

Turkish Individuals' Listener Reactions To The Person Who Stutters: A Cross-Cultural Comparative Study

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Abstract

Social attitudes and reactions towards people who stutter (PWS) are generally examined through scales. The purpose of this study is to compare the attitudes and behaviors of Turkish and non-Turkish individuals in their interactions with PWS in an experimental condition. The participants were two PWS and 16 adults as interaction partners, including eight Turkish and eight non-Turkish individuals. In the experiment, each interaction partner engaged in a conversation with PWS on spontaneous themes. Four raters scored the attitudes of the interactors by watching the recorded videos via a questionnaire consisting of 49 antonym adjectives. Two raters calculated the interactive behaviors of the interaction partners. Based on the qualities with an agreement rate over .7 according to the reliability findings, the groups were compared with independent samples t-test. In the behavioral sense, the Turkish group exhibited significantly more 'sentence completion' and 'asking consecutive questions' behaviors compared to the non-Turkish group. In terms of interaction attitudes, the Turkish group received significantly higher scores in responding in the first syllable, completing the statement, being serious and anxious. In comparison to the Turkish group, the non-Turkish group received significantly higher scores in using gestures/ facial expressions and being empathetic, warm, positive, sincere, sympathetic, and open.

Keywords: culture, interactor attitude, interactor behavior, stuttering

Türk Bireylerin Kekemeliği Olan Bireylere Yönelik Dinleyici Tepkileri: Kültürlerarası Bir Karşılaştırma

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Öz

Kekemeliği olan bireylere yönelik toplumsal tutumların ve tepkilerin genellikle ölçekler ile incelendiği görülmektedir. Bu çalışmanın amacı Türk ve Türk olmayan bireylerin kekemeliği olan bir bireyle etkileşimleri esnasında sergiledikleri tutumları ve davranışları deneysel bir koşulda karşılaştırmaktır. Çalışmanın katılımcıları, kekemeliği olan iki yetişkin birey ve etkileşim partneri rolünde sekiz Türk ve sekiz Türk olmayan 16 yetişkin bireydir. Deney aşamasında her bir etkileşim partneri, kekemeliği olan bir birey ile bazı temalarda bire bir sohbet etmiştir. Değerlendirme aşamasında dört puanlayıcı algıladıkları tutumlar bakımından 49 maddelik, zıt sıfatlardan oluşan bir sıfat listesi üzerinden etkileşim partnerlerini puanlamışlardır. Ayrıca iki puanlayıcı etkileşimcilerin etkileşim davranışlarını hesaplamışlardır. İki grup, puanlayıcılar arası uyum düzeyi .7 ve üstünde bulunan nitelikler bakımından bağımsız örneklemeler t-testi ile karşılaştırılmıştır. Davranışsal açıdan Türk grup Türk olmayan gruptan anlamlı düzeyde daha sık 'cümle tamamlama' ve 'art arda soru sorma' davranışı sergilemiştir. Etkileşim tutumu açısından ise Türk grup yabancı gruba göre ilk hecede cevap veren, ifadeyi tamamlayan, ciddi ve kaygılı maddelerinden anlamlı düzeyde yüksek puanlar almıştır. Türk olmayan grup Türk gruba göre jest/mimik kullanan, empatik, cana yakın, pozitif, içten, samimi ve açık sıfatlarında anlamlı düzeyde yüksek puanlar almıştır.

Anahtar Kelimeler: kültür, etkileşimci tutumu, etkileşimci davranışı, kekemelik

Introduction

Stuttering and Social Environment

Although stuttering is mainly defined by stuttering behaviors (Yairi and Seery, 2014), this phenomenon is not only defined on an individual-specific basis. This disorder is considered as a sociological phenomenon, along with its social-emotional factors involving its many dimensions (Zhang and Kalinowski, 2012). Being so, this fluency disorder has the potential to affect the communication between the persons who stutter (PWS) and the environment (Healey, 2010). For example, the severity of stuttering varies according to the perceived listener position (e.g., authority, teacher) and environment (e.g., telephone, bigger groups) (van Riper, 1982; Kalinowski and Saltuklaroglu, 2006; Bloodstein and Bernstein-Ratner 2008). PWSs are exposed to some negative stereotyping including being considered as shy, anxious, nervous, tense, withdrawn and guarded (St. Louis and Lass, 1981; Kalinowski, Stuart, and Armson, 1996). Moreover, listeners exhibit different emotional, behavioral and physiological responses while listening to PWS (Guntupalli et al., 2007; Bowers et al., 2010). Thus, PWS face social penalties and stigmatization, and even self-stigmatization (Boyle, 2013). Therefore, vocational, educational and social participation and quality of life levels of PWS are adversely affected (Yaruss and Quesal, 2006; Boyle, 2015).

