# Measurement of social recognition in the perception of a person who has experienced a traumatic event

# Polish adaptation of the Social Recognition Questionnaire (SAQ)

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#### **ABSTRACT**

#### Objective

The aim of the study was to adapt the Social Acknowledgment Questionnaire (SAQ) for the Polish-speaking population. The questionnaire is used to assess the socio-interpersonal responses to people who have experienced traumatic events.

#### Method

Studies were carried out in five groups representing different populations. The reliability of the SAQ was estimated using Cronbach's alpha coefficients and intra-class correlation coefficients. The accuracy of the SAQ was checked with the use of confirmatory factor analysis and an analysis of the correlations between SAQ results vs. the severity of post-traumatic stress disorder (PTSD) symptoms and depression symptoms.

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#### Results

The Polish adaptation of the SAQ meets the criteria of reliability and validity. The values of reliability were found to be sufficiently high, taking into account the dimensions of internal cohesion expressed by the values of Cronbach's alpha coefficients, as well as stability expressed by intra-class correlation coefficients. The SAQ factor structure requires further analyses involving larger samples.

#### **Conclusions**

Social recognition can be a dynamic variable influenced by therapeutic interventions. The Polish version of the SAQ is a tool with good psychometric properties, which can be helpful in assessing the risk of PTSD development. It can also be a valuable questionnaire for further research in the context of prevention and treatment strategies for people with PTSD and their relatives.

Keywords: traumatic stress; PTSD; social recognition; SAQ; Polish adaptation

#### INTRODUCTION

Risk factors for post-traumatic stress disorder (PTSD) have been extensively investigated (Brewin et al., 2000; Brewin et al., 2017; Ozer et al., 2003), however the research conducted to date has focused largely on either the properties of traumatic events, or the intrinsic characteristics of traumatized individuals, including personality traits, post-traumatic cognitive responses and dysfunctional coping styles. Much less research has been devoted to the social and interpersonal variables that may be associated with this disorder. In an attempt to explore the responses of the social environment in the process of post-traumatic adaptation, Maercker and Müller (2004) proposed a construct of social recognition as a victim or survivor. Social recognition is defined as an injured person's experience of positive reactions from the community and responses that indicate the recognition of an injured person's particular distress. As stated by the authors, "(...) In a positive case, social recognition is associated with the attitude of unconditional support towards the victims and the injured. On the other hand, victims may experience negative reactions, such as ignoring, rejecting or blaming them (...)" [Maercker and Müller, 2004, p. 345; crowd. authors]. The concept of social recognition described above accounts for several aspects of perceived recognition: in contact with the closest person – partner, in an intimate relationship, in family relations, in the local community, and in society in general.

Based on the above concept of social recognition, almost a decade later Mearcker and Horn (Maercker and Horn, 2013) presented the "socio-interpersonal model of PTSD". This extensive theoretical model combines the previously described approaches to neurological changes, affective and cognitive processes with previously underestimated interpersonal and environmental processes. It assumes the existence of three levels at which interpersonal processes are analyzed. The first – individual – includes intrapersonal properties that have already been described in the literature in various PTSD models (Ehlers and Clark, 2000; Horowitz, 1976). However, the authors also emphasize the "social emotions" that had not been included

in these concepts, such as shame, guilt, anger or social cognitions, which are related to the social reality of an individual after a traumatic experience (Maercker and Horn, 2013). At the second level, interpersonal processes in close relationships, e.g. marriage or partnership, are analyzed. These processes can be important protective factors as well as risk factors for PTSD. In dealing with a traumatic event, attention is paid to social support, disclosure, blaming the victim and the phenomenon of ostracization. Finally, the third level of the socio-interpersonal PTSD model concerns further social relations, social and cultural conditions (e.g. cultural values) that affect the trauma victim. At the second level of this model, relations are defined from the "I – close person" perspective, whereas at the third level, the focus is shifted towards the "I – group" perspective. The third level also applies to phenomena related to the sense of belonging to a specific social group. Research indicates that collectively experienced trauma, e.g. after catastrophes and natural disasters, has less negative psychopathological effects than trauma experienced individually (Kessler et al., 2005; Maerkcer et al., 2008).

