

A POLISH ADAPTATION AND VALIDATION OF THE POSITIVE–NEGATIVE RELATIONSHIP QUALITY (PN-RQ) SCALE

Anna Papińska¹ and Dariusz Kuncewicz²

¹ SWPS University of Social Sciences and Humanities, Warsaw

² John Paul II Catholic University of Lublin

The Positive–Negative Relationship Quality (PN-RQ) scale is used to test the quality of close relationships, taking into account their positive and negative dimensions. The aim of our study was to check the factor structure and criterion validity of the Polish version of this scale, and the possibilities offered by two-dimensional estimation of relationship quality. The validation study involved 740 people (369 female and 371 male) who were in romantic relationships. In addition to the PN-RQ scale, the respondents completed two other relationship quality measures: the Relationship Assessment Scale (RAS) and the Experiences in Close Relationships (ECR) attachment questionnaire. Confirmatory factor analysis confirmed that the bi-factor model is suitable for the multidimensional nature of PN-RQ. The results showed the following: high internal consistency of the subscales and the entire scale; compliance with the results obtained with RAS; the possibility of a nuanced assessment of the quality of close relationships, also taking into account the unique differences that arise as a result of anxious or avoidant attachment. The Polish version of the PN-RQ scale is characterized by good psychometric properties and measurement sensitivity; it could be useful in both research and clinical diagnostics.

Keywords: relationship quality; relationship scale; Polish adaptation; relationship satisfaction.

ANNA PAPIŃSKA, <https://orcid.org/0000-0002-5503-7391>; DARIUSZ KUNCEWICZ, <https://orcid.org/0000-0002-7298-0867>. Correspondence concerning this article can be addressed to ANNA PAPIŃSKA, Uniwersytet SWPS, Wydział Psychologii, ul. Chodakowska 19/31, 03-815 Warsaw, Poland; e-mail: apapinska@swps.edu.pl.

Handling editor: MARIA KAŻMIERCZAK, University of Gdansk.

Received 4 July 2021. Received in revised form 20 Oct. 2021. Accepted 20 Oct. 2021. Published online 2 Dec. 2021.

The 2018 report of the Central Statistical Office of Poland shows that, on average, over 192 thousand marriages took place annually in recent years, but each year 65 thousand marriages were subject to divorce and 1.3 thousand legally separated. These figures represent a significant increase over the last 28 years as 24 thousand less divorce decrees were granted annually in the 1990s (GUS, 2018). The consistent increase in the number of failed formal relationships encourages us to take a closer look at the permanence of romantic relationships. It is assumed that divorce is the last step in marital breakdown, but the process begins much earlier (Ponzetti et al., 1992). Both formal and informal relationships disintegrate, but informal ones are difficult to capture in statistics. Therefore, in our work we focus on romantic relationships, regardless of whether they are formal or informal, because the emotional costs are similar. It is worth looking for variables that effectively explain and illustrate the proper functioning of romantic relationships, especially since numerous studies have shown that the quality of a romantic relationship has multiple consequences for health (Butler & Sbarra, 2013), physical and mental well-being (e.g. Beach et al., 2003; Kiecolt-Glaser et al., 2005; Meyers, 2003) and is a significant predictor of lifetime happiness (Argyle, 2001; Demirtas & Tezer, 2012; Diener et al., 2000; Kamp Dush & Amato, 2005; Myers, 2003; Russell & Wells, 1994). Relationship satisfaction as a key element of life satisfaction is often included in quantitative research; thus, it is regularly selected as an outcome variable in meta-analyses (Heller et al., 2004). Despite this, the literature lacks conceptual consistency in the romantic relationship quality construct, which is reflected in its various indicators and operationalizations (Rogge et al., 2016).

However, most researchers agree that relationship quality refers to feelings, thoughts or behaviors related to sexual attitudes (Liberacka-Dwojak & Izdebski, 2021), commitment (Kelmer et al., 2013), and openness to a partner (Hendrick, 1988; Janicka & Szymczak, 2019). The emotions that arise in relationships, also in happy ones, are both positive and negative; however, the current relationship quality measures are usually limited to global assessments and ignore this two-dimensionality (Fincham & Rogge, 2010). Research shows that although positive and negative affect are related, it is beneficial to evaluate them separately. As is the case with the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988) or the Mood and Symptom Questionnaire (MASQ; Watson et al., 1995), a two-dimensional conceptualization of relationship quality allows more precise insights into individual differences in experiences of personal relationships that one-dimensional measures may not show (Rogge et al., 2016).

One-dimensional relationship assessment does not work, for example, in relation to people with insecure attachment. For example, people who are anxiously attached want to get closer to their partners and experience positive feelings towards

them; on the other hand, they fear this closeness and consequently experience negative feelings. In turn, due to their avoidant tendency, they have a greater problem with experiencing both negative and positive feelings in a relationship (Mikulincer, Shaver, & Pereg, 2003). The ambivalence signaled here or the weaker intensity of positive and negative feelings would be difficult to grasp when assessing the quality of a relationship if we did not take into account its positive and negative dimensions.

