Psychometric properties of the Polish adaptation of short form of the Empathy Quotient (EQ-Short)

Kamila Jankowiak-Siuda[1], Joanna Kantor-Martynuska[2],
Anna Siwy-Hudowska[1], Magdalena Śmieja[3],
Mariola Dobrołowicz-Konkol[1], Iwona Zaraś-Wieczorek[1],
Agnieszka Siedler[1]

[1] Faculty of Psychology, University of Social Sciences and Humanities, Warsaw
[2] Institute of Psychology, Polish Academy of Sciences, Warsaw
[3] Jagiellonian University, Krakow

Summary

Aim. The purpose of the present study was to analyze the psychometric properties of the Polish-language version of the EQ-Short questionnaire, designed to measure affective and cognitive empathy.

Method. 940 subjects, aged 15–80, took part in the study. Subjects fluent in both Polish and English ($N = 31$) completed the questionnaire in the original English version and its Polish translation. The remaining subjects ($N = 909$) participated in a study designed to verify construct validity and reliability of the Polish version of the tool.

Results. The Polish and English versions of the EQ-Short show linguistic equivalence at a satisfactory level ($r = 0.80$, $p < 0.001$). Tests of validity and reliability of the translated tool showed that the Polish-language EQ-Short has good psychometric properties (Cronbach's $\alpha = 0.78$), comparable to the original version. In all age groups there were statistically significant sex differences in EQ-Short scores: women scored higher than men.

Conclusion. The Polish-language adaptation of EQ-Short is linguistically and psychometrically similar to the English original and meets the criteria of a reliable tool for measuring empathy.

Key words: empathizing, assessment, EQ-Short

Introduction

Empathy is a key component of social cognition, a common subject of research in social science. However, there is no consensus on the proper definition of this theoretical construct. In the affective approach, empathy is understood as the ability to share the emotional states of others, as well as to emotionally attune to another person [1–3]. From the cognitive point of view, empathy is the ability to take the perspective of and reason about another person's mental states (thoughts, intentions and beliefs) [4, 5]. Empathy is given the broadest interpretation in multidimensional theories that combine the above-mentioned approaches [6, 7]. These include the definition of empathy given by Baron-Cohen (2002) within the framework of the Empathizing-Systemizing theory (E-S).

This theory includes two dimensions: empathizing and systemizing. These dimensions are measured with two parallel scales: the Empathy Quotient (EQ) and the Systemizing Quotient (SQ), that can be used together or separately. Used together, they may be used to determine the relative tendency to empathize and to systemize. When applied separately, the EQ scale allows measuring individual differences in a tendency to empathize. Empathizing means "following" another person's emotions. Empathizing involves identifying another person's emotional state and thoughts, so as to understand and respond to them appropriately, manifesting pro-social behavior directed towards meeting the needs of a fellow human being [8–12]. Systemizing is a tendency to analyze the elements of a system, grasping the relationships between them and deducing about the rules underlying how the system works. This function allows making predictions about how the system will behave and controlling it [13]. It contrasts with empathizing in that it is focused on the logical-mathematical properties of the system components.

The Empathy Quotient [13, 14] is commonly used to measure empathy. The scale consists of 60 items, of which 40 are related to empathy and 20 are control items. Wakabayashi et al. [15] proposed a short form of the questionnaire, with only 22 items (Empathy Quotient – short). They have shown that a short form of the Empathy Quotient (EQ-Short) is a reliable and valid tool for the measurement of individual differences in empathizing. The EQ-Short includes items that refer to an ability to recognize thoughts or feelings of another person and to react to these thoughts and feelings with adequate behavior.

Research demonstrates that empathizing is more developed in women than in men [10, 13, 16, 17]. From early infancy, girls spend more time looking at faces, particularly the eyes, while boys turn their attention to the moving objects [18]. Women interpret all non-verbal messages more accurately on the basis of facial expression (e.g., the eyes) and intonation, and are better at evaluating emotional states of other people [8, 19]. Empathy is essential to any dialogue in the proper sense, both at the personal and social levels. Empathizing deficits may be characteristic of disorders associated with autism [20–22] and psychopathy [23].

