

## ADAPTATION STUDY OF THE 'SOCIAL MOTIVATION QUESTIONNAIRE' TO TURKISH SOSYAL MOTİVASYON ANKETİ'NİN TÜRKÇEYE UYARLAMA ÇALIŞMASI

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### Öz

#### Amaç

Bu çalışmanın amacı 'Sosyal Motivasyon Anketi'nin Türkçeye uyarlanması, geçerliliğinin ve güvenilirliğinin sağlanmasıdır.

#### Gereç ve Yöntem

Öncelikle anket, iyi seviyede İngilizce bilen ve birbirlerinden bağımsız iki araştırmacı tarafından Türkçeye tercüme edildi. Ardından, geri-tercüme işlemi ile İngilizceye çevrildi. Bu şekilde dil uygunluğu sağlanan anketin, Türk kültüründeki kapsam geçerliliği 18 katılımcı üzerinde incelendi. Kapsam geçerliliğini sağlayan anketin pilot uygulaması için çalışmaya, hastanemizin bekleme salonunda bulunan, yaşı 18 yıldan büyük olacak şekilde farklı yaş gruplarından olan, Türkçe okuma ve yazma becerisine sahip bireyler (n=137) katıldı. Katılımcıların; tanımlayıcı bilgi formu, EQ-5D genel yaşam kalite ölçeği ve sosyal motivasyon anketi yüz yüze ortamda yapıldı.

#### Bulgular

Hesaplanan I-CVI değerlerinin 0,78-1,00 aralığında ve S-CVI değerinin 0,93 olması ile anketin Türkçe versiyonunun kapsam geçerliliğini sağladığı belirlendi. Anketin 'duygu düzenleyici' alt boyutunun maddelerinden 1 adedi (Madde 8) Cronbach alfa katsayısını düşürdüğü için, diğer 1 adedi (Madde 2) ise her iki alt boyuta kayış göstererek binişik özelliğinde olduğu için anketin Türkçe versiyonundan çıkartıldı. Böylece

Cronbach alfa değeri 0,693 bulunan 6 maddeli ve 2 alt boyutlu anketin Türkçeye uyarlanmış versiyonunun doğrulayıcı faktör analizi uyum iyiliği değerlerini karşıladığı görüldü. Anketin toplam puanının, duygu düzenleyici alt boyut puanı ile orta düzeyde ( $r=0,581$ ), bilgi arayan alt boyut puanı ile çok yüksek düzeyde ( $r=0,955$ ) ilişkisi vardı.

#### Sonuç

Sosyal Motivasyon Anketi'nin Türkçeye uyarlanması, geçerliliği ve güvenilirliği 6 maddeli ve 2 alt boyutlu yapı ile sağlamıştır.

**Anahtar Kelimeler:** Anket, Gerontoloji, Motivasyon

#### Abstract

#### Objective

The aim of this study is to adapt the 'Social Motivation Questionnaire' into Turkish and to ensure its validity and reliability.

#### Material and Method

First of all, the questionnaire was translated from its English original to Turkish by two independent researchers with a good level of English. Then, it was translated back into English. The content validity of the questionnaire, which was provided with language compatibility in this way, in Turkish culture was examined on 18 participants. For the pilot application of the questionnaire that provided the content

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validity, individuals (n=137) who were in the waiting room of our hospital, were older than 18 years, from different age groups, and had the ability to read and write in Turkish. Participants' descriptive information form, EQ-5D general quality of life scale and social motivation questionnaire were administered face-to-face.