Based on the theory that partners in romantic relationships experience both positive and negative feelings towards each other which are partially independent of each other, Rogge, Fincham, Crasta and Maniaci (2016) developed the Positive–Negative Relationship Quality (PN-RQ) scale. Other researchers consider the concepts of relationship quality and relationship satisfaction to be synonymous and refer to a two-dimensional construct (Araz, Güngör, & Aşçı, 2019). The PN-RQ tool consists of two subscales with eight positive and negative relationship definitions, to which respondents respond on a 6-point scale that ranges from 0 = *not at all* to 5 = *completely true*. The positive subscale measures the positive characteristics of a relationship. Participants are asked to rate their relationships only in terms of their positive qualities (*Enjoyable, Pleasant, Strong, Alive, Fun, Full, Energizing, Exciting*); the negative qualities are ignored. Higher scores on this subscale indicate higher perceived relationship quality. The negative subscale measures the negative qualities of a relationship. Participants are asked to consider their relationships in the context of only negative qualities (*Miserable, Bad, Empty, Lifeless, Unpleasant, Dull, Weak, Discouraging*); positive qualities are ignored. The higher the results on this subscale, the lower the perceived quality of the relationship (Rooge et al., 2016).

The aim of this study was to create a Polish-language version of the Positive–Negative Relationship Quality Scale (PN-RQ). In particular, we wanted to check the factor structure and the criterion validity of PN-RQ.

We verified the tool's factor structure by testing alternative factorial models: a correlated factor model, an orthogonal (uncorrelated) factor model, a one-factor model and a bi-factor model (see Brunner et al., 2012; Dunn & McCray, 2020). Of these, like Araz et al. (2019), we assumed that the bi-factor model achieves the greatest conceptual clarity. This model simultaneously groups test items into two separate but correlated factors and one global factor. In other words, each questionnaire item belongs to the positive or negative subscale and forms a general scale (cf. Reise, Bonifay, & Haviland, 2018; Reise, Moore, & Haviland, 2010).

We checked the criterion (diagnostic) validity of the PN-RQ scale directly with the use of another commonly used measure of relationship quality (Relationship Assessment Scale; Hendrick, 1988); we also checked it indirectly with a tool that captures patterns of anxious and avoidant attachment in a romantic relationship (the Experiences in Close Relationships Scale; Brennan et al., 1998). First, we predicted

that the positive PN-RQ subscale would strongly and positively correlate with other measures of relationship quality, while the negative subscale would correlate negatively with other measures of relationship quality. Second, we wanted to determine whether a simultaneous consideration of the positive and negative dimensions of PN-RQ in the assessment of relationship quality allows them to be effectively differentiated. Third, we predicted that the two-dimensionality of PN-RQ somehow correspond to the specificity of how events are perceived in a relationship, which may differ between anxious attachment and avoidant attachment.

METHOD

Participants and Procedure

The study involved 740 adults aged 18 to 70 years ($M = 35.53$; $SD = 12.99$). The gender proportions were balanced: 49.9% ($N = 369$) of the participants were female and 50.1% ($N = 371$) were male. All respondents were in romantic relationships: 52.3% were in a formal relationship and 47.7% were in an informal relationship. The duration of the relationships ranged from 1 month to 46 years ($M = 9.43$; $SD = 9.46$). Higher education was recorded in 37.6% of the respondents, secondary education in 46.8%, and lower than secondary in 5.7%. The education level of 74 respondents was not known.

The research was conducted from May 2021 to June 2021. It was approved by the Ethics and Research Committee of the Faculty of Psychology, SWPS University of Social Sciences and Humanities in Warsaw (approval no. 27/2021). Respondents were recruited through a research company (Research Park based in Lodz) and received financial remuneration for their participation. The study was conducted via an internet platform: company-owned application. The respondents completed the questionnaires in the following order: demographic data questionnaire, ECR (PL), RAS (PL), PN-RQ (PL).

Measures

Positive–Negative Relationship Quality Scale

The PN-RQ, by Rogge, Fincham, Crasta, & Maniaci, 2016, consists of 2 subscales containing 8 positive and negative terms that describe a relationship. The respondents indicate how they define aspects of their relationship on a 6-point scale from 0 = *definitely not true* to 5 = *definitely true*. The reliability coefficients

(Cronbach's α) in three studies by the authors of the PN-RQ (Rogge et al., 2016) ranged from .94 to .96 for the positive subscale, and from .84 to .95 for the negative subscale. Similar reliability coefficients were obtained by the authors of the Turkish adaptation of this tool: .93 for the positive subscale and .90 for the negative subscale (Araz et al., 2019).

In the first stage of adapting the PN-RQ to the Polish-language version, two psychologists fluent in English translated the questionnaire into Polish. Their translations were broadly similar, but for several items there were differences in the translations. So, another researcher was asked for an opinion, and thus the final language version was jointly established. In the next stage, a Polish psychologist who also has a master's degree in English made the reverse translation. This translation was exactly the same as the original version of the tool. The Cronbach's α -coefficient of the Polish version of PN-RQ used in this study was .95 for the positive subscale and .97 for the negative subscale.