The tool currently used to study empathy – the self-report Empathic Sensitiveness Scale [24] – measures such reactions of an observer to another person's experience considered as a tendency to empathize, taking a perspective of another person and experiencing personal distress in three dimensions. However, unlike the EQ-Short, this tool cannot be used to assess the general level of empathy.

Using self-report measures in psychological research is burdened with the risk of error resulting from the participants' distortion of the information about their own characteristics. Considering such a risk, it is reasonable to use a self-report measure of empathy (ESS) together with another test of empathy. Moreover, given the functional importance of empathy, the small number of self-report tests measuring it, both at normal and deficit levels, and the current interest in the subject of empathy, it seems a worthwhile endeavor to provide researchers with another reliable tool. The present paper discusses the psychometric properties of the Polish-language version of the EQ-Short that fills in the gap mentioned above. We assumed there is a positive relationship between empathy measured with the EQ-Short and the selected subdimensions of empathic sensitivity measured with the ESS [24], as well as with the perception and understanding of emotions as measured with the EIT [25].

Method

The EQ-Short [15] is a short version of the scale designed to measure cognitive and affective empathy [13, 14]. The scale consists of 22 statements, which describe the subject's behavior towards other people. The items relate to the ability to recognize other people's thoughts and feelings, as well as emotional responses to them.

Subjects were asked to indicate the degree of agreement or disagreement with each statement by marking one of four possible answers ("strongly agree", "slightly agree", "slightly disagree", and "strongly disagree") [15]. The reliability test of the original scale has shown that it is internally consistent to a high degree ($\alpha = 0.88$).

Items 1, 2, 5, 6, 7, 8, 10, 11, 13, 15, 16, 17, 18, 19, 20, and 21 were scored according to the following formula: "slightly agree" – 1 point, "strongly agree" – 2 points, "slightly disagree" and "strongly disagree" – 0 points. For the remaining items (3, 4, 9, 12, 14, and 22), an inverted scoring formula was used: "slightly disagree" – 1 point, "strongly disagree" – 2 points, "slightly agree" and "strongly agree" – 0 points. The scores were then added up to calculate the EQ-Short score; its maximum value was therefore 44 points [13, 14].

Participants

The linguistic equivalence of the original and translated scales was tested on a group of 31 subjects (21 females and 10 males), aged 28–47, fluent in both Polish and English. The subjects were recruited using snowball sampling. The studied group includes members of at least two generations.

The absolute stability of the adapted questionnaire was tested on 30 subjects (18 females and 12 males) aged 20–35. The test-retest study was conducted in a four-week interval.

The internal consistency of the Polish EQ-Short was tested on data collected from 909 subjects aged 15–80 (443 females and 462 males; 4 subjects did not reveal their sex; mean age $M = 28.09$, $SD = 16.04$). The sample included high school and college students, employees and pensioners.

Adaptation procedure

Once the permission to adapt the EQ-Short for the Polish population was granted by the main author, the adaptation procedure was carried out complying with the questionnaire translation rules. Minor inconsistencies with the original were allowed in some of its items, with regard to language differences [26, 27].

The psychometric properties of the EQ-Short were tested in several stages. As part of the translation work, the original version of the scale was translated into Polish, from which a back-translation was prepared. The translations were then analyzed and revised and a study with subjects fluent in Polish and English was performed. The original scale was initially translated independently by four psychologists fluent in English, including three researchers specializing in empathy and individual differences. These translations were then compared and a single Polish version emerged as a result of discussion. This version was back-translated into English and then tested for linguistic equivalence with the original by individuals fluent both in English and in Polish. In this procedure, the subjects first filled out the English-language version of the scale and 21 days later they completed its Polish translation. In the next step, the final version of the scale was used to test the participants whose native language was Polish, so as to assess the test-retest stability and reliability of the tool, and to measure the variables required to verify construct validity of the adapted tool. Detailed information about the age and number of participants in each study group is given in Table 1.

