutch providers ($M = 3.93, SD = 0.73; M = 3.57, SD = 1.04; p = .039$). In the Dutch the difference was not significant ($p = .609$).

3.4.4. Intercultural evaluations; provider from ingroup

To test how help-seeking between the intercultural patient and provider was evaluated from the perspective of a participant with different cultural background as the patient, a variable (intercultural-provider) with four levels was developed (see Table C4): with Dutch participants who evaluated the indirect (level 1) and direct (level 2) support seeking between Surinamese patients and Dutch providers, and Surinamese participants who evaluated indirect (level 3) and direct (level 4) support seeking between Dutch patients and Surinamese providers.

First, a one-way ANOVA was conducted with ingroup as independent variable and appropriateness as dependent variable. Again, it was expected that participants would have a preference for a direct or indirect style based on projection of their ingroup rules or accommodation to the outgroup rules. The model showed a significant effect; $F(3167) = 9.02, p < .001, \eta_p^2 = 0.14$. This significance seemed to be caused by a main effect of communication style: Contrast analysis were conducted to compare the mean scores of appropriateness of indirect and direct help seeking in the Dutch (level 1 vs 2) and in the Surinamese (level 3 vs 4) participants, but results showed no significant differences among Surinamese and among Dutch who evaluated the intercultural interactions, $p > .05$.

3.5. Effects cultural related individual differences on the appropriateness of help-seeking

3.5.1. Correlation

Table 4 shows the correlation between independent, interdependent self, individualism, collectivism and appropriateness. Independent self was moderately related to individualism ($r = 0.45, p < .001$) and interdependent self was also moderately related to collectivism ($r = 0.55, p < .001$). In addition, there were low, but significant correlations between independent self and collectivism ($r = 0.20, p < .001$) and between interdependent self and individualism ($r = 0.09, p < .001$). These variables were therefore included as covariates in the coming moderation analyses.

3.5.2. Moderation effects of cultural related individual differences on the appropriateness of help-seeking

The previous analyses showed that the cultural background of Dutch or Suriname patients and providers, as experimentally manipulated by looks, had little effect on the preferred communication style used for help-seeking. Therefore, additional analyses were conducted in all participants recruited and living in Suriname or in the Netherlands ($N =$

Table 4
Correlation between cultural related individual differences.

	1	2	3	4	5
1. Appropriateness	–				
2. Independent self	.140**	–			
3. Interdependent self	.180**	.108**	–		
4. Individualism	.050	.452**	.095*	–	
5. Collectivism	.155**	.207**	.554**	.154**	–

Note:.

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

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

782). Independent of their cultural background, now the moderation effects of individual differences in individualism, collectivism, independent self, interdependent self on rating of appropriateness of direct or indirect help seeking were tested. Because the measures of these individual differences were all related (see the above correlations), thereby leaving the possibility of confounding, all four interactions were tested in a single ANOVA model (Yzerbyt et al., 2004). The results are presented in table C5. No evidence was found for moderation of interdependent self ($F(1772) = 2.41, p = .121, \eta_p^2 = 0.003$), individualism ($F(1772) = 0.15, p = .695, \eta_p^2 = 0.000$), collectivism ($F(1772) = 0.91, p = .340, \eta_p^2 < 0.001$). Only the interaction between independent self and communication style approached significance ($F(1772) = 3.14, p = .065, \eta_p^2 = 0.004$).

Exploration showed that when individualism was excluded from the analysis, the interaction between communication style and independent self became significant ($F(1774) = 5.07, p = .025, \eta_p^2 = 0.007$). Therefore, further analyses were conducted to show the meaning of the interaction. To test whether the main effect of communication style was significant when independent self was low and when it was high, a low independent self-group and high independent self-group were modelled using the whole dataset. This was done by increasing and decreasing the z-scores of independent self with 1 standard deviation (Siero et al., 2009). The analyses showed that only when independent self was high, communication style had a significant effect on appropriateness ($F(1772) = 20.89, p = .000, \eta_p^2 = 0.026$); in the low independent self group, the main effect of communication style only approached significance ($F(1772) = 3.17, p = .075, \eta_p^2 = 0.004$). As shown in Fig. 2, especially when participants scored high on independent self, their preference for direct communication was strong.

