

Development and validation of the Polish-language version of the Dating Anxiety Scale¹ in a sample of young adults

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The development and validation of the Polish-language version of the Dating Anxiety Scale for Adolescents (DAS-A) (Glickman & La Greca, 2004) is described in this article. The aim of this study was to develop and validate the Polish version of the DAS-A in a sample of young adults, and to establish the psychometric properties of this instrument measuring fear of negative evaluation in dating situations, social distress in interactions with real or potential dating partners, and social distress in interactions in groups of mixed-sex individuals. A total of 287 university students completed the Polish version of the DAS-A for adults. Differences in the factor structures between the original and Polish version of the DAS-A were found. The factor structure did not fully replicate for Polish respondents. At the same time, the results indicated that the Polish version of the DAS-A is a reliable and valid measure of dating anxiety among young adults with good levels of internal consistency, homogeneity and construct validity.

Keywords: dating anxiety, young adults, adult assessment, Polish adaptation

The Dating Anxiety Scale for Adolescents (DAS-A) was developed by Glickman and La Greca (2004) as a tool for measuring adolescents' experience of anxiety in dating and heterosocial situations. The development of this scale for adolescents is fully justified regarding the significant role of dating relationships for adolescents' psychosocial functioning (Collins, 2003). At the same time, although dating and romantic relationships are normative in adolescence (La Greca & Mackey, 2007) and set the stage for the development of intimate, adult, romantic partnerships (Collins, 2003), young adults also display great concern over romantic relationships and highly value finding a lifetime partner (Cantor, Acker, Cook-Flanngan, 1992). Therefore, we may assume that dating is not a typical average for establishing and maintaining romantic relationships (Allen,

Bourhis, Emmers-Sommer, & Sahlstein, 1998) reserved only for adolescents, but also constitutes an important average for searching for a dating or romantic partner for young adults. Moreover, for some young people, dating is associated with inherent anxiety that sometimes results in avoidance (Allen et al., 1998). Dating anxiety is a significant problem among college students and adults, and the feelings of anxiety and distress in dating situations can interfere with the ability to form and sustain close and intimate romantic relationships (Chorney & Morris, 2008). Therefore, the lack of an ability to comfortably participate in heterosexual interactions may eventually lead to the development of dysfunctional patterns of behavior (Allen et al., 1998). It turns out, the anxiety experienced in dating situations may be to some degree a result of negative consequences anticipated by the individual caused by deficits in the personal social skills necessary for successful dating interactions (Curran, Gilbert, & Little, 1976). Furthermore, dating anxiety may prevent many young people from establishing romantic partnerships (La Greca & Mackey, 2007).

The original DAS-A assesses adolescents' anxiety in heterosocial and dating situations. It contains of 21 items

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¹ Polish questionnaire available from the author on request (via e-mail).

rated on a 5-point scale ranging from 1 (*not at all characteristic of me*) to 5 (*extremely characteristic of me*) with additional five filler items. The original study run on a sample of adolescents aged 15–18 years old ($M = 16.60$, $SD = 1.00$) revealed the three-factor model of dating anxiety: fear of negative evaluation in dating situations, social distress in interactions with real or potential dating partners, and social distress in interactions in groups of mixed-sex peers. The questionnaire is comprised of the following three subscales: Fear of Negative Evaluation – Dating (FNE-Dating; 10 items) which measures concern or worry that a date or a member of the other sex would judge the adolescent in a negative manner (e.g., “*I am often afraid that I may look silly or foolish while on a date.*”); Social Distress-Dating (SAD-Date; 7 items) assessing inhibition and distress while interacting with a member of the other sex on a date or socially (e.g., “*I am usually nervous going on a date with someone for the first time.*”); and Social Distress-Group (SAD-Group; 4 items) reflects inhibition and distress during heterosocial group situations (e.g., “*It takes me a long time to feel comfortable when I am in a group of both males and females.*”). Glickman and La Greca (2004) evaluated dating anxiety by analyzing associations between the DAS-A subscales and such variables as grade, sex, ethnicity, social anxiety, depression, and dating experience. For instance, with respect to sex differences, the original study revealed that boys reported higher levels of distress in heterosocial group situations than girls (Glickman & La Greca, 2004). In regard to social anxiety, Glickman and La Greca (2004) found that adolescents who reported greater dating anxiety also reported greater social anxiety ($r = .73$). Regarding depression, Glickman and La Greca (2004) found that dating anxiety was moderately related to depression ($r = .36$): higher levels of dating anxiety were associated with higher levels of depressive symptoms. Finally, with respect to dating experience, adolescents who reported more dating anxiety were less likely to be currently dating.

Regarding the significance of dating anxiety for successful dating and establishing and maintaining romantic relationships in young adulthood, the necessity of effective assessment of dating anxiety among young adults is an essential issue for researchers and clinicians. In addition, the fact that no scale to measure dating anxiety in Polish culture currently exists, encouraged the author to develop a Polish version of the DAS-A. Therefore, the aim of the present study was to develop and validate the Polish adaptation of the Dating Anxiety Scale for Adolescents (DAS-A), originally designed to measure dating anxiety in adolescence, for young adults in a sample of Polish participants.