## Results

It was determined that the Turkish version of the questionnaire provided content validity, with the calculated I-CVI values in the range of 0.78-1.00 and the S-CVI value being 0.93. One of the items (Item 8) of the 'emotion regulator' sub-dimension of the questionnaire was removed from the Turkish version of the questionnaire because it decreased the Cronbach's alpha coefficient. Other one (Item 2) was

removed from the Turkish version of the questionnaire because overlapping by showing a shift to both sub-dimensions. Thus, it was seen that the Turkish version of the 6-item and 2 sub-dimension questionnaire with a Cronbach Alpha value of 0.693 provided the confirmatory factor analysis goodness-of-fit values. The total score of the questionnaire had a moderate correlation with the emotion regulation sub-dimension score ( $r=0.581$ ) and a very high correlation ( $r=0.955$ ) with the information seeking sub-dimension score.

## Conclusion

The adaptation, validity and reliability of the Social Motivation Questionnaire into Turkish was ensured with a 6-item and 2 sub-dimension structure.

**Keywords:** Questionnaire, Gerontology, Motivation.

## Introduction

People are a social being by nature and this situation maintains its validity at every stage of human life (1). While a newborn baby is preparing for life by interacting with her family and her new environment (2), an elderly individual at the advanced stage of his/her life leads a sociopsychologically healthy life with social interaction (3). Individuals communicate with other individuals with different motivations in social life. Two of these motivations are information seeking (IS) social motivation and emotion-regulatory (ER) social motivation (4).

Humans are beings who seek, inquire and question information throughout their lives. With this motivation, he/she can choose the individuals he/she meets and interacts with socially. May enjoy interacting with individuals who know little about the person or with individuals who challenge their intelligence. At the same time, people are an emotional being and wants to communicate with people he/she feels close to or who add meaning to his/her life. The importance of these social motivations on the individual can be affected by factors such as gender, personality, society and family structure. One of these factors is the age of the individual (5).

When examined as a social entity, it can be observed that people's expectations of social environment change with age (3). In previous studies; compared to younger individuals, older individuals have been shown to be more selective in shaping their social environment (6), interact more with individuals they

feel emotionally close to (7), and maintain their interaction with a core close environment for long periods of time (8). At the same time, compared to younger individuals, older individuals experience better quality social relationships (9) and face fewer problems in their relationships (5).

In studies on the change of social expectation with age; it has been reported that social motivation changes with age. And in these studies; it has been shown that young individuals have more IS social motivation, while older individuals have more ER social motivation (4). One of the most important reasons for this social motivation that changes with age is the future time perspective put forward in the "Socioemotional Selectivity Theory" (4). According to this theory; As social beings, people make plans for the future and develop themselves regularly in this direction. They feel the need to constantly improve themselves in line with their efforts to earn a living and their career goals. As a result, individuals form their social circles from people they can benefit from. However, as people get older and their expectations about the future decrease, their social circles consist of people with whom they are emotionally attached. Individuals who think that they are approaching the end of life leave their success goals behind and want to be with people in their close circles who add meaning to their lives (5).

The 'Social Motivation Questionnaire' developed by Gong et al was developed to objectively measure IS social motivation and ER social motivation. It is a structurally evaluated and validated questionnaire in

Germany, Hong Kong and the United States (USA) (5). The aim of this study is to adapt the 'Social Motivation Questionnaire' to Turkish society and Turkish, and to ensure the validity and reliability of the questionnaire.

## Material and Method

Individuals who are older than 18 years and have the ability to read and write in Turkish, in the waiting room of our hospital, participated in the study. Since the number of items in the original 'Social Motivation Questionnaire' (5) was 8, it was aimed to include at least 80 participants from different age groups (young adult: 18-40 years, middle-aged adult: 41-65 years, older adult: 66-90 years) in the sample of the study.

### Translation Process

The questionnaire was translated into Turkish by two independent researchers with a good level of English. The two translations created were combined into a single questionnaire by the principal researcher by correcting the conceptual errors and inconsistencies in the translations. The questionnaire, which was translated into Turkish, was translated into English by a native English translator who did not foresee the original version of the questionnaire and had a good command of Turkish. After all translations were compared with the original by the principal researcher and it was determined that they were compatible, the Turkish version of the questionnaire used in the intelligibility assessment was obtained.