Maercker and Müller (2004) constructed a scale to assess the perception of an injured person in relation to the responses of the social environment after a traumatic event. The Social Acknowledgment Questionnaire (SAQ) covers various aspects of the perceived recognition of a traumatic experience by the immediate environment (family, friends), the local environment (acquaintances, neighbors, employers, local authorities, clergy), as well as the perceived recognition of being in a difficult situation. The situation by the entire society and culture in which the survivor was brought up.

Many empirical studies have confirmed the relationship between the level of social recognition in the perception of respondents and the severity of PTSD symptoms (Eising et al., 2021; Engler et al., 2020; Guan et al., 2019; Kern et al., 2019; Lis-Turlejska et al., 2018; Ljubotina et al., 2007; Mueller et al., 2008; Mueller et al., 2009; Müller and Maercker, 2006; Rzeszutek et al., 2020; Thormar et al., 2016; Wagner et al., 2012; Xu et al., 2016). The level of social recognition in the perception of people who have experienced trauma was analyzed as a predictor of the severity of PTSD symptoms or as a mediator of the relationship between risk factors. This includes the level of exposure to trauma and the severity of PTSD symptoms. The relationship between the level of social recognition and the severity of depression symptoms is not so clear-cut. The literature indicates that the level of perceived social recognition plays an important role in the development of PTSD symptoms but not depression symptoms, because unlike depression symptoms, PTSD symptoms are a specific emotional response to the experience of trauma (Rzeszutek et al., 2020). In other studies (Lis-Turlejska et al., 2018), a statistically significant relationship was found between the level of social recognition and the severity of depression symptoms.

The aim of this study was to present the Polish version of the SAQ and to analyze its reliability, including measurement stability, factor structure and accuracy. The reliability of measurement was estimated using Cronbach's reliability coefficients. Measurement stability was checked using intra-class correlation coefficients applied to two consecutive measurements. The values of intra-class correlation coefficients not only account for the correlation between successive

measurements, but they can also be used to verify the differences between the results of the first and second measurements. The factor structure was determined by confirmatory factor analysis based on the maximum likelihood method. Intergroup differences in terms of the factor structure were verified with the use of multigroup confirmatory factor analysis (MGCFA). Relevance was assessed by analyzing the correlation coefficients between the scores on the SAQ scales vs. the severity of PTSD symptoms and the severity of depression symptoms.

It was assumed that the Polish version of the SAQ will be considered reliable and accurate provided that:

- 1. The obtained values of the reliability coefficients will exceed the threshold value of 0.70 qualifying the tool for use in scientific research.
- 2. The results of the confirmatory analysis will confirm the adopted factor structure of the tool.
- 3. The relationship between the results on the SAQ scales and the severity of PTSD symptoms, documented in a series of the above-mentioned empirical research studies, will be confirmed.

#### **METHOD**

#### **Participants**

In order to verify the psychometric properties of the SAQ, i.e. the reliability and accuracy of measurement, the results obtained in the research conducted in 2015–2021 in five groups of respondents were analyzed. The study groups differed in terms of the type of traumatic experiences. The analyzed sample included college students, adult children of alcoholics referred to as "ACoAs" and alcohol addicts, women diagnosed with cancer, women experiencing domestic violence, and firefighters. In total, the results obtained for 505 subjects were included in the analysis. Additionally, the absolute stability of measurement performed with the use of the SAQ was assessed in a group of 57 students. The results obtained for samples from different populations were included in the analyses to verify the psychometric properties of the tool on a diverse sample. The demographic characteristics of the study sample are presented in Table 1.

#### **Questionnaires**

The research involved direct contact with the subjects. The following tools were used, preceded by a sociodemographic survey:

#### 1. Social Recognition Questionnaire (Maercker & Müller, 2004)

The Social Recognition Questionnaire (SAQ) is a self-report scale designed to study people who have experienced a traumatic event and/or a severe life crisis.

