

APPRAISAL OF ILLNESS SCALE (AIS – Revised)

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Theoretical background/definition

Development of the Appraisal of Illness Scale was grounded in cognitive-transactional theories of stress and coping (primarily that of Lazarus & Folkman) in which appraisal is defined as the evaluation of a potentially stressful person-environment encounter in terms of its personal meaning or significance to well-being. Although the language of primary appraisal has been used to label subscales during instrument development, some items focus on evaluation of resources (secondary appraisal) and perceptions of coping effectiveness. The instrument, thus, is a measure of reappraisal (covering elements of primary, secondary, and initial reappraisal) and is most appropriately used after the initial stressful encounter has occurred and coping has begun.

Description

The current working version of the AIS consists of 27 items (plus 5 filler items that are not scored) reflecting possible appraisals in response to a broad range of illness-related stressors, including physical health and symptoms, emotional health and cognitive capacity, lifestyle, finances, relationships, roles and responsibilities, self-care, and overall personal impact. The AIS measures four types of stressful appraisals of the illness situation: threat, loss, financial strain, and general stressfulness. Because two additional theorized subscales (challenge and benefit) could not be supported empirically or psychometrically, the overall feeling tone of the remaining 27 items could be construed as somewhat negative; we have, therefore retained 5 benefit items as unscored fillers.

Subscales

The initial item pool for the AIS consisted of 72 items, many of which were found to have limited variance. Five subscales were derived from a factor analysis of the 38 items remaining after elimination of poorly performing and/or clearly redundant items; 11 items did not load clearly and were dropped. Two of the derived subscales (both containing threat items) were strongly intercorrelated and have been combined. Items in the benign appraisal category were found to have excellent variability; these items are reverse scored and reflect an appraisal of the overall stressfulness of the situation. Summary data on the measure are presented in the attached tables.

It is important that users be aware that the current working version has not been tested; the data are based on individual item performance from the original, longer scale. We recommend that unless sufficient data are available to the user to test the stability of the factor structure, only the total score be used.

Subscale structure

Threat (17 items)	1, 3, 7, 10, 12, 13, 14, 16, 17, 19, 21, 23, 24, 25, 27, 28, 32
Loss (3 items)	5, 20, 30
Financial Strain (2 items)	9, 29
General Stressfulness (5 items)	4, 8, 11, 15, 31

Note: Items 2, 6, 18, 22 and 26 are not scored

Response format and scoring

The intensity of each item is measured by a 5-point, Likert-type scale, with response choices ranging from “very false” to “very true”; higher scores indicate more stressful appraisals. The five general stressfulness items are reverse scored. Mean scores can be derived for the total scale or, when appropriate, the subscales.

Table 1. AIS Factors, Eigenvalues, and Percent of Variance (N=228)

<u>Factor</u>	<u>Eigenvalue</u>	<u>Percent Variance</u>
1 (threat 12 items)	11.55	42.8
2 (self threat 5 items)	2.11	7.8
3 (loss 3 items)	1.36	5.0
4 (overall stress.)	1.31	4.9
5 (financial strain)	1.04	3.8
Total cum. percent		64.4

Table 2. AIS Subscale intercorrelations (N=228)

	<u>Loss</u>	<u>Finance</u>	<u>Overall Stress</u>	<u>Total Appraisal</u>
Threat	.66	.51	.53	.96
Loss		.44	.49	.77
Finance			.37	.61
Overall Stressful				.69
Total Appraisal				

Table 3. Mean, SD, and Reliabilities for AIS Subscales (N=228)

Subscale	No. of items	Mean	SD	Mean inter-item cor.	Alpha
Threat	17	2.76	.96	.52	.95
Loss	3	2.91	1.20	.56	.79
Overall Stress	5	3.23	.96	.36	.74
Financial Strain	2	2.80	1.30	.64	.78
Total	27	2.88	.87	.40	.95