The aim of the study was to test whether the Polish DAS-A would replicate prior findings in terms of factorial

structure, psychometric properties, sex differences and associations with indicators of psychological functioning such as interpersonal competence, life satisfaction, loneliness, and dating experience. It was expected that the three dimensional structure of Polish version of the DAS-A for young adults would be confirmed, and it was hypothesized that the Polish version of DAS-A would be a reliable measure of dating anxiety among young adults. Finally, all the above evidence would provide further support for the psychometric integrity of the DAS-A.

METHOD

The adaptation process of the Polish-language version of the DAS-A for young adults was performed in the following three stages: (1) translation of the English-language version of the DAS-A into Polish, (2) the process of testing the psychometric equivalence of the Polish and English versions of the DAS-A, and (3) verification of the factor structure, and the concurrent and discriminant validity of the Polish version of the DAS-A.

Translation of the English-language version of the DAS-A into Polish

To establish the Polish version of the DAS-A, all of the items were separately translated into Polish by three independent translators who were competent in both written and spoken English and had experience in social and psychological research. The translated forms were reviewed by the author and a native English speaker, and then compared to each other in terms of the content and clarity of the items. In addition, the Polish form was reviewed by one Polish linguist to assess the appropriateness of the grammatical structure of each item. As a result, the Polish version was created and first applied to a small sample of university students ($n = 36$) who were instructed to indicate any confusing words or sentences. Subjective feedback revealed that some of the items were not clear and comprehensible. The problematic items were evaluated and corrected to ensure that all points were understandable. The final Polish version was back-translated into English by three different experienced translators.

The process of testing the psychometric equivalence of the Polish and English versions of the DAS-A

The back-translation resulted in a version highly similar to the original scale, which as an experimental version was used in the second phase of research on a bilingual group of 110 English Philology students from The School of English, Adam Mickiewicz University in Poznań, Poland. Seventy five females and 35 males participated in this stage. The mean age of the sample was 24.75 years, ranging

from 23 to 27 and a standard deviation of .99. The student sample completed both the short form of the English and Polish DAS-A in a counterbalanced order to ascertain the effectiveness of the translation. In order to minimize item recall, a one-month interval separated the completion of each version. The English version was completed in January, 2013, and after an interval of one month, all students completed the Polish version in February, 2013. Participating students completed the two questionnaire forms during their classes. The whole procedure lasted about 15 minutes. A series of paired *t* tests comparing the two forms at the item and subscale levels revealed no significant differences between the two measures. They were highly correlated:

Fear of negative evaluation in dating situations, $r = .81$, $p < .001$, Social distress in dating situations, $r = .82$, $p < .001$, and Social distress in a group of mixed-sex individuals, $r = .84$, $p < .001$. Therefore, the Polish version of the DAS-A was judged to be an effective translation of the scale.

VERIFICATION OF THE FACTOR STRUCTURE, AND THE CONCURRENT AND DISCRIMINANT VALIDITY OF THE POLISH VERSION OF THE DAS-A

Participants and procedure

The main study was carried out on a sample of university students from different faculties of Adam Mickiewicz University in Poznań, Poland. Four hundred questionnaires were originally distributed of which 350 were returned. Sixty three participants were excluded from the study due to incomplete data, yielding a final sample of 287 students – 180 females (62.70%) and 107 males (37.30%). Participants were 20–26 years old ($M = 21.73$, $SD = 1.94$), resided in a large Polish city with a population exceeding 500,000 inhabitants. All the respondents were unmarried.

The author distributed the measures to the participants across different courses. The questionnaire packages were administered in classrooms to groups of 20 to 40 students at a time and participation was voluntary. The purpose of the study was explained to students. The students were assured that the information provided would remain anonymous and confidential. The instructions were read aloud. Participants completed a demographic questionnaire and a package of measures. In order to minimize the possible influence of the order of questionnaire presentation, the Polish version of the DAS-A appeared equally often in each ordinal position. Completing the questionnaire package took approximately 20 minutes.

Measures

The questionnaire package presented to the study participants was comprised of the following instruments: the focus of the study, the Polish version of the DAS-A,

and the General Health Questionnaire-28 (GHQ-28), the Interpersonal Competence Questionnaire – Revised (ICQ-R), the Satisfaction With Life Scale (SWLS), and the Social and Emotional Loneliness Scale for Adults – Short Form (SELSA-S) – to evaluate the concurrent and discriminant validity of the DAS-A, and a demographic questionnaire.

Demographic questionnaire. This questionnaire was designed by the present author to obtain general descriptive information such as age, sex, faculty and current dating and relationship status.

