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Polish short Revised UCLA Loneliness Scale

BACKGROUND

Shortened versions of loneliness measurement scales have been developed in many languages. Due to the considerable interest in loneliness among researchers, the aim of the study was to develop a short Polish version of the Revised UCLA Loneliness Scale.

PARTICIPANTS AND PROCEDURE

Study 1 involved 3477 participants ($M_{age} = 26.10$, $SD = 8.86$; 71.5% female). A confirmatory factor analysis was conducted to compare competing single-factor models based on different sets of scale items. Study 2 involved 653 participants ($M = 34.56$, $SD = 12.33$; 60.2% female). In this study, Model 7 was verified by means of confirmatory factor analysis.

RESULTS

Satisfactory global fit and reliability indices were obtained for the shortened, 4-item version of the scale. For this rea-

son, Model 7 can be interpreted as a short, psychometrically stable solution that is well balanced in terms of fit and loading quality.

CONCLUSIONS

Owing to its conciseness and good psychometric properties, the Polish shortened version of the loneliness scale constitutes a reliable and valid measure for assessing loneliness in Polish samples. The Polish short Revised UCLA Loneliness Scale can be considered a reliable instrument for measuring loneliness. From a methodological perspective, short scales are typically designed to capture a general construct rather than its dimensions. The proposed instrument can therefore be used in screening studies.

KEY WORDS

Polish; short version; Revised UCLA Loneliness Scale

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BACKGROUND

Loneliness is a subjective experience related to the discrepancy between the social relationships a person desires and those they actually have (Perlman & Peplau, 1981). It also occurs when the need for interpersonal closeness is not fully satisfied. The literature describes loneliness as a common public health problem. Loneliness is significantly correlated with an increase in health problems and mortality (Hertz, 2020) and with poorer mental health (Christiansen et al., 2021; Shim & Go, 2025). Many analyses of this phenomenon focus on older adults, pointing to the detrimental impact of loneliness for their well-being (Holt-Lunstad et al., 2015). However, loneliness is now known to affect people of all ages, including students (Bhagchandani, 2017). An increasing number of people in Poland experience loneliness (Dziedzic et al., 2025). The problem intensified during the COVID-19 pandemic (Kobos et al., 2022) and has continued to increase since the pandemic ended (Grygiel & Dąbrowska, 2025).

The most commonly used instrument for measuring loneliness is the UCLA Loneliness Scale (Russell, 1996). Its author conceptualises the feeling of loneliness as a state that shares its fundamental meaning with solitude and the sense of being alone. The scale has gone through three versions. Russell developed the first edition in 1978 (Russell et al., 1978), which comprised 20 self-report statements used to assess feelings of loneliness. Its drawback was the use of negatively worded items, which could contribute to a systematic response bias. In 1980, the original 20 negatively worded statements were changed to 10 positively worded and 10 negatively worded items. This new scale is the revised version of the R-UCLA Scale (Russell et al., 1980). To improve the R-UCLA, Russell and colleagues developed a third generation of the UCLA Loneliness Scale (UCLA-3) in 1996. Modified again, the UCLA-3 received 9 positively worded statements and 11 negatively worded ones. This version of the UCLA Loneliness Scale is characterised by high internal consistency, test-retest reliability, and discriminant validity (Russell, 1996).

In the Polish context, the Revised R-UCLA Loneliness Scale was adapted by Kwiatkowska et al. (2018). The adaptation used data from research conducted on a sample of 247 secondary-school students, with a mean age of 16 years. In its adapted Polish version, the R-UCLA instrument consists of 20 items that form three factors (subscales): Intimate others, Social others, and Belonging and affiliation. Results regarding structural validity, reliability, and external validity made it possible to regard the adaptation as a reliable instrument for studying loneliness. Intimate others is expressed in the lack of close relationships with others and separation from others. This subscale contains 10 statements that allow respon-

dents to assess their own feelings regarding their relationship with a group or their isolation from others. A higher score on this subscale indicates a stronger sense of loneliness. The second subscale, Social others, comprises five statements. It measures the intensity of respondents' sense of loneliness through social contact with people in their immediate environment and with the group. The higher the score on this subscale, the greater the sense of lacking people with whom respondents feel closely connected. The subscale refers to the lack of a social network and a sense of closeness in relationships with other people in terms of their availability. The third subscale, Belonging and affiliation, refers to belonging to a social group. It comprises five statements that allow assessment of the level of integration into and belonging to a group.