3.5.3. Differences between Dutch and Surinamese on cultural related individual differences

When comparing Dutch and Surinamese ($N = 782$) on their scores of interdependent self, independent self, individualism and collectivism, results showed unexpectedly that Surinamese participants scored higher on all these measurements (p 's < 0.001). To check our assumption that Surinamese participants can be treated as having a unitary cultural background, sub groups of Surinamese participants were compared on the four individual differences. For this test, the two largest ethnicity groups were selected: Hindustani, people from Indian descendants ($n = 118$) and Mixed ethnicity ($n = 122$), respectively a Surinamese Asian and non-Asian group. The results showed that Hindustani participants living in Suriname had a significant higher interdependent score compared to mixed ethnic participants ($M = 3.61, SD = 0.46; M = 3.43, SD = 0.45; t = 249.65, p = .003$).

4. Discussion

This study investigated how direct and indirect verbal support seeking questions from Dutch and Surinamese female patients to non-professional Dutch or Surinamese support providers were evaluated by Dutch and Surinamese female participants. We expected that Dutch participants would evaluate direct help-seeking questions as more appropriate and Surinamese people would evaluate the indirect help-seeking questions a more appropriate way of seeking help with a physical health related task. The expectation was based on the theoretical framework in which the Surinamese culture is more collectivistic and collectivistic cultures seek support in a more implicit way, while the Dutch culture is more individualistic, and therefore associated with seeking support in a more explicit way (Kim et al., 2006; Matsumoto, 1990; Mesquita, 2001; Gudykunst et al., 1996; Mortensen, 2009).

The first main result showed that both Dutch and Surinamese participants evaluated direct help seeking as more appropriate compared to indirect help seeking. Thus, independent of the cultural background of the patient and the provider, and independent of the own cultural background of the participant, the direct formulated request for help

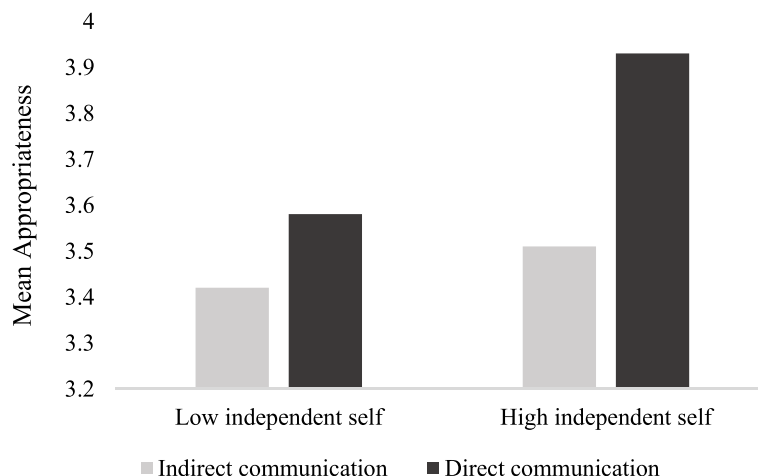


Fig. 2. Independent self as moderator of the effect of communication style on appropriateness of help-seeking.

was seen as more appropriate than the indirect request. It may be that the Surinamese and the Dutch have become more alike. This might be understood through the Communication Accommodation Theory, which explains that a person adjusts and adapts their communication in response to an interaction partner's communication (Gasiorek, 2016); a process which is also embedded in socio-historical context (Giles and Ogay, 2007; Harwood et al., 2006). Suriname and the Netherlands do share a long standing social history (St-Hilaire, 2001). Surinamese are the third largest residents with a migration background in the Netherlands (Centraal Bureau voor de Statistiek, 2021), and with about 350.000 Surinamese living in the Netherlands, of which half include first generation migrants, a Suriname population of 575.000 in Suriname (Algemeen Bureau voor de Statistiek in Suriname, 2017), and Dutch as common official language (Diepeveen and Hüning, 2016), frequent family relationships, interactions and mutual cultural influence between Surinamese and Dutch is inevitable.