The Relationship Assessment Scale (RAS; Hendrick, 1988), adapted for Polish by Natora (2011), contains 7 questions on key global aspects of a relationship, to which respondents respond on a 5-point Likert response scale (1 = *never* to 5 = *very often/very much*). A higher overall score represents higher relationship satisfaction. The internal consistency (Cronbach's α) of the English version of the RAS ranged from .86 to .91 (Hendrick, 1986; Vaughn & Matyastick Baier, 1999); for the Polish version the score was from .91 to .92 (Natora, 2011; Kuncewicz & Jaśkowska, 2018), while in this study it was .89.

Experiences in Close Relationships Scale

The ECR (Brennan, Clark, & Shaver, 1998), in a Polish adaptation by Stawska (2011), is used to test attachment in romantic relationships on two orthogonal dimensions: fear and avoidance. The combination of low and high scores in both dimensions allows division into four attachment styles (e.g., low anxiety and low avoidance characterize the safe style). In the literature on the subject (cf. numerous studies by Mikulincer and Shaver, 2016), the ECR questionnaire is most frequently used to measure anxiety and avoidance as continuous variables in the context of avoidance. This tool contains 36 statements that relate to broadly understood experiences (including feelings, behaviors, beliefs, preferences) in a relationship with a partner. The respondents reply to them on a 7-point scale, which ranges from 1 (*I strongly disagree*) to 7 (*I strongly agree*). The internal consistency (Cronbach's α) of the English version of ECR was .94 for avoidance and .91 for anxiety; for the Polish version of the ECR this was .85 for avoidance and .86 for anxiety (Stawska, 2010); in this study it was .91 for avoidance and .90 for anxiety.

RESULTS

The analyses were conducted with the use of IBM SPSS Statistics 27.0 and Amos Graphics 26.0.

Descriptive Statistics and Gender Differences

Table 1 presents descriptive statistics for the analyzed variables from the group of men and the group of women, and the values of the Mann–Whitney *U* test. It was used to assess the statistical significance of the differences between the two groups.

Table 1

Descriptive Statistics for Analyzed Variables Acquired in Group of Men and Group of Women

	Women (<i>n</i> = 310)					Men (<i>n</i> = 347)					<i>z</i>
	<i>M</i>	<i>SD</i>	<i>A</i>	<i>K</i>	<i>d</i>	<i>M</i>	<i>SD</i>	<i>A</i>	<i>K</i>	<i>d</i>	
Positive Subscale	3.61	1.23	-.97	.26	.15***	3.54	1.07	-.59	.01	.09***	-1.77
Negative Subscale	.62	1.03	2.37	5.62	.27***	.61	.97	2.21	5.17	.26***	-.27
RAS	3.95	.79	-1.11	1.01	.13***	3.92	.69	-.75	.52	.09***	-1.63
ECR Anxiety Scale	4.02	1.17	-.13	-.50	.06*	3.88	1.13	-.03	-.43	.04	-1.62
ECR Avoidance Scale	2.54	1.09	.64	-.52	.11***	2.68	1.01	.14	-1.12	.08***	-2.12*

Note. *M* = mean; *SD* = standard deviation; *A* = asymmetry; *K* = kurtosis; *d* = Kolmogorov–Smirnov normality of distribution test with the Lilliefors correction; *z* = value of Mann–Whitney *U* test.

* $p < .05$; *** $p < .001$.

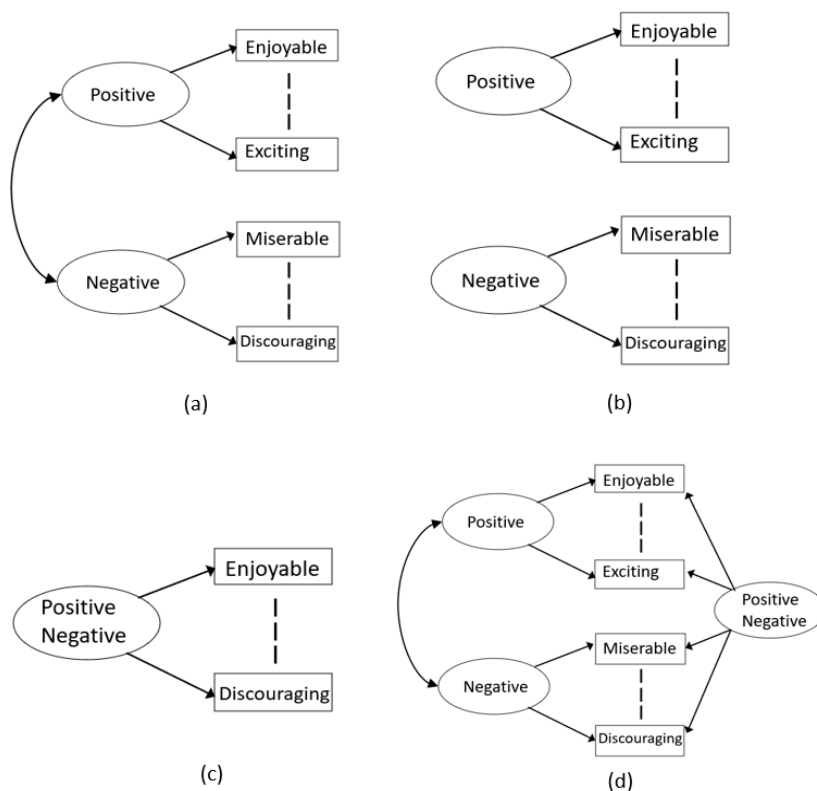
With the exception of the ECR anxiety scale in the group of men, the distributions of all analyzed variables significantly differed from the normal distribution. The distributions of the scores on the Negative scale in both the men's and women's groups were positively skewed and leptokurtic. The distribution of the RAS scores in the women's group was negatively skewed and leptokurtic. The distribution of scores on the ECR avoidance scale in the men's group was platykurtic. Gender turned out not to differentiate between four of the five variables included in the analyses. Only the mean value on the ECR avoidance scale was significantly higher in the group of men than in the group of women. Since most of the analyses showed no significant differences, we did not differentiate by gender in further analyses.

