## New Psychodiagnostic Methods The Scale of Depresivity and The Scale of Aggression

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## The Scale of Depresivity

In this method, depression is understood as a psychological state (rather than a personality trait) in which various symptoms of depression are manifested. Thus it is an individual characteristic, which may or may not reach clinical significance. The fundamental manifestations of depression canbe observed in three domains - mood, activity and energy.

The scale comprises 20 statements, to which respondents are invited to respond by selecting one of four options: strongly disagree, disagree, agree or strongly agree.

## The Scale of Aggression

The questionnaire comprises items designed to ascertain the prevalence of aggressive behaviour in adolescents. These aggressive activities indicate the presence of a constant component, namely the internal disposition of the personality, which may be characterised as either aggressive or as exhibiting a readiness for violent and aggressive behaviour. For these reasons, the authors elected to designate the method as the Aggression Scale. It is a psychodiagnostic method that reveals a permanent personality trait (aggression) on the basis of observed behaviour.

The scale is appropriate for use in diagnosing adolescents aged 11–19 years and adults aged 19–40 years.

Additionally, the ordinal alpha, with a reliability estimate of **0.94**, was employed for this purpose. Similarly, the reliability coefficient omega has a value of **0.94**.

The mean Pearson correlation between items is 0.34. The mean polychoric correlation between items is 0.42.

The model exhibited a normal convergence after 32 iterations, demonstrating a satisfactory fit to the data as evidenced by the following indices:  $\chi^2$  (157) = 513.64; p < 0.001 (the influence of the large sample size on this statistic is evident, yet the  $\chi^2/df$  ratio of 3.3 remains within an acceptable range); RMSEA = 0.044 (90% CI 0.040-0.048); SRMR = 0.043; CFI = 0.994 and TLI = 0.993. The values of the charges and residuals are presented in Figure 2. The results of the EFA and CFA contribute to the evidence pertaining to content validity.

**Figure 2:** CFA scheme (n2 = 1,183)



The scale measures one central scale of General Aggressiveness (24 items) and three subfactors of aggression, namely Hostility (5 items), Anger (8 items) and Physical Aggression (11 items). The respondent is required to select one of four possible responses: strongly disagree, disagree, agree nad strongly agree.

The scale is appropriate for use in diagnosing adolescents aged between 15 and 19 years.

The robust variant yielded the following values:  $\chi^2 = 1217$  (df = 228; p < 0.001); CFI = 0.974; TLI = 0.968; RMSEA = 0.052 (0.049-0.055); SRMR = 0.039.

**Figure 6:** CFA diagram of the bifactor solution of the SADSS model (ntest = 1,586)



Dolejš, M., Charvát, M., Komrska, Š., Suchá, J., Skopal, O., (2018). The Scale of Aggression Dolejš, Suchá, Skopal (SADSS). Olomouc: Univerzita Palackého v Olomouci, p. 25

The factor determinacy scores, which are relatively high (ranging from 0.84 to 0.89) for all three subscales, and the construct replicability scores, which range from 0.77 to 0.85, also indicate that the hostility, anger, and physical aggression subscales are defensible minority factors.

Dolejš, M., Skopal, O., Suchá, J., Charvát, M. (2018). Škála depresivity Dolejš, Skopal a Suchá. Olomouc: Univerzita Palackého v Olomouci, p. 30.

It can be concluded that a scale around two standard deviations above the mean of the measured variable has the most accurate estimation and the highest discriminatory power, which is undoubtedly an optimal characteristic for a screening test designed to distinguish adolescents with a clinical depression problem.

**Figure 4:** Test Information Function (TIF)



Dolejš, M., Skopal, O., Suchá, J., Charvát, M. (2018). Škála depresivity Dolejš, Skopal a Suchá. Olomouc: Univerzita Palackého v Olomouci, p. 32.

A cohort of multi-year high school students was selected for the purpose of verifying the test-retest reliability. The adolescents were required to complete the questionnaire on three occasions. A period of six months elapsed between the initial and subsequent testing sessions, while a further three months elapsed between the second and third testing sessions. A total of 187 triplets of results could be paired, resulting in a relatively high average correlation coefficient (0.68) between all measurements. Cronbach's alpha values were found to be consistent across the three measurements, with values of 0.91 for the first and second and 0.93 for the third.

The adjusted item correlations with the remaining scales for the complete data set ranged from 0.42 to 0.74. The difficulty index, or more accurately the popularity index, of the items ranged from 0.32 to 0.65.

It can be concluded that the test-retest reliability is satisfactory for the total SADSS score and the anger and physical aggression subscales, with a correlation coefficient of r = 0.80. The hostility subscale displays the least stability over time, yet its value remains sufficient (r = 0.71).

The correlation between the SADSS and the Buss and Perry Aggression Questionnaire (Buss & Perry, 1992) is strong along the diagonal, indicating a significant relationship between the mirror subscales.

**Table 19:** Pearson correlations of the SADSS and its subscales with the BPAQ and its subscales

(N = 2,845)	BPAQ total score	Hostility	Anger	Physical aggression	Verbal aggressiveness
		BPAQ	BPAQ	BPAQ	BPAQ
SADSS total score	0.81	0.42	0.61	0.72	0.45
Hostility HO	0.47	0.61	0.30	0.19	0.23
Anger AN	0.71	0.37	0.77	0.44	0.46
Physical aggr. PH	0.62	0.15	0.31	0.82	0.31

Dolejš, M., Charvát, M., Komrska, Š., Suchá, J., Skopal, O., (2018). The Scale of Aggression Dolejš, Suchá, Skopal (SADSS). Olomouc: Univerzita Palackého v Olomouci, p. 34

The test manual is available in both English and Czech. The questionnaire is available in four languages: English, Albanian, Macedonian and German.