### Intelligibility Assessment and Content Validity

The Turkish version of the questionnaire was administered for pilot purposes on a total of 18 participants (50% (n=9) female and 50% (n=9) male) in different age categories (young adult: n=8, middle-aged adult: n=5, older adult: n=5). The questionnaire was quantitatively analyzed in terms of intelligibility with a 4-point Likert-type evaluation tool using the "Intelligibility Assessment Form". In addition, open-ended questions were asked, which allowed the participants to offer suggestions so that the items in the questionnaire could be understood more easily in terms of qualitative aspects.

In the evaluation made by adhering to the Davis method for intelligibility, it was determined that the I-CVI values of the questionnaire were in the range of 0.78-1.00 (Item 1: 1.0, Item 2: 1.0, Item 3: 1.0, Item 4: 0.94, Item 5: 0.78, Item 6: 1.0, Item 7: 0.89, Item 8: 0.83) and the S-CVI values were 0.93, thus exceeding the recommended critical limit (0.78 for I-CVI and 0.80 for S-CVI) values (10) and ensuring the content validity of the Turkish version.

### Data Collection Tools Used in the Pilot Implementation

In the research, a questionnaire form containing descriptive information created by the researcher, the 'Social Motivation Questionnaire' consisting of a total of 8 items and 2 sub-dimensions, which are 'IS social motivation (Item 1, 3, 5, 7)' and 'ER social motivation (Item 2, 4, 6, 8)' (5), and the EQ-5D quality of life scale (11) were used as data collection tools. Data collection tools were applied using face-to-face interview technique. During the pilot implementation of the study, 137 (57.7% female, 42.3% male) participants, whose descriptive characteristics are presented in Table 1, were interviewed.

When the participants were questioned to determine the number of people in their social circle and all participants were taken into account, the number of very close friends were  $9.4 \pm 12.8$ ; number of close friends were  $17.5 \pm 28.7$ ; the number of fewer close friends were  $36 \pm 70.5$  and the number of household members were  $3.2 \pm 1.9$ . Considering the age groups, these data are respectively;  $8.2 \pm 10.0$ ,  $13.4 \pm 15.5$ ,  $13.4 \pm 15.5$  and  $3.4 \pm 1.5$  in the younger group;  $13.3 \pm 17.4$ ,  $19.1 \pm 20.5$ ,  $30.1 \pm 48.8$  and  $3.4 \pm 1.3$  in the middle age group; and  $13.3 \pm 17.4$ ,  $19.1 \pm 20.5$ ,  $30.1 \pm 48.8$ , and  $3.4 \pm 1.3$  in the elderly group. Participants did not differ according to age groups in terms of the number of people in their social circle (p value respectively 0.054; 0.303; 0.784 and 0.306).

### Ethical Dimension of Research

Permission was obtained from Gong, who developed the 'Social Motivation Questionnaire' (5), via e-mail on 09.02.2020 to ensure the validity and reliability of the questionnaire in Turkish. The study was approved by the local ethics committee's decision dated 18.08.2021 and numbered 17/269.

### Statistical Analysis

SPSS v.23 and AMOS v.24 package programs were used for data analysis. The frequency and percentage rates of the data were determined by descriptive analysis, and the difference according to age groups was determined by One-Way ANOVA and chi-square tests. For validity and reliability analysis, Cronbach's alpha coefficient, factor analysis with 'varimax' rotation in the 'Principal component' analysis method, and difference analysis in the lower and upper 27% groups were applied. The relations of the variables with each other were tested with Pearson correlation analysis. Data are presented as frequency (n), percentage rates (%) and mean  $\pm$  standard deviation. The p value is significant at the 0.05 level.