The overall preference for the direct communication style, which is more associated with individualistic cultures, suggests that Surinamese have been more inspired by the Dutch than the other way around. Therefore, even though the Surinamese culture is generally characterized as more collectivistic and Dutch as more individualistic, it is likely that participants accommodated their evaluation of the appropriate communication style for help seeking as part of an effort to support and maintain intergroup interaction, which then minimizes the social differences in the interaction (Giles and Ogay, 2007). Similar result was found in a cross-cultural study among Pattani and Javanese students where communication accommodation was performed to level communication behavior with their speech partners (Jazeri and Nurhayati, 2019). The interpretation that at least the cultural orientation of the present Surinamese and Dutch participants were similar was tested by comparing them on the two cultural dimensions and two personal orientations. Surprisingly, the Surinamese participants scored higher on all scales. This is a confusing finding that may be caused by Surinamese participants being more agreeable regarding all kinds of formulations of statement on the self in relation to others.

Besides the above explanation that the two cultural group are more similar on cultural-relevant dimensions, the result may also be related to the specific context of help seeking by a diabetes patient. That is, if a situational context is health related and the help question imposes a high sense of importance or urgency, it is possible that people retain or deviate from their underlying communication rules. For example, in our case with the Surinamese Asian group who were higher in interdependent self, but still did not find the indirect help seeking more appropriate as we would have expected, contextual communication rules might apply. Derived from contextual display rules which refer to the perceptions that particular emotions should be displayed in a specific set of

circumstances (Richard and Converse, 2015). From this perspective it may be that, participants demonstrate a within-person variance in underlying communication rules, where direct help seeking by a patient who is physically suffering is more appropriate, but when the help question relates to a non-health matter, different rules apply.

Although the above main finding of direct help-seeking being received as more appropriate by Surinamese as well as Dutch participants was not in line with our initial theoretical expectations, the additional moderation effect was in the expected direction: Especially participants with a strong independent self-construal had a high preference for the direct communication message. This is congruent with the theoretical notion that defining oneself more as an independent individual lowers the need to be modest and similar to others to not threaten dependence relations (Fischer, et al., 2009). Thus, people with such an independent self-construal find it more appropriate to be more clear and explicit in help seeking, as in direct communication.

This study has some relevant limitations. Firstly, the face vignettes used in this study only expressed a neutral expression. The expression of the emotions can have a moderation effect on evaluations made by support providers about the appropriateness of how help is sought (Matsumoto et al., 2010); this study did not address the possible effects of the facial expressions, but only on the manipulated ethnic background. Secondly, the support provider in the manipulations was presented as "an acquaintance" with the own, or another ethnic background to avoid that the request for help would be to a stranger. This may not have been optimal as earlier studies identified an acquaintance as a non-close relation and thus an outgroup (Matsumoto, et al., 2008; Gächter, et al., 2015; Flicker et al., 2017). However, dependent on the level of closeness, the acquaintance can be an outgroup when compared to close friends, but an ingroup when compared to people of other countries (Matsumoto, et al., 2008). A third limitation of the study is about the ethnic composition of the sample. While the Dutch models on the photo's (patients and providers) were quite homogenous in physical appearance, the Surinamese models represented different Surinamese ethnic subgroups. Differences found in earlier studies with regard to emotional expressions to ingroups and outgroups included homogenous population samples such as Asian populations (Matsumoto, 1990; Kim et al., 2006; Gudykunst, et al., 1996). Nevertheless, Hofstede (2011), Gudykunst et al. (1996) and Mesquita (2001), speak of generalized cultural norm, where the Dutch population is individualistic and the Surinamese population collectivistic. And even though general cultural variability applies, individual differences within cultures do not always fit the generalized culture characterization, as was shown in our study. Lastly, participation in this online study required both reading and digital literacy, which limited participation though exclusion of participants without these skills. Although this is in principle undesirable, we