In the literature, studies that focus on the responses of the listeners to the non-fluent speech, which was measured in various ways, are remarkable. As for behavioral evaluations, listeners may react to non-fluent speech by missing eye contact, completing the word, or intervening (Kamhi, 2003). In another study, Freud et al. (2016) examined the behaviors of conversational partners (CPs) in their communication with adults who stutter (AWS) and adults who do not stutter (AWNS). Researchers have found that CPs exhibited a higher rate of "interruptions and completions in response to stuttered turns". Moreover, CPs exhibited a larger proportion of 'reinforcers' during their conversations with the AWS with moderate stuttering severity, in comparison to the AWS with mild severity.

In some studies, listeners' eye gaze responses were measured objectively. For example, Bowers et al. (2010) examined eye gaze responses while listen-

ing to fluent and severely stuttered speech samples by using eye-tracking paradigms. It was found that the listeners missed more eye contact in the moments of disfluency. The authors interpreted this as that "this response may occur as a result of emotional, cognitive and pragmatic factors in communication partners". Similarly, Hudock et al. (2015) found that listeners looked at eyes of people who do not stutter (PWNS) longer than PWS (e.g., maintaining eye-contact). They also spent significantly more time observing the mouth regions of PWS. While watching the videos of PWSs, participants spent significantly more time observing the nose and mouth regions when speech was stuttered (PWS-S) than when speech was fluent (PWS-F). The authors discussed this on the basis of negative emotional responses to stuttering.

In other studies, objective physiological assessment tools were used. Zhang et al. (2010) recorded skin conductance response and heart rate while listening to fluent versus non-fluent speech in fluent individuals and persons who stutter. It was found that both groups reacted differently in terms of these variables while listening to non-fluent speech. Additionally, the participants rated themselves with qualities that characterize emotional discomfort while listening to non-fluent speech (self-rating). The authors interpreted this as "clinically, these results acknowledge the arousal and emotional discomfort in fluent speakers and persons who stutter" (p670). Likewise, it was found that fluent adults (Guntupalli et al., 2006) and speech-language pathology students (Guntupalli et al., 2012) displayed different autonomic reactions to disfluent speech.

Stuttering and Culture

Culture is simply a lifestyle shared by sociological groups, including components such as beliefs and practices (MCAT, 2015). The studies which have taken Hofstede's (1980) model into consideration showed that cultural factors play a role in attitudes towards disability. In this model, Hofstede proposed six dimensions of culture as power distance, individualism versus collectivism, masculinity versus femininity, uncertainty avoidance, long-term orientation and indulgence. For example, while an individualist culture tends to show an inclination to inclusion (through equal rights), a collectivist culture has a segregation-based attitude (Westbrook and Legge, 1993; Meyer, 2010).

Disability for an individualist culture is not a source of grief and pessimism, but a challenge to be handled with optimism (Hofstede, 2001).

When cross-cultural comparison studies in which public attitudes were examined are considered, in general, attitudes towards stuttering across cultures and geographic locations appeared to be negative on various degrees (Abdalla and St. Louis, 2012). Research showed that PWS appear to express fear, shame, frustration or embarrassment regardless of culture (for review, Finn and Corders, 1997). On the other hand, the cultural factors across countries and ethnic groups may change perceptions, beliefs, values and norms for stuttering (for review, Robinson, 2012). For example, Madding (1995) found that Latinos indicated an overall relaxed and open feeling about stuttering. Asians revealed a tendency toward negativity about the disorder. Moreover, Euro-American populations showed high levels of fear, shame, avoidance, anger and rejection associated with stuttering. Similarly, Zhang and Kalinowski (2014) investigated African-American and Caucasian college students' perceptions of shame- and guilt-proneness of persons who stutter (PWSs) as compared to normally fluent individuals. They found that Caucasian participants scored higher than African-American participants on both shame- and guilt-proneness from both perspectives. St. Louis et al. (2016) studied attitudes towards stuttering in Bosnia and Herzegovina, Italy, Germany, Norway / Sweden and Ireland. They found large differences between the countries' data: European attitudes ranged from less positive than average (i.e., Italians) to more positive than average (i.e., Norwegians and Swedes).

There are few studies focused on the behaviors of listeners from different cultures towards PWSs. For example, Zhang and Kalinowski (2012) examined the eye gaze responses of African-American, European-American and Chinese adults to stuttering. Their findings showed that the Chinese group reduced their gaze time more on the speaker's mouth in comparison to other groups. Additionally, the Chinese participants' gaze behaviors were more focused on the regions of interest (ROI) of the outside, whereas the two American groups showed a similar focus on the ROIs of the eyes and mouth. As it may be seen here, findings regarding the attitudes and behaviors of audiences vary across cultures.