**Table 1** Participants' descriptive features and analyzes by age groups

	All (n=137)	Young group (n=60)	Middle age group (n=42)	Elderly group (n=35)	P value
<b>Gender (F/M), (%)</b>	57.7/42.3	61.7/38.3	52.4/47.6	57.1/42.9	0.645
<b>Age (year)</b>	46.6±19.0	27.7±5.5 <sup>a</sup>	52.9±6.9 <sup>b</sup>	71.5±4.2 <sup>c</sup>	<b>0.0001*</b>
<b>Height (cm)</b>	167.7±8.8	168.7±8.6	168.2±9.7	165.4±7.8	0.200
<b>Weight (kg)</b>	70.9±14.7	66.4±16.5 <sup>a</sup>	75.2±11.8 <sup>b</sup>	73.7±12.3 <sup>b</sup>	<b>0.004*</b>
<b>BMI (kg/m<sup>2</sup>)</b>	25.1±4.4	23.1±4.3 <sup>a</sup>	26.6±3.6 <sup>b</sup>	26.9±3.9 <sup>b</sup>	<b>0.0001*</b>
<b>Exercise (min/w)</b>	100.1±150.0	137.3±173.8 <sup>a</sup>	86.8±148.0	52.1±78.6 <sup>b</sup>	<b>0.021*</b>
<b>EQ-5D-3L</b>	0.75±0.18	0.80±0.16 <sup>a</sup>	0.78±0.15 <sup>a</sup>	0.63±0.20 <sup>b</sup>	<b>0.0001*</b>
<b>EQ-VAS</b>	77.9±14.2	80.3±13.8 <sup>a</sup>	79.7±10.9 <sup>a</sup>	71.7±16.7 <sup>b</sup>	<b>0.010*</b>
<b>Marital status (M/S/W), (%)</b>	55.5/30.7/13.9	43.3 <sup>a</sup> /56.7 <sup>a</sup> /0.0 <sup>a</sup>	78.6 <sup>b</sup> /16.7 <sup>b</sup> /4.8 <sup>a</sup>	48.6 <sup>a</sup> /2.9 <sup>b</sup> /48.6 <sup>b</sup>	<b>0.0001*</b>
<b>Chronic disease (%)</b>	36.5	8.3 <sup>a</sup>	42.9 <sup>b</sup>	77.1 <sup>c</sup>	<b>0.0001*</b>
<b>Psychiatric disease (%)</b>	10.9	11.7	7.1	14.3	0.576
<b>Drug use (%)</b>	31.4	10.0 <sup>a</sup>	35.7 <sup>b</sup>	62.9 <sup>b</sup>	<b>0.0001*</b>
<b>Educational status (%)</b>					<b>0.0001*</b>
Primary	21.2	0.0 <sup>a</sup>	14.3 <sup>b</sup>	65.8 <sup>c</sup>	
High school	13.9	10.0	21.4	11.4	
College/ University	52.5	75.0 <sup>a</sup>	50.0 <sup>b</sup>	17.1 <sup>c</sup>	
Master's degree/ Doctorate	12.4	15.0	14.3	5.7	
<b>Income status (%)</b>					<b>0.110</b>
Low	26.3	28.3	23.8	25.7	
Medium	51.1	60.0	45.2	42.9	
High	22.6	11.7	31.0	31.4	

F/M: Female/Male, BMI: Body mass index, min/w: minutes/week, M/S/W: Married/Single/Widow, a-b-c: There is a difference between the groups marked with different letters, \*: The p value is significant at the 0.05 level (2-tailed).