do not know whether literacy is related to help seeking preferences and would have influenced our results. Furthermore, nowadays more and more people from the general population are acquainted with the internet, and data gathering through the internet (also for medical or scientific purposes) has become standard practice. Facebook recruitment can be successful in reaching a wide range of people in the general population, resulting in diversity in age for our sample, which was relevant for our study. Although the presently used recruitment strategy was not limited to one or two Facebook groups, with possibly particular types of users, it cannot be ruled out that some relevant selection has occurred. However, results from electronic surveys are in general comparable with results from studies conducted in highly controlled laboratory environment (Dijkstra et al., 2009) or with paper/pencil surveys (Boyer et al., 2002), with some advantages as fewer missing data, greater protection of anonymity (Ward et al., 2014) and no difference in interpretation of questions (Leung and Kember, 2005). Therefore, we do not expect that the recruitment procedure and the use of the internet to gather data lowers the validity of the results. However, it remains important to study other populations to assess solidity of the findings.

The present study showed that Dutch and Surinamese participants evaluated direct support seeking to an acquaintance as more appropriate when compared to indirect support seeking. This effect was present over and above expected influences of ingroup, outgroup and intercultural manipulations. In addition, this effect was especially present in people with a strong independent self-construal. Although the study has relevant limitations, it increased our insight in communication rules with regard to help-seeking and showed that stereotypical inferences, even theory-based, need to be applied very carefully. The study showed that, overall, direct help-seeking is seen as more appropriate; it demonstrated that individual differences within cultures do not always fit our expectations on the generalized group communication styles. Formal support providers should closely assess and understand individual patients'

help-seeking communication style, improve the patients' awareness of their typical help-seeking, and when desired, support them in adapting their help-seeking to strengthen their self-management capacity (Leventhal et al., 2008). At the end, it seems that we cannot generalize and say 'because Suriname is a collectivistic and high context culture, Surinamese prefer indirect help-seeking' or 'because the Netherlands has an individualistic and low context culture, Dutch prefer direct help-seeking'. Given that both the Netherlands and Suriname are multi-ethnic populations (Mesquita, 2001; Salentin and Schmeets, 2017; Herfs and Gishti, 2016) and the Netherlands will continue to develop as such (Centraal Bureau voor de Statistiek, 2019), these findings inspire future research on communication rules applied in help-seeking, close to the practical reality where daily intercultural interactions between patients and support providers are inevitable and common.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Text for the experimental conditions

Introduction of the manipulation

Diabetes is a disease that can cause problems anywhere in the body. People with diabetes may feel tired more often, experience blurred or poor vision, suffer from badly healed wounds, suffer from shortness of breath or pain in the legs when walking. They also have a greater risk of getting cardiovascular disease. This makes it very difficult for people with this disease.

Direct support questions

1. Can you bring me to the doctor today? Because I have such pain in my feet and I walk unsteadily
2. Can you read for me what is on the instructions for use of this medicine? Because, I am not seeing so well lately
3. Can you help me put a new bandage for the wound on my toe? Because I have difficulty reaching it.
4. Can you get me some vegetables and fruit today? Because I feel so tired and can't do this today.
5. Can you watch the children this afternoon? Because, I have to go to the physiotherapy from 2.00 to 3.00pm

Indirect support questions

1. I must go to the doctor today I have such a pain in my feet and if I walk by myself, I will walk unsteadily
2. I have to know what is written on the instructions for this medicine Lately, I have difficulty seeing things clearly myself
3. I need a new bandage for the wound on my toe I have difficulty reaching it myself
4. I need fruit and vegetables today I feel so tired that I can't do this myself.
5. The children must be watched today.....I have to go to the physiotherapist by myself from 2.00 to 3.00pm