Turkish Culture and Stuttering

The Republic of Turkey was established in 1923 as a democratic, secular, social state after the collapse of the Ottoman empire. The new country is situated in between Europe and the Middle East and at the confluence of these two different cultures/geographies. The country is home to 82 million people (TurkStat, 2019), and its borders extend to the continents of Europe and Asia. Similar to its geographic location, it has multicultural characteristics (Demirtaş-Madran, 2012).

Referring to Turkey's cultural characteristics, it is observed that there is a high level of power distance, femininity (preferences for cooperation, modesty, caring for the weak and quality of life) and uncertainty avoidance (Hofstede, 1980; Hofstede-insights.com, 2020). Turkish culture shows collectivist characteristics (Phalet and Claeys, 1993; Göregenli, 1997; Hofstede, 2001). In this culture, people have close relationships with their family members, romantic partners, friends and acquaintances (Uskul et al., 2004). On the other hand, Turkish culture is defined to be as part of a transition society (Tezcan, 1997). Kağıtçıbaşı (1983) stated that there is a transition from collectivism to individualism in Turkish culture (Cited: Bozo, Toksabay and Kürüm, 2009).

The studies conducted in Turkish population showed that there are negative attitudes towards stuttering (Özdemir et al., 2011a, 2011b). The main stereotypes attributed to PWS are of being nervous, excitable, shy and fearful (Özdemir, 2010; Özdemir, Topbaş and St. Louis, 2011). Furthermore, along with a group of countries (e.g., Bulgaria, Egypt, Brazil or China), also in Turkey, it is seen that attitudes towards PWS are more negative in comparison to Northern America, Western Europe and Australia (Abdalla and St. Louis, 2014; Nabieh, El-Adawy, St. Louis, Emam, Elbaradoy and Mostafa, 2020; St. Louis et al., 2016; Valente et al., 2017).

Attitudes towards stuttering are also affected by demographic characteristics in Turkish culture. For example, Özdemir (2010) found that adults and elderly people express more negative attitudes towards PWS. In another study comparing American and Turkish preschool children's attitudes, the two groups marked most items as negative at a similar rate. They rated the trait and personality of children with stuttering more negative but their potential more positive (Weidner, St. Louis, Nakisci, and Ozdemir, 2017). St.

Louis et al. (2011) reported that the findings of Turkey have similar characteristics to the findings of USA, Russia and Bulgaria.

It is also seen in studies where social attitudes towards stuttering have been examined with tools other than POSHA that attitudes towards stuttering are negative. For example, Limura et al. (2017) found that the elderly, females and individuals with high education had more knowledge on stuttering. Boyle (2017) examined personal opinions and public perceptions with qualitative and quantitative methods. The participants defined PWS with traits of low confidence and shyness. The participants also stated that the society has negative perceptions about stuttering. They reported, for example, that the society perceived speaking with a PWS as uncomfortable, and there is a belief in the society that PWS cannot perform some jobs. Walden and Lesner (2018) also found that individuals who stutter are exposed to negative implicit and explicit attitudes. Familiarity was associated with implicit attitudes. It was also determined that social desirability bias predicted explicit attitudes.

Purpose

The purpose of this study is to compare the perceived attitudes and behaviors of Turkish and non-Turkish conversation partners (CPs) during their interactions with PWS. It is seen that previous studies have examined attitudes towards PWSs in Turkey by using scales (Özdemir et al., 2011a, 2011b). In studies including behavior observations just as this study, more reliable data may be obtained. This is because there is no other way than trusting the respondents in survey-type studies, and sometimes, people might not know how they behave (Farley and Flota, 2018). It is believed that this study will contribute to clarification of reactions towards PWS as the data collection process was based directly on behavioral observations.

Method

Participants

Participants who stutter: Within the scope of the objectives of the study, to have one-on-one conversations with the rest of the participants, two participants with stuttering were included in the study. The inclusion criteria were

volunteering to participate in this study, being older than 18 years old, having chronic stuttering following developmental stuttering that started before seven years of age and measurement of higher than 3% rate of stuttered syllables. The stuttering of the participants was diagnosed by the first author in compliance with DSM-5 (APA, 2013). Additionally, both participants had no mental, neurological, sensory or psychiatric disorder or an additional communication disorder.

