

# Gratitude and its measurement – the Polish adaptation of the *Grat – R Questionnaire*

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## GRATITUDE AND ITS MEASUREMENT – THE POLISH ADAPTATION OF THE GRAT – R QUESTIONNAIRE

The purpose of the article is to present the results of the Polish adaptation of the Gratitude Resentment and Appreciation Test (Revised GRAT), published by P.C. Watkins, K. Woodward, T. Stone & R.L. Kolts. This tool is meant for the measurement of an individual disposition of gratitude. In literature, the concept of gratitude is vague. A shallow, although very common definition explains the concept as experiencing positive emotional states caused by receiving good from others. A broader picture, in accordance with the philosophy of the original authors, is treating gratitude as a certain disposition, general trait, encompassing not only the interpersonal context (gratitude towards the giver), but also the transpersonal and existential contexts, such as appreciation for the beauty of nature or the simple joys of everyday life. Because of a lack of Polish sources defining gratitude as such a complex construct, it seems appropriate to choose adaptations.

**Key words:** Gratitude, GRAT – R, Polish adaptation, appreciation, life satisfaction

### INTRODUCTION

Psychology, as a science, ever since it was invented, has been concentrated on the identification of symptoms pointing to dysfunctions, flaws, disorders, and diseases (Ryan & Deci, 2001; Emmons & Sheldon, 2002; Trzebińska, 2004; Seligman, Rashin & Parks, 2006). Until recently, issues regarding positive human traits, so-called virtues, and psychical forces have been marginalized. However, currently, positive psychology is getting increasingly popular, underlining the importance of research concerning those aspects of human functioning, which encourage overcoming boundaries and obstacles (Gulla & Tucholska, 2007). One of the psychological variables, which have become the point of interest of scientists, is gratitude. This virtue is defined as a base for all the other virtues (Seligman, 2004). It should, however, be mentioned, that, in the field of psychology, systematic and deep exploration of this topic has only first begun in the 21st century (Szcześniak, 2007; Wood, 2008; Tucholska, 2016). This construct has been conceptualized in many different ways, with no clear answer. Gratitude should be treated as an emotion, with the traits of a social, moral and cognitive emotion (Fredrickson, 1998; Walker & Pitts, 1998; McCullough, Emmons & Tsang, 2002; Emmons, 2004; Roberts, 2004; DeSanto et al., 2010); it is a virtue of an ambivalent, relational nature

(Gruszecka, 2011; Trzebińska, 2008); a positive affective state (Mayer & Salovey, 1991; McCullough, Emmons & Tsang, 2002); a life orientation (Caprara, 2009); a virtue or a trait (Peterson & Seligman, 2004); a personality trait/disposition (Watkins et al., 2003), a positive strategy of coping (Wood, Joseph & Linley, 2007) or a moral attitude (Morgan, Gulliford & Kristjánsson, 2017). In the subject's literature, there are both broad and shallow pictures of gratitude (Lambert, Graham & Fincham, 2009). The first picture restricts the range of experiencing gratitude to the social situations, where a good is received (help, favors, benefits) from a donor, the so-called interpersonal gratitude (Emmons, 2004; Roberts, 2004; DeSanto et al., 2010). The second approach points to existential and transpersonal cross-references of a unit, the so-called generalized gratitude (Adler & Fragley, 2005; Wood et al., 2008; Wood, Froh & Geraghty, 2010). In this approach, it is generally stated that a human, summarizing his achievements, accounts for not only the contribution of other humans but also of a broadly defined higher power. According to the most common and, at the same time, most general definition, gratitude is a complex, positive emotion appearing during the act of receiving a good (a benefit), with the source of the gift being other than the receiver, being a result of the actions of other people, life situations, fate, nature, world, cosmos or God (Roberts, 2004; Emmons, 2004; Szcześniak, 2007; Kwiatek, 2012; Niewiadomski, 2014; Tucholska, 2016). The common denominator of most of those views is underlining the positive effect that gratitude has on the functioning of a human (Gruszecka, 2011).