Appendix B. Sample photos of the experimental conditions

Communication style	
Indirect	Direct
<p>Condition 1</p>  <p>Ik moet een nieuw verband voor de wond op mijn teen ik kom er zelf niet zo goed bij</p> <p>Patiënt Een kennis</p>	<p>Condition 2</p>  <p>Kan je me helpen met het zetten van een nieuw verband voor de wond op mijn teen? Want ik kom er niet zo goed bij.</p> <p>Patiënt Een kennis</p>
<p>Condition 3</p>  <p>Ik moet vandaag naar de dokter Ik heb zo'n pijn in mijn voeten en als ik op mezelf loop dan loop ik wankel</p> <p>Patiënt Een kennis</p>	<p>Condition 4</p>  <p>Kan je me vandaag naar de dokter brengen? Want ik heb zo'n pijn in mijn voeten en ik loop ik wankel</p> <p>Patiënt Een kennis</p>
<p>Condition 5</p>  <p>Ik moet vandaag naar de dokter Ik heb zo'n pijn in mijn voeten en als ik op mezelf loop dan loop ik wankel</p> <p>Patiënt Een kennis</p>	<p>Condition 6</p>  <p>Kan je me vandaag naar de dokter brengen? Want ik heb zo'n pijn in mijn voeten en ik loop ik wankel</p> <p>Patiënt Een kennis</p>
<p>Condition 7</p>  <p>Ik moet een nieuw verband voor de wond op mijn teen ik kom er zelf niet zo goed bij</p> <p>Patiënt Een kennis</p>	<p>Condition 8</p>  <p>Kan je me helpen met het zetten van een nieuw verband voor de wond op mijn teen? Want ik kom er niet zo goed bij.</p> <p>Patiënt Een kennis</p>

Note: The gray bars were not depicted in the experiment.

Appendix C. Tables

Tables C1, C2, C3, C4, C5

Table C1Appropriateness of communication style in *ingroup* encounters, according to Surinamese and Dutch participants.

Level	Participant	Ingroup		n	Mean	SD	p	Cohen's d
		Communication style	Patient * Provider					
1	S	Indirect	S*S	40	3.44	1.08	.028	.43
2	S	Direct	S*S	45	3.84	.74		
3	D	Indirect	D*D	44	3.43	.84	.531	.15
4	D	Direct	D*D	45	3.54	.60		

Note: S = Surinamese; D = Dutch.

Table C2Appropriateness of communication style in *outgroup* encounters, according to Surinamese and Dutch participants.

Level	Participant	Outgroup Condition		n	Mean	SD	p	Cohen's d
		Communication style	Patient * Provider					
1	D	Indirect	S*S	39	3.48	.90	.169	.32
2	D	Direct	S*S	36	3.76	.80		
3	S	Indirect	D*D	43	3.42	1.10	.017	.51
4	S	Direct	D*D	42	3.89	.68		

Note: S = Surinamese; D = Dutch.

Table C3Appropriateness of communication style in intercultural encounters with an *ingroup patient*, according to Surinamese and Dutch participants.

Level	Participant	Intercultural condition		n	Mean	SD	p	Cohen's d
		Communication style	Patient * Provider					
1	S	Indirect	S*D	44	3.57	1.04	.039	.40
2	S	Direct	S*D	52	3.93	.73		
3	D	Indirect	D*S	44	3.54	.86	.609	.11
4	D	Direct	D*S	41	3.63	.67		

Note: S = Surinamese; D = Dutch.

Table C4Appropriateness of communication style in intercultural encounters with an *ingroup provider*, according to Surinamese and Dutch participants.

Level	Participant	Intercultural condition		n	Mean	SD	p	Cohen's d
		Communication style	Patient * Provider					
1	D	Indirect	S*D	43	3.16	.92	.235	.25
2	D	Direct	S*D	37	3.38	.81		
3	S	Indirect	D*S	46	3.76	.96	.134	.32
4	S	Direct	D*S	45	4.02	.60		

Note: S = Surinamese; D = Dutch.

Table C5

Two-way ANCOVA on appropriateness of help-seeking.