Attention was paid to ensure that the participants with stuttering were as similar as possible in terms of their demographic and stuttering-related characteristics. Accordingly, the first participant was an 18-year-old male university student and had a 6% rate of stuttered syllables. The second participant was a 24-year old male university graduate and had a 7.5% rate of stuttered syllables.

Interaction Group Participants: The second group of participants for the study consisted of 16 individuals who were planned to have one-on-one conversations with the stuttering participants. These participants, who could be defined as *listener* or *interaction partner* consisted of eight Turkish and eight non-Turkish individuals at the ages of 30-49 (Table 1 and 2).

In this study, the distinction of *Turkish* and *non-Turkish* was not based on ethnic origin but is referred to the culture from where these individuals came from. This is because Turkish society has hosted highly various ethnicities and identities due to its geographical location and history (Konda, 2006). Therefore, in this study, the criterion for inclusion in the Turkish group was taken as *being born and growing up in Turkey and feeling to belong in this culture*. The criterion for inclusion in the non-Turkish group was taken as *being born in a country other than Turkey, spending childhood and adolescent years in another country and feeling to belong in their culture of origin*. The criterion of *being able to speak Turkish to the extent that one could maintain their daily life* was also considered for the non-Turkish participants. The participants' statements and the author's observations for the participants' spontaneous speech in the interview were taken as the basis for this criterion.

The participants were accessed by announcements on social media and via language courses. Firstly, eight non-Turkish participants that met the inclusion criteria were included. Afterwards, eight Turkish participants, similar

to non-Turkish group in terms of gender and educational level distribution were reached.

Table 1. Age, gender and education levels of the Turkish group

Group	Age	Gender	Education
Turkish	49	Female	University
Turkish	47	Female	University
Turkish	43	Male	University
Turkish	40	Female	University
Turkish	46	Female	University
Turkish	40	Female	High School
Turkish	30	Female	University
Turkish	32	Female	University

Table 2. Age, gender and education levels of the non-Turkish group

Group	Age	Gender	Country	Education
Non-Turkish	48	Female	Russia	University
Non-Turkish	37	Female	Spain	University
Non-Turkish	38	Male	Spain	University
Non-Turkish	36	Female	Colombia	University
Non-Turkish	46	Female	Colombia	University
Non-Turkish	31	Female	Italy	High School
Non-Turkish	30	Female	Italy	University
Non-Turkish	32	Female	Macedonia	University

Considering Tables 1 and 2, the ages of the Turkish group varied from 32 to 49 (\bar{x} = 40.88, SD = 6.9), while those of the non-Turkish group varied from 32 to 48 (\bar{x} = 37.25, SD = 6.7).

Ethics

Ethics Board approval was obtained from the Non-Interventional Studies Assessment Board at Uskudar University (61351342/ 2020-222). The study was conducted in accordance with the principles of the Declaration of Helsinki. A written consent was obtained from all participants who agreed to participate in the study.

Procedure

Each participant from each listener group has a conversation with one participant with stuttering for approximately five minutes. For this, the participants

were firstly invited to the SLT (speech and language therapy) department of Uskudar University or a private SLT center.

The content of the study was described in detail to the individuals who stutter, and they were asked to not speak in a controlled way or use any stuttering therapy techniques during their conversations. There were only informed that this was a study on stuttering and explained what they should do in short. The instruction was as follows: "I would like you to talk to an individual who stutters for five minutes on certain topics."

The conversations progressed spontaneously in the form of dialogues and back and forth questions and answers. For the conversation to progress comfortably, certain themes were presented to the individual with stuttering and their interaction partner. Attention was paid to ensure that the selected themes were topics that would not lead to extreme emotions in the participants. The proposed themes were *health, weather, hobbies, sports, shopping, travelling, education life, healthy nutrition, holidays, books, arts and music*.

The individual with stuttering and his partner were seated in chairs that had an angle between about 90 and 120 degrees. All these interactions were recorded by two cameras from different angles (SonyN50 and NikonD5000). While one of the cameras recorded both participants, the other only recorded the participant who acted as the interaction partner.

Data Analysis

Data on the Behaviors of the Listeners: In behavioral analysis, two raters firstly watched all videos and took notes on the listener behaviors. The two raters agreed to assess these behaviors under 13 titles. These were: *head shaking, avoiding eye contact, smiling, sentence completion, sentence interruption, hand fidgeting, changing facial expression, playing with hair, crossing arms, responding without waiting, making a joke, laughing out loud and asking consecutive questions*.

In the analysis of listener behaviors, all videos were watched by two rates who were last-year students of the department of SLT. One of these raters was independent of this study. Afterwards, they determined the frequency of each behavior. By counting the number of stuttering occasions in each video, they calculated the ratios of these frequencies based on the behaviors. An example of this calculation is presented in Table 3.