Table 1. **Descriptive statistics for the whole sample.**

	Linguistic equivalence analysis				
	N	Min.	Max.	*M*	*SD*
Men	10	31	41	35.10	3.35
Women	21	28	47	35.90	4.83
Total	31	28	47	35.65	4.36
	Test-retest stability				
	N	Min.	Max.	*M*	*SD*
Men	12	22	29	25.20	2.25
Women	18	20	35	26.60	5.20

Total	30	20	35	26	4.28
	Internal consistency				
	N	Min.	Max.	*M*	*SD*
Men	462	15	78	26.72	15.54
Women	443	16	80	29.61	16.48
Total	905	15	80	28.10	16.04
Information about sex not available	4	—	—	—	—
Information about age not available	69	—	—	—	—

Research tools

In addition to the Empathy Quotient, participants were also tested with the Empathic Sensitiveness Scale (ESS) [24] and the first part of the Emotional Intelligence Test (EIT) [25]. The ESS is an adaptation of the Interpersonal Reactivity Index (IRI) by Davis [28], and measures empathy considered as a multidimensional construct. It consists of 28 statements, related to three separate factors: Empathic Concern (EC, 11 items), Perspective Taking (PT, 9 items) and Personal Distress (PD, 8 items). The EC scale measures compassion and empathy directed towards others, the PT scale – feelings directed towards oneself (fear, distress, discomfort), and the PD scale – a tendency to take another person's perspective.

The first part of the Emotional Intelligence Test consists of 12 tasks. In each of these tasks a participant is asked to think about what the characters in the depicted situation feel and think. The tasks can be divided into two subscales – Perception and Understanding. Perception is defined here as accurate identification of feelings, while the term Understanding refers to knowledge about the experiences relevant to the emotional sphere. The second part of the Emotional Intelligence Test consists of the scales of Assimilation and Regulation. These scales can be used to measure a degree to which a participant's selection of the most effective behavior in a given situation is correct [25]. The tools were judged theoretically invalid for the study of empathy and therefore were not used in the present analysis.

Results

Linguistic equivalence analysis

Authors of the original scale did not provide any justification for narrowing down the scores to the 0–2 range. Neither did they show that this procedure was necessary for data analysis. For this reason, we used the 0–3 range in all our analyses below. This should make it more likely that EQ-Short scores will be distributed normally, so as to correspond to the assumed actual distribution of the variable in the population. Moreover,

due to the fact that variance between answers 0 and 1 was not 0, there is no reason to recode the scores. The higher discriminative power of the tool is thus also preserved.

Raw data were used in the analysis, in accordance with the practice established in psychology considering the variables that are measured on a Likert scale [28]. For the English version, the average score across all the participants was 27.65 (SD = 7.71). For the Polish version, the average score was 26.17 (SD = 6.49). Scores on the Polish and English-language versions of the EQ-Short were highly correlated (r = 0.80; p < 0.001). Analysis of non-parametric correlation coefficients (Spearman's *rho*) between pairs of scale items revealed statistically insignificant or nearly insignificant relations between five pairs of scale items (3, 11, 14, 18, 20). The remaining seventeen pairs of items were moderately to highly correlated (from rS = 0.39; p < 0.05 for item 12 to rS = 0.75; p < 0.001 for item 21).