Confirmatory Factor Analysis

In order to verify the factorial structure of PN-RQ questionnaire, confirmatory factor analysis based on the likelihood method was conducted. Four different models were assessed (see Figure 1): a model based on two correlated factors (Model 1); a model based on two uncorrelated factors (Model 2); a one-factor model (Model 3); and a bi-factor model (Model 4).

Figure 1

Four Models Based on Multidimensional Structure of the PN-RQ Scale



Note. (a) Model 1: Factor structure based on two correlated factors; (b) Model 2: Factor structure based on two uncorrelated factors; (c) Model 3: One-factor structure; (d) Model 4: Bi-factor model.

The values of fit indices are depicted in Table 2.

Table 2

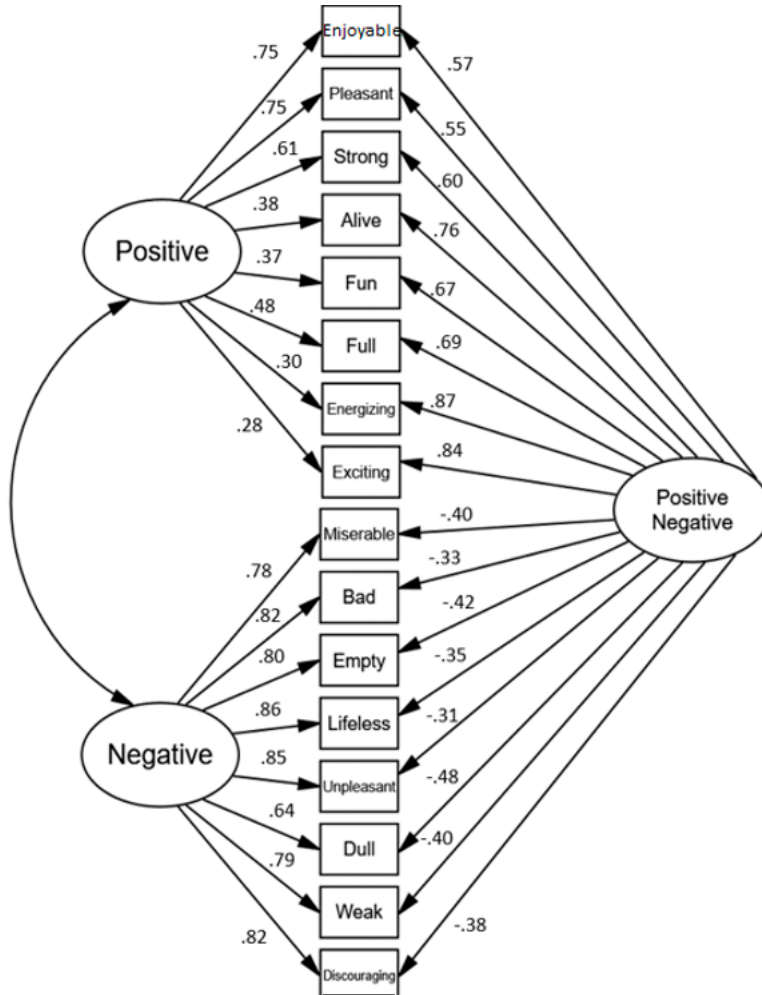
Values of Fit Indices for Four Different Models of PN-RQ Factorial Structure

Model		χ^2/df	RMSEA	CFI	NFI
Model 1	Two correlated factors	8.56	.10	.94	.93
Model 2	Two uncorrelated factors	11.90	.12	.91	.91
Model 3	One-factor structure	39.72	.23	.69	.69
Model 4	Bi-factor model	4.57	.07	.98	.97

Note. RMSEA = root mean square error of approximation; CFI = comparative fit index; NFI = normed-fit index.

The values of the χ^2/df and RMSEA indices were lowest for Model 4. The values of CFI and NFI were highest for Model 4, which means that this model had the best fit to the analyzed data and depicted the factorial structure of PN-RQ. Additionally, only the values of fit indices for Model 4 fulfilled the recommended criteria. The following were found only for Model 4: the NFI value was higher than the recommended cut-off value of .9 (Bentler & Bonett, 1980); the CFI value was higher than the recommended cut-off value of .95 (Schermelleh-Engel & Moosbrugger, 2003); and the value of RMSEA was lower than the recommended cut-off value of .08 (Browne & Cudeck, 1993). Figure 2 presents the acquired factor loadings.