Table 3. An example on examination of the listener behaviors among the participants

Participant	Listener Behaviors			
	Head shaking	Avoiding eye contact	Smiling	Sentence Completion
H.T.	4.2%	2.1%	2.1%	2.1%

Data on the Attitudes of the Listeners: In order to subjectively assess the listener attitudes and behaviors, the authors of this study prepared a form. In the 49-item form, each item contained two-pole adjectives regarding the listener attitudes and behaviors. In this Likert-type form, an assessment was made in the range of 1-7 (1=negative, 7=positive). Two methods were followed in the development process of the form. In the first one, the literature was reviewed to establish a pool of adjectives (Özdemir, 2010; St.Louis et al., 2000; Manning, Burlison, and Thaxton, 1999). In the other, the researchers watched the videos, took notes regarding the listener reactions and discussed the issue. After the form was prepared, it was examined by two faculty members experienced in the field of SLT.. Therefore, this form which was considered to represent listener attitudes and behaviors and consisted of 49 two-pole adjectives took its final shape.

Four raters took part in the scoring process. While two of these raters were the authors of this study, the other two were independent of the study. In the examination of the listeners with this form, each rater independently watched each conversation video and scored each listener. These raters consisted of two SLT last year students - intern therapists and two experienced SLTs.

Interrater Reliability: The agreement levels regarding the perceptual assessment of listener attitudes by the four raters and calculation of listener behavior by two raters were calculated based on the Cronbach's Alpha (α) coefficient.

Interrater Reliability Findings on the Perceptual Assessment of Listener Attitudes: Within the form containing 49 two-pole adjectives regarding listener attitudes, "perfect, good or acceptable levels of agreement" were obtained ($\alpha \geq .7$). A 'perfect' agreement was found only in the *one who laughs out loud* adjective ($\alpha = .901$). There was 'good agreement' in five items: *surprised* ($\alpha = .831$), *warm* ($\alpha = .825$), *empathetic* ($\alpha = .814$) *sincere-sympathetic* ($\alpha = .811$) and *one who behaves differently at the occasion of stuttering* ($\alpha = .803$). Finally, "acceptable agreement" was found in 14 items [*sincere* ($\alpha = .796$), *one who uses gestures-facial*

expressions ($\alpha = .794$), *humorist* ($\alpha = .787$), *one who understand and responds at the first syllable* ($\alpha = .774$), *one who smiles* ($\alpha = .773$), *one who completes the statement* ($\alpha = .764$), *emotional-one who expresses emotion* ($\alpha = .754$), *open (expresses comfortably)* ($\alpha = .749$), *one who speaks fast* ($\alpha = .739$), *easygoing (not shy)* ($\alpha = .732$), *positive* ($\alpha = .729$), *anxious* ($\alpha = .716$), *serious* ($\alpha = .716$), *one who asks too many consecutive questions* ($\alpha = .714$).

Interrater Reliability Findings on the Calculation of Listener Behaviors:

Considering the scoring process of the listener behaviors by two raters under 13 categories, there was a perfect agreement in 10 listener behaviors ($\alpha \geq .9$). These behaviors were *asking consecutive questions*, *sentence interruption*, *avoiding eye contact*, *hand fidgeting*, *making a joke*, *laughing out loud*, *smiling*, *playing with hair*, *responding without waiting*, *sentence completing* and *changing facial expressions*. There was a 'good agreement' in the *head-shaking* behavior ($\alpha = .897$). As the value in terms of the *crossing arms* behavior was found as $\alpha = .427$, this behavior was not used in the intergroup comparisons.

Statistical Analysis

The software SPSS version 20 (Statistical Package for the Social Sciences) was used for statistical analysis (IBM Corp. 2013). In the calculation of the listener behaviors, descriptive statistics such as frequency and percentage were utilized. The listener reactions where the raters obtained "perfect, good or acceptable agreement" were used in the comparison of the two groups ($\alpha \geq .7$). As the assumption of normal distribution was satisfied, the listener behaviors and attitudes of the Turkish and non-Turkish groups were compared by using independent-samples t-test.

Results

Comparison of Turkish and non-Turkish groups in terms of Adjectives Used by Interaction Partner

The Turkish and non-Turkish participants were compared with an independent-samples t-test over 20 items with at least "acceptable agreement" among the 49 items with two-pole adjectives ($\alpha \geq .7$) (Table 4). Significant differences were found in 11 of these 20 items ($p < .05$).