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Research show, that this variable is connected to physical and mental well-being, optimism, joy and the feeling of happiness, feeling of coherence and satisfaction with life; with hope, humility, and trust; with a non-materialistic life philosophy (Emmons & McCullough, 2003; Sheldon & Lyubomirsky, 2006; Lambert & Fincham, 2009; Lambert, Fincham & Dean, 2009; Toepfer & Walker, 2009; Fagley, 2012; Subandi et al., 2014; Kruze et al., 2014). Gratitude is thought of as a factor protecting from mental disorders, depression, social anxiety, negative effects of everyday stress and post-traumatic stress disorders, loneliness and jealousy (Krause, 2006; Froh, Miller & Snyder, 2007; Kashdan et al., 2009; Froh, Miller & Snyder, 2011; Caputo, 2015). Experiencing gratitude supports maintenance and development of deep bonds with others, both in terms of intimate relationships and friendships (Fredrickson, 1998; McCullough & Tsang, 2004; Algoe, Haidt & Gable, 2008; Lambert & Fincham, 2009; Bartlett et al., 2012). Gratitude motivates and is a cause of pro-social and altruistic behavior, achievement of educational excellence, economic well-being, consumer maturity (engagement and self-confidence as a consumer) (Bartlett & De Steno, 2006; Froh, Miller & Snyder, 2007; Froh et al., 2011; Bock et al., 2013). The quoted experimental results confirm the validity of the topic of gratitude. In Poland, this topic's main researcher is Eufrozyna Gruszecka (2011, 2014), who constructed a 20-item Gratitude Questionnaire for the measure of reaction to aid, and a tool named Good and Gratitude Balance. Empirical research regarding this variable was also conducted by Marlena Kossakowska and Piotr Kwiatek (2014), who created Polish adaptation of one of the most popular gratitude disposition measurement tools, the GQ-6 scale. It should, however, be noted, that this scale defines gratitude as a one-dimensional construct, focused only on the emotions of the beneficiary during the act of receiving good from someone else.

However, in the mind of authors such as Watkins et al. (2003); Adler and Fagley (2005); Morgan et al. (2007) gratitude is more complex disposition. In the GRAT test, gratitude is analyzed as a general trait, comprising not only of the interpersonal context of the feeling of gratitude but also the transpersonal and existential contexts, such as the appreciation for the beauty of nature or simple joys of everyday life (Morgan, Gulliford & Kristjánsson, 2017). It, therefore, appears justified to discuss appropriate adaptations, with the goal being an adaptation of The Gratitude, Resentment and Appreciation Test-Revised (GRAT – R) by Watkins, Woodward, Stone, and Kolts (2003) to the Polish realm. The GRAT Questionnaire treats gratitude as a tri-dimensional construct. The tool has a high Cronbach Alpha coefficient .92, with the individual sub-scales having coefficients of .76 to .90. The aim of the study was to verify the GRAT – R Test and to check whether the structure factor of gratitude by Watkins et al. (2003) is also adequate for Polish culture.

## METHOD

### PARTICIPANTS

The research was conducted among 287 participants (171 women and 116 men). The average age of the participants was 25.72 ( $SD=9.92$ ; with an age range of 18 to 66 years). The questionnaire GRAT is designed for both adults and teenagers. In the original version, validation studies on the GRAT questionnaire were conducted on a group of students (Watkins et al., 2003), while further work included a group of adolescents aged 10-19 years (Froh et al., 2011). The Polish adaptation was conducted on a group of adults.

**Sample 1.** The first sample consisted of 87 participants (73 women and 14 men), with an average age of 22.32 years ( $SD=5.17$ ). All respondents were students of social sciences. The research was carried out at the Pedagogical University in Krakow.

**Sample 2.** The second sample consisted of 200 participants including 98 women and 102 men. The research was conducted online, through the one author's website. The study includes demographic variables: age, gender, education, place of residence and professional activity.

The mean age was 27.64 years and a standard deviation of 12.22. The age range was between 18 to 66 years. The majority of surveyed had a secondary education (56.5%) and higher education (33.5%). Vocational education presented 4% of respondents and the primary only 2.5%, while seven people (3.5%) did not provide this information. Most of the respondents came from large cities (42%), almost 1/3 came from small towns (31.5%), 23% of respondents lived in the villages, and 4% of respondents did not answer about the place of residence. Respondents from nine voivodships in Poland took part in the survey, of which 80% lived in three provinces: Lesser Poland, Subcarpathian Province, and Silesia. Answers to the question about the professional activity of the respondents showed that 40% of them were working people, 48% were students and 10% were non-working persons, including pensioners. 2% of respondents did not provide such information.

### MEASURES

Tools for the measurement of gratitude:

*The GRAT – R Questionnaire* (Thomas & Watkins, 2003) is a tool used for measuring gratitude disposition. It consists of 44 questions, which are answered using the Likert scale, from 1 to 9 (with 1 being "I strongly disagree" and 9 being "I strongly agree"). In the test, 15 questions are reverse. The tool allows for a calculation of the general gratitude levels and its three components, such as the Sense of Abundance (AB) (a subscale consisting of 17 questions), Appreciation for Simple Pleasures (SA) (consisting of 14 items), and Social Appreciation (SAO) (consisting of 11 items).