## Results

### Validity and Reliability Analysis

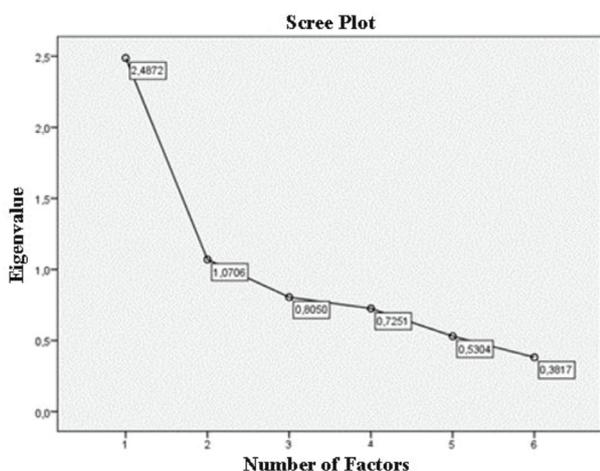
As a result of the Kaiser Meyer Olkin test, in which the construct validity of the questionnaire was examined, a value of 0.737 and a Bartlett sphericity test p value of <0.001 were obtained, and it was determined that the questionnaire was factorable. However, one item (Item 8: Corrected Item-Total Correlation was -0.037) of the 'emotion regulatory' sub-dimension of the questionnaire was removed from the questionnaire because it decreased the Cronbach's alpha coefficient, and the other one (Item 2: Corrected Item-Total Correlation was 0.206) was overlapping by showing a shift to both sub-dimensions.

When explanatory factor analysis was applied, it

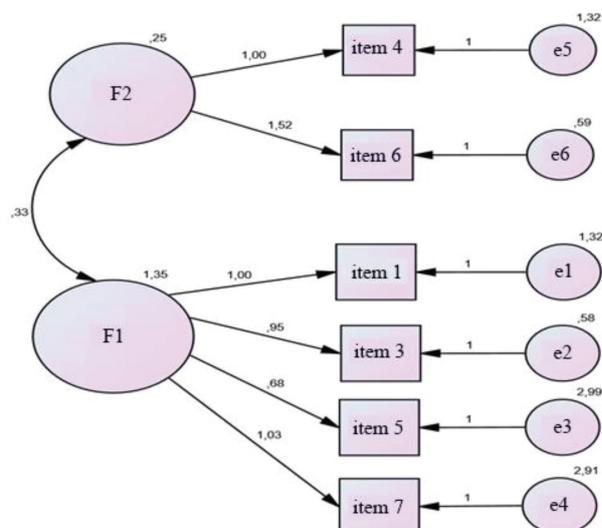
was seen that the questionnaire was divided into 2 sub-dimensions as in the original and the explained variance was 59.3%. The eigenvalue and explained variance rate of factor 1 are 2.48 and 41.5%, respectively. In factor 2, these values were 1.07 and 17.8%, respectively (Figure 1, Table 2).

The p value in the lower and upper 27% groups of the data in the pilot application differed as 0.0001; In other words, it was determined that the questionnaire provided item discrimination. No maximum (5.1%) and minimum (0.7%) effects were observed in the survey results.

It was seen that the Turkish version of the 6-item and 2 sub-dimension questionnaire with a Cronbach alpha value of 0.693 provided the confirmatory factor analysis goodness of fit values (Figure 2, Table 3).



**Figure 1**  
Eigenvalue-slope graph



**Figure 2**  
Confirmatory factor analysis diagram  
of the questionnaire

**Table 2** Explanatory factor analysis results

Item		Min	Max	Mean $\pm$ SD	F <sub>1</sub>	F <sub>2</sub>
1	It is important for me to spend time with people who know about topics that I know very little about	1	7	5.7 $\pm$ 1.6	0.807	
2*	I seek contact with people who accept me the way I am	-	-	-		-
3	At this point in my life it is important for me to contact knowledgeable persons	2	7	6.1 $\pm$ 1.3	0.783	
4	I spend most of my time with people whom I feel very close	2	7	6.0 $\pm$ 1.2		0.822
5	Few things are more interesting than meeting new and different people	1	7	3.9 $\pm$ 1.9	0.512	
6	I need to be with people who give my life a sense of meaning	2	7	6.2 $\pm$ 1.1		0.734
7	I like to be with people who challenge my intellect	1	7	4.7 $\pm$ 2.1	0.776	
8*	At my age there should always be someone around with whom there is a sense of mutual understanding	-	-	-		-
	Information seeking sub-dimension (Items 1, 3, 5 and 7)	7	28	20.4 $\pm$ 5.1		
	Emotion regulator sub-dimension (Items 4 and 6)	4	14	12.2 $\pm$ 1.9		
	Questionnaire Total Score	11	42	32.6 $\pm$ 6.0		