The value of the correlation coefficient between the positive scale and the negative scale was equal to $r = -.61, p < .001$, which means that both variables shared 37.2% of variance.

Figure 2*Factor Loadings Acquired in the Bi-Factor Model*

Correlation Analysis

Table 3 presents the correlation coefficient values between the PN-RQ scores and the scores in the RAS and ECR questionnaires.

Table 3

Values of Correlation Coefficients Between PN-RQ Scores and Scores in RAS and ECR Questionnaires

	Positive Subscale	Negative Subscale
RAS	.82***	-.73***
ECR Anxiety Scale	-.33***	.33***
ECR Avoidance Scale	-.57***	.48***

*** $p < .001$

The Positive scale correlated positively with the RAS questionnaire scores but negatively with the anxiety and avoidance scales. The Negative scale correlated negatively with the RAS scores but positively with the anxiety and avoidance scales. Correlations between the PN-RQ and RAS questionnaire scores were distinctly stronger than the correlations between the PN-RQ and ECR scores.

Between-Group Comparisons

The analyzed sample was divided into four distinctive groups with the use of a median split performed on the PN-RQ scores. Participants with low values (below median) on both the positive and negative scales were included in the “indifferent” group. Participants with high values (above median) on both the positive and negative scales were included in the “ambivalent” group. Participants with high values on the positive scale and low values on the negative scale were included in the “satisfied” group. Participants with low values on the positive scale and high values on the negative scale were included in the “dissatisfied” group. The median for the positive scale was equal to 3.88. The median for the negative scale was equal to .13. Table 4 depicts the mean values of the ECR and RAS scores in the extracted groups; it also presents the values of the one-way analysis of variance that was used to assess the statistical significance of the differences between groups.

Table 4*Mean Values of ECR and RAS Scores in Extracted Groups*

	Satisfied <i>n</i> = 300	Dissatisfied <i>n</i> = 282	Indifferent <i>n</i> = 82	Ambivalent <i>n</i> = 76	<i>F</i>	<i>df</i>	<i>p</i>
RAS	4.50 (.34)	3.31 (.68)	3.91 (.44)	4.09 (.52)	217.74	3,653	.001
ECR Anxiety Scale	3.43 (1.03)	4.42 (1.06)	3.79 (1.13)	4.29 (1.07)	40.34	3,653	.001
ECR Avoidance Scale	1.97 (.81)	3.22 (.96)	2.67 (.89)	2.63 (.92)	85.59	3,653	.001

There were statistically significant differences regarding all three analyzed variables. According to the values of the Games-Howell post-hoc test, the mean value on the RAS scale was significantly higher in the Satisfied group than in the Dissatisfied group ($p < .001$), the Indifferent group ($p < .001$) and the Ambivalent group ($p < .001$). The mean value on the RAS scale was also significantly lower in the Dissatisfied group than in the Indifferent group ($p < .001$) and the Ambivalent group ($p < .001$); moreover, the mean value on the RAS scale in the Ambivalent group was on the verge of statistical significance ($p < .1$) and was higher than in the Indifferent group ($p < .1$).

The mean value on the ECR anxiety scale was significantly lower in the Satisfied group than in the Dissatisfied group ($p < .001$), the Indifferent group ($p < .05$), and the Ambivalent group ($p < .001$). The mean value on the ECR anxiety scale was also significantly lower in the Indifferent group than in the Dissatisfied group ($p < .001$), and the Ambivalent group ($p < .05$).

The mean value on the ECR avoidance scale was significantly lower in the Satisfied group than in the Dissatisfied group ($p < .001$), the Indifferent group ($p < .001$), and the Ambivalent group ($p < .001$). The mean value on the ECR avoidance scale was also significantly higher in the Dissatisfied group than in the Indifferent group ($p < .001$) and the Ambivalent group ($p < .001$).

It should be noted that the mean value on RAS differentiated all four groups; either significantly or at the limit of statistical significance, each group contrasted against all the others. Similarly, statistically significant difference was not observed when analyzing the ECR scales. The mean value on the ECR Anxious Attachment scale was not statistically significant when compared with the Dissatisfied group or the Ambivalent group ($p = .84$); however, the mean value on the ECR Avoidance scale was not significantly different in the Indifferent group or in the Ambivalent group ($p = .99$).

DISCUSSION

The aim of the study was to create a Polish-language version of the two-dimensional PN-RQ scale and check its factor structure and criterion validity.

The results of the confirmatory factor analysis, as was the case with the original (Rogge et al., 2016) and Turkish versions of the scale (Araz et al., 2019), showed that out of the four tested models (two correlated factors, two uncorrelated factors, one factor, bi-factor), the bi-factor model best fitted the data; this is the most multifaceted model as it simultaneously captures two correlated dimensions of relationship quality (positive and negative) and its one global dimension. The relatively strong negative correlation between the positive and negative PN-RQ subscales corresponds to the simultaneous interdependence and distinctiveness of the dimensions of relationship quality that are assumed in the bi-factor model and the neurobiological foundations of human experience (cf. the behavioral approach and behavioral inhibition systems, see Gable, Reis & Elliot, 2000; for positive-negative organization of affective experiences see Watson, Clark & Tellegen, 1988).