Several shortened versions of the scale have been developed. These include: the Three-Item Loneliness Scale, consisting of three items and a simplified set of response categories, which measures the general sense of loneliness (Hughes et al., 2004); the Revised UCLA Loneliness Scale (RULS-6), with good psychometric properties established in independent samples of students and psychiatric outpatients (Wongpakaran et al., 2020); and the short-form UCLA Loneliness Scale (ULS-8), which has better reliability and validity than the ULS-4 version (Wilson et al., 1992).

Different versions of the instrument have been adapted in several cultural contexts, including a Turkish adaptation tested in a sample of 411 clinical and non-clinical participants (Elbi et al., 2025), an Iranian adaptation of the six-item version tested among older adults (Bahadori et al., 2025), and an Italian adaptation of the three-item version for students (Boffo et al., 2012).

The present study aimed to develop a short Polish version of the R-UCLA scale.

ETHICAL ISSUES

The study was conducted in accordance with the guidelines of the Declaration of Helsinki. Approval for the study was obtained from the Faculty Ethics Committee of the Faculty of Applied Social Sciences and Resocialisation (WSNSiR) at the University of Warsaw (approval dated 7 May 2025). Participation in the study was voluntary and anonymous. Each respondent received detailed information about the aim of the study, its subject matter, the principles of data processing, and the contact details of the researchers conducting the study. Participants were informed of their right to refuse participation at any stage. All participants were able to select a "yes" or "no" response on the informed-consent form. Respondents received no remuneration for participating in the study.

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STUDY 1

PARTICIPANTS

The study was conducted using an online questionnaire between May 2025 and February 2026. The sample comprised 3,477 Polish participants (28.5% men), with a mean age of 26.10 years ($SD = 8.86$).

MEASURE

The study used the Polish version of the Revised UCLA Loneliness Scale by Kwiatkowska et al. (2018). The scale consists of three subscales: Intimate others (10 items, e.g., “I am no longer close to anyone”), Social others (5 items, e.g., “There are people I can talk to”), and Belonging and affiliation (5 items, e.g., “I do not feel alone”). The overall scale score is produced by summing the scores on the individual subscales. The respondent rates each statement on a 4-point Likert scale from 1 (*never*) to 4 (*often*).

The questionnaire statements were modified to match the respondents' gender. For example, the statement “Czuję się opuszczony” (“I feel left out”) was modified to read “Czuję się opuszczony/a” (with both masculine and feminine endings).

STATISTICAL PROCEDURE

The development of the shortened Polish adaptation was inspired by the study by Cosentino and Castro Solano (2026). The authors of the Polish version obtained written permission from the authors of that study. In the first stage, a series of confirmatory factor analyses (CFAs) was conducted to compare 39 competing single-factor models based on different sets of scale items. The analyses were performed in R using the *lavaan* package. Items were treated as ordinal variables, and the WLSMV estimator, which is recommended for ordinal Likert-type items, was applied (Flora & Curran, 2004; Li, 2016). Each model was estimated separately and then compared in terms of model fit, reliability, and number of items (Kline, 2016).

Fit was assessed based on a set of contemporary indices, in accordance with the recommendations of Hu and Bentler (1999), Marsh et al. (2004), and Kline (2016). Specifically, the scaled chi-square test, the comparative fit index (CFI), the Tucker-Lewis index (TLI), the standardised root means square residual (SRMR), and the root mean square error of approximation (RMSEA), together with its 95% confidence interval, were reported. When interpreting the indices, the typical thresholds used in structural equation modelling research were adopted: CFI and TLI values ≥ 0.95 were treated as indicating very good fit,

whereas values in the range 0.90-0.95 were treated as signs of acceptable but suboptimal fit (Hu & Bentler, 1999; Kline, 2016). For SRMR, values ≤ 0.08 were considered satisfactory, and RMSEA ≤ 0.06 was taken as an indicator of good fit, with values in the range 0.06-0.08 interpreted as moderate fit (Hu & Bentler, 1999; Marsh et al., 2004).