General Health Questionnaire-28 (GHQ-28; Goldberg & Hillier, 1979) (Polish adaptation – Goldberg, Williams, Makowska, & Merecz, 2001). The General Health Questionnaire measures symptoms of non-psychotic psychiatric disorders (Goldberg & Hillier, 1979). The GHQ-28 scale was derived from the original 60-item version of the questionnaire mainly for research purposes but it is also often used as a measure of psychological well-being (e.g., Goldberg & Williams, 1988). GHQ-28 consists of four 7-item scales: somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. Respondent are asked to compare their recent psychological state with their usual state on a 4-point (1 = *not at all*, 2 = *no more than usual*, 3 = *rather more than usual*, 4 = *much more than usual*). In the current study the bimodal scoring procedure (0, 0, 1, 1) is applied. Using the conventional bimodal GHQ scoring method there is a range of 0–28 with a score above a threshold of 4 indicative of psychiatric disorder. In the present study the internal consistency for the subscales was $\alpha = .72$, $\alpha = .79$, $\alpha = .77$, $\alpha = .84$, and $\alpha = .89$ for Somatic symptoms, Anxiety, Social dysfunction, Severe depression, and for the Total scale, respectively.

Interpersonal Competence Questionnaire – Revised (ICQ-R; Buhrmester, Furman, Wittenberg, & Reis, 1988). (Polish adaptation – Górska, 2011). The ICQ-R is a measure of interpersonal competences in specific social situations, mainly direct, informal and intimate relationships. It consists of 40 items rated on a 5-point Likert-type scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). This questionnaire is comprised by the five following subscales: Initiating relationships, Asserting influence, Self-disclosure, Providing emotional support, and Conflict resolution. The score for each scale is the average scale score. The above-mentioned dimensions were found to be independent and have satisfactory psychometric parameters with internal reliability estimates from .77 to .87 (Buhrmester et al., 1988). The Polish language version by Górska (2011) been shown to be a valid measure of interpersonal competences

in a Polish population with Cronbach's alphas ranging from .72 to .86. The Cronbach's alphas in the present study were .85 for Initiating Relationships, .85 for Providing emotional support, .83 for Asserting influence, .86 for Self-disclosure, and .76 for Conflict resolution.

The Social and Emotional Loneliness Scale for Adults – Short Form (SELSA-S; DiTommaso, Brannen, & Best, 2004) (Polish adaptation, Adamczyk & DiTommaso, 2014). The SELSA-S is a multidimensional measure of loneliness. It consists of 15 items designed to measure emotional (romantic and family) and social loneliness. The items are rated on a 7-point scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). High SELSA scores indicate high levels of emotional and social loneliness. The SELSA-S's three subscales have high internal reliability, with Cronbach's alphas ranging from .87 to .90, and have been shown to be a valid measure of loneliness (DiTommaso et al., 2004). In the present study the internal consistency for the subscales were high: $\alpha = .86$, .84, and .84 for the Family, Social and Romantic Loneliness scales, respectively.

Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) (Polish adaptation, Juczyński, 2009). This scale measures an individual's satisfaction with his/her life. The SWLS uses a 7-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (7), yielding a possible score range of 5 (low life satisfaction) to 35 (high life satisfaction). The scale's internal consistency was high ($\alpha = .87$) and two week test-retest reliability was $r = .85$. The Cronbach's alpha in the current study was .83.

Data analysis

First, the factorial structure of the Polish adaptation of the DAS-A was investigated by conducting an exploratory and confirmatory factor analysis. Second, psychometric properties of the scale were investigated. Reliability of the DAS-A scales was tested by calculating their internal consistencies. Third, sex differences were investigated. Finally, the correlations between the Polish version of the DAS-A and constructs of psychological functioning such as mental health problems, interpersonal competence, satisfaction with life, romantic loneliness, and information on respondents' dating experience were analyzed.

RESULTS

Exploratory factor analysis

In order to compare findings concerning the factorial structure of the present study with the results from the original study by Glickman and La Greca (2004) a principal

factors analysis with Promax rotation was performed, removing the filler items before the analysis.

The Kaiser-Meyer-Olkin index of adequate sampling was .95 for the sample and indicated that the data represented a homogeneous collection of variables that were suitable for factor analysis. Bartlett's test of sphericity was significant for the sample, $\chi^2 = 3757.32$, $df = 210$, $p < .001$, which indicated that the set of correlations in the correlation matrix were significantly different from zero and suitable for factor analysis. Similarly to the results obtained in Glickman and La Greca's (2004) original study, a principal factor analysis extracted three distinct factors. This analysis resulted in three eigenvalues greater than 1. The three factors with eigenvalues greater than 1 explained 63.09% of the total variance, however the three-factor solution did not show clear loadings of the items on the respective scales (all as $> .40$). The items, loadings and variance for the three factors of the Polish version of DAS-A in comparison to the original DAS-A are presented in Table 1.

As Table 1 demonstrates, 26 items exhibited high loading on the factors; however, not all items exhibited loading for the factors for which they were intended. The following items loaded on the different subscales contrary to the original DAS-A: items # 1, 3, 6, 7, 10, 19 and 24. Therefore, it can be concluded that some significant differences in the factor structure between the original and Polish DAS-A exist.