The GQ-6 Gratitude Scale by McCullough, Emmons, and Tsang (2002), according to a Polish adaptation by Kossakowska and Kwiatek (2014). The tool consists of 6 items, which are answered using the Likert scale, from 1 to 7. The sum of points allows for determining the general gratitude disposition levels. The inner coherence of the questionnaire according to the indicator by Cronbach's  $\alpha$  equals .71.

Set of tools used for measuring life quality<sup>1</sup>:

The Subjective Vitality Scale (SVS) by R. Ryan and C. Frederick, consisting of 7 items, is used for measuring the feeling of vitality.

The Meaning of Life Questionnaire (MLQ) by M.F. Steger, P. Frazier, Sh. Oishi and M. Kaler includes two subscales (with 5 items each) answered using a scale from 1 to 7. The first MLQ-P scale is a tool used for measuring the current feeling of broader meaning in life, self-esteem, optimism in life and general happiness, while the second scale measures the individual's need for searching and giving life meaning through declarations of the need to search for meaning, purpose, mission, destiny and need for importance (Kossakowska, Kwiatek & Stefaniak, 2013).

The Life Satisfaction Scale (SWLS) by E. Dinner, R. Emmons, R. Larsen and Sh. Griffin, consisting of 5 items, according to the adaptation by Z. Juczyński (2009). Life satisfaction is defined as an effect of the individual's comparisons between their life situation and accepted standards.

The General Self-Esteem Scale (GSE) by E. O'Brien and S. Epstein, comprising of 7 items. The answers are depictions of subjective, general pictures and the assignment of positive or negative value to oneself.

The Altruism Scale (A-N) by J. Śliwak. In this scale, altruistic behavior is defined as conscious and voluntary actions for the benefit of others, for no goods in return, where helping others has a large enough value for the person in itself (Śliwak, 2005). In the research, a revised version, consisting of 10 stories, with 4 pre-written answers attached to each one, expressing the intensity of altruism (or otherwise), has been used. The general score is the sum of points and has a range of 10 to 40 points.

<sup>1</sup> The presented scales of psychological life quality have been chosen, translated and edited by prof. Zenon Uchnast in 2007 – the work has not been published.

## PROCEDURE

The research was conducted from November 2016 to January 2017. The first group of the examined participants has filled out a set of psychological questionnaires in paper form, such as the GRAT – R test, the GQ-6 scale, the Set of tools for measuring life quality and the A-N Altruism Scale. The survey took around 25 minutes. The second group has answered the GRAT – R Questionnaire electronically. The participants had a possibility of commenting on the level of clarity of the items. A factor analysis on the basis of the results has then been conducted. The obtained results allowed for an analysis of the validity of the GRAT-R test.

## RESULTS

Table 1 presents the descriptive statistics of the Polish version of the GRAT – R test, calculated for the first sample. Women achieved substantially higher scores in the GRAT – R test than men. The current research concerning emotions shows that, compared to men, women are more aware of their own emotions and tend to use more complex descriptions of their emotional states (Barett et al., 2000; Ciarrochi, Hynes & Crittenden, 2005). The results also show that women are more spontaneous in expressing gratitude than men (Kashdan et al., 2009; Yoosefvand & Rasekh, 2014; König & Glück, 2014) and achieve higher levels of gratitude disposition (Ansari, 2014).

Subsequently checked intergroup differences due to age. Respondents were divided into three age groups, i.e. 18-20 years ( $N=82$ ); 21 – 30 years ( $N=157$ ); 31 – 66 years ( $N=48$ ). Then, a one-way ANOVA analysis was carried out. The results of the statistical analysis indicate that there are no significant differences between persons of different ages in terms of gratitude and its dimensions.

The results of ANOVA variance analysis showed that variables such as the level of education or the type of professional activity are not related to the level of gratitude. It turned out, however, that the respondents differed in the Sense of Abundance level depending on the place of residence. One way ANOVA with post-hoc Tukey's HSD test showed, that people from big cities had higher scores in this subscale compared to people from the villages  $F(2,189)=3.98, p=.02, \eta_p^2=.03$