Absolute stability

In the remaining analyses we followed the original research that we considered as prototypical. The absolute stability of the adapted questionnaire was tested on 30 subjects (18 females and 12 males) aged 20–35, in a four-week interval. The correlation coefficient for the two sets of measurements with the EQ-Short questionnaire was r = 0.85; p < 0.001. In the first measurement, the mean was M = 23.00; SD = 6.44; in the second one the figures were: M = 24.57; SD = 6.04. In the first measurement, Cronbach's α = 0.85, and in the second measurement – Cronbach's α = 0.72. The correlation coefficient corrected for attenuation was r > 1.0. Repeated-measures ANOVA showed significant differences between the two measurements – $F(1.29)$ = 6.26; p < 0.05, η2 = 0.18. These small, though significant differences between the means can be explained by the effect of experience, i.e., participants' familiarity with the questionnaire and their tendency to be more thoughtful in responding to the questionnaire items. In this group, there was no correlation between the EQ-Short score and age – r = 0.06; p = 0.15.

Internal consistency

The 22-item scale proved reliable to a satisfactory degree (Cronbach's α = 0.78). It turned out that Cronbach's α was 0.80 in the group of subjects under 50 years of age, while it was 0.63 in the subjects aged 50 and over. The discriminative power of scale items is given in Table 2.

Table 2. **Internal consistency of the EQ-Short: in the whole sample and in two subsamples consisting of older and younger subjects**

Item	Total (N = 909)		Age < 50 years (N = 797)		Age > = 50 years (N = 109)	
	Item-total correlation	Cronbach's alpha if item deleted	Item-total correlation	Cronbach's alpha if item deleted	Item-total correlation	Cronbach's alpha if item deleted
1	0.316	0.776	0.308	0.793	0.471	0.598

2	0.469	0.767	0.473	0.784	0.424	0.596
3	0.231	0.783	0.259	0.797	0.056	0.643
4	0.173	0.785	0.197	0.800	0.010	0.645
5	0.140	0.791	0.165	0.805	-0.048	0.655
6	0.493	0.766	0.511	0.782	0.342	0.604
7	0.368	0.774	0.387	0.790	0.220	0.618
8	0.382	0.773	0.388	0.790	0.354	0.604
9	0.195	0.785	0.201	0.800	0.135	0.628
10	0.477	0.767	0.495	0.783	0.344	0.603
11	0.374	0.773	0.374	0.790	0.389	0.599
12	0.201	0.784	0.235	0.798	0.006	0.649
13	0.399	0.772	0.410	0.788	0.346	0.602
14	0.190	0.784	0.195	0.800	0.162	0.626
15	0.392	0.773	0.404	0.789	0.343	0.603
16	0.468	0.767	0.480	0.784	0.386	0.597
17	0.476	0.767	0.502	0.783	0.253	0.615
18	0.387	0.773	0.410	0.788	0.172	0.623
19	0.389	0.772	0.409	0.788	0.181	0.622
20	0.446	0.769	0.468	0.785	0.302	0.609
21	0.369	0.773	0.397	0.789	0.143	0.626
22	0.207	0.783	0.230	0.798	0.056	0.640

Considering the whole sample, items 4, 5, 9, and 14 have low discriminative power, which may indicate that the given item is of little value for the tool or that its theoretical consistency is low [29, 30], although it is not provided in the analysis accompanying the original version. However, when several analyses were performed on subsamples defined by age, it turned out that for subjects who were 50 or older, correlations between the items and the scale as a whole were below 0.2 for as many as 9 items (4, 5, 9, 12, 14, 18, 19, 21, 22). Among younger subjects, the correlation with the remaining items was markedly lower only for item 5. Analyses indicate that scores in the 50-and-over age group exhibit lower internal consistency than in the group of younger subjects. For people under 50 years of age – most often participating in psychological research – construct validity and reliability of the tool are satisfactory.