As can be seen in Table 1, after Promax rotation, the variables loaded more than .56 on Factor 1, more than .48 on Factor 2, and more than .73 on Factor 3. Factor 1 represents fear of negative evaluating in dating situations and accounts for 48.11% of the common variance. Factor 2 represents social distress in interactions with real or potential dating partners and accounts for 8.53% of the common variance. Lastly, Factor 3 represents social distress in interactions in groups of mixed-sex individuals and accounts for 6.45% of the common variance.

Confirmatory factor analysis

To examine the adequacy of the three-factor structure of the Polish version of the DAS-A a confirmatory factor analysis was performed for the 21-item scale by Amos version 21, removing the filler items before the analysis. The three-factor structure was compared to one-factor model. The following commonly used criteria were used to evaluate the adequacy of the hypothesized and alternative models: chi-square, goodness-of-fit indices (GFI), and the standardized (RMR). The GFI fit indices range from 0 to 1, with values of .90 or higher indicating an adequate fit, a value greater than .95 as a very good model fit (Williams & Holahan, 1994; Newsom, 2012). For the standardized

Table 1
Items and Promax rotated factor loadings for the DAS-A

Items/ Subscales	Explained variance	Factor		
		1	2	3
		47.40%	7.70%	5.00%
		48.11%	8.53%	6.45%
Fear of Negative Evaluation – Dating				
23.	I am afraid that the person I am dating will find fault with me	.85 .82		
6.	I am usually worried about what kind of impression I make while on a date.	.81 -	.58	
14.	I often worry that the person I have a crush on won't think very much of me.	.80 .69		
22.	I often worry about what kind of impression I am making on members of the opposite sex.	.77 .85		
8.	I think I am too concerned with what members of the opposite sex think of me.	.76 .82		
20.	I am frequently afraid that the person I have a crush on will notice my flaws.	.71 .89		
3.	I worry that I may not be attractive to people of the opposite sex.	.61 -	.46	
17.	I am concerned when I think that a date is forming a negative impression of me.	.57		
26.	I worry what my date will think of me even when I know it doesn't make any difference.	.56 .74		
1.	I am usually nervous going on a date with someone for the first time.	.48 -		
Social Distress – Dating				
10.	I often feel nervous when talking to an attractive member of the opposite sex.		.78 -	
		.53		
1.	I am usually nervous going on a date with someone for the first time.		.77 .98	
7.	It is difficult for me to relax when I am with a member of the opposite sex who I do not know very well.		.72 -	.46
13.	I feel tense when I'm on a date with someone I don't know very well.		.66 .49	
9.	I feel nervous in dating situations.		.62 .76	
19.	I become tense and jittery when I feel that someone of the opposite sex is checking me out.		.51 -	
		.62		
24.	I am more shy with someone of the opposite sex.		.42 -	
		.51		

continued

continued

Items/ Subscales	Explained variance	Factor		
		1	2	3
		47.40%	7.70%	5.00%
		48.11%	8.53%	6.45%
12.	I tend to be quieter than usual when I'm with group of both males and females.			.75 .87
16.	I often feel nervous or tense in casual get-togethers in which both guys and girls are present.			.59 .76
21.	Parties often make me anxious and uncomfortable.			.51 .77

Note. The top row is from study by Glickman & La Greca (2004), and the bottom row – results of the present study.

In the Polish study items # 1, 3, 6, 7, 10, 19 and 24 loaded on differ factors than in the original study.

RMR and RMSEA, values below .05 indicate a good fit (Bentler, 1990; Browne & Cudeck, 1993), and values between .08 and .10 represent a mediocre fit (Duru, 2007).

Confirmatory factor analysis revealed an acceptable fit for the three-factor model of dating anxiety, with a Goodness-of-Fit-Index (GFI) = .776, a standardized root mean square residual (SRMR) = .081, and a root mean square error of approximation (RMSEA) = .096, $\chi^2(186) = 680.51, p < .001$. In the original study, fit indices for the three-factor model were as follow: GFI = .95, SRMR = .039, RMSEA = .057, $\chi^2(186) = 661.20, p < .001$. In contrast, similarly as in the original study, the one-factor model did not have a good fit. Specifically, in the current study indices for the one-factor model fit were as follows: GFI = .71, SRMR = .104, and RMSEA = .117, $\chi^2(189) = 930.65, p < .001$. In the original study fit indices for the one-factor model were as follow: GFI = .84, SRMR = .063, and RMSEA = .097, $\chi^2(189) = 1574.30, p < .001$.

Furthermore, following the results of the exploratory factor analysis indicating different loadings of items # 1, 3, 6, 7, 10, 19 and 24 (see Table 1), a three-factor model with items' loadings suggested by this analysis was examined. The fit indices for this modified was as follows: GFI = .84, SRMR = .09, and RMSEA = .08, $\chi^2(186) = 553.82, p < .001$. It can be concluded that the fit indices for the modified three-factor model (Fear of Negative Evaluation – Dating, Social Distress – Dating, and Social Distress – Group) with items' loadings different than in the original DAS-A indicated that this model was superior to the one-factor model and to the three-factor model reflecting the original structure of the DAS-A, and represented an acceptable yet mediocre fit to the data.