**Table 1**  
Descriptive statistics of Polish GRAT – R (Study 1,  $N=200$ )

Name of scale	Total ( $N=200$ )		Female ( $N=98$ )		Male ( $N=102$ )		$t$	$p$
	$M$	$SD$	$M$	$SD$	$M$	$SD$		
Sense of Abundance (AB)	91.01	22.54	95.07	27.21	91.96	22.82	.877	.381
Appreciation for Simple Pleasures (SA)	93.49	25.05	98.21	22.30	84.09	20.61	4.654	.000
Social Appreciation (SAO)	71.92	15.00	74.59	15.79	69.35	13.79	2.501	.013
Total score GRAT-R	256.42	49.27	267.88	53.71	245.40	41.97	3.305	.001

**THE STRUCTURE OF GRATITUDE IN THE POLISH VERSION OF THE GRAT-R QUESTIONNAIRE**

In order to verify the original structure of the three-factor structure of gratitude, confirmatory factor analysis (CFA) based on modeling of structural equations using the SPSS Amos 21 program was performed. The calculations included data from the electronic version of the questionnaire (N=200).

The values of matching indices obtained for the tested model do not fully confirm the assumed three-piece structure of gratitude. At the satisfactory level are the value of  $\chi^2 / df=2.649$  (less than 4) (Januszewski, 2011)

and the RMSEA index .039 (a value indicating good data fit the model, i.e. below .07) (Steiger, 2007). However, SRMR=.09 and indexes comparing the estimated model with the base model GFI=.657; AGFI=.620 and CFI=.732 are lower than the permissible value of .09 (Januszewski, 2011). Due to the lack of conclusive CFA results, it was decided to conduct exploratory factor analysis (EFA).

The factor structure of the GRAT – R test has been inspected with the use of an explorative factor analysis using the method of Main Components with the Varimax rotation. The matrix determinant for the analyzed data was equal to -14,.039, and Bartlett’s test was significant [ $\chi^2 (817)=1501.988, p<.001$ ]. In the analysis, three fac-