Table 1
Demographic sample characteristics

Demo- graphic	Group								
variables	(1) ACoAs + addicts	(2) Onco- logical patients	(3) Domestic violence victims	(4) Fire- fighters	(5) Students	(6) Students stability verification			
Age	19–75	29–86	20–63	20–44	19–26	20–29			
Gender									
Females	98 (57.6%)	67 (100%)	118 (100%)	0	63 (77.8%)	20 (35.1%)			
Males	72 (42.4%)	0	0	95 (100%)	18 (22.2%)	37 (64.9%)			
Education									
Primary	49 (28.8%)	4 (6.0%)	39 (33.1%)	0	0	0			
Secondary	60 (35.3%)	23 (34.3%)	49 (41.5%)	62 (65.3%)	45 (55.6%)	51 (89.5%)			
Higher	61 (35.9%)	40 (59.7%)	30 (25.4%)	33 (34.7%)	36 (44.4%)	6 (10.5%)			
Total	170 (100%)	67 (100%)	118 (100%)	95 (100%)	81 (100%)	57 (100%)			

The respondents subjectively evaluate themselves as persons who experienced recognition/appreciation due to being in a difficult situation after the experienced traumatic event. The respondents independently respond to each question measuring specific dimensions of the perceived social recognition of their experiences after the traumatic event. The intensity of the above-mentioned variable is measured on a four-point scale from 0 (completely disagree) to 3 (completely agree).

Of the 16 items included in the questionnaire, two items (No. 9 and No. 11) are to be reverse scored. The responses to these items should be recoded before proceeding with further calculations. The questionnaire includes three subscales: general disapproval (e.g. in the item "Most people cannot understand what I have gone through"), family disapproval (e.g. "My family thinks that I overreact to this event"), and recognition as a victim (e.g. "Many people offered to help me in the first days after the event"). It should be noted that the first subscale – general disapproval does not constitute the overall result in the questionnaire. The term "general" refers to the measurement of social recognition by society in general. In the questionnaire, the overall score is also calculated by inverting the results on the subscale of general disapproval and family disapproval, and then adding the resulting values to the scores on the recognition scale.

#### 2. PCL-5 questionnaire (Weathers et al., 2013; Ogińska-Bulik et al., 2018)

The questionnaire is used to measure the severity of PTSD symptoms in adults. The individual items of the questionnaire correspond to 20 symptoms of PTSD, and are adjusted to the diagnostic criteria of the DSM-5 classification. The subjects indicate the severity of each symptom on a scale from 0 (not at all) to 4 (very strongly). The reliability of measurement with the Polish version of the questionnaire is 0.96.

#### 3. BDI questionnaire (Beck et al, 1961; translated by Lewicka and Czapiński)

It is a widely used questionnaire for measuring the severity of depression, including cognitive and somatic symptoms. The severity of each symptom is measured on a scale from 0 to 3. A value of zero indicates no symptom is present and a value of 3 indicates the greatest severity of the symptom. The questionnaire contains 21 items. The reliability of measurement with the questionnaire ranges from 0.73 to 0.92, 0.86 on average (Beck, Steer, & Garbin, 1988).

#### Description of the validation process of the original SAQ version

The first version of the SAQ contained 66 statements. It was created based on a literature review and questionnaires filled in by people who have experienced various traumatic events. The surveys focused on the perceived recognition by other people. The scale was reduced to 49 statements after it had been evaluated by four experts from the Department of Psychopathology at the University of Zurich where the authors are employed. In a study by Maercker and Mueller (Maercker and Müller, 2004), the questionnaire was validated in a group of 178 former political prisoners (from the former German Democratic Republic – GDR) and a group of 151 crime victims. It was shown that all subscales of the SAQ were significantly correlated with the severity of PTSD symptoms as measured by the revised version of the IES-R Event Impact Scale (Weiss and Marmar, 1997). The family disapproval and general disapproval subscales were positively correlated with the results in the IES-R subscales measuring symptoms of agitation, intrusion and avoidance (correlation coefficients ranged from 0.32 to 0.58), while the recognition subscale was negatively correlated with the above subscales (correlation coefficients ranged from -0.29 to -0.32). Cronbach's alpha values in the group of political prisoners were as follows: for the overall score  $\alpha = 0.86$ , for General Disapproval  $\alpha = 0.82$ , for Recognition  $\alpha = 0.79$ , for Family Disapproval  $\alpha = 0.78$ . Cronbach's alpha values in the group of crime victims were as follows: for the overall score  $\alpha = 0.79$ , for General Disapproval  $\alpha = 0.78$ , for Recognition  $\alpha = 0.87$ , for Family Disapproval  $\alpha = 0.85$ . The factor structure was found to be almost identical in both groups of respondents. The relationship between the General disapproval subscale and the level of PTSD symptoms was strongest. The SAQ also demonstrated satisfactory test-retest reliability in a study conducted on a group of former political prisoners with an interval of two months between two consecutive measurements (overall score, r = 0.80;