Reliability

The reliability of the DAS-A scales was tested by calculating their internal consistencies. Cronbach's coefficient alpha was obtained for the DAS-A subscales and for the scale as a whole. For Fear of Negative Evaluation – Dating, Social Distress – Dating and Social Distress – Group subscales, the values were .92, .88, and .80, respectively. The reliability of the total scale was .94. The coefficient alpha values for individual subscales, and for the scale as a whole, demonstrated very good internal reliability with coefficient alpha levels comparable to those obtained in the original study (Glickman & La Greca, 2004).

Intercorrelations

To ensure comparability with Glickman and La Greca' (2004), the product-moment correlation between the scales was calculated. In the original study by Glickman and La Greca (2004), the correlation between Fear of Negative Evaluation – Dating and Social Distress – Dating subscales was $r = .73, p < .001$, the correlations between Fear of Negative Evaluation – Dating and Social Distress – Group was $r = .59, p < .001$, while the correlation between Social Distress – Dating and Social Distress – Group was $r = .67, p < .001$. In the current study, the correlation between Fear of Negative Evaluation – Dating and Social Distress – Dating subscales was $r = .83, p < .001$, the correlations between Fear of Negative Evaluation – Dating and Social Distress – Group was $r = .51, p < .001$, while the correlation between Social Distress – Dating and Social Distress – Group was $r = .63, p < .001$. In the current study the values of Pearson's correlations were similar as values in the original study by

Glickman and La Greca (2004): the three subscales were positively and significantly correlated with each other.

Sex differences

The Student *t* test was performed to evaluate differences between women and men in regard to dating anxiety. To be precise, women reported greater fear of negative evaluation in dating situations ($M = 30.39$, $SD = 8.68$) than men did ($M = 27.38$, $SD = 9.01$), $t(285) = 2.80$, $p = .006$, and had also higher levels of social distress in interactions with real or potential dating partners, ($M = 20.52$, $SD = 6.13$) than men did ($M = 18.46$, $SD = 5.80$), $t(285) = 2.81$, $|p = .005$. Women also reported higher levels of total dating anxiety ($M = 60.76$, $SD = 16.78$) with respect to men ($M = 55.42$, $SD = 16.46$), $t(285) = 2.62$, $p = .009$. No sex differences emerged in regard to social distress in interactions in groups of mixed-sex individuals, $t(285) = .58$, $p = .562$.

Concurrent and discriminant validity

To assess the validity of the DAS-A subscales, the relationship between the DAS-A and the other measures was evaluated. It was hypothesized that dating anxiety would be positively related to mental health problems (i.e., somatic symptoms, anxiety, social dysfunction, severe depression, and total mental health problems) and romantic loneliness, and would be negatively related to interpersonal competence and satisfaction with life. It was also anticipated that dating anxiety would be negatively related to young adults' dating experiences. The Pearson product correlations of the DAS-A subscales with individual difference measures are presented in Table 2.

As can be seen in Table 2, significant correlations, although low and moderate, were obtained only for mental health problems and life satisfaction, whereas the rest of correlations were non-significant. At the same time,

Table 2
Pearson product correlations of the DAS subscales with individual difference measures

Variables	DAS			
	FNE- Dating	SD – Date	SD-Group	Total DAS
Mental health problems				
Somatic symptoms	.26**	.00	.03	.00
Anxiety, insomnia	.26**	.00	.00	.00
Social dysfunction	.23**	.00	.00	.00
Severe depression	.28**	.00	.00	.00
Total mental health problems	.30**	.00	.00	.00
Interpersonal Competence				
Initiating relationships	.00	.00	.00	.00
Providing emotional support	.06	.00	.00	.00
Asserting influence	.00	.00	.00	.00
Self-disclosure	.01	.00	.00	.00
Conflict resolution	.00	.04	.00	.00
Loneliness				
Romantic loneliness	.17	.00	.23	.00
Satisfaction with life	-.16**	-.18**	.14	.01

Note. FNE-Dating – fear of negative evaluation in dating situations; SD-Date – social distress in interactions with real or potential dating partners; SD- Group – social distress in interactions in groups of mixed-sex individuals; DA – Dating Anxiety.

** $p < .01$.

correlations of the DAS-A subscales with the mental health problems and life satisfaction were in the expected direction, indicating that increased dating anxiety was related to higher levels of mental health problems, and to a lower level of life satisfaction.

The final aim of the study was to examine the linkages between young adults' dating anxiety and their dating experiences. It was expected that a higher level of dating anxiety would be related to less experiences in the domain of dating, in particular to lack of a partner, not dating, smaller number of partners in the past, and lower frequency of dating.