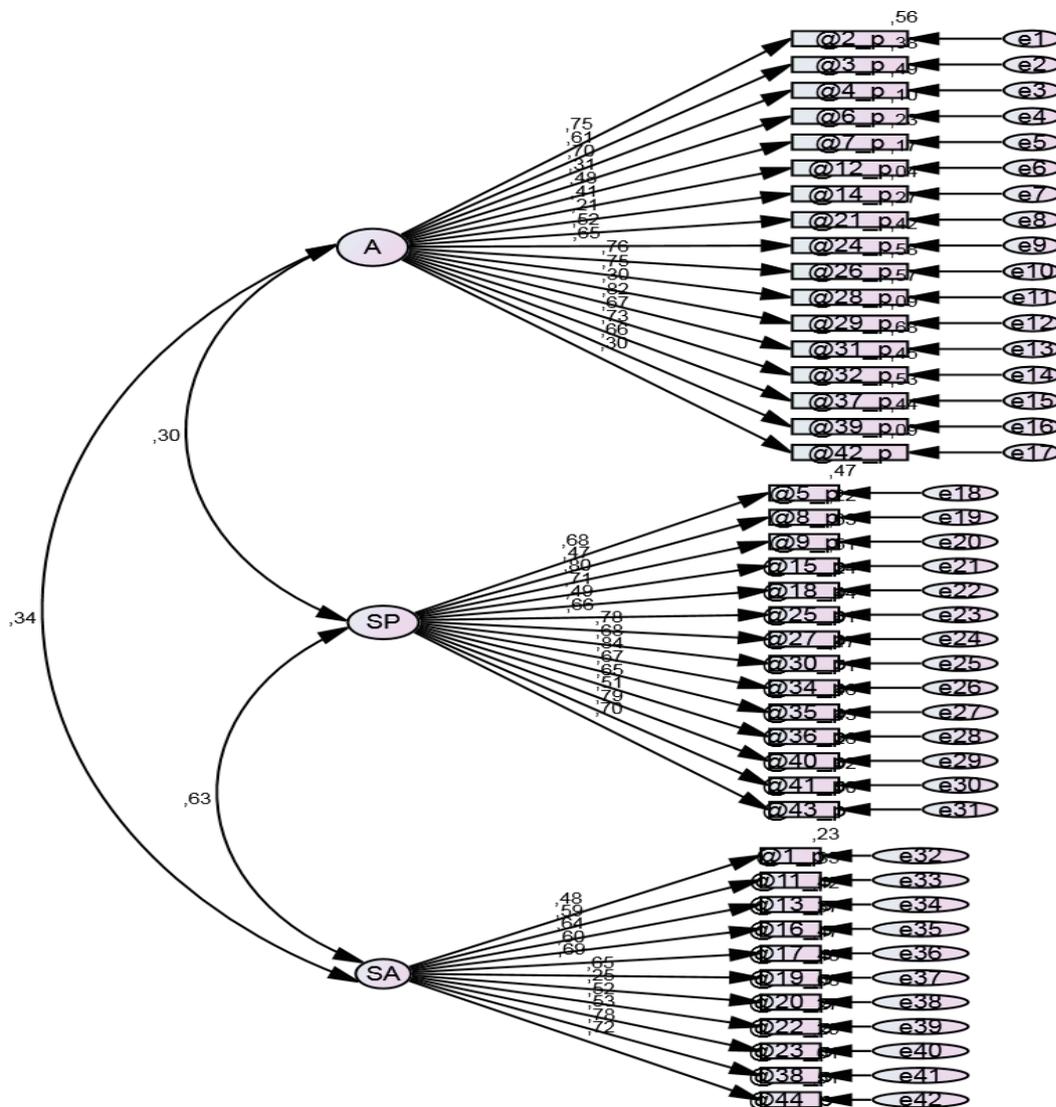


Figure 1. The structure of gratitude in the Polish adaptation of the GRAT – R Questionnaire – results of the confirmatory factor analysis of CFA  
 Note: A – Sense of Abundance, SP – Appreciation for Simple Pleasures; SA – Social Appreciation

**Table 2**  
**Results of EFA for GRAT – R**

Factor name	Item number	Factor Loadings Following Rotation		
		FACTOR I	FACTOR II	FACTOR III
Simple Pleasures (SA)	5	.761	.070	.095
	8	.460	.063	.308
	9	.761	.119	.301
	30	.819	.097	.037
	15	.828	.044	.078
	18	.554	.021	.231
	25	.464	.185	.626
	27	.880	.025	.136
	30	.819	.097	.035
	34	.848	.040	.302
	35	.529	.129	.515
	36	.471	.204	.576
	40	.386	-.051	.473
	41	.758	.021	.340
	43	.501	.177	.613
33	.546	.084	.180	
Sense of Abundance (AB)	2	-.088	-.769	-.066
	3	-.120	-.693	.081
	4	-.098	-.779	.070
	6	.271	.266	.225
	7	-.043	-.533	-.189
	12	-.058	-.463	-.264
	14	-.031	-.279	.349
	21	-.196	-.478	-.260
	24	.296	.540	.464
	26	-.129	-.754	-.176
	28	.011	-.790	-.163
	29	.228	.244	.382
	31	-.025	-.835	-.157
	32	-.038	-.707	.017
	37	.029	-.803	-.123
39	-.120	-.730	-.078	
42	.070	-.402	-.075	
Social Appreciation (SAO)	1	.103	.017	.551
	10	.108	.126	.627
	11	.268	.221	.643
	13	.173	.026	.721
	16	.281	-.104	.646
	17	.515	.080	.600
	19	.106	.123	.783
	20	-.062	-.397	-.114
22	.241	.130	.525	

	23	.347	-.004	.483
	38	.150	.106	.799
	44	.251	.182	.736
Explained Variance, Total: 50.9%		17.3%	16.2%	17.4%
Cronbach's alpha = .88		.82	.94	.81

tors, each corresponding to one scale in the original version, have been extracted. Within the Polish research, a three-factor solution with eigenvalues over 1 was emerged from the EFA explaining 50.9% of the variance. The percentage of explained variance of results for factor I is equal to 17.3% of the total variance. This factor corresponds to the SA scale in the original version, and the common variance of the factors ranged from .39 (item 40) to .88 (item 27). 49. The second factor explains 16.2% of the variance and corresponds to the original scale AB. Altitudinal range of factor loading in individual items is from .24 (item 29) to .84 (item 31), only three questions load the scale below the psychometric criteria (items 6, 14, 29). The median of the loading on the second factor was .64. The latter explains 17.4% variance, corresponds to the highlighted scale SAO. The loadings of the items on the third factor ranged between .11 (item 20) and .80 (item 38), only one item loads the scale poorly (item 20). The median of the loading on the third factor was .59. In the conducted factor analysis, four questions (item 20, 25, 29 and 40) were loading the other factor than assumed in the original more. The four items in the entire test had lower factor loadings than required in the psychometric criteria (items 6, 14, 20, 29).

The reliability analysis indicated that the Polish version of the GRAT – R yielded a high internal consistency in both samples ( $\alpha=.88$  for each of the samples). For the GRAT – R sub-dimensions Cronbach's alpha coefficients were for the sample filling electronic version: .82 (SA), .94 (AB), .81 (SAO) and paper version: .87 (SA), .87 (AB) and .75 (SAO).