The preferred solution was the one that jointly met the following criteria: a non-significant chi-square test (indicating no significant discrepancy between the observed and model-implied covariance matrices), CFI ≥ 0.95 , and SRMR < 0.08 . For methodological reasons, RMSEA was treated as auxiliary, considering its sensitivity to sample size and to the degrees of freedom of ordinal models (Chen et al., 2008; Marsh et al., 2004). In addition, in line with recommendations for assessing reliability within CFA, composite reliability (CR) and average variance extracted (AVE) were calculated for each model, adopting CR ≥ 0.70 as an indicator of at least satisfactory reliability and CR ≥ 0.80 as a level desirable in scientific research (Hair et al., 2019). For AVE, values ≥ 0.50 were considered acceptable, indicating that a factor explains at least half of the variance of its indicators (Fornell & Larcker, 1981). Cronbach's alpha coefficient was additionally reported to assess the internal consistency of the individual sets of items.

In addition to global fit and reliability indices, standardised factor loadings were also assessed. In line with commonly applied recommendations, loadings ≥ 0.50 were treated as acceptable and ≥ 0.70 as desirable, indicating a strong association of the item with the factor. Lower values were interpreted with caution, especially when they concerned individual items in a model with good overall fit.

In the final stage, the models were ranked on the basis of their combined fit and reliability. First, models meeting all the main fit criteria (a non-significant chi-square test, high CFI, and low SRMR) were identified. They were then compared in terms of reliability (CR, AVE, and alpha) and number of items. In accordance with the principle of parsimony, shorter models were preferred, provided that they demonstrated fit comparable to or better than that of longer models (Kline, 2016; Marsh et al., 2004). On this basis, the model that best balanced fit, reliability, and structural conciseness was selected.

RESULTS

Of all the tested models (see Table 1), only Models 4 and 6 jointly met all the selection conditions. Model 4 included items 2, 3, 7, and 8 and achieved very good fit, $\chi^2(2) = 5.61$, $p = .061$; robust CFI = 0.998, robust TLI = 0.995, SRMR = 0.009, and RMSEA = 0.034, 90% CI [0.006, 0.064]. Its reliability was good but low-

*Polish short
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er than that of Model 6, with CR = 0.802, AVE = 0.518, and $\alpha = .73$.

Model 6, comprising items 4, 10, 19, and 20, also showed very good fit, $\chi^2(2) = 1.30$, $p = .522$; robust CFI = 1.000, robust TLI = 1.001, SRMR = 0.004, and RMSEA = 0.000, 90% CI [0.000, 0.039]. At the same time, this model was characterised by higher reliability than Model 4, with CR = 0.864, AVE = 0.635, and $\alpha = .76$. For this reason, Model 6 can be considered a more advantageous solution for the shortened version of the instrument.

Despite the very good fit of both models, some factor loadings in Models 4 and 6 did not reach the threshold of 0.50, let alone 0.70, which means that although the models met the global fit criteria, their convergent validity for individual indicators was uneven.

Therefore, in the next step, the lack of significance of the χ^2 test was dropped as a criterion (in all the models other than Models 4 and 6, this statistic was statistically significant), and the models and their fit were reconsidered. Model 7, comprising items 2, 7, 11, and 14, also met the adopted fit criteria and constituted a valuable alternative to Models 4 and 6. It obtained very good fit indices: robust CFI = 0.997, robust TLI = 0.992, SRMR = 0.010, and RMSEA = 0.052, 90% CI [0.028, 0.079]. The reliability of this model was high, with CR = 0.871, AVE = 0.630, and $\alpha = .82$. At the level of factor loadings, Model 7 presented the following items: 2 = 0.708, 7 = 0.625, 11 = 0.820, 14 = 0.856. All loadings exceeded the 0.50 threshold, and three of the four items reached a level of 0.70 or higher, indicating good saturation of the factor by the indicators. For this reason, Model 7 can be interpreted as a short, psychometrically stable solution that is well balanced in terms of fit and loading quality.

STUDY 2 – VALIDATION OF MODEL 7

PARTICIPANTS

The study was conducted from April 2026 to May 2026 on a group of 653 people (39.8% men), aged $M = 34.56$, $SD = 12.33$.

PROCEDURE AND DATA ANALYSIS

In Study 2, Model 7, identified in Study 1, was verified using an independent sample. A confirmatory factor analysis of a single-factor model composed of items 2, 7, 11, and 14 was conducted. The same procedure as in Study 1 was used for estimation: the *lavaan* package (Rosseel, 2012) with the WLSMV estimator, with items treated as ordinal variables. Global model fit, composite reliability (CR), and standardised factor loadings were assessed.