The means and standard deviations of the EQ-Short scores

The following scoring was used: "strongly agree" = 3, "slightly agree" = 2, "slightly disagree" = 1, "strongly disagree" = 0. This scoring method departs from that proposed for

the original EQ-Short [15] that combined the answers "slightly disagree" and "strongly disagree" (or "slightly agree" and "strongly disagree", see items 3, 4, 9, 12, 14, and 22) into one category, this obtaining a 0–2 answer scale. By distinguishing the "slightly disagree" and "strongly disagree" answers, we preserve information about the actual responses given by the subjects. Thus, the variance of the responses present in the source data is preserved, reflecting the true discriminative power of the items. The distribution of a "tendency to empathize" variable was close to normal, the Shapiro-Wilk W (909) = 0.997; $p = 0.055$; *Skewness* = 0.001; *SESKE* = 0.081; *Kurtosis* = 0.225; *SEK* = 0.162. Tests of normality of the distribution of empathy variables for each sex produced the following results: women – the Shapiro-Wilk $W = 0.995$; $p = 0.135$; *Skewness* = 0.163; *SESKE* = 0.116; *Kurtosis* = – 0.002, *SEK* = 0.231; men – the Shapiro-Wilk $W = 0.995$; $p = .132$; *Skewness* = – 0.142; *SESKE* = 0.114; *Kurtosis* = 0.261, *SEK* = 0.227).

Construct validity of the EQ-Short

A total of 325 subjects (123 females and 202 males) completed the ESS. Internal consistency of the scores on individual scales was as follows: Empathic concern (EC, $N = 324$), Cronbach's α = 0.76; Personal distress (PD, $N = 324$) Cronbach's α = 0.68; Perspective taking (PT, $N = 324$), Cronbach's α = 0.70. Correlations between responses on the EQ-short and subdimensions of the ESS – EC, PD and PT – are given in Table 3. There are significant relationships between the variables under analysis.

Out of the whole sample, 147 participants (81 females, 66 males) filled in the EIT. the results were acceptable considering their internal consistency (Cronbach's α = 0.62 for Perception subscale, Cronbach's α = 0.68 for Understanding subscale; see [31]). There was no significant relationship between the EQ-Short and the two EIT subscales (see Table 3).

Table 3. **Correlations between the Empathy Scales and subdimensions of the Empathic Sensitiveness Scale – Empathic concern, Personal distress and Perspective taking, as well as subdimensions of the Emotional Intelligence Test – Perception and Understanding**

Variables	EQ-S	ESS Empathic concern	ESS Personal distress	ESS Perspective taking	EIT Perception	EIT Understanding
EQ-S						
ESS Empathic concern	0.44***					
ESS Personal distress	-0.17**	0.19**				
ESS Perspective taking	0.42***	0.56***	-0.03			
EIT Perception	0.15	0.24**	-0.004	0.17*		
EIT Understanding	0.11	0.16*	0.09	0.27**	0.60***	
EIT Total	0.17*	0.23**	0.03	0.24**	0.91***	0.86***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

The study demonstrated the lack of correlation between empathy and age ($r = 0.016$; $p = 0.65$ for $N = 840$). With reference to the Student's t-test we can confirm the significantly higher level of empathy in females as compared to males – $t(903) = 7.01$; $p < 0.001$; Cohen's $d = 0.46$. Differences in the level of empathy in women and men are independent of age (Table 4). The age groups are aligned with phases of human development, except for the 50+ age bracket, which was taken into consideration due to the lower internal consistency of responses in this group.

Table 4. **Mean scores on the EQ-Short for men and women in specific age groups**

	N	Women			Men			Student's t	Cohen's d
		M	SD	N	M	SD	N		
Under 20 years	355	67.33	7.26	135	64.18	6.60	220	4.20***	0.45
20–29 years	244	66.86	6.19	126	64.42	6.37	118	3.03**	0.39
30-49	139	68.38	5.84	87	63.23	8.78	52	3.76**	0.69
50 and over	101	66.92	5.15	53	64.27	5.43	48	2.51*	0.50

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Confirmatory factor analysis

In the next step we carried out confirmatory factor analysis (CFA) to confirm the original, single-factor structure of the EQ-Short. We used the method of maximum likelihood (ML). The most frequently used measures of model fit were analyzed: $\chi^2(209) = 964.10$; $p < 0.001$; RMSEA = 0.063 (CI: 0.059–0.067), GFI = 0.901; AGFI = 0.881; CFI: 0.756; TLI = 0.730. The fit between the model and the data was rated as satisfactory. In this model all path coefficients and parameter variances were statistically significant ($p < 0.01$).