Victim Recognition, r = 0.85; General Disapproval, r = 0.81; Family Disapproval, r = 0.74). The correlation between the SAQ scale and the scale for measuring social support – Social Support SOZZU was also examined (Sommer and Fydrich, 1991). Positive correlations were found between social support and all subscales of the SAQ (correlation coefficients ranged from 0.41 to 0.63). Moreover, a hierarchical regression analysis revealed that the SAQ included in the analysis explained a greater degree of variance in the severity of PTSD symptoms than the SOZZU questionnaire for measuring social support applied alone. According to the authors, a similar factor structure of the SAQ in both groups of respondents (i.e. former political prisoners and crime victims) indicates that it can be used in research involving individuals who have experienced various types of trauma, e.g. traffic accidents, assaults, violence.

#### **SAQ translation**

According to the Brislin (1980) procedure, the first stage of the translation procedure involved the translation of the SAQ. The translations were made by psychologists and psychotherapists who are fluent in English and have worked with trauma victims, including the author of this work. Several Polish versions of the SAQ were analyzed, one of them was selected and retranslated into the original language. Retranslation into English was made by a person with experience in therapeutic work who performs professional translations in the field of psychology (as a native speaker). This version was submitted to the author of the tool, Andreas Maercker, who suggested minor changes and then approved the Polish version of the tool.

#### **RESULTS**

#### **Reliability analysis**

The reliability of measurement with the questionnaire was determined based on the Cronbach method. The calculations were performed using the data obtained in the entire tested sample, i.e. in the six analyzed groups in total. The following reliability coefficients were obtained:  $\alpha = 0.75$  for the overall result in the SAQ,  $\alpha = 0.75$  for the results on the general disapproval scale,  $\alpha = 0.79$  for the results on the recognition scale and  $\alpha = 0.73$  for the results on the scale of family disapproval. Table 2 (p. 108) presents the values of the corrected item-scale correlation coefficients for individual items of the questionnaire.

In order to estimate the absolute stability of the test-retest of the SAQ, a group of 57 students (20 females, 37 males) was examined. The study involved two measurements three weeks apart. High values of intra-class correlation coefficients were obtained, pointing to the high stability of measurement with the questionnaire. The obtained values were Rtt = 0.66 for the results on the General

Disapproval subscale, Rtt = 0.66 for the results on the Recognition subscale, Rtt = 0.66 for the results on the Disapproval subscale, and Rtt = 0.77 for the overall score in the SAQ. The obtained results concerning reliability in both its aspects, i.e. the internal homogeneity of the tool and the stability of measurement with the tool, allow to state that the questionnaire in the Polish adaptation is a reliable tool.

 ${\bf Table~2}$  Values of corrected item-scale correlation coefficients for individual items of the SAQ

Item	Scale	r	Item	Scale	r
No. 7	General disapproval	0.63	No. 12	Recognition	0.65
No. 5	General disapproval	0.56	No. 3	Recognition	0.34
No. 4	General disapproval	0.54	No. 16	Recognition	0.50
No. 2	General disapproval	0.55	No. 11	Family disapproval	0.41
No. 1	General disapproval	0.65	No. 10	Family disapproval	0.40
No. 15	Recognition	0.44	No. 9	Family disapproval	0.27
No. 14	Recognition	0.69	No. 8	Family disapproval	0.50
No. 13	Recognition	0.69	No. 6	Family disapproval	0.50