The positive and negative sub-scales correlated positively and negatively in high degree, respectively, with the global measure of RAS relationship quality; this remains in line with the results obtained from the American (Rogge et al., 2016) and Turkish (Araz et al., 2019) samples. These and other international results suggest that although the bidimensional PN-RQ scale captures the quality of romantic relationships from a different perspective than the unidimensional scale, it measures the same culturally universal construct.

As measured by RAS, the average level of global relationship satisfaction differed among the four groups of people (Satisfied, Dissatisfied, Indifferent and Ambivalent), which were selected on the basis of a combination of low and high scores on the positive and negative subscales. This suggests that simultaneous consideration of the positive and negative dimensions of relationship quality makes it possible to show minor differences between similar phenomena. Most people were in the Satisfied and Dissatisfied groups, i.e., they were clearly satisfied or dissatisfied with their relationships. As suggested by Fincham and Linfield (1997), slightly less frequent ambivalent (high positivity and high negativity) or indifferent (low positivity and low negativity) assessments of relationship quality may reflect changes in a relationship due to its development stage or a current crisis. Rogge et al. (2016) also draw attention to the potentially clinical aspects of the differences between Indifferent and Ambivalent experiences of relationships with a partner. People who assessed their relationship as indifferent engaged in fewer interactions with their partner, both

positive and negative. On the other hand, people who assessed their relationship as ambivalent were less likely to forgive their partner.

The positive PN-RQ subscale moderately or very negatively correlated with the anxiety and avoidant ECR attachment scale, while the negative subscale correlated moderately positively. These results are consistent with numerous reports which indicate that people with less secure attachment have poorer quality relationships (e.g., Creasey & Hesson-McInnis, 2001; Feeney, 1999; Tran & Simpson, 2009). As anticipated, the bi-dimensional PN-RQ allows detailed assessment of how the quality of romantic relationships depends on the insecure attachment style. Comparisons among groups of individuals according to their low and high scores on PN-RQ subscales showed that Ambivalent respondents presented a fairly high or significantly higher level of anxious attachment than those who were Indifferent. However, their Avoidance style scores were somewhat lower and similar to those of Indifferent respondents. The above results suggest that the bi-dimensional PN-RQ scale of relationship quality reacted somehow to the unique attributes of the anxious attachment style, i.e., an internally conflicted, ambivalently positive or negative way of experiencing a relationship. However, this scale also reacted to less emotionally involved respondents, and thus to the less ambivalent and more indifferent ways of experiencing a relationship that are specific to avoidant attachment (Mikulincer et al., 2003).

To sum up, similarly to the American and Turkish versions, the factor structure of the Polish version of the PN-RQ scale meets the theoretical assumptions, according to which the quality of a relationship, when understood as one construct, is constituted by two separate but related positive and negative dimensions. Both subscales, positive and negative, as well as the entire PN-RQ scale are characterized by high internal consistency and accuracy of measurement, as was verified in relation to another measure of relationship quality used in Poland (RAS). The possibility of using the PN-RQ scale to assess the quality of a relationship in a more nuanced way than is possible with one-dimensional scales was also confirmed. Potentially, it can be used in both scientific research and clinical diagnostics.

One of the limitations of this study is the lack of data on the time stability of the Polish version of the PN-RQ. Although, in principle, the scale captures a general rather than a temporary assessment of relationships, we are not clear to what extent this assessment is independent of situational factors, therefore, this is worth investigating in the next study. Moreover, the measurement properties of PN-RQ were not explored depending on the duration of the relationship. For example, partners in the honeymoon phase may assess their relationship in a completely different way than when they are in more difficult phases (Kuncewicz et al., 2020; Reese-Weber, 2005). Taking into account the length or the phases of a relationship, the use of the

two-dimensional PN-RQ scale in cross-sectional and longitudinal studies would lead to a better understanding of the developmental dynamics of the quality of relationships. In subsequent studies, it is also worth checking how the two-dimensional assessment of the quality of a relationship depends on various sociodemographic variables, such as gender, sexual orientation, relationship status (e.g., formal, restarted relationship, etc.).

CRediT Author Statement

ANNA PAPIŃSKA (55%): conceptualization, writing (original draft), visualization.

DARIUSZ KUNCEWICZ (45%): methodology, supervision, writing (review & editing).