Furthermore, CFA was performed for the multigroup model, with sex differences taken into account. The following measures of fit were obtained: $\chi^2(418) = 1235.395$; $p < 0.001$; RMSEA = 0.047 (CI: 0.044–0.050); GFI = 0.881; AGFI = 0.856; CFI: 0.732; TLI = 0.704. Both in the female and male subsamples, parameter variation was statistically significant ($p < 0.01$), though statistically non-significant regression coefficients were obtained: for item 4 in the female group ($b = -0.093$; $p = 0.434$) and items 9 ($b = -0.025$; $p = 0.801$) and 14 ($b = -0.084$; $p = 0.347$) in the male group.

Discussion

The Polish-language EQ-Short is similar to the original EQ-S tool in terms of its linguistic meaning and content. It has good psychometric properties and is a practical tool for studying affective and cognitive empathy in the adult population. Preliminary results indicate that the EQ-S is as reliable a tool as the original English-language EQ-S [15] or the Chinese EQ-S [32]. In contrast to the original study, the Polish sample

included the participants over 50 years of age. Results indicate that the reliability of the scale is lower in this group. However, reliability of the scale in the population of adults under 50 years of age make it a useful research tool. The obtained results show high test-retest consistency of the EQ-S within one month. This provides evidence for relative stability of the tendency to empathize.

The analysis of construct validity of the EQ-Short shows its moderate correlation with EC and PT considered as subscales of the Empathic Sensitiveness Scale. EQ-Short also shows a negative relationship with PD which is consistent with the results obtained for the original version of the full EQ [33], as well as the adaptations of the EQ to the French [34] and Italian [35] populations. These results position the EQ-Short as a psychometric tool that can be used to measure affective and cognitive empathy. Furthermore, empathy measured by the EQ-Short is independent of such determinants of emotional intelligence as perception and understanding of emotions, measured by the EIT [25], or the tendency to exhibit negative emotional responses (fear, anxiety or distress) measured by the PD subscale of the ESS.

The lack of significant correlation between the EQ-Short and the two Emotional Intelligence Test scales may be due to the fact that, in accordance with the theoretical model on which the EIT is based [36, 37], the latter measures the ability to process affective information (here: perception and understanding), rather than motivation or competence. As it turns out, emotionally competent individuals can use their abilities to manipulate others [38], and psychopaths are very good at recognizing certain kinds of emotions [39–42]. A weak relationship between the EQ-Short and EIT scores may result from the formal differences between these measures. Correlations between empathy and certain aspects of emotional intelligence would obviously be stronger if self-report measures of emotional intelligence were used besides the EQ-Short. Most research shows that the "performance" tests of EI weakly (ca. 0.30) correlate with the measures of self-report in this domain [43]. Moreover, some data indicate an insignificant [44] or negative relationship between them [45]. If a correlation between the measures of the same construct is so low and unstable, we should expect that the correlation between the results of a test of EI and the results of a self-report measure of a similar construct is even lower. As ca. 80% of the population is convinced that their emotional intelligence is higher than average [46], using a "performance" test instead of a self-report measure seems a sound methodological decision. Having applied this methodology we know that the ability to perceive and make sense of emotion can help to empathize but does not determine the level of this tendency.