# **Validity**

First, the adopted factor structure of the results obtained with the SAQ was verified. For this purpose, a confirmatory factor analysis based on the maximum likelihood method was performed. The main correction to the adopted factor structure, which was introduced due to the very high value of the modification index (MI = 143.16), was the inclusion of an additional correlation between items No. 9 and No. 11. It should be noted that these are the only items in the SAQ which should be recoded before calculating the results. Based on the values of the modification index, correlations were also added between adjacent items No. 12 and No. 13 (M.I. = 9.71) as well as No. 15 and No. 16 (M.I. = 12.37). The obtained values of the matching coefficients were satisfactory: NFI = 0.90, TLI = 0.97, CFI = 0.93, RMSEA = 0.06 [90% CI = 0.05; 0.07]. The recommended threshold values for the above-mentioned fit factors are 0.90 for the NFI index (Bentler, 1992), 0.95 for the TLI index (Hu and Bentler, 1999), 0.90 for the CFI index (Bentler, 1992) and <= 0.08 for the RMSEA index (Browne and Cudeck, 1993). Figure 1 (p. 109) shows a schematic representation of the factor structure of the results in the SAQ obtained in the conducted analyses.

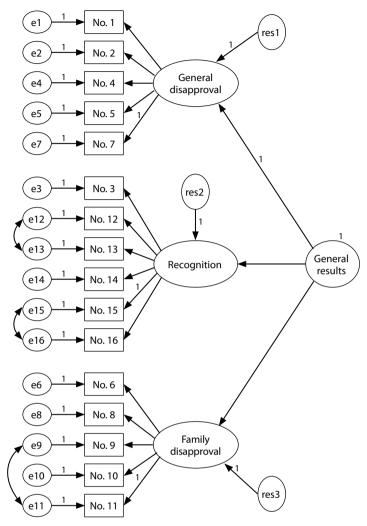


Figure 1. Schematic representation of the factor structure of SAQ results obtained with the use of confirmatory factor analysis

Table 3 (p. 110) presents the values of factor loadings obtained for individual items of the questionnaire.

The values of all correlation coefficients, except for item No. 9, were higher than 0.30.

In the analysis of the values of factor loadings, attention should be paid to the low value of the standardized regression coefficient regarding the relationship between the overall result in the SAQ and the results on the recognition scale. Based on the analysis of the MGCFA in the analyzed factor structure, it was found that

the values of factor loadings obtained in the five groups composing the analyzed sample differed from each other,  $\chi^2(52) = 86.04$ , p < 0.01. The values of factor loadings obtained in each group are presented in Table 4 (p. 111).

 ${\bf Table~3}$  Values of factor loadings for individual items of the SAQ

Path in factor structure			f	р
General disapproval	<	Total score	-0.99	0.001
Recognition	<	Total score	0.08	0.061
Family disapproval	<	Total score	-0.64	0.001
No. 7	<	General disapproval	0.76	0.001
No. 5	<	General disapproval	0.63	0.001
No. 4	<	General disapproval	0.61	0.001
No. 2	<	General disapproval	0.63	0.001
No. 1	<	General disapproval	0.70	0.001
No. 15	<	Recognition	0.44	0.00
No. 14	<	Recognition	0.85	0.00
No. 13	<	Recognition	0.76	0.00
No. 12	<	Recognition	0.65	0.00
No. 3	<	Recognition	0.38	0.00
No. 16	<	Recognition	0.55	0.00
No. 11	<	Family disapproval	0.24	0.00
No. 10	<	Family disapproval	0.64	0.00
No. 9	<	Family disapproval	0.11	0.00
No. 8	<	Family disapproval	0.83	0.00
No. 6	<	Family disapproval	0.79	0.00
No. 11	<>	No. 9	0.54	0.001
No. 15	<>	No. 16	0.15	0.003
No. 13	<>	No. 12	0.39	0.00

 $f-{\it factor loading}; p-{\it statistical significance}$ 

 ${\bf Table~4}$  Values of factor loadings for individual items of the SAQ in each group