\*: As a result of the analysis, Items 2 and 8 were extracted from the Turkish version of the questionnaire.  
SD: standard deviation, F: Rotated factor load

Table 3 Confirmatory factor analysis results

Model goodness of fit values	Value	Discussion
Chi-Square / Degrees of Freedom ( $\chi^2/sd$ )	1.252	Good fit
Root Mean Square Error of Approximation (RMSEA)	0.043	
Comparative Fit Index (CFI)	0.986	
Goodness of Fit Index (GFI)	0.977	
Adjusted Goodness of Fit Index (AGFI)	0.940	
Incremental Fit Index (IFI)	0.986	
Tucker-Lewis Index (TLI)	0.973	
Standardized Root Mean Square Residual (SRMR)	0.120	Acceptable fit

### The Correlation Levels of the Variables with the 'Social Motivation Questionnaire' Score

The total score of the questionnaire had a moderate correlation with the emotion regulatory sub-dimension score, and a very high correlation with the information seeking sub-dimension score. Relationship levels with other variables are presented in Table 4.

### Discussion

It is important to adapt this and similar questionnaires to different languages in order to reduce the differences caused by cross-cultural psycholinguistic characteristics (12). The original study was evaluated structurally in Hong Kong, Germany and the USA (5). Due to the fact that Turkish culture, social structure and language characteristics are different from these countries, it is inevitable to adapt these and similar questionnaires to Turkish. Therefore, in this study, we aimed to adapt the 'Social Motivation Questionnaire' to our own culture.

When the descriptive characteristics and analyzes according to age groups of the participants are examined, it is seen that the body weight and body mass index (BMI) are significantly higher in older individuals than in young people. This may be due to the fact that elderly individuals live more sedentarily than young people, young people exercise more than the elderly, or the elderly have more chronic diseases than young people. When the literature is scanned, it can be seen that previous studies are in parallel with our study, that the elderly have more chronic diseases than the young and their BMIs are higher (13, 14). At the same time, in our study data, it is seen that drug use is significantly higher in elderly individuals than in young people, and EQ-5D-3L and EQ-VAS

scores are lower. It can be predicted that old age will inevitably bring together chronic disease, drug use and daily activity limitation, and as a result of all these factors, a decrease in the quality of life may occur (15). In this context, the sample of our research has characteristics that reflect the society.

In the original study, the 'Social Motivation Questionnaire' with two sub-dimensions and eight items was developed. However, two items were excluded in our study. Item 2 was removed from the Turkish-adapted questionnaire, since it had overlapping characteristics by showing a shift to both sub-dimensions. The reason for this is that the item expressed as "I seek contact with people who accept me the way I am" in our society is considered in Turkish culture and language, including both ER and IS social motivation. Therefore, this item, which showed a shift in both sub-dimensions, was removed from the Turkish version of the questionnaire as suggested in the literature (16). It has been observed that Item 8, which states "At my age there should always be someone around with whom there is a sense of mutual understanding", may be important for every individual in the Turkish society structure and that there is no difference between age groups. As a result of the analyzes made, it was deemed appropriate to exclude item 8 from the Turkish-adapted questionnaire, since it reduced the Cronbach's alpha coefficient (17).

With the removal of these two items, the Turkish version of the 6-item and 2 sub-dimension questionnaire with a Cronbach alpha value of 0.693 was created. The Cronbach's alpha value of the questionnaire was accepted as reliable considering the limit values in the literature (17).