In terms of descriptive information concerning dating experiences, 161 students (56.10%) declared being in a romantic relationship at the time of the assessment whilst 126 students (43.90%) were not. Fifty one participants (18.10%) declared that they did not date at all, 73 participants (25.40%) declared that they were dating or seeing one person, 28 participants (9.80%) declared that they were dating or seeing more than one person, and 134 participants (46.70%) declared that they were in a serious exclusive relationship and dated their partners. With respect to frequency of dating, 31 participants (10.80%) reported that they dated once a week, 45 participants (15.70%) reported that they dated two-three times a week, 14 participants (4.90%) reported that they dated four and more times a week, 34 participants (11.80%) reported that they dated once a month, 21 participants (7.30%) reported that they dated two-three times a month, 5 participants (1.70%) reported that they dated four and more times a month, 6 participants (2.10%) reported that they dated once a year, 5 participants (1.70%) reported that they dated two-three times a year, and 10 participants (3.50%) reported that they dated four and more times a year. Ninety nine participants (34.50%) declared that in the past they had never had a partner, 102 participants (35.50%) declared that in the past they had had one partner, 59 participants (20.60%) declared that in the past they had had two partners, and 27 participants (9.40%) declared that in the past they had had three partners.

With respect to relationship status (i.e., possessing a romantic partner), Student *t* test revealed no significant differences between single and partnered individuals either in the area of fear of negative evaluation in dating situations, $t(285) = -1.57, p = .118$, of social distress in interactions with real or potential dating partners, $t(285) = -1.69, p = .092$, of social distress in interactions in groups of mixed-sex individuals, $t(285) = .16, p = .875$ or of total dating anxiety, $t(285) = -1.41, p = .161$.

In regard to the number of partners in the past, a one-way ANOVA resulted in a significant result of the number of

partners in the past for social distress in interactions with real or potential dating partners, $F(3, 283) = 3.45, p = .017$. Post-hoc comparisons by Bonferroni test revealed that significant differences existed between individuals who had never had a partner and individuals who had had three partners. To be precise, individuals who had never had a partner reported a higher level of dating anxiety ($M = 10.56, SD = 3.61$) than individuals who had had three partners ($M = 8.19, SD = 3.15$).

In regard to the dating status, a one-way ANOVA showed significant differences in the extent of fear of negative evaluation in dating situations, $F(3, 283) = 3.74, p = .012$, in the extent of social distress in interactions with real or potential dating partners, $F(3, 283) = 7.21, p < .001$, and in the extent of total dating anxiety, $F(3, 283) = 4.69, p = .003$. No differences emerged to be significant in the extent of social distress in interactions in groups of mixed-sex individuals, $F(3, 283) = .92, p = .433$. Post-hoc comparisons by Bonferroni test revealed significant differences in the area of social distress in interactions with real or potential dating partners between individuals who did not date at all and individuals who dated more than one person, as well as between individuals who did not date at all and individuals who were in a serious exclusive relationship. Significant differences were also found between individuals who dated one person and individuals who dated more than one person, as well as between individuals who dated one person and individuals who were in a serious exclusive relationship. Furthermore, significant differences were found in regard to total dating anxiety between individuals who did not date at all and individuals who dated more than one person, and between individuals who dated one person and individuals who dated more than one person.

With respect to dating frequency, a one-way ANOVA showed no significant differences in the extent of fear of negative evaluation in dating situations, $F(8, 162) = 1.08, p = .377$, in the extent of social distress in interactions with real or potential dating partners, $F(8, 162) = 1.15, p = .336$ or in the extent of social distress in interactions in groups of mixed-sex individuals, $F(8, 162) = .96, p = .471$. No differences emerged to be significant in the extent of total dating anxiety, $F(8, 162) = .93, p = .496$.

DISCUSSION

The present study yielded preliminary results providing evidence that the Polish adaptation of the DAS-A is a reliable and valid self-report measure for assessing the dating anxiety among the Polish population of young adults. At the same time, the results of the confirmatory factor analysis and the factor solution derived from the exploratory factor analysis raise concerns regarding the factor structure of the Polish

version of the DAS-A. The confirmatory factor analysis indicated that the factor structure of the original DAS-A did not fully replicate in the sample of Polish respondents in terms of the original items' loadings. Differences between American and Polish respondents suggest that the components of dating anxiety may be conceptually different in Polish and American groups. In particular, these differences concern predominantly the concepts of fear of negative evaluation in dating situations and social distress in interactions with real or potential dating partners. The analysis of items' loadings and its contents suggests that in Poland, in general, situations associated with making an impression on a date or being attractive to the opposite sex are experienced by individuals more as situations involving social distress than as situations involving fear of negative evaluation. At the same time, these differences in how dating situations are conceptualized may be due not just to the differences in the cultural and social experiences between Poles and Americans, but also, if not predominantly, the developmental differences between adolescents for whom the DAS-A was originally developed and young adults for whom this scale was adopted. These differences may reflect differences in dating anxiety experience by these two groups. In turn, these differences may be related to the fact that adolescents are convinced that they are in the center of attention of the other people who are judging them (Bakiera, 2009).