Path in the factor structure			f(1)	f(2)	f(3)	f(4)	f( <b>5</b> )
General disapproval	<	Total score	-0.94	-0.94	-0.96	-0.94	-0.97
Recognition	<	Total score	0.03	0.56	0.07	0.36	0.42
Family disapproval	<	Total score	-0.49	-0.88	-0.58	-0.83	-0.54
No. 7	<	General disapproval	0.70	0.82	0.74	0.83	0.75
No. 5	<	General disapproval	0.45	0.68	0.61	0.67	0.70
No. 4	<	General disapproval	0.46	0.62	0.65	0.71	0.63
No. 2	<	General disapproval	0.58	0.73	0.61	0.69	0.53
No. 1	<	General disapproval	0.75	0.82	0.62	0.67	0.60
No. 15	<	Recognition	0.42	0.51	0.34	0.49	0.35
No. 14	<	Recognition	0.91	0.77	0.78	0.84	0.81
No. 13	<	Recognition	0.58	0.81	0.95	0.76	0.76
No. 12	<	Recognition	0.45	0.70	0.79	0.60	0.79
No. 3	<	Recognition	0.37	0.19	0.28	0.64	0.44
No. 16	<	Recognition	0.50	0.42	0.51	0.74	0.53
No. 11	<	Family disapproval	0.31	0.46	0.22	0.12	0.02
No. 10	<	Family disapproval	0.67	0.35	0.57	0.73	0.54
No. 9	<	Family disapproval	0.04	0.23	0.07	0.11	0.13
No. 8	<	Family disapproval	0.78	0.98	0.77	0.80	0.84
No. 6	<	Family disapproval	0.70	0.72	0.80	0.94	0.77
No. 11	<>	No. 9	0.25	0.16	0.22	0.16	0.39
No. 15	<>	No. 16	0.64	0.23	0.34	0.37	0.11
No. 13	<>	No. 12	0.58	0.43	0.47	0.60	0.59

f – factor loading; p – statistical significance; (1) – ACoAs+addicts; (2) – oncological patients; (3) – domestic violence victims; (4) – firefighters; (5) – students

The factor loadings obtained for items No. 9 and 1, i.e. items with an inverted key, were relatively low. Low values of standardized regression coefficients regarding the relationship between the overall result in the SAQ and the results on the recognition scale were found in the analysis of the results obtained in the group of ACoA and alcohol addicts, and in the group of women experiencing domestic violence. After the Credit scale had been excluded from the SAQ factor structure, an increase in the values of the matching indices was noted. These values were as follows: NFI = 0.95, TLI = 0.96, CFI = 0.97. RMSEA = 0.06 [90% CI = 0.04; 0.07].

Table 5 presents descriptive statistics for the analyzed interval variables.

Descriptive statistics for interval variables

Table 5

Variable	M	SD	min	max	$\mathbf{S}$	K
General disapproval	6.01	3.72	0	15	0.37	-0.50
Recognition	6.27	4.22	0	18	0.43	-0.42
Family disapproval	6.17	3.51	0	15	0.43	-0.14
SAQ total score	24.09	7.61	0	43	-0.31	0.01
Symptom severity criterion B	7.96	5.39	0	18	0.04	-1.17
Symptom severity criterion C	4.06	2.76	0	8	-0.07	-1.40
Symptom severity criterion D	14.16	7.87	1	28	-0.16	-1.20
Symptom severity criterion E	12.16	6.10	1	24	-0.03	-0.92
Severity of PTSD symptoms	38.33	19.69	4	70	-0.11	-1.10
Severity of depression symptoms	12.34	7.16	1	35	0.69	0.35

M – mean value; SD – standard deviation; min – minimum value; max – maximum value; S – skewness; K – kurtosis

Next, an analysis of convergent validity was performed by analyzing the correlation coefficients between the results obtained in the SAQ vs. the severity of PTSD symptoms measured with the PCL-5 questionnaire and the severity of depression symptoms measured with the BDI questionnaire. The results are presented in Table 6.

It was found that the results on the General Disapproval subscale were positively correlated with the severity of PTSD symptoms and with the severity of depression symptoms. The overall results in the SAQ were negatively correlated with the severity of PTSD symptoms and with the severity of depression symptoms. The results on the Recognition subscale were negatively correlated with the severity of depression symptoms, but they were not correlated with

the severity of PTSD symptoms. The results on the family disapproval subscale were positively correlated with the severity of PTSD symptoms and the severity of depression symptoms. The results confirmed the accuracy of measurements with the SAQ.