RESULTS

Model 7 demonstrated satisfactory fit to the data in the independent sample: $\chi^2(2) = 4.47$; $p = .107$; robust CFI = 0.996; robust TLI = 0.987; SRMR = 0.014; RMSEA = 0.072, 90% CI [0.000; 0.165]. The chi-square test was not statistically significant, which suggests an acceptable correspondence between the observed data and the proposed model. The CFI and TLI indices clearly exceeded the adopted threshold of 0.95, and SRMR = 0.014 indicates very good fit at the residual level. The wide RMSEA confidence interval results from the low number of degrees of freedom of the model ($df = 2$), which is a well-documented property of this index (Kenny et al., 2015).

The composite reliability of the model was CR = 0.894, which exceeds the threshold for high reliability (≥ 0.80). Cronbach's alpha was $\alpha = .84$. The average variance extracted, AVE = 0.68, was clearly above the acceptable threshold of 0.50 (Fornell & Larcker, 1981), indicating good convergent validity at the global level.

Standardised factor loadings are presented in Table 2. All four loadings were statistically significant ($p < .001$) and ranged from 0.729 (item 7) to 0.919 (item 11). Three of the four indicators reached values ≥ 0.80 , and the loading of item 7 = 0.729 exceeded the desired threshold of 0.70. The results indicate satisfactory and homogeneous saturation of the factor by all four indicators.

The results of Study 2 confirm the replication of the single-factor structure of Model 7 on an independent sample. Both the global fit indices (robust CFI = 0.996, SRMR = 0.014) and the composite reliability (CR = 0.894) reached values indicating good psychometric quality of the shortened scale. The high and homogeneous factor loadings ($\lambda = 0.729-0.919$) confirm that all four items load the latent construct well.

DISCUSSION

The aim of the present study was to develop a shortened Polish version of the Revised UCLA Loneliness Scale and to assess its psychometric properties. In Study 1, a set of competing single-factor models based on different combinations of items was tested. Three of them met the predefined criteria for acceptable model fit and reliability.

Model 7, however, proved to be the most balanced solution, combining very good global fit indices with high reliability and well-functioning factor loadings. In contrast to the other models, all four items in Model 7 showed satisfactory loadings. The selected items thus form a coherent representation of the underlying construct.

The replication carried out in Study 2 on an independent sample confirmed the robustness and

Table 1*Model summary*

Model	n	Items	s.χ ²	s.p	r.CFI	r.TLI	SRMR	RMSEA	RMSEA 95% CI		CR	AVE	α
									LL	UL			
1	4	2, 11, 14, 17	68.25	<.001	0.983	0.950	0.021	0.124	0.102	0.147	0.861	0.609	.82
2	4	1, 5, 6, 9	331.38	<.001	0.919	0.758	0.055	0.275	0.248	0.302	0.862	0.612	.80
3	4	12, 14, 17, 18	67.78	<.001	0.985	0.954	0.024	0.116	0.093	0.141	0.850	0.590	.81
4	4	2, 3, 7, 8	5.61	.061	0.998	0.995	0.009	0.034	0.006	0.064	0.802	0.518	.73
5	4	10, 16, 19, 20	55.14	<.001	0.991	0.973	0.019	0.126	0.096	0.159	0.927	0.763	.87
6	4	4, 10, 19, 20	1.30	.522	1.000	1.001	0.004	0.000	0.000	0.039	0.864	0.635	.76
7	4	2, 7, 11, 14	13.35	.001	0.997	0.992	0.010	0.052	0.028	0.079	0.871	0.630	.82
8	4	1, 4, 5, 15	15.80	<.001	0.995	0.984	0.015	0.049	0.028	0.074	0.737	0.429	.65
9	4	1, 13, 15, 18	215.43	<.001	0.931	0.792	0.051	0.201	0.178	0.226	0.793	0.492	.73
10	5	10, 15, 16, 19, 20	81.67	<.001	0.987	0.975	0.019	0.099	0.080	0.119	0.911	0.678	.85
11	5	1, 4, 5, 6, 9	375.34	<.001	0.921	0.843	0.046	0.175	0.159	0.191	0.824	0.505	.74
12	5	1, 5, 6, 8, 9	403.22	<.001	0.919	0.837	0.050	0.185	0.169	0.202	0.846	0.532	.78
13	5	1, 4, 6, 16, 19	244.98	<.001	0.948	0.895	0.039	0.147	0.131	0.164	0.837	0.523	.75
14	5	2, 7, 8, 11, 18	153.01	<.001	0.970	0.940	0.034	0.111	0.095	0.127	0.845	0.530	.79
15	5	5, 9, 10, 15, 20	474.14	<.001	0.899	0.798	0.066	0.212	0.194	0.230	0.859	0.553	.79
16	5	3, 12, 13, 14, 17	188.47	<.001	0.965	0.930	0.033	0.127	0.112	0.143	0.866	0.567	.82
17	5	2, 3, 11, 14, 17	122.67	<.001	0.979	0.959	0.026	0.104	0.089	0.120	0.885	0.608	.85
18	5	1, 5, 6, 9, 15	460.93	<.001	0.916	0.833	0.053	0.200	0.184	0.217	0.874	0.582	.82
19	5	6, 10, 16, 19, 20	142.04	<.001	0.978	0.955	0.025	0.135	0.116	0.154	0.923	0.709	.87
20	5	2, 11, 13, 14, 18	315.25	<.001	0.961	0.922	0.039	0.145	0.130	0.160	0.886	0.610	.85

