Implicit Association Test (IAT)

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Background and Definition of the Implicit Association Test (IAT)

Psychologists have long suspected the existence of thoughts and feelings that are not accessible by simply asking a person to report them. It may be that people are unwilling to report what they think and feel. Or, even more likely, people may not be aware of everything that they think and feel. Beginning in the 1980s, efficient alternatives to self-report measures were invented to study implicit or unconscious forms of thoughts and feelings. One such measure is the Implicit Association Test (IAT).

The IAT requires respondents to rapidly sort items from four different categories into groups. For example, imagine sorting a deck of playing cards – with red hearts, red diamonds, black clubs, and black spades – two times. For the first time, all the hearts and diamonds are sorted into one pile and all the clubs and spades are sorted into a second pile. This would be quite easy to do because the suits are being sorted by a common perceptual feature – color. Now imagine doing the same task but this time sorting clubs and hearts into one pile and diamonds and spades into the other. This would probably be harder and take longer to complete because clubs and hearts are not as related to each other as are hearts and diamonds. The simple idea is that things that are associated by some feature are easier to put together than things that are not associated.

Now translate the idea of sorting cards by their suit to sorting items by their social categories. A gender IAT, for example, would provide a measure of the relative strength with which *female* and *male* are associated with *family* versus *career* concepts. Like sorting cards by their suit, sorting *female* with *family* and *male* with *career* would be easier than sorting *female* with *career* and *male* with *family*. The IAT can thus provide a measure of the strength of association between mental constructs, categories such as “female” or “male” on the one hand and attributes such as “family” or “career” on the other. A gender IAT of this type functions as a measure of implicit stereotype. It measures strength of association between category and attribute by using the time it takes to make the pairings, and the number of errors in classifying, while respondents are trying to respond rapidly. The strength of association between categories and evaluative attributes such as *good* and *bad* provides a measure of implicit attitude, and the strength of association between self and evaluative attributes provides a measure of implicit self-esteem. The IAT is best administered via computer and can use words, pictures, or sounds to

represent concepts. This makes the IAT flexible enough to administer to the blind, young children, and others who are unable to read.

How to make an IAT

Several articles have described methods of constructing an IAT. Sample IATs may be found at https://implicit.harvard.edu, and background papers and information about programs appear at http://projectimplicit.net/.

Facts about IAT results

1. The IAT has been used in research all over the world, revealing the pervasiveness of phenomena of implicit attitudes and stereotypes.
2. Implicit biases revealed by the IAT are often not observed on parallel self-report (explicit) measures.
3. Because of the frequent deviation of IAT measures from parallel explicit (self-report) measures, IAT results sometimes surprise a person - revealing information that was not consciously available.
4. Implicit bias is observed even in children as young as four years of age.
5. Implicit biases have been observed to vary as a function one's own group membership and life experiences.
6. IAT measures have effectively predicted behavior such as friendliness, giving resources, and other preferential decisions about members of different groups. That is, those people who show stronger IAT-measured biases against a target social group are also more likely to discriminate against that target group and its members.
7. IAT measures can be influenced by situations of administration, but nevertheless show stability across time.

Suggested Further Readings

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102*, 4-27.

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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.

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