REFERENCES

- Araz, A., Güngör, D., & Aşçı, E. (2019). Turkish adaptation of the Positive–Negative Relationship Quality (PN-RQ) Scale: A reliability and validity study. *Behavioral Sciences, 9*(9), 100. <https://doi.org/10.3390/bs9090100>
- Argyle, M. (2001). Social relations and work and unemployment. In M. Argyle (Ed.), *The Psychology of Happiness* (pp. 14–63). Methuen & Co. Company.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*(2), 226–244. <https://doi.org/10.1037/0022-3514.61.2.226>
- Beach, S. R., Katz, J., Kim, S., & Brody, G. H. (2003). Prospective effects of marital satisfaction on depressive symptoms in established marriages: A dyadic model. *Journal of Social and Personal Relationships, 20*(3), 355–371. <https://doi.org/10.1177/0265407503020003005>
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88*(3), 588–606. <https://doi.org/10.1037/0033-2909.88.3.588>
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). Guilford.
- Brunner, M., Nagy, G., & Wilhelm, O. (2012). A tutorial on hierarchically structured constructs. *Journal of Personality, 80*(4), 796–846. <https://doi.org/10.1111/j.1467-6494.2011.00749.x>
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Sage.
- Butler, E. A., & Sbarra, D. A. (2013). Health, emotion, and relationships. *Journal of Social and Personal Relationships, 30*(2), 151–154. <https://doi.org/10.1177/0265407512453425>
- Creasey, G., & Hesson-McInnis, M. (2001). Affective responses, cognitive appraisals, and conflict tactics in late adolescent romantic relationships: Associations with attachment orientations. *Journal of Counseling Psychology, 48*(1), 85–96. <https://doi.org/10.1037/0022-0167.48.1.85>

- Demirtas, S. C., & Tezer, E. (2012). Romantic relationship satisfaction, commitment to career choices and subjective well-being. *Procedia – Social and Behavioral Sciences*, 46, 2542–2549. <https://doi.org/10.1016/j.sbspro.2012.05.519>
- Diener, E., Gohm, C. L., Suh, E., & Oishi, S. (2000). Similarity of the relations between marital status and subjective well-being across cultures. *Journal of Cross-Cultural Psychology*, 31(4), 419–436. <https://doi.org/10.1177/0022022100031004001>
- Dunn, K., & McCray, G. (2020). The place of the bifactor model in confirmatory factor analysis investigations into construct dimensionality in language testing. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01357>
- Feeney, J. A. (1999). Adult attachment, emotional control, and marital satisfaction. *Personal Relationships*, 6(2), 169–185. <https://doi.org/10.1111/j.1475-6811.1999.tb00185.x>
- Fincham, F. D., & Linfield, K. J. (1997). A new look at marital quality: Can spouses feel positive and negative about their marriage? *Journal of Family Psychology*, 11(4), 489–502. <https://doi.org/10.1037/0893-3200.11.4.489-502>
- Fincham, F. D., & Rogge, R. D. (2010). Understanding relationship quality: Theoretical challenges and new tools for assessment. *Journal of Family Theory and Review*, 2(4), 227–242. <https://doi.org/10.1111/j.1756-2589.2010.00059.x>
- Gable, S. L., Reis, H. T., & Elliot, A. J. (2000). Behavioral activation and inhibition in everyday life. *Journal of Personality and Social Psychology*, 78(6), 1135–1149. <https://doi.org/10.1037/0022-3514.78.6.1135>
- Gottman, J. M., & Levenson, R. W. (1992). Marital processes predictive of later dissolution: Behavior, physiology, and health. *Journal of Personality and Social Psychology*, 63(2), 221–233. <https://doi.org/10.1037/0022-3514.63.2.221>
- Główny Urząd Statystyczny (2018). Sytuacja demograficzna Polski do 2018 roku. Tworzenie i rozpad rodzin. GUS. <https://stat.gov.pl/obszary-tematyczne/ludnosc/ludnosc/sytuacja-demograficzna-polski-do-2018-roku-tworzenie-i-rozpad-rodzin,33,2.html>
- Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, 5(1), 1–22. https://doi.org/10.1207/s15327965pli0501_1
- Heller, D., Watson, D., & Iles, R. (2004). The role of person versus situation in life satisfaction: A critical examination. *Psychological Bulletin*, 130(4), 574–600. <https://doi.org/10.1037/0033-2909.130.4.574>
- Hendrick, S. S. (1988). The relationship assessment scale. *Journal of Social and Personal Relationships*, 15(1), 137–142. <https://doi.org/10.1177/0265407598151009>
- Janicka, I. L., & Szymczak, W. (2019). Can close romantic relationships last? The commitment of partners in married and cohabitant couples. *Current Issues in Personality Psychology*, 7(3), 203–211. <https://doi.org/10.5114/cipp.2019.86129>
- Kamp Dush, C. M., & Amato, P. R. (2005). Consequences of relationship status and quality for subjective well-being. *Journal of Social and Personal Relationships*, 22(5), 607–627. <https://doi.org/10.1177/0265407505056438>
- Kelmer, G., Rhoades, G. K., Stanley, S., & Markman, H. J. (2013). Relationship quality, commitment, and stability in long-distance relationships. *Family Process*, 52(2), 257–270. <https://doi.org/10.1111/j.1545-5300.2012.01418.x>
- Kiecolt-Glaser, J. K., Loving, T. J., Stowell, J. R., Malarkey, W. B., Lemeshow, S., Dickinson, S. L., & Glaser, R. (2005). Hostile Marital Interactions, Proinflammatory Cytokine Production, and Wound Healing. *Archives of General Psychiatry*, 62(12), 1377–1384. <https://doi.org/10.1001/archpsyc.62.12.1377>

