

Multidimensional School Anger Inventory Scoring

Which version to use?

Based on recent research, there are now two versions of the MSAI.

The MSAI-36 can be used for most applied research and evaluation purposes.

(see: Furlong, M. J., Smith, D. C., & Bates, M. P. (2002). Further development of the multidimensional school anger inventory: Construct validation, extension to female adolescents, and preliminary norms. *Journal of Psychoeducational Assessment*, 20, 46–65. doi:10.1177/073428290202000104)

Where there is interest in a more concise measurement tool, we have now developed the MSAI-12 that includes the best items that measure Anger Experience, Hostility, and Destructive Expression. This measure has robust structural validity across multiple national samples and can be used in various types of comparative research and when efficient latent trait measures are needed.

(see Furlong, M. J., You, S., Smith, D. C., Gonzalez, V., Boman, P., Shimoda, Y., Terasaka, A., Merino, C., & Grazioso, M. (2012). *An Examination of the Factorial Invariance and Refinement of the Multidimensional School Anger Inventory for Five Pacific Rim Countries*. Manuscript under review.)

Scoring and Norms

We only have norms at this point for 36 items so, for scoring.

1. *Anger Experience*: You would simply add the scores for items 1-13 items and that gives you an anger experience subscale score (ranging from 13-52).
2. *Hostility*: The next six items (items 14-19) comprise the hostility scale and that is simply the sum of those six items (ranging from 6-24).
3. Anger Expression: Items (20-36) comprise the behavioral expression scale
 - a. *Destructive Expression* subscale is the sum of items 20-28 (ranging from 9-36)
 - b. *Positive Coping* is items 29-36 (ranging from 8-32).
4. Therefore, in essence, you wind up with four subscale scores. Other items are trial items or for assessing the validity of the responses.

For the 12-item MSAI, please contact us for more information as this research is still in progress.

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The MSAI is meant for use in research and to assist in the assessment of school-based prevention and intervention programs. In our view, all assessment tools should continually undergo a process of validation, across populations and contexts. Hence, we do not charge a fee for the use of the MSAI, but

we do ask that whenever it is used, that the results be shared with us so that we can continue to assess the MSAI's validity and utility. We request that all users of the MSAI please request permission before using it, and we are interested in sharing and research collaboration.

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MSAI-R Average Scores for Males and Females Based on Sample of 1,589 Students in Grades 9-12

| Raw Score | Anger Experience | | Hostility | | Destructive Expression | | Positive Coping | |
|-----------|------------------|---------|-----------|---------|------------------------|---------|-----------------|---------|
| | Males | Females | Males | Females | Males | Females | Males | Females |
| alpha | 0.87 | 0.83 | 0.79 | 0.79 | 0.84 | 0.74 | 0.68 | 0.61 |
| 52 | 2.74 | 3.68 | | | | | | |
| 51 | 2.61 | 3.52 | | | | | | |
| 50 | 2.47 | 3.35 | | | | | | |
| 49 | 2.34 | 3.18 | | | | | | |
| 48 | 2.20 | 3.02 | | | | | | |
| 47 | 2.07 | 2.85 | | | | | | |
| 46 | 1.93 | 2.68 | | | | | | |
| 45 | 1.80 | 2.52 | | | | | | |
| 44 | 1.66 | 2.35 | | | | | | |
| 43 | 1.53 | 2.18 | | | | | | |
| 42 | 1.39 | 2.02 | | | | | | |
| 41 | 1.26 | 1.85 | | | | | | |
| 40 | 1.12 | 1.68 | | | | | | |
| 39 | 0.99 | 1.52 | | | | | | |
| 38 | 0.85 | 1.35 | | | | | | |
| 37 | 0.72 | 1.18 | | | | | | |
| 36 | 0.58 | 1.02 | | | 3.72 | 6.53 | | |
| 35 | 0.45 | 0.85 | | | 3.54 | 6.08 | | |
| 34 | 0.31 | 0.68 | | | 3.35 | 5.81 | | |
| 33 | 0.18 | 0.52 | | | 3.17 | 5.53 | | |
| 32 | 0.04 | 0.35 | | | 2.98 | 5.25 | 3.93 | 3.62 |
| 31 | -0.09 | 0.18 | | | 2.80 | 4.97 | 3.68 | 3.35 |
| 30 | -0.23 | 0.02 | | | 2.61 | 4.69 | 3.44 | 3.08 |
| 29 | -0.36 | -0.15 | | | 2.43 | 4.42 | 3.20 | 2.81 |
| 28 | -0.50 | -0.32 | | | 2.24 | 4.14 | 2.95 | 2.54 |
| 27 | -0.64 | -0.48 | | | 2.06 | 3.86 | 2.71 | 2.27 |
| 26 | -0.77 | -0.65 | | | 1.87 | 3.58 | 2.46 | 2.00 |
| 25 | -0.91 | -0.82 | | | 1.69 | 3.31 | 2.22 | 1.73 |
| 24 | -1.04 | -0.98 | | | 1.50 | 3.03 | 1.98 | 1.46 |
| 23 | -1.18 | -1.15 | 2.94 | 3.73 | 1.31 | 2.75 | 1.73 | 1.19 |
| 22 | -1.31 | -1.32 | 2.65 | 3.40 | 1.13 | 2.47 | 1.49 | 0.92 |
| 21 | -1.45 | -1.48 | 2.35 | 3.07 | 0.94 | 2.19 | 1.24 | 0.65 |
| 20 | -1.58 | -1.65 | 2.06 | 2.73 | 0.76 | 1.92 | 1.00 | 0.38 |
| 19 | -1.72 | -1.82 | 1.76 | 2.40 | 0.86 | 1.64 | 0.84 | 0.11 |
| 18 | -1.85 | -1.98 | 1.47 | 2.07 | 0.39 | 1.36 | 0.51 | -0.16 |
| 17 | -1.99 | -2.15 | 1.18 | 1.73 | 0.20 | 1.08 | 0.27 | -0.43 |
| 16 | -2.12 | -2.32 | 0.88 | 1.40 | 0.02 | 0.81 | 0.02 | -0.70 |
| 15 | -2.26 | -2.48 | 0.59 | 1.07 | -0.17 | 0.53 | -0.22 | -0.97 |
| 14 | -2.39 | -2.65 | 0.29 | 0.73 | -0.35 | 0.25 | -0.46 | -1.24 |
| 13 | -2.53 | -2.82 | 0.00 | 0.40 | -0.54 | 0.00 | -0.71 | -1.51 |
| 12 | | | -0.29 | 0.07 | -0.72 | -0.31 | -0.95 | -1.78 |
| 11 | | | -0.59 | -0.27 | -0.91 | -0.58 | -1.20 | -2.05 |
| 10 | | | -0.88 | -0.60 | -1.09 | -0.86 | -1.44 | -2.32 |
| 9 | | | -1.18 | -0.93 | -1.28 | -1.14 | -1.68 | -2.59 |
| 8 | | | -1.47 | -1.27 | | | -1.93 | -2.86 |
| 7 | | | -1.76 | -1.60 | | | | |
| 6 | | | -2.06 | -1.93 | | | | |
| 5 | | | | | | | | |
| 4 | | | | | | | | |
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