

## Summary of Improved Scoring Algorithm

The table below summarizes method for computing the improved scoring algorithm that was first reported in:

Greenwald, A. G, Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, 85, 197-216.

The table below is from p. 92 of:

Lane, K. A., Banaji, M. R., Nosek, B. A., & Greenwald, A. G. (2007). Understanding and using the Implicit Association Test: IV. What we know (so far) (Pp. 59–102). In B. Wittenbrink & N. S. Schwarz (Eds.). *Implicit measures of attitudes: Procedures and controversies*. New York: Guilford Press.

The full Lane et al. chapter can be downloaded from:

<http://faculty.washington.edu/agg/bydate.htm>

SPSS syntax for computing the *D* measure can be found in the “Generic IAT zipfile download” at:

[http://faculty.washington.edu/agg/iat\\_materials.htm](http://faculty.washington.edu/agg/iat_materials.htm)

SAS syntax is available at:

<http://projectimplicit.net/nosek/papers/scoringalgorithm.sas.txt>

**TABLE 3.3. Summary of IAT Scoring Procedures Recommended by Greenwald et al. (2003)**

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- 1 Delete trials greater than 10,000 msec
  - 2 Delete subjects for whom more than 10% of trials have latency less than 300 msec
  - 3 Compute the “inclusive” standard deviation for all trials in Stages 3 and 6 and likewise for all trials in Stages 4 and 7
  - 4 Compute the mean latency for responses for each of Stages 3, 4, 6, and 7
  - 5 Compute the two mean differences ( $\text{Mean}_{\text{Stage 6}} - \text{Mean}_{\text{Stage 3}}$ ) and ( $\text{Mean}_{\text{Stage 7}} - \text{Mean}_{\text{Stage 4}}$ )
  - 6 Divide each difference score by its associated “inclusive” standard deviation
  - 7  $D$  = the equal-weight average of the two resulting ratios
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*Note.* From Greenwald, Nosek, and Banaji (2003, Table 4). Copyright 2003 by the American Psychological Association. Adapted by permission. This computation is appropriate for designs in which subjects must correctly classify each item before the next stimulus appears. If subjects can proceed to the next stimulus following an incorrect response, the following steps may be taken between Steps 2 and 3 in the table: (1) compute mean latency of correct responses for each combined Stage (3, 4, 6, 7); (2) replace each error latency with an error penalty computed optionally as “Stage mean + 600 msec” or “Stage mean + twice the *SD* of correct responses for that Stage.” Proceed as above from Step 3 using these error-penalty latencies. Stage numbers refer to the stages depicted in Figure 3.1. SPSS and SAS syntax for implementing the new scoring algorithm are available at [faculty.washington.edu/agg/iat\\_materials.htm](http://faculty.washington.edu/agg/iat_materials.htm) and [www.briannosek.com](http://www.briannosek.com), respectively.