Table 4. Mean (\bar{x}), standard deviation (SD), degrees of freedom (df), t-test statistic (t) and significance (p) findings on the perceptual assessment of the attitudes and behaviors of the conversation partners in the Turkish and non-Turkish groups

Attitude/ Behavior	Group	n	\bar{x}	SD	df	t	p
Gestures/facial expressions	Turkish	8	5.125	1.48805	14	-2.179	.047*
	Non-Turkish	8	6.406	0.74327	10,29		
Laughs out loud	Turkish	8	5	1.72171	14	-1.271	.224
	Non-Turkish	8	5.938	1.1783	12,38		
Serious	Turkish	8	4.344	1.17213	14	3.247	.006*
	Non-Turkish	8	2.469	1.13733	13,99		
Behaves diff. disfluencies	Turkish	8	3.656	1.93159	14	1.647	.122
	Non-Turkish	8	2.281	1.35908	12,57		
Smiles	Turkish	8	5.719	0.98595	14	-1.713	.109
	Non-Turkish	8	6.469	0.74926	13,06		
Anxious	Turkish	8	3.344	1.43886	14	2.180	.047*
	Non-Turkish	8	2.063	0.83184	11,21		
Empathetic	Turkish	8	5.313	0.82104	14	-3.676	.002*
	Non-Turkish	8	6.5	0.40089	10,16		
Completes statement	Turkish	8	4	1.23201	14	5.514	.000*
	Non-Turkish	8	1.438	0.45806	8,899		
Asks consecutive questions	Turkish	8	3	1.44544	14	2.177	.055
	Non-Turkish	8	1.781	0.64694	9,696		
Surprised	Turkish	8	2.438	1.43769	14	1.818	.101
	Non-Turkish	8	1.438	0.59387	9,321		
Warm	Turkish	8	5.281	1.32583	14	-2.387	.038*
	Non-Turkish	8	6.531	0.66059	10,27		
Positive	Turkish	8	4.969	1.77501	14	-2.261	.040*
	Non-Turkish	8	6.5	0.71962	9,241		
Easygoing	Turkish	8	5.5	1.23924	14	-.740	.471
	Non-Turkish	8	5.906	0.93482	13,02		
Humorist	Turkish	8	3.875	1.24642	14	-1.932	.074
	Non-Turkish	8	5.188	1.46232	13,66		
Sincere	Turkish	8	5.375	0.86603	14	-3.444	.004*
	Non-Turkish	8	6.625	0.55097	11,87		
Emotional	Turkish	8	4.375	1.36277	14	-1.718	.108
	Non-Turkish	8	5.5	1.25357	13,91		
Sympathetic	Turkish	8	5.25	1	14	-3.286	.007*
	Non-Turkish	8	6.594	0.58152	11,25		
Open	Turkish	8	5.594	1.10144	14	-2.565	.031*
	Non-Turkish	8	6.656	0.3995	8,810		
Responds at first syllable	Turkish	8	3.781	1.42326	14	2.262	.040*
	Non-Turkish	8	2.094	1.55803	13,89		
Talks fast	Turkish	8	3.25	1.3496	14	-.932	.367
	Non-Turkish	8	3.969	1.71359	13,28		

The Turkish group received significantly higher scores in the adjectives *completes statement* ($t = 5.514, p = .000$), *serious* ($t = 3.247, p = .006$), *anxious* ($t = 2.180, p = .047$) and *responds at first syllable* ($t = 2.262, p = .040$). The non-Turkish group received significantly higher scores in the adjectives *uses gestures/facial expressions* ($t = -2.179, p = .047$), *empathetic* ($t = -3.676, p = .002$), *warm* ($t = -2.387, p = .038$), *positive* ($t = -2.261, p = .040$), *sincere* ($t = -3.444, p = .004$), *sympathetic* ($t = -3.286, p = .007$) and *open* ($t = -2.565, p = .031$).

Comparison of Turkish and non-Turkish groups in terms of Interaction Partner Behaviors

For the 12 behavior categories that provided at least 'acceptable agreement' regarding the conversation partner behaviors ($\alpha \geq .7$), the Turkish and non-Turkish participants were compared by using independent-samples t-test (Table 5). Turkish group exhibited significantly more behaviors of *sentence completion* ($t = 2.271, p = .039$) and *asking consecutive questions* than the non-Turkish group ($t = 2.365, p = 0.49$) ($p < .05$).