Table 4 The level of relationship between the questionnaire score and the variables

		Total score	ER	IS
Total score	r	1	<b>0.581**</b>	<b>0.955**</b>
	p		0.0001	0.0001
ER subscore	r	<b>0.581**</b>	1	<b>0.312**</b>
	p	0.0001		0.0001
IS subscore	r	<b>0.955**</b>	<b>0.312**</b>	1
	p	0.0001	0.0001	
Age (year)	r	<b>-0.385**</b>	-0.072	<b>-0.423**</b>
	p	0.0001	0.403	0.0001
BMI (kg/m <sup>2</sup> )	r	<b>-0.253**</b>	-0.064	<b>-0.272**</b>
	p	0.003	0.454	0.001
Exercise (min/w)	r	<b>0.206*</b>	-0.016	<b>0.246**</b>
	p	0.016	0.856	0.004
The number of very close friends	r	<b>0.279**</b>	0.139	<b>0.275**</b>
	p	0.001	0.109	0.001
The number of close friends	r	<b>0.172*</b>	0.065	<b>0.176*</b>
	p	0.047	0.450	0.041
The number of fewer close friends	r	<b>0.198*</b>	0.122	<b>0.187*</b>
	p	0.021	0.157	0.030
The number of households	r	0.143	0.027	0.157
	p	0.096	0.751	0.067
EQ-5D-3L	r	<b>0.349**</b>	<b>0.238**</b>	<b>0.321**</b>
	p	0.0001	0.005	0.0001
EQ-VAS	r	<b>0.350**</b>	<b>0.219*</b>	<b>0.328**</b>
	p	0.0001	0.010	0.0001

ER: Emotion-regulatory sub-dimension (Items 4 and 6) score, IS: Information-seeking sub-dimension (Items 1, 3, 5 and 7) score, BMI: Body mass index, min/w: minutes/week. \*: p value is significant at the 0.05 level (2-tailed), \*\*: p value is significant at the 0.01 level (2-tailed). When p value is less than 0.05, there is a very weak correlation if  $r < 0.2$ , weak level if  $r = 0.2-0.4$ , moderate level if  $r = 0.4-0.6$ , high level if  $r = 0.6-0.8$ , and very high correlation if  $r > 0.8$ .

When the version of the 'Social Motivation Questionnaire' adapted to Turkish and Turkish culture is examined, the total score of the questionnaire has a moderate correlation with the emotion-regulatory sub-dimension score, and a very high correlation with the information-seeking sub-dimension score. It can be predicted that the moderate relationship between the ER sub-dimension and the total score may be due to the fact that the two items that were removed were items belonging to the ER sub-dimension. When the original article of Gong et al. is examined, it is

hypothesized that IS social motivation decreases and ER social motivation increases with age (5). When our study is examined, as can be seen in Table 4, age and IS social motivation score showed a moderate negative correlation ( $r = -0.423$ ). However, the total score of the questionnaire showed a weak negative correlation with age ( $r = -0.385$ ). This shows that our study moderately supports the hypothesis of Gong et al.'s (5) regarding the decline of IS social motivation with age. However, in our study, no significant statistical difference was observed regarding the

increase in ER social motivation with age ( $r=-0.072$ ). It was thought that the reason for this might be due to the cultural differences of the societies in which the questionnaires were applied.

On the other hand, it can be observed that other parameters (BMI, exercise time, the number of very close/close/fewer close friends, the number of households, EQ-5D-3L and EQ-VAS) do not make a statistically significant difference on the questionnaire total score, ER and IS subscores. Contrary to our study, in the study of Gong et al., ER motivation showed a negative correlation with the social environment (the number of very close/close/fewer close friends) (5). Researchers have suggested that the reason for this is that people who seek ER motivation have a smaller and more core social environment, making them feel more emotionally secure, and therefore these individuals are friends with fewer and more emotionally close individuals. It has also been suggested that personal networks are more stable and less variable with age or over time than personality and social motivation (18). Considering the original study and our study, we suggest that future studies should be related to the effect of changes in the social environment on the ER and IS social motivation parameters.