Table 3 indicates that intercorrelations of GRAT – R and its subscales carried out on the results of filling electronic version were all positive and significant with AB (.768), SA (.809) and SAO (.786). Correlations of GRAT – R sub-dimensions were all positive and medium level (Pearson  $r$  ratios range from .31 to .63) and high correlation with the general result (Pearson  $r$  factors are between .77 to .81). Medium level correlations among sub-dimensions indicate that they measure different contents of gratitude.

Presented statistics on external validity were based on correlations between GRAT – R and indicators of quality of life, happiness and global self – assessment. The selection of variables was mainly dictated by the original studies of the authors of the GRAT questionnaire. Watson et al. (2003) analyzing the relevance of the tool, they tested the relationship between gratitude and its dimensions and subjective quality of life (SWB), life satisfaction (SWLS), belief in personal control (BPCS),

and happiness (HF) (Watkins et al., 2003). Taking into account in the analysis of quality of life it was justified by the fact that the analysis of the relevance of the Polish adaptation of gratitude scale GQ also included verification of the relationship between gratitude and satisfaction with life (Kossakowska & Kwiatek, 2015). In order to test the criterion validity, gratitude questionnaire GQ-6, measures of quality of life such as: scale subjective vitality (SVS); meaning in life Questionnaire – Presence (MLQ-P), meaning in life Questionnaire – Search (MLQ-S); Scale sense of satisfaction with life (SWL); Global self-esteem (GSE) and altruism scale (A-N) were used. In the light of the research results so far, all the above-mentioned variables should positively correlate with the indicators of gratitude. The results obtained are given in Table 3 confirm the accuracy of the tool.

Analysis of the correlation ratios between the results in the GRAT – R test and measurement of gratitude scale GQ-6 indicates a positive significant correlation of low and moderate strength. In the light of results of the previous studies, the gratitude is closely linked with the high quality of life and with mental and physical welfare (Adler & Fagley, 2005; McCullough, Emmons & Tsang, 2002; McCullough, Tsang & Emmons, 2004; Watkins et

**Table 3**  
The correlation results in test GRAT – R with other psychological metrics (the correlation coefficients  $r$  Pearson in Study 2,  $N=87$ )

	AB	SA	SAO	GRAT-R
AB				
SA	.314***			
SAO	.381***	.630***		
GRAT-R	.768***	.809***	.786**	
GQ-6	.365***	.314**	.610***	.573***
SVS	.402***	.426***	.195	.515***
MLQ-P	.451***	.387***	.186	.522***
MLQ-S	-.361***	-.050	-.048	-.256*
SWL	.546***	.172	.316	.515***
GSE	.529***	.336**	.221*	.554***
A-N	.129	.262*	.413***	.342***

Note: Sense of Abundance (AB), appreciation for Simple Pleasures (SA), Social Appreciation (SAO); Gratitude Questioner (GQ-6); Scale subjective vitality (SVS); meaning in life Questionnaire - Presence (MLQ-P); meaning in life Questionnaire - Search (MLQ-S); Scale sense of satisfaction with life (SWL); Global self-esteem (GSE); Altruism (A-N)

al., 2003; Wood, Joseph & Linley, 2007). Obtained ratios between the results in the GRAT – R test with the psychological measures, are used to assess the level of psychological quality of life confirm the accuracy of the tool. The overall level of gratitude measured with GRAT – R test positively correlates at statistically significant level with nearly all psychological measures, excluding the search for the meaning of life (significant negative correlation). Gratitude, especially in the area of the sense of abundance of received gifts (Sense of Abundance) is linked to the higher results on the scales: subjective vitality (SVS), presence and the search for the meaning of life (MLQ-P; MLQ-S), a sense of life's satisfaction (SWL) and generalized self-esteem (GSE). The most insignificant correlation was obtained in the scale of appreciation of others (Social Appreciation – SAO), which was only associated with the higher generalized sense of one's own worth and altruism. Appreciation for Simple Pleasures (SA) correlated with greater vitality, current sense of the meaning of life and a sense of one's own worth and altruism.

In accordance with the assumptions of the original version of the GRAT questionnaire, the higher the results a person gets, the higher the level of gratitude and its dimensions. The results are calculated separately for each scale, adding up the number of points. It should be remembered that some of the statements are questions reversed. The range of results for individual scales includes the following ranges: from 17 to 153 points (Sense of Abundance scale – AB); from 14 to 126 points (Appreciation for Simple Pleasures scale – SA) and from 11 to 99 points (Social Appreciation scale – SAO). The overall result from the scale is the sum of the individual results from the three subscales and is in the range from 44 to 396 points. The normalization analyzes were based on the results of the entire sample ( $N=287$ ). Temporary stens norms are presented in Table 4. Due to the skewness of the distribution of results in SA and SAO subscales, the continuity correction was applied during standardization (Hornowska, 2010).