The test manual is available in Czech and Slovak languages. The questionnaire is available in the following languages: English, Albanian, Macedonian, German, Persian and Slovak.

The Scale of depresivity Dolejs, Skopal, Sucha (SDDSS)			
.[Dolejš, Skopal, Suchá, 2013]	Strongly Disagree Agree Agree Agree	The Scale of Aggression Dolejš, Suchá, Skopal (SADSS)	Strongly Disagree Agree Strongly Disagree Agree Agree
This questionnaire contains 20 questions. Questions are focused on how you feel and your attitude	1 I am still sad and I can not change how I feel.	(Dolejš, Suchá, Skopal, 2014)	Disagree Disagree Agree Agree
towards other people. Read carefully each one of them and answer honestly. Your answers are	2 I have a feeling I have nothing to look forward to.	This questionnaire contains 24 questions. The questions are focused on your relationships with other people	
considered confidential. This is not a test, there are no right or wrong answers. If the given statement	3 When I look back on my life, I can only see a lot	and your reactions to different situations. Read carefully each one of them and answer honestly. Your answers	
is in line with your opinion and it is true, please answer "STRONGLY AGREE". If the statement does not	4 Nothing makes me happy anymore.	are considered confidential. This is not a test, there are no right or wrong answers. If the above statement matches your opinion and is true, answer "Strongly Agree" (it matches in 90 percent or more) or "Agree" (it	3 I often hit a classmate.
apply to you, please answer "STRONGLY DISAGREE". You must not omit any question. Although the	5 Mostly I feel guilty.	matches often). If the statement does not apply to you, answer "STRONGLY DISAGREE" (does not match in	4 I have more reasons to use violence at present.
	6 I expect to be punished.	90 percent or more) or "DISAGREE" (it matches only occasionally). You must not omit any question. Although the decision-making can sometimes be difficult, you always have to decide on one answer. There can only be	5 People have no respect for me.
decision-making can sometimes be difficult, you always have to decide for one answer. In each row	7 1 am disgusted with myself.	one answer in each row. For more of an explanation or detailed information, please contact your respective	6 When someone mocks me, I hit him.
there may only be one answer. When you reach the end, please double check that you have answered	8 I continually blame myself for my mistakes.	contact person before you submit the questionnaire. Before you submit your questionnaire, please go through it again and double check that you have not omitted any questions.	7 When someone hits me, I hit him back with even
all the questions. If you don't understand something, please raise your hand and ask.	9 Recently I think of death or suicide.		8 I am guick-tempered.
	10 I am often angry or irritated.	Marking the answers in the questionnaire: Mark the correct answer with a cross inside the square:	
Marking of the answers in the questionnaire:	11   Lately I cry more than before.		9 argument.
Mark the correct answer with a cross inside the square:	12 I have no interest in other people recently.	If you accidentally mark two check boxes, circle the correct one:	10 Unfortunately, I am one of those people who
If you accidentally mark two check boxes, circle the correct one:	13 Making decisions is more difficult to me than	If you accidentally mark two check boxes and you decide to go back to the previous choice, circle	orten gets angry.
If you accidentally mark two check boxes and you decide to go back to previous choice,	14 I feel like my appearance keeps turning for the	and underline your final choice:	11 When I get angry, I am able to break something.
circle and underline your final choice:	worse.		12 People do not understand me.
	15 I must force myself to do anything.	Basic Personal Data First name and Surname: Month of Birth:	13 People can often make me angry.
	16 I wake up one or two hours earlier than usual and I cannot fall asleep again.	Class: Year of Birth:	14 I am all ready to use violence to defend my
Basic Personal Data	17 Almost everything I do makes me tired.	Age: Date of administration:	15 I often get angry with others.
First name and Surname: Month of Birth:	18   I have a smaller appetite than before.	Gender:	16 I have the feeling that others treat me "unfair".
Class: Year of Birth:	19 Recently, I have lost more weight than I would		
Age: Date of administration:	20 I am afraid of physical difficulties, so it's hard for	Evaluation of the questionnaire	17 the face.
Gender:	<sup>20</sup> me to think of anything else.	Range Rough score Percentile Sten General Aggressiveness	18 cometimes feel like smashing something or
	Thank you for completing this questionnaire.	Hartility	hitting someone.
Quartiannaire aggaggment		Δησογ Δησογ	19 I often feel angry.
Questionnaire assessment	Before you submit your questionnaire, please double check if you have answered all the questions.	Project         Project <t< td=""><td>20 I sometimes have the feeling that other people</td></t<>	20 I sometimes have the feeling that other people
Raw Score Percentile Administrator's Notes		Administrator's Notes:	
Fotal score (20 qs.)			21 when I am angry, I sometimes lose control over
		Graphic profile in the Sten 1 2 3 4 5 6 7 8 9 10	22 Sometimes I really feel like provoking a fight.
		General Aggressiveness the set-set-set-set-set-set-set-set-set-set-	23 I only need a slight trigger to get angry.
		Hostility +	24 It is better to break someone's nose than be
		Anger +++++++++	a coward.
		Physical Aggression +++++++++++	
			Thank you for completing this questionnaire.
			Before you submit your questionnaire, please double check if you have answered all the questions.
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**Cited literature on request from the authors.** 

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