Although the factor analyses showed that Poles and Americans respond differently to various statements about dating situations, the findings also indicate that, concerning reliability and associations with indicators of psychological functioning, the Polish translation of the DAS-A, including the three subscales (Fear of negative evaluation in dating situations, Social distress in interactions with real or potential dating partners, and Social distress in interactions in groups of mixed-sex individuals), corresponds to the original English version.

With respect to reliability, internal consistency coefficients of the three DAS-A' scales were very good and were comparable to those obtained in the original study. The intercorrelations of the DAS-A scales were generally comparable with the pattern found in the original version of the English. The correlations were significant and high, which suggests the existence of a common latent variable.

The current investigation revealed sex differences in terms of fear of negative evaluation in dating situations, social distress in interactions with real or potential dating partners, and total dating anxiety, with women reporting higher levels of these dating anxiety types. At the same time, in regard to social distress in interactions in groups of mixed-sex individuals, no difference emerged between women and

men. Contrary to the present study, in the original study by Glickman and La Greca (2004) boys reported a higher level of distress in heterosocial group situations than girls (Glickman & La Greca, 2004). The pattern of results obtained in the Polish sample may be related to the specificity of dating in young adulthood compared to adolescence when the peer group plays a much more important role in the adolescent's development (Bakiera, 2009; Glickman & La Greca, 2004) than in young adulthood. The obtained results may suggest that for young adult women situations of a more dyadic character are more stressful than those of group character. The three subscales of the Polish DAS-A also displayed validity via the pattern of associations between dating anxiety and mental health problems. There were statistically significant and positive correlations between each subscale's scores and the total scale, and between scores on the somatic symptoms, anxiety, social dysfunction, severe depression and total mental health problems. Similarly, as in the original study by Glickman and La Greca (2004), greater dating anxiety was highly related to greater social anxiety and moderately related to depression. There was also statistically significant and negative, however low, correlation between fear of negative evaluation in dating situations and social distress in interactions with real or potential dating partners subscales and the scores on the Satisfaction with Life Scale. At the same time, performed analyses indicated no linkage between dating anxiety, interpersonal competence and romantic loneliness. This lack of associations between dating anxiety and interpersonal competence may suggest that interpersonal competence measured in the current study is not specific for competence demanded in such a narrow range of social situations as dating. At the same time, the lack of linkage between dating anxiety and romantic loneliness confirms that this type of loneliness refers, among others, to emotional loneliness perceived as a lack of close or intimate relationships which are characteristic of ties with a romantic partner (Weiss, 1973), rather than to dating partners.

As predicted, in general, dating anxiety was related to less dating experiences. To be precise, individuals who reported higher dating anxiety in regard to social distress in interactions with real or potential dating partners also reported smaller number of past partners. Significant differences were also found in regard to social distress in interactions with real or potential dating partners between individuals of different dating statuses (daters and non-daters). These results are congruent with the results obtained in the original study by Glickman and La Greca (2004), in which adolescents who reported more dating anxiety were less likely to be currently dating. Furthermore, no significant differences in the extent of dating anxiety in

regard to possessing a partner and dating frequency were found. Therefore, those patterns of results confirm the role of dating anxiety for dating experiences in young adulthood.

It is important to note that the present study was not without its limitations. One such limitation was that the Polish version of the DAS-A was tested on a relatively homogenous, normative sample of university students. Therefore, it would be important to investigate the psychometric properties, including temporal stability, and factor structure of the DAS-A with subjects drawn from other populations, such as a sample of non-student individuals. Secondly, measures used in the present study to test the validity of the Polish version of the DAS-A were different than measures used in the original study. It was due to the fact that no valid Polish adaptation of most measures originally used exists in Poland. Furthermore, in the current study it was not possible to explore the potential causes of the differences in the factor structure between the original DAS-A and its Polish version. Therefore, future research should investigate a range of possible influences on cultural and developmental differences in experiencing of dating anxiety. It is also suggested to further refine the Polish version of the DAS-A by using additional measures such as measures of depression and social anxiety to assess concurrent and discriminant validity of the Polish adaptation of the DAS-A in future studies. Until then, researchers should be careful how they use the Polish DAS-A until the psychometric properties of this measure are not confirmed in further studies conducted on a sample of adult individuals.