**Table 4**  
**GRAT – R questionnaire: temporary sten norms**  
**( $N=287$ , age 18 – 66 years)**

	Results	Sten	Interpretation
GRAT – Total Score	44 – 168	1 – 3	LOW
	169 – 305	4 – 6	AVERAGE
	306 – 396	7 – 10	HIGHT
AB	17 – 71	1 – 3	LOW
	72 – 107	4 – 6	AVERAGE
	108 – 153	7 – 10	HIGHT
SA	14 – 69	1 – 3	LOW
	70 – 104	4 – 6	AVERAGE
	105 – 126	7 – 10	HIGHT
SAO	11 – 49	1 – 3	LOW
	50 – 80	4 – 6	AVERAGE
	81 – 99	7 – 10	HIGHT

## DISCUSSION

1. The results of the statistical analysis indicate that the Polish version of the GRAT – R test has comparable psychometric index values to the original one.

2. The reliability of the Polish version of the scale is high ( $\alpha=.88$ ). Statistical analysis of the tool reliability, however, did not include the assessment of the tool stability, i.e. test-retest method, which should be included in further adaptation work on the GRAT-R questionnaire.

3. Analyzes testing the structure of gratitude only partially confirm the three-piece structure. The results of CFA factor confirmatory analysis are ambiguous. Obtained results of CFA statistics should be repeated because a relatively small number of respondents could influence the obtained model parameters. The analysis of the EFA confirmed the existence of the tri-elemental structure of the gratitude. The data obtained in this statistic indicate the methodological difficulties for only 4 questions that have significantly lower factor loadings than in the original version (items 6, 14, 20, 29). Two items are reversed statements, which could cause that their content was unclear for the respondents (items 14, 20). It is worth mentioning that the items 20 and 29 in the original version, also have low factor loadings and values similar to obtained in the Polish version (Watkins et al., 2003). By analyzing the content of the questions 6 “Life has been good to me” it should be noted that in Polish culture, the generally more popular expression is reversed, meaning “Life has not been good to me”. This may cause that respondents first association appear negative, which in effect would have to be reflected in the obtained result. Similar doubts may include the content of item 14 “I do not think that I have gotten all the good things that I deserve in life”. The negation included in the question could create a difficulty considered the understanding of the meaning of the expression. It is also worth noticing of the content of item 29 “I believe that the things in life that are really enjoyable are as available to me as they are to the rich people”, which in authors' original intention is to load the AB factor. Turning the test respondents to the category of the rich people can generate making attribution only to material issues. With this in mind, this question (like in the original) can lower the loadings of this factor. In the context of presented doubt, it seems important to carry out a re-examination of the linguistic layer of the GRAT – R test.

4. Within the analysis of the accuracy of the test, the correlations between the results of the GRAT – R test and the scale of gratitude GQ-6 were checked. The significant correlations ratios obtained, their positive direction and the correlation strength (high and moderate correlations with the results of the general GRAT and SAO and low with the scales AB and SA) confirms the accuracy of the tool. An interesting notion in this context, appears to be the particularly low correlation with two factors of gratitude – Sense of Abundance (AB) and appreciation for Simple Pleasures (SA). The obtained results confirm the