Source	p	η_p^2
Communication style (A)	.000	.029
Independent self (B)	.001	.013
Interdependent self (C)	.003	.011
Individualism (D)	.587	.000
Collectivism (E)	.068	.004
A x B	.065	.004
A x C	.121	.003
A x D	.695	.000
A x E	.340	.001

References

Algemeen Bureau voor de Statistiek in Suriname, 2017. *Demografische data 2013-2016*.
 Boyer, K.K., Olson, J.R., Calantine, R.J., Jackson, E.C., 2002. Print versus electronic surveys: a comparison of two data collection methodologies. *J. Operat. Manage.* 20, 357–373.

Brantley-Hill, S.M., Brinthaup, T.M., 2014. Perceptions of affectionate communication among people with unfavorable and favorable attitudes toward homosexuality. *J. Homosex.* 62 (2), 270–287.

Centraal Bureau voor de Statistiek. (2019). *Forecast: 19 million inhabitants in 2039*. Retrieved from <https://www.cbs.nl/en-gb/news/2019/51/forecast-19-million-inhabitants-in-2039>.

Centraal Bureau voor de Statistiek. (2021). *Migratie achtergrond*. Retrieved from [cbs.nl: https://www.cbs.nl/nl-nl/visualisaties/dashboard-bevolking/migratieachtergrond](https://www.cbs.nl/nl-nl/visualisaties/dashboard-bevolking/migratieachtergrond).