 ${\bf Table~6}$  Coefficients of correlation between SAQ results vs. the severity of PTSD symptoms and the severity of depression symptoms

	SAQ					
	General disapproval	Recognition	Family disapproval	SAQ total score		
Symptom severity criterion B	0.437***	-0.004	0.230***	-0.329***		
Symptom severity criterion C	0.455***	-0.076	0.274***	-0.393***		
Symptom severity criterion D	0.527***	-0.058	0.363***	-0.465***		
Symptom severity criterion E	0.393***	-0.036	0.170***	-0.292***		
Severity of PTSD symptoms	0.515***	-0.046	0.299***	-0.421****		
Severity of depression symptoms	0.386***	-0.243***	0.154***	-0.344***		

<sup>\*\*\*</sup> p < 0.001; \*\* p < 0.01

#### DISCUSSION

The Polish adaptation of the SAQ meets the criteria of reliability and validity. Reliability values were high for both internal consistency expressed by the values of Cronbach's coefficients, and absolute stability verified with the use of intra-class correlation coefficients. The factor structure of the SAQ was also consistent with the structure resulting from the key used to calculate the results. However, it should be noted that the results obtained using the Recognition subscale depend on the nature of the sample studied. There was no correlation between the results in this subscale and the overall results in the SAQ in the analysis of the results obtained in the group of ACoA and alcohol addicts, or in the group of women experiencing domestic violence. It should also be noted that the Recognition subscale is the only subscale in the SAQ that examines the intensity of recognition directly, e.g. "My friends' reaction was helpful". The other two subscales, General disapproval and Family disapproval, are based mainly on negatively worded items, e.g. "Most people cannot understand what I have been through". It seems that with regard to some respondents, depending on the type of traumatic experiences, the diagnostic value of directly formulated items may be limited. In the experience of some respondents, including alcohol-dependent people and women experiencing domestic violence, social recognition behaviors may be difficult to observe. Inverted measurement, i.e. based on the severity of negative phenomena related to disapproval, may then be a more effective technique. In studies where no statistically significant correlation is found between the results in the Recognition subscale and the overall results in the SAQ, the use of only the subscales of general disapproval and family disapproval can be considered. As the authors of the adaptation, we therefore recommend that the factor structure of the questionnaire be verified in each study with the use of this tool. Particular attention should be paid to whether the results on the Recognition scale are properly related to the overall result, especially in studies carried out in groups of respondents for whom the nature of traumatic experiences (associated with addiction or domestic violence) may hinder the perception of social recognition. This type of mismatch in the factor structure is not expected to occur in the results of studies conducted e.g. among individuals suffering from somatic diseases, firefighters, soldiers or policemen.

The absence of correlation between the results on the Recognition scale and the severity of PTSD symptoms, noted in the present study, had been previously reported by Wagner et al. (2012).

The conducted study has certain limitations. It is cross-sectional, whereas longitudinal analyses would certainly broaden the knowledge of the factors influencing the process of coping with trauma, taking into account the role of social recognition. Longitudinal studies would also support further verification of measurement stability using the SAQ.

Despite the above limitations, the Polish version of the SAQ is a tool with good psychometric properties, which can be helpful in assessing the risk of developing PTSD. It can also be a valuable questionnaire for further research in the context of prevention and treatment strategies for people suffering from PTSD and their relatives. The experience of social recognition as a victim or survivor is a protective factor in those who have experienced trauma. It is also of great importance to the trauma recovery process. It can be crucial in supporting the readiness to find new goals and seek the meaning of traumatic experiences. The perception of social recognition can also be a dynamic variable, influenced by therapeutic interventions. These interventions may focus on cognitive distortions and social skills, which in turn may affect the degree of perceived social recognition (Foa et al., 2005; van der Velden et al., 2019). Therefore, it should be taken into account in therapeutic work with people experiencing PTSD symptoms (Woodhouse et al., 2018; Zhao et al., 2020).

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