The results of our research are in accordance with the results of other studies run with the full EQ that demonstrated females' higher level of empathy as compared to males [13, 14, 47, 48]. Sex differences in empathy can be partly explained by the social role traditionally assigned to women as those exhibiting a high level of empathy. This cultural phenomenon is consistent with the results of the neuroanatomical [49, 50] and neurophysiological [51] research which demonstrates that as compared to men, women have more gray matter in areas where mirror neurons have been found (pars

opercularis of prefrontal cortex and inferior parietal lobule) [50]. These characteristics may predispose women to the increased emotional reactivity and empathy [51, 52]. Research reveals increased activity in female brain structures including the amygdala during tasks that require emotional evaluation [53, 54].

Moreover, the present study indicates that differences in the level of empathy between the sexes persist across different age groups, confirming earlier findings [55, 56]. However, the difference was shown to diminish with age, corroborating the results of the original study.

Recapitulation

This paper presents the procedure and analysis of the psychometric properties of the Polish adaptation of the Empathy Quotient-Short [15]. The Polish-language version of the EQ-Short, just as the English-language original, was shown to have good psychometric properties such as satisfactory reliability (internal consistency) and construct validity. The tool can be used to measure the general level of empathizing [13, 14]. Reliability of the scale in the population of adults under 50 years of age make it a useful research tool.

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Address: Kamila Jankowiak-Siuda
University of Social Sciences and Humanities
03-815 Warszawa, Chodakowska Street 19/31.

Appendix 1

SKRÓCONA SKALA ILORAZU EMPATII

*Tłumaczenie i adaptacja na język polski: K. Jankowiak-Siuda,
J. Kantor-Martynuska, A. Siwy-Hudowska*

Instrukcja: Wypełnij poniższy kwestionariusz jak najszybciej, zgodnie z pierwszą odpowiedzią jaka przyjdzie Ci na myśl. Przy każdym z poniższych stwierdzeń zaznacz (X), czy się z nim zgadzasz i w jakim stopniu.

		Zdecydowanie tak	Raczej tak	Raczej nie	Zdecydowanie nie
1.	Szybko i intuicyjnie dostrajam się do samopoczucia drugiej osoby.				
2.	Potrafię przewidzieć, jak ktoś inny będzie się czuł.				
3.	Jest mi trudno zrozumieć, dlaczego ludzie tak bardzo denerwują się różnymi rzeczami.				
4.	W sytuacjach towarzyskich nie wiem jak się zachować.				
5.	Sytuacje towarzyskie nie wprawiają mnie w zakłopotanie.				
6.	Ludzie mówią mi, że dobrze rozumiem jak się czują i co mają na myśli.				
7.	Z łatwością zauważam, jeśli ktoś chce się włączyć do rozmowy.				
8.	Z łatwością orientuję się, czy ktoś jest zainteresowany czy znudzony tym, co mówię.				
9.	Ludzie często mówią, że jestem nieczuły, choć ja sam nie zawsze wiem dlaczego.				
10.	Z łatwością potrafię postawić się w sytuacji innej osoby.				
11.	Szybko orientuję się, gdy ktoś mówi co innego niż myśli.				
12.	W rozmowie koncentruję się raczej na tym, co ja myślę, a nie na tym, co może myśleć mój rozmówca.				

13.	Potrafię przewidzieć jak ktoś inny się zachowa.				
14.	Nie zawsze rozumiem, dlaczego ktoś poczuł się urażony.				
15.	Szybko zauważam, kiedy ktoś w grupie czuje się niezręcznie lub niekomfortowo.				
16.	Potrafię rozpoznać, jeśli ktoś ukrywa swoje prawdziwe uczucia.				
17.	Znajomi zazwyczaj opowiadają mi o swoich problemach, bo uważają, że dobrze ich rozumiem.				
18.	Potrafię wyczuć czy przeszkadzam nawet, jeśli ktoś mi o tym nie powie.				
19.	Zazwyczaj przejmuję się problemami moich przyjaciół.				
20.	Łatwo domyślam się, o czym druga osoba chce ze mną rozmawiać.				
21.	Lubię troszczyć się o innych ludzi.				
22.	Często trudno mi ocenić, czy coś jest grzeczne czy nie.				