REFERENCES

- Adamczyk, K. & DiTommaso, E. (2014). Psychometric properties of the Polish version of the Social and Emotional Loneliness Scale for Adults (SELSA-S). *Psychological Topics*, 23 (3), 327–341.
- Allen, M., Bourhis, J., Emmers-Sommer, T. & Sahlsteind, E. (1998). *Communication Reports*, 11 (1), 49–55, doi: 10.1080/08934219809367684.
- Bakiera, L. (2009). *Czy dorastanie musi być trudne?* [Does adolescence have to be difficult?]. Warszawa: Wydawnictwo Naukowe Scholar.
- Bentler, P. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107 (2), 238–246, doi: 10.1037/0033-2909.107.2.238.
- Buhrmester, D., Furman, W., Wittenberg, M. T. & Reis, H. T. (1988). Five domains of interpersonal competence in peer relationships. *Journal of Personality and Social Psychology*, 55 (6), 991–1008, doi: 10.1037/0022-3514.55.6.991.
- Cantor, N., Acker, M. & Cook-Flanagan, C. (1992). Conflict and preoccupation in the intimacy life task. *Journal of Personality and Social Psychology*, 63 (4), 644–655, doi: 10.1037/0022-3514.63.4.644.
- Chorney, D. B. & Morris, T. L. (2008). The changing face of dating anxiety: Issues in assessment with special populations. *Clinical Psychology: Science and Practice*, 15 (3), 224–238, doi: 10.1111/j.1468-2850.2008.00132.x.
- Collins, W. A. (2003). More than myth: The developmental significance of romantic relationships during adolescence. *Journal of Research on Adolescence*, 13 (1), 1–24, doi: 10.1111/1532-7795.1301001.
- Curran, J. P., Gilbert, F. S. & Little, L. M. (1976). A comparison between behavioral replication training and sensitivity training approaches to heterosexual dating anxiety. *Journal of Counseling Psychology*, 23 (3), 190–196, doi: 10.1037/0022-0167.23.3.190.
- Diener, E., Emmons, R. A., Larsen, R. J. & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- DiTommaso, E., Brannen, C. & Best, L. A. (2004). Measurement and validity characteristics of the short version of the social and emotional loneliness scale for adults. *Educational and Psychological Measurement*, 64, 99–119.
- Duru, E. (2007). Re-examination of the psychometric characteristics of the Multidimensional Scale of Perceived Social Support among Turkish university students. *Social Behavior and Personality*, 35 (4), 443–452, doi: 10.2224/sbp.2007.35.4.443.
- Glickman, A. R. & La Greca, A. M. (2004). The Dating Anxiety Scale for Adolescents: Scale development and associations with adolescent functioning. *Journal of Clinical Child and Adolescent Psychology*, 33, 566–578.
- Goldberg, D. P. & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9 (1), 139–145, doi: 10.1017/S0033291700021644.
- Goldberg, D. & Williams, P. (1988). *A user's guide to the General Health Questionnaire*. London: NFER NELSON Publishing Company Ltd. Windsor.
- Goldberg, D., Williams, P., Makowska, Z. & Merez, D. (2001). *Ocena zdrowia psychicznego na podstawie badań kwestionariuszami Davida Goldberga. Podręcznik dla użytkowników kwestionariuszy GHQ-12 i GHQ-28* [The assessment of mental health on the base of questionnaire research by David Goldberg. The handbook for users of GHQ-12 and GHQ-28]. Łódź: Instytut Medycyny Pracy im. Prof. J. Nofera.
- Górska, M. (2011). Psychometric properties of the Polish version of the Interpersonal Competence Questionnaire (ICQ-R). *European Journal of Psychological Assessment*, 27 (3), 186–192, doi: 10.1027/1015-5759/a000066.
- Juczyński, Z. (2009). *Narzędzia pomiaru w promocji i psychologii zdrowia [Measurement instruments in the promotion and psychology of health]*. Warszawa: Pracownia Testów Psychologicznych PTP.
- La Greca, A. M. & Mackey, E. R. (2007). Adolescents' anxiety in dating situations: The potential role of friends and romantic partners. *Journal of Clinical Child and Adolescent Psychology*, 36 (4), 522–533, doi: 10.1080/15374410701662097.
- Newsom, J. T. (2012). *Some clarifications and recommendations on fit indices*. Retrieved from http://www.upa.pdx.edu/IOA/newsom/semclass/ho_fit.pdf (1.07.2014).

Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. Cambridge, MA: MIT Press.

Williams, L. J. & Holahan, P. J. (1994). Parsimony-based fit indices for multiple-indicator models: Do they work? *Structural Equation Modeling*, 1 (2), 161–189.

Opracowanie i walidacja polskiej wersji językowej kwestionariusza Dating Anxiety Scale na próbie młodych dorosłych

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STRESZCZENIE

W artykule przedstawiono wyniki badań walidacyjnych nad polską wersją językową kwestionariusza *Dating Anxiety Scale for Adolescents* (DAS-A; Glickman, La Greca, 2004). Celem badań było stworzenie i walidacja polskiej wersji skali z przeznaczeniem do badań młodych dorosłych oraz ocena psychometrycznych właściwości narzędzia pozwalającego na pomiar lęku w sytuacjach umawiania się na randki, społecznego dystresu w interakcjach z rzeczywistym lub potencjalnym partnerem oraz dystresu społecznego w interakcjach w grupie różnopłciowej. Przeprowadzone analizy potwierdziły trójczynnиковą strukturę polskiej wersji skali oraz ujawniły wysoką rzetelność narzędzia. Wyniki przeprowadzonych badań wskazują, że polska wersja skali DAS-A jest rzetelnym i trafnym narzędziem do pomiaru lęku w sytuacjach umawiania się na randki.

Słowa kluczowe: *lęk w sytuacjach umawiania się na randki, młodzi dorośli, ocena dorosłych polska adaptacja*

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