- Kuncewicz, D., Kuncewicz, D., Mroziński, B., & Stawska, M. (2020). A combination of insecure attachment patterns in a relationship and its quality: The role of relationship length. *Journal of Social and Personal Relationships*. <https://doi.org/10.1177/0265407520969896>
- Kuncewicz, D., & Jaśkowska, K. (2018). Mało bezpieczne wzorce więzi i opowieści o miłości, a satysfakcja ze związku. *Annales*, 31(2), 313–329.
- Li, T., & Chan, D. K-S. (2012). How anxious and avoidant attachment affect romantic relationship quality differently: A meta-analytic review. *European Journal of Social Psychology*, 42(4), 406–419. <https://doi.org/10.1002/ejsp.1842>
- Liberacka-Dwojak, M., & Izdebski, P. (2021). Psychospołeczne wyznaczniki komunikacji seksualnej: przegląd badań. *Seksuologia Polska*, 19, 1–12. <https://doi.org/10.5603/SP.2021.0002>
- Lorber, M. F., Erlanger, A. C. E., Heyman, R. E., & O’Leary, K. D. (2015). The honeymoon effect: Does it exist and can it be predicted? *Prevention Science*, 16(4), 550–559. <https://doi.org/10.1007/s11121-014-0480-4>
- MacDonald, G., Locke, K. D., Spielmann, S. S., & Joel, S. (2012). Insecure attachment predicts ambivalent social threat and reward perceptions in romantic relationships. *Journal of Social and Personal Relationships*, 30(5), 647–661. <https://doi.org/10.1177/0265407512465221>
- Mikulincer, M., Shaver, P. R., Bar-On, N., & Ein-Dor, T. (2010). The pushes and pulls of close relationships: Attachment insecurities and relational ambivalence. *Journal of Personality and Social Psychology*, 98(3), 450–468. <https://doi.org/10.1037/a0017366>
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamic development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion*, 27(2), 77–102. <https://doi.org/10.1023/A:1024515519160>
- Mikulincer, M., & Shaver, P. R. (2016). *Attachment in adulthood: Structure, dynamics, and change* (2nd ed.). Guilford Press.
- Myers, D. G. (2003). Close relationships and quality of life. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 376–390). The Russell Sage Foundation.
- Natora, M. (2011). *Role w związku partnerskim a strategie rozwiązywania konfliktów i satysfakcja ze związku* [Unpublished master’s thesis]. SWPS University, Warsaw, Poland.
- Ponzetti, J., Zvonkovic, A., Cate, R., & Huston, T. (1992). Reasons for divorce. *Journal of Divorce & Remarriage*, 17(3–4), 183–201. https://doi.org/10.1300/J087v17n03_11
- Reese-Weber, M. (2015). Intimacy, communication, and aggressive behaviors: Variations by phases of romantic relationship development. *Personal Relationships*, 22(2), 204–215. <https://doi.org/10.1111/pere.12074>
- Reise, S. P., Moore, T. M., & Haviland, M. G. (2010). Bifactor models and rotations: Exploring the extent to which multidimensional data yield univocal scale scores. *Journal of Personality Assessment*, 92(6), 544–559. <https://doi.org/10.1080/00223891.2010.496477>
- Reise, S. P., Bonifay, W., & Haviland, M. G. (2018). Bifactor modelling and the evaluation of scale scores. *The Wiley Handbook of Psychometric Testing*, 675–707. <https://doi.org/10.1002/9781118489772.ch22>
- Rogge, R. D., Fincham, F. D., Crasta, D., & Maniaci, M. R. (2016). Positive and negative evaluation of relationships: Development and validation of the Positive–Negative Relationship Quality (PN-RQ) Scale. *Psychological Assessment*, 29(8), 1028–1043. <https://doi.org/10.1037/pas0000392>
- Russell, R. J. & Wells, P. A. (1994). Predictors of happiness in married couples. *Personality and Individual Differences*, 17(3), 313–321. [https://doi.org/10.1016/0191-8869\(94\)90279-8](https://doi.org/10.1016/0191-8869(94)90279-8)

- Schermelleh-Engel, K., & Moosbrugger, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23–74.
- Stawska, M. (2011). *Styl przywiązania i percepcja partnera a satysfakcja ze związku* [Unpublished doctoral dissertation]. Uniwersytet Kazimierza Wielkiego, Bydgoszcz, Poland.
- Tran, S., & Simpson, J. A. (2009). Prerelationship maintenance behaviors: The joint roles of attachment and commitment. *Journal of Personality & Social Psychology*, 97(4), 685–698. <https://doi.org/10.1037/a0016418>
- Vaughn, M. J., & Matyastick Baier, M. E. (1999). Reliability and validity of the Relationship Assessment Scale. *American Journal of Family Therapy*, 27, 137–147.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070. <https://doi.org/10.1037/0022-3514.54.6.1063>
- Watson, D., Clark, L. A., Weber, K., Assenheimer, J. S., Strauss, M. E., & McCormick, R. A. (1995). Testing a tripartite model: II. Exploring the symptom structure of anxiety and depression in student, adult, and patient samples. *Journal of Abnormal Psychology*, 104(1), 15–25. <https://doi.org/10.1037/0021-843X.104.1.15>