- Cohen, J., 1992. A power primer. *Psychol. Bull.* 112 (1), 155–159.
- Cozma, L., 2011. How are individualism and collectivism measured? *Romanian J. Appl. Psychol.* 13 (1), 11–17.
- Derlega, V.J., Winstead, B.A., Oldfield III, E.C., Barbee, A.P., 2003. Close relationships and social support in coping with HIV: a test of sensitive interaction systems theory. *AIDS Behav.* 7 (2), 119–129.
- Diepeveen, J., Hüning, M., 2016. The status of Dutch in post-colonial suriname. In: Schmidt-Brücken, D., Schuster, S., wienberg, M. (Eds.), *Aspects of (post)colonial linguistics. Current perspectives and new approaches.* De Gruyter, Berlin, Boston, pp. 131–155. <https://doi.org/10.1515/9783110436907-007>.
- Dijkstra, A., Schakenraad, R., Menninga, K., Buunk, A.P., Siero, F., 2009. Self-discrepancies and involvement moderate the effects of positive and negative message framing in persuasive communication. *Basic Appl. Soc. Psych.* 31, 234–243.
- Feldman, R.S., 1982. *Development of Nonverbal Behavior in Children.* Springer Science+Business Media, New York. <https://doi.org/10.1007/978-1-4757-1761-7>.
- Field, A., 2018. *Discovering Statistics Using IBM SPSS Statistics.* Sage publications Ltd, London.
- Fischer, R., Ferreira, M.C., Assmar, E., Redford, P., Harb, C., Glazer, S., Achoui, M., 2009. Individualism-Collectivism as descriptive norms. Development of a subjective norm approach to culture measurement. *J. Cross. Cult. Psychol.* 40 (2), 187–213.
- Flicker, S.M., Ayoub, H.J., Guynn, M.J., 2017. Emotional display rules in Palestine: ingroup/outgroup membership, status of interaction partner and gender. *Internat. J. Psychol.*
- Gächter, S., Starmer, C., Tufano, F., 2015. Measuring the closeness of relationships: a comprehensive evaluation of the 'inclusion of the other in the self' scale. *PLoS. One* 10 (6).
- Gasiorek, J., 2016. Theoretical perspectives on interpersonal adjustments in language and communication. In: Giles, H. (Ed.), *Communication accommodation theory: negotiating personal relationships and social identities across contexts.* Cambridge University Press, Cambridge, United Kingdom, pp. 13–35. <https://doi.org/10.1017/CBO9781316226537.00>.
- Giles, H., Ogay, T., 2007. Communication accommodation theory. In: Whaley, B., Samter, W. (Eds.), *Explaining communication: Contemporary Theories and Exemplars.* Lawrence Erlbaum, Mahwah, NJ, pp. 293–310.
- Gudykunst, W.B., Matsumoto, Y., Ting-Toomey, S., Nishida, T., Kim, K., Heyman, S., 1996. The influence of cultural individualism-collectivism, self construals, and individual values on communication styles across cultures. *Hum. Commun. Res.* 22 (5), 510–543.
- Harwood, J., Soliz, J., Lin, M.C., 2006. Communication accommodation theory: an intergroup approach to family relationships. In: Braithwaite, D., Baxter, L.A. (Eds.), *Engaging theories in family communication: multiple perspectives.* Sage publications, Inc., pp. 19–34. <https://doi.org/10.4135/9781452204420.n2>
- Herfs, P.G., Gishti, O., 2016. Migration and health effects in the Netherlands. In: Renzaho, A.M. (Ed.), *Globalisation, migration, Health.* Imperial College Press, Sydney, Australia, pp. 305–328.
- High, A.C., Scharp, K.M., 2015. Examining family communication patterns and seeking social support direct and indirect effects through ability and motivation. *Hum. Commun. Res.* 41, 459–479.
- Hofstede, G., 2011. Dimensionalizing cultures: the Hofstede model in context. *Online Read. Psychol. Cult.* 2 (1).
- Jazeri, M., Nurhayati, D., 2019. Cross-cultural communication: communication accommodation experiences of Pattani students with Javanese students at IAIN Tulungagung. *J. English Lang. Teach. Linguistics* 4 (3), 379–393.
- Kim, H.S., Sherman, D.K., Taylor, S.E., 2008. Culture and social support. *American Psychol.* 63 (6), 518–526.
- Kim, H., Sherman, D., Ko, D., Taylor, S.E., 2006. Pursuit of comfort and pursuit of harmony: culture, relationships, and social support seeking. *Personal. Social Psychol. Bull.* 32 (12), 1595–1607.
- Lacko, D., Čeněk, J., Urbánek, T., 2021. Psychometric properties of the independent and interdependent self-construal questionnaire: evidence from the Czech Republic. *Front. Psychol.* 12 (564011).
- Leung, D.Y., Kember, D., 2005. Comparability of data gathered from evaluation questionnaires on paper and through internet. *Res. High. Educ.* 46 (5), 571–591.
- Leventhal, H., Weinman, J., Leventhal, E.A., Phillips, L.A., 2008. Health Psychology: the search for pathways between behavior and health. *The Annual Review of Psychology* 59, 477–505.
- Markus, H.R., Kitayama, S., 1991. Culture and the self: implications for cognition, emotion, and motivation. *Psychol. Rev.* 98 (2), 224–253.