Table 1 continues

Polish short
Revised UCLA
Loneliness Scale

Table 1

Table 1 continued

Model	n	Items	s.χ ²	s.p	r.CFI	r.TLI	SRMR	RMSEA	RMSEA 95% CI		CR	AVE	α
									LL	UL			
21	6	1, 4, 5, 6, 9, 15	518.90	< .001	0.914	0.856	0.048	0.155	0.143	0.167	0.849	0.500	.78
22	6	2, 5, 11, 14, 17, 18	302.61	< .001	0.964	0.940	0.035	0.112	0.101	0.124	0.888	0.573	.85
23	6	7, 8, 12, 13, 16, 18	123.83	< .001	0.982	0.971	0.021	0.074	0.062	0.086	0.877	0.548	.84
24	6	2, 3, 11, 14, 17, 18	241.72	< .001	0.972	0.954	0.029	0.103	0.092	0.115	0.902	0.607	.87
25	6	2, 4, 7, 11, 13, 18	399.74	< .001	0.944	0.906	0.044	0.129	0.117	0.140	0.860	0.517	.81
26	7	2, 3, 11, 12, 13, 14, 18	627.21	< .001	0.947	0.920	0.043	0.128	0.119	0.137	0.914	0.604	.88
27	8	2, 3, 9, 11, 14, 15, 17, 18	1468.26	< .001	0.889	0.844	0.069	0.157	0.150	0.165	0.901	0.536	.87
28	8	1, 2, 4, 5, 7, 11, 14, 15	1038.62	< .001	0.893	0.851	0.059	0.141	0.133	0.148	0.880	0.486	.84
29	8	1, 5, 6, 9, 10, 15, 19, 20	2014.40	< .001	0.810	0.734	0.084	0.235	0.225	0.245	0.926	0.614	.88
30	9	1, 5, 6, 9, 10, 15, 16, 19, 20	2278.99	< .001	0.833	0.777	0.077	0.205	0.197	0.214	0.933	0.611	.89
31	10	2, 3, 7, 8, 11, 12, 13, 14, 17, 18	1153.99	< .001	0.927	0.906	0.046	0.113	0.107	0.119	0.924	0.552	.90
32	10	2, 3, 4, 7, 10, 13, 14, 16, 19, 20	1460.25	< .001	0.907	0.880	0.046	0.143	0.136	0.150	0.935	0.600	.89
33	10	1, 5, 6, 8, 9, 11, 12, 15, 17, 18	2171.03	< .001	0.835	0.788	0.070	0.156	0.150	0.162	0.905	0.491	.87
34	10	2, 3, 4, 7, 11, 12, 13, 14, 17, 18	1227.58	< .001	0.924	0.903	0.047	0.114	0.108	0.120	0.920	0.542	.89
35	10	1, 2, 4, 6, 7, 8, 11, 16, 18, 19	1741.31	< .001	0.881	0.848	0.059	0.133	0.127	0.139	0.903	0.492	.86
36	10	3, 5, 9, 10, 12, 13, 14, 15, 17, 20	1793.60	< .001	0.874	0.838	0.064	0.147	0.141	0.153	0.920	0.539	.88
37	10	2, 3, 7, 8, 11, 12, 13, 14, 17, 18	1153.99	< .001	0.927	0.906	0.046	0.113	0.107	0.119	0.924	0.552	.90
38	10	2, 6, 10, 11, 13, 14, 16, 18, 19, 20	2405.60	< .001	0.865	0.827	0.060	0.175	0.168	0.181	0.942	0.622	.91
39	10	1, 4, 5, 6, 9, 10, 15, 16, 19, 20	2415.14	< .001	0.836	0.789	0.071	0.180	0.173	0.188	0.925	0.563	.88

Note. s – scaled; r – robust; AVE – average variance extracted; CR – construct reliability, CI – confidence interval. The indicators that conform to the selection criteria are presented in bold.

stability of the single-factor model. The consistency of results across the two samples indicates that the selected items reliably capture the one-dimensional construct of loneliness.