One of the limitations of our current study is that it was conducted in a single center and in the city center. Another limitation is that both items removed from the Turkish version of the questionnaire belong to the ER social motivation sub-dimension. This situation should also be tested in different samples, and Gong et al.'s original 8-item questionnaire should be conducted in a wider Turkish geography and retested whether item 2 and item 8 are adaptable to Turkish society.

As a result of this research, we have created a version of the 'Social Motivation Questionnaire' consisting of 2 sub-dimensions and 6 items adapted to Turkish and Turkish culture (Appendix 1). We think that this questionnaire can be used to objectively measure the social motivation of Turkish society.

#### Conflict of Interest Statement

The authors have no conflicts of interest to declare.

#### Ethical Approval

Permission was obtained from Gong, who developed the 'Social Motivation Questionnaire, via e-mail on 09.02.2020 to ensure the validity and reliability of the questionnaire in Turkish. The study was approved by the local ethics committee's decision dated 18.08.2021 and numbered 17/269.

#### Consent to Participate and Publish

Written informed consent to participate and publish was obtained from all individual participants included in the study.

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#### Availability of Data and Materials

Data available on request from the authors.

#### Authors Contributions

GK: Data curation; Visualization; Writing-original draft  
SE: Conceptualization; Formal analysis; Investigation; Methodology; Validation; Project administration; Supervision; Writing-review & editing.

#### Editorial

Although SE, one of the authors of the article, is editorial board member of the journal, she has not taken part in any stage of the publication processes of this article.

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### Appendix 1.

Adapted version of the 'Social Motivation Questionnaire' into Turkish and Turkish culture

#### Sosyal Motivasyon Anketi-TR

Açıklama: Aşağıdaki ifadeleri okuyunuz. Her bir ifade için, lütfen kendi durumunuza göre ne kadar katıldığınızı değerlendiriniz. 1 'hiç katılmıyorum', 7 'çok katılıyorum' anlamına gelen ankette, uygun sayının altına işaret koyunuz.

Eski (original) numara	Yeni numara	Madde	1	2	3	4	5	6	7
1	1	Hakkında çok az şey bildiğim konular hakkında bilgi sahibi insanlarla vakit geçirmek benim için önemlidir							
2	*	<i>Beni olduğum gibi kabul eden insanlarla iletişim kurmaya çalışırım</i>							
3	2	Hayatımın bu noktasında bilgili kişilerle iletişim kurmak benim için önemlidir							
4	3	Zamanımın çoğunu çok yakın hissettiğim insanlarla geçiririm							
5	4	Yeni ve farklı insanlarla tanışmaktan daha ilginç çok az şey vardır							
6	5	Hayatıma anlam katan insanlarla birlikte olmaya ihtiyacım var							
7	6	Zekama meydan okuyan insanlarla birlikte olmayı seviyorum							
8	*	<i>Benim yaşımda, her zaman etrafında karşılıklı anlayış duygusu olan biri olmalıdır</i>							

Not: BA = bilgi arayan sosyal motivasyon; DD = duygu düzenleyici sosyal motivasyon. Madde 1, 2, 4 ve 6'nin toplam puanı BA motivasyonunun seviyesini ölçer, daha yüksek puan (en düşük: 4 puan, en yüksek: 28 puan) daha güçlü BA motivasyonunu gösterir; Madde 3 ve 5'in toplam puanı DD motivasyonunun seviyesini ölçer, daha yüksek puan (en düşük: 2 puan, en yüksek: 14 puan) daha güçlü DD motivasyonunu gösterir.

\*: Anketin Türkçeye uyarlama çalışması sırasında uygulanan analizler sonucu elde edilen bulgular ışığında, anketin Türkçeye uyarlanmış sürümünden çıkartılmış olan maddelerdir.