Table 5. Mean (\bar{x}), standard deviation (SD), degrees of freedom (df), t-test statistic (t) and significance (p) findings on the conversation partner behaviors of the Turkish and non-Turkish groups

Behavior	Group	n	\bar{x}	SD	df	t	p
Head Shaking	Turkish	8	10.17	5.4777	14	.840	.415
	Non-Turkish	8	8.319	2.481	9.774		
Avoiding Eye Contact	Turkish	8	5.613	12.692	14	1.120	.282
	Non-Turkish	8	0.569	1.051	7.098		
Playing with Hair	Turkish	8	0.525	1.4849	14	-.334	.743
	Non-Turkish	8	0.863	2.4395	11.561		
Responding without Waiting	Turkish	8	1.213	2.253	14	-.533	.602
	Non-Turkish	8	1.944	3.1602	12.655		
Making a Joke	Turkish	8	0.2	0.5657	14	-1.815	.111
	Non-Turkish	8	3.188	4.6203	7.210		
Smiling	Turkish	8	4.356	4.1431	14	-.944	.361
	Non-Turkish	8	6.9	6.39358	11.998		
Sentence Completion	Turkish	8	6.644	4.7263	14	2.271	.039*
	Non-Turkish	8	2.325	2.5689	10.804		
Sentence Interruption	Turkish	8	5.913	7.4813	14	1.209	.247
	Non-Turkish	8	2.619	1.8559	7.858		
Hand Fidgeting	Turkish	8	10.03	10.205	14	1.478	.162
	Non-Turkish	8	3.806	6.1483	11.490		
Changing Facial Expressions	Turkish	8	8.781	4.9239	14	1.390	.186
	Non-Turkish	8	5.594	4.2193	13.679		
Laughing Out Loud	Turkish	8	6.156	5.6097	14	-1.508	.154

	Non-Turkish	8	10.413	5.6781	13.998		
Asking Cons. Questions	Turkish	8	14.75	16.708	14	2.365	.049*
	Non-Turkish	8	0.688	1.9445	7.190		

Discussion and Conclusion

This study examined the interactions of each individual in the Turkish and non-Turkish groups with an individual who stutters. The measurements were made in two ways. In the first way, the listeners were scored on a 49-item, two-pole list of adjectives by four raters. In the other, two raters calculated the behaviors displayed by the listeners.

Considering the findings, the point that appears interesting at a first glance was that the raters consistently defined the Turkish group as significantly more *anxious* and *serious* in comparison to the non-Turkish group based on the adjective list. However, the qualities that were found significantly more frequent in the non-Turkish group were *positive*, *warm*, *open*, *sincere*, *sympathetic* and *using gestures/facial expressions* (Table 5).

Table 6. Attitudes and behaviors found to be significantly higher in the Turkish and non-Turkish groups

	Turkish group	Non-Turkish group
49-item two-pole adjective list	Anxious	Positive
	Serious	Warm
	Responds at first syllable	Sincere
		Sympathetic
		Open
		Empathetic
		Uses gestures/facial expressions
Behavior frequency	Sentence completion	
	Asking consecutive questions	

While the non-Turkish group was described with positive qualities, the Turkish group was described with negative attitudes such as more anxious and serious ($p < 0.05$) in their interaction with PWS. Such that, while the difference was not significant, the non-Turkish group received higher scores from behaviors such as smiling and making a joke. This situation may be discussed in the context of studies on social attitudes towards stuttering. It should firstly be stated that, not only in Turkey (Özdemir; 2010; Özdemir et al., 2011a, 2011b; Çağlayan, 2019), but also in all countries without discrimination, attitudes towards stuttering are negative (Abdalla, Irani, and Hughes,

2014). However, considering that the data on Turkey, like many others, are more negative in comparison to Northern America and Western Europe (Abdalla and St. Louis, 2014; Nabieh et al., 2020; St. Louis et al., 2016; Valente et al., 2017), this was an expected finding. Additionally considering the stereotypes in Turkey towards individuals who stutter (Özdemir, 2010), it may be stated that these interactor reactions would be expected.

The term 'negative' that is used to compare the countries mentioned above should not be interpreted as a complete 'stigmatization' or 'discrimination' against individuals who stutter. This is because, looking at the sub-tests of Public Opinion Survey of Human Attributes-Stuttering (POSHA) that are used in such studies (St. Louis, Lubker, Yaruss, and Aliveto, 2009), it is seen that not just prejudices are measured. For example, the D2 sub-test of POSHA asks about the 'possible concern/sadness of the individual in the probability that there is a stuttering person around them'. This sub-test is related to empathy, even sympathy. D3 asks how the individual would feel while speaking to a person who stutters (feeling good or bad, whether or not feeling impatient, pitying the person). There are also questions on what kind of attitudes and behaviors they would have (e.g., making a joke, completing sentence, trying to comfort). Therefore, in this study, also considering previous studies, it may be thought that the Turkish group showed an 'over-empathetic' attitude (possibility of over-empathy to turn into sensitive, anxious and serious attitudes) while in communication with the individual with stuttering. Özdemir (2010) asked their participants to select one of the three options (yes, no, undecided) for each completeive statement in the item *If I was speaking to a stuttering person (...)* in POSHA's D3 sub-test. 39.7% of the participants responded as *I would pity the person*. Additionally, the statement *I would feed good and relaxed* received responses of 'no' by 33.5% and 'not sure' by 19.9%. In the field of sociology, pity and worrying are an important theme in studies on attitudes towards disability (Burcu, 2011).