Importantly, the items included in the final model correspond to those identified in earlier work on short versions of the UCLA Loneliness Scale (e.g., Roberts et al., 1993), which provides additional confirmation of the cross-cultural relevance and theoretical coherence of the selected indicators. This convergence suggests that certain key aspects of loneliness may be stable across different cultural contexts of loneliness measurement.

Developing a short instrument is particularly important in contemporary research, where time constraints and the total number of items are of key importance, especially in large-scale studies or studies using multiple questionnaires. The present findings are consistent with earlier research indicating that short versions of the UCLA Loneliness Scale can retain satisfactory psychometric properties while substantially reducing respondent burden (Hughes et al., 2004; Wongpakaran et al., 2020).

The original Polish adaptation of the R-UCLA scale proposed a multidimensional structure consisting of three factors (Kwiatkowska et al., 2018). The present study, by contrast, supports a one-dimensional representation of loneliness in its short form. This difference probably reflects both methodological and conceptual factors. From a methodological perspective, short scales are typically designed to capture a general construct rather than its dimensions. The proposed instrument can therefore be used in screening studies.

Future research should extend these findings by analysing additional aspects of validity, sensitivity to change, and invariance across different demographic groups. Epidemiological studies, including those on subclinical groups, will be very valuable. It is also advisable to conduct a test-retest study. Such work would allow further confirmation of the robustness and usefulness of the instrument in empirical research.

CONCLUSIONS

The aim of the present study was to develop a shortened Polish version of the Revised UCLA Loneliness Scale. The results obtained from two independent stages of research confirm that the four-item, single-factor version of the instrument has good psychometric properties. The proposed shortened version demonstrated satisfactory model fit, high reliability, and strong factor loadings. These findings indicate that the scale provides a coherent measure of the loneliness construct. Owing to its conciseness and good psychometric properties, the Polish shortened version of the loneliness scale constitutes a reliable and valid measure for assessing loneliness in Polish samples.

Table 2

Standardised factor loadings of Model 7 in the validation sample (Study 2)

Item	Factor loading (λ)	<i>p</i>
Item 2	0.783	< .001
Item 7	0.729	< .001
Item 11	0.919	< .001
Item 14	0.855	< .001

*Polish short
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DISCLOSURES

This research received no external funding. The study was approved by the Ethics Committee of the Faculty of Applied Social Sciences and Resocialisation (WSNSiR) at the University of Warsaw (Approval date May 7, 2025). The authors declare no conflict of interest.

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R-UCLA (POLISH SHORT VERSION)

The following statements vary from person to person. Indicate how often each statement describes you, in accordance with the meaning given below:

Poniżej zebrano stwierdzenia, które w różnym stopniu dotyczą każdego człowieka. Wskaż, jak często każde z poniższych stwierdzeń opisuje Ciebie zgodnie z podanym poniżej znaczeniem:

- 1 – never / nigdy
- 2 – rarely / rzadko
- 3 – sometimes / czasami
- 4 – often / często

*Polish short
Revised UCLA
Loneliness Scale*

No./Lp.	Test item	Pozycja testowa				
1	I lack companionship	Brakuje mi towarzystwa	1	2	3	4
2	I am no longer close to anyone	Już nie jestem dla nikogo bliską osobą	1	2	3	4
3	I feel left out	Czuję się opuszczony/a	1	2	3	4
4	I feel isolated from others	Czuję się odizolowany/a od innych	1	2	3	4

Note. The overall scale score is produced by summing the 4 items. Ogólny wynik skali uzyskuje się poprzez zsumowanie 4 itemów.

This scale is based on the items, item scale, and directions of the Revised UCLA Loneliness Scale from Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39, 472–480. <https://doi.org/10.1037/0022-3514.39.3.472>

The Polish version was developed on the basis of: Kwiatkowska, M. M., Rogoza, R., & Kwiatkowska, K. (2018). Analysis of the psychometric properties of the Revised UCLA Loneliness Scale in a Polish adolescent sample. *Current Issues in Personality Psychology*, 6, 164–170. <https://doi.org/10.5114/cipp.2017.69681>