assumptions underlying the creation of the GRAT scale, which is to serve to measure gratitude treated as the feature and not only its affective aspect. As underlined in the Watkins et al. (2003) persons with the feature of gratitude have suitability to experiencing the gratitude because they are predisposed with the lower threshold of this emotion's excitation. The authors note that has to be clearly distinguished gratitude interpreted as the condition and as a feature. Affective aspect of gratitude understood as a condition of gratitude means the desire for giving thanks for favors received and their liking (Guralnik, 1971, for Watkins et al., 2003). Items in the scale GQ-6 relate mainly to the intensity and frequency of experiencing the emotions of gratitude in principle in the context of social relations (half the questions relate to the appreciation of the benefits obtained from other people). This, therefore, suggests focusing on a narrow sense of this variable. In the intention of the authors of the GRAT – R test, this tool was to include a wider, transcendental notion of the understanding of gratitude. For this reason, the obtained correlations fully confirm the accuracy of the tool. Positive results of the GRAT – R correlations with indicators of the quality of life i.e. subjective vitality, current sense of the meaning of life, satisfaction with life, the generalized feeling of its own effectiveness also confirms the accuracy of the tool. It is worth noting the negative correlations between the results of GRAT – R and the search for the meaning of life (MLQ-S). In the light of the previous research, feeling and showing gratitude strengthens the subjective sense of the emotional quality of life and appreciation of its meaning (Wood, Froh & Geraghty, 2010; Watkins, Uher & Pichinevskiy, 2015). Gratitude is also linked with the past life and the overall positive evaluation of life (Gruszecka, 2011). The results also indicate that are people featured with gratitude, are people who are already familiar with answers to questions about the meaning to their own life. They do not feel uncertainty and are more focused on the positive aspects of life and the benefits of it. These people, even in objectively negative and difficult situations are able to see sense and importance and are able to integrate this knowledge with their own history of life (Wood, Froh & Geraghty, 2010; König & Glück, 2014). The effect of such a positive reinterpretation is lesser mental and physical strain and greater internal integration. Therefore, in this group of people, the so-called post-traumatic increase can be observed and gratitude is being recognized as a not only pro-development factor but also protecting against the stress and mental crisis. Such recognition is also included in the conviction that gratitude provides a base for "good life", making the reflection on one's own existence and the positive balance of life (Gruszecka, 2011; König & Glück, 2014; Solom et al., 2016). However, it is worth noting that in research of Gruszecka (2011) the tendency to experience and showing of gratitude was not linked to a current life satisfaction and expectations about the future. According to research conducted by different psychologists the status

of welfare measurement in which assessment of current status are susceptible to the background and are formulated without deeper reflection, therefore are temporary. This understanding can explain the obtained negligible correlation between the scale SAO and current meaning of life (MLQ-P). In this dimension of gratitude, unit refers to the specific social experience for which the assessment may differ materially depending on the context and the test. Data on external relevancy, including a check of the relationship between gratitude and other emotions, e.g. empathy, were carried out by the authors, however, due to the limitations of the text volume of this article they were not presented (see Lasota, 2017).

5. In accordance with existing test results, it can be concluded that gratitude promotes prosocial and cooperative behaviors (research including Tsang, 2006, 2007; DeSteno et al., 2010). At this point, it is in line to reference the latest research in which the gratitude was the factor between the frequent and close interactions between parents and their children and prosocial behaviors presented by the children i.e. sharing, helping others and cooperative behaviors (Wu et al., 2016). The correlations obtained in Polish studies confirm these findings. The overall level of gratitude and appreciation of the other connects to the presenting of altruistic behavior. At the same time, altruism correlates poorly with the SA scale and did not connect with the AB scale. The results appear to justify the fact that the altruistic attitude is closely linked with the social context that does not appear in the showing of gratitude for the minor pleasures, the goods received from fate, nature or God. As part of the analysis, the differences in the level of gratitude were checked due to the sociodemographic variables of gender and the age of the respondents. Data obtained were indicative of significantly higher rates of gratitude in the group of women (in addition to the AB scale). There were no significant differences between groups due to age. It is worth noting that compared groups were not equinumerous (dominated by people aged 21 – 30 years). apart from gender differences, there were also differences depending on the place of residence of the respondents.

6. The highest level of Sense of Abundance was presented by people living in a big city, the lowest by people from the village. Thus this study may not demonstrate the actual difference between groups, or underestimate the main effects. One limitation of the study is the lack of consideration of other sociodemographic variables, i.e. marital status, economic status, having children etc. Further studies should include a larger representative sample of the Polish population based on a layered selection.

## CONCLUSION

The psychology of gratitude seeks to describe the relationship between this complex emotion and the functioning of human beings. These findings confirm the need and purpose for studying this construct, mainly because

of the wide spectrum of benefits coming from feeling it. The experiencing of gratitude not only helps the human to feel happy, to know and understand the meaning of one's own life, overcome one's limits, to achieve professional and academic success, but also to better interact with others and enjoy cooperation with them. To sum up the results of the validation of the Polish adaptation of the GRAT – R questionnaire, it can be noted that this tool provides a good indicator of gratitude and its psychometric value allows to conduct a psychological and interdisciplinary research. In a way, it covers a gap in Polish tests which approach this phenomenon only regarding emotional grounds, because gratitude is treated as a multidimensional and complex phenomenon. This enables a wider exploration of this issue according to Polish realities and culture. Further research might be focused on the quantities of the dimensions of the disposal of gratitude; its ties with the feeling of appreciation or the need for giving thanks for received goods; methods and prevention programs supporting its development and shaping in children and young people and research on cultural differences in perceiving gratitude.

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