Moreover, the topic may also be viewed from a perspective of culture. The more serious and anxious appearance of the Turkish interaction partners may be associated with the collectivist or feminine culture. This is because, in cultures showing feminine qualities (grief, pessimism) such as the Turkish culture, there is a question of support and assistance for individuals with difficulties (Hofstede, 2001; Meyer, 2010; Westbrook and Legge, 1993).

Considering stuttering as a deficiency or a disability with its outputs (Yaruss and Quesal, 2006), there is benefit in also looking at studies on attitudes towards disability in Turkey. Looking at the findings of these studies, it is difficult to make a conclusion as that attitudes towards disability in Turkey are positive or negative (Altıparmak, Yıldırım and Sarı, 2012; Girli, Sarı, Kırkım and Narin, 2016).

Other related qualities significantly distinguishing the Turkish group from the non-Turkish group were the qualities of *responding at the first syllable* and *completing statement*. These findings were consistent with findings based on behavior analysis (sentence completion and asking consecutive questions). These behaviors that may lead stuttering individuals to experience time pressure and feel inadequate were shown more by the Turkish group and less by the non-Turkish group. These findings appear to be in agreement with those reported by Özdemir (2010). In Özdemir's study, 70.5% of the participants responded 'yes' to the statement *I would say slow down and be comfortable while speaking to a stuttering person*. Additionally, 50.6% said 'yes' to the statement *I would complete the statement of the person*, while 18.6% said 'yes' to the statement *I would get impatient*. Likewise, in a study by Freud et al. (2016) conducted in Israel, CPs showed more behaviors of 'sentence interruption' and 'sentence completion'. They also displayed more reinforcers for AWSs with moderate stuttering severity ($p < 0.05$). These behaviors are among the listener behaviors that are considered 'the most disturbing' by individuals with stuttering.

In this study, according to the raters, the non-Turkish group used more gestures and facial expressions in comparison to the Turkish group ($p < 0.05$). It is difficult to reach a clear conclusion regarding this issue, because gesture usage and the meanings of gestures may vary between cultures (Archer, 1997; Kita, 2009). For example, in the non-Turkish group, two participants were Italian, and two others were Spanish. Since it was stated that gesture usage is more noticeable in Mediterranean countries (Kita, 2009), amount of gesture usage may vary among different cultures.

POSHA findings differ based on demographic factors (Valente et al., 2017). There would also be a benefit in discussing the findings of this study in the context of the demographic characteristics of the CPs. This is because the gender distribution was not balanced in either group ($F = 7, M = 1$). Nev-

ertheless, according to Özdemir (2010), negative attitudes do not vary by gender among adults. The findings on the topic are conflicting in other studies in Turkey on attitudes towards disability (Gedik and Toker, 2018; Girli, Sarı, Kırkım and Narin, 2016; Şahin and Gedik, 2020).

In this study, both datasets attributed more negative qualities to the Turkish group in comparison to the non-Turkish group. Thus, the conclusions that were reached in previous studies in Turkey conducted with self-report scales were almost confirmed in this study by directly examining real CP behaviors. These findings revealed how important it is to conduct social awareness efforts in Turkey regarding stuttering.

Limitations and recommendations for future studies

In this study, the Turkish and non-Turkish groups were formed based on certain participant criteria. However, Turkey has multicultural characteristics (Demirtaş-Madran, 2012). The non-Turkish group also showed heterogeneous features. Future studies may be recommended to form groups by controlling all demographic-cultural variables by standard instruments. Moreover, replicating this study with a higher number of participants will contribute to the field.

The raters were Turkish and worked as SLTs. These qualities pose a risk in terms of the reliability of measurement. This is because, in comparative studies, the Turkish society is described by tourists as friendly and hospitable (Baloğlu and Mangaloğlu, 2001). Therefore, in the study, the raters (even the participants with stuttering) may have been affected by this. For this reason, researchers may be recommended to take precautions regarding the selection and objectivity of raters.

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