- Markus, H.R., Kitayama, S., 2010. Cultures and selves: a cycle of mutual constitution. *Perspect. Psychol. Sci.* 5 (4), 420–430.
- Matsumoto, D., 1990. Cultural similarities and differences in display rules. *Motiv. Emot.* 14 (3), 195–214.
- Matsumoto, D., Hwang, H., Yamada, H., 2010. Cultural differences in the relative contributions of face and context to judgements of emotions. *J. Cross. Cult. Psychol.* 1 (21).
- Matsumoto, D., Yoo, S., Fontaine, J., Anguas-Wong, A.M., Arriola, M., Ataca, B., Granskaya, J.V., 2008. Mapping expressive differences around the world. The relationship between emotional display rules and individualism versus collectivism. *J. Cross. Cult. Psychol.* 55 (74).
- Mayo, A.Y., 2004. Expressions of individualistic and collectivistic beliefs in surinamese-Dutch, dutch middle-class, and dutch working-class mother-child interactions. *SCO-Kohnstamm Instituut.*
- Mesquita, B., 2001. Emotions in collectivistic and individual contexts. *J. Pers. Soc. Psychol.* 80 (1), 68–74.
- Mesquita, B., Walker, R., 2003. Cultural differences in emotions: a context for interpreting emotional experiences. *Behav. Res. Ther.* 41, 777–793.
- Mortenson, S.T., 2009. Interpersonal trust and social skill in seeking social support among Chinese and Americans. *Communic Res* 36 (1), 32–53.
- Muraya, J.G., Miller, A.N., Mjomba, L., 2011. Implications of high-/low-Context communication for target audience member interpretation of messages in the Nimechill abstinence campaign in Nairobi, Kenya. *Health Commun.* 26, 516–524.
- Norouzian, R., Plonsky, L., 2018. Eta- and partial eta-squared in L2 research: a cautionary review and guide to more appropriate usage. *Second. Lang. Res.* 34 (2), 257–271.
- Nurullah, A.S., 2012. Received and provided social support: a review of current evidence and future directions. *Am. J. Health Stud.* 27 (3), 173–188.
- Oppenheimer, L., 2004. Perception of individualism and collectivism in Dutch society: a developmental approach. *Int. J. Behav. Dev.* 28 (4), 339–346.
- Pallant, J., 2020. *SPSS survival manual. A step by step guide to data analysis using IBM SPSS.* McGraw-hill education, London.
- Palomares, N.A., Giles, H., Soliz, J., Gallois, C., 2016. Intergroup accommodation, social categories, and identities. In: Giles, H. (Ed.), *Communication accommodation theory. Negotiating personal relationships and social identities across contexts.* Cambridge University Press, Cambridge, pp. 123–151. <https://doi.org/10.1017/CBO9781316226537.007>.
- Richard, E.M., Converse, P.D., 2015. An examination of within-person variance in contextual display rules and deviation from display rules. *Eur. J. Work Organ. Psychol.* 25 (3), 412–429.
- Safdar, S., Matsumoto, D., Kwantes, C., Friedlmeier, W., Hee Yoo, S., Kakai, H., Shigemasa, E., 2009. Variations of emotional display rules within and across cultures: a comparison between Canada, USA and Japan. *Canadian J. Behav. Sci.* 41 (1), 1–10.
- Salentin, K., Schmeets, H., 2017. Sampling immigrants in the Netherlands and Germany. *Comp. Migr. Stud.* 5 (21).
- Siero, F., Huisman, M., Kiers, H., 2009. *Voortgezette Regressie En Variantie Analyse.* Springer Media, Houten.
- Singelis, T.M., 1994. The measurement of independent and interdependent self-construals. *Soc. Personal. Social Psychol.* 20 (5), 580–591.
- St-Hilaire, A., 2001. Ethnicity, assimilation and nation in plural Suriname. *Ethn. Racial Stud.* 24 (6), 998–1019.
- Taylor, S.E., Welch, W.T., Kim, H.S., Sherman, D.K., 2007. Cultural differences in the impact of social support on psychological and biological stress responses. *Psychol. Sci.* 18 (9), 831–837.
- Tominaga, J., Gudykunst, W.B., 2003. Perceptions of effective communication in the United States and Japan [Paper presentation]. May 27. Annual meeting of the international communication association, San Diego, CA.
- Triandis, H.C., Gelfand, M.J., 1998. Converging measurement of horizontal and vertical individualism and collectivism. *J. Pers. Soc. Psychol.* 74 (1), 118–128.
- Uskul, A.K., Hynie, M., Lalonde, R.N., 2004. Interdependence as a mediator between culture and interpersonal closeness for Euro-Canadians and Turks. *J. Cross. Cult. Psychol.* 35 (2), 174–191.
- Ward, P., Clark, T., Zabriskie, R., Morris, T., 2014. Paper/pencil versus online data collection. *J. Leis. Res.* 46 (1), 84–105.
- Yoo, S., 2013. The context of perceived and desired social support among Korean older adults. *Psychol. Health Med.* 18 (1), 47–55.
- Zyerbyt, V.Y., Muller, D., Judd, C.M., 2004. Adjusting researchers' approach to adjustment: on the use of covariates when testing interactions. *J. Exp. Soc. Psychol.* 40, 424–431. <https://doi.org/10.1016/j.jesp.2003.10.001>.