

Autism Research Institute

Autism Treatment Evaluation Checklist (ATEC)

December 2005 Update

The Autism Treatment Evaluation Checklist (ATEC) was developed in 1999 to help researchers evaluate the effectiveness of various treatments for autistic children and adults and to help parents determine if their children benefit from a specific treatment. Parents and teachers use the ATEC to monitor or track how well their children are progressing over time, even without the introduction of a new treatment.

Reliability

We examined the internal consistency of the ATEC by conducting a split-half reliability test on over 1,300 completed ATECs. The internal consistency reliability was high (.94 for the Total score). Professor Jim Adams at Arizona State University is conducting a study on the ATEC's test-retest reliability. An initial analysis of the data, based on 22 parents, is very encouraging. Dr. Adams continues to collect data for his study.

Validity

We are aware of three published studies which has shown the ATEC to be sensitive to changes as a result of a treatment:

- Betty Jarusiewicz (2002). Efficacy of neurofeedback for children in the autism spectrum: A pilot study. *Journal of Neurotherapy*, 2002, Vol. 6 (4), pp. 39-49
- Derrick Lonsdale, Raymond J. Shamberger, Tapan Audhya (2002). Treatment of autism spectrum children with thiamine tetrahydrofurfuryl disulfide: A pilot study. *Neuroendocrinology Letters*, Vol. 23 (4), pp. 303-308
- A study published on the Internet, by Jørgen Klaveness and Jay Bigam, showed that the ATEC was able to measure behavioral improvements as a result of the gluten-free/casein-free diet (www.gfcfdiet.com/dietsurveysept2.htm).

Dr. Doreen Granpeesheh of the Center for Autism Related Disorders (CARD) is currently conducting a study examining the validity of the ATEC (i.e., comparing the results from the ATEC with the results from various standardized tests). We are also aware of several other studies that have successfully used the ATEC to evaluate various treatments. These studies are currently in preparation for publication.

Bernard Rimland, Ph.D. Stephen M. Edelson, Ph.D.
Director Research Associate

Statistical Analyses: May 7, 2000

Reliabilities and Score Distributions

The following data are based on the first 1358 initial (baseline) ATEC forms submitted to the Autism Research Institute by mail, fax or via the Internet. "Initial" refers to the first ATEC form submitted for a given individual.

Since the primary function of the ATEC is to measure the efficacy of interventions, it is expected that a number of ATECs will be submitted for each individual periodically during the trial of the intervention, subsequent to the initial (baseline) ATEC.

Reliability

Pearson split-half (internal consistency) coefficient

N=1358

	Uncorrected r
Scale I Speech	.920
Scale II: Sociability	.836
Scale III: Sensory/Cognitive Awareness	.875
Scale IV: Health/Physical/Behavior	.815
Total ATEC Score	.942

These are gratifyingly high reliabilities. So far, so good!

Score Distributions

The purpose of the ATEC is to measure change in an individual due to various interventions - that is - the difference between the initial (baseline) ATEC scores and later ATEC scores. Nevertheless, we are often asked for normative data, which permit comparison of one individual with others. Here are the score distributions. (The lower the scores, the better.)

	Scale I Speech	Scale II Sociability	Scale III Sensory/Cognitive Awareness	Scale IV Health/Physical/ Behavior	Total
	Range: 0-28	Range: 0- 40	Range: 0-36	Range: 0-75	Range: 0-180
Centile					
<i>Mild</i>					
0-9	0-2	0-4	0-5	0-8	0-30
10-19	3-5	5-7	6-8	9-12	31-41
20-29	6-7	8-10	9-11	13-15	42-50
30-39	8-10	11	12-13	16-18	51-57
40-49	11-12	12-13	14-15	19-21	58-64
50-59	13-15	14-15	16-17	22-24	65-71
					72-76

60-69	16-19	16-18	18-19	25-28	14-17
70-79	20-21	19-21	20-21	29-32	80-89
80-89	22-24	22-25	22-25	33-39	90-103
90-99	25-28	26-40	26-36	40-75	104-
<i>Severe</i>					179

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