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# Implicit evaluations of peanuts compared to shellfish among peoples with food allergies

Supplement 3 to Nosek and Hansen (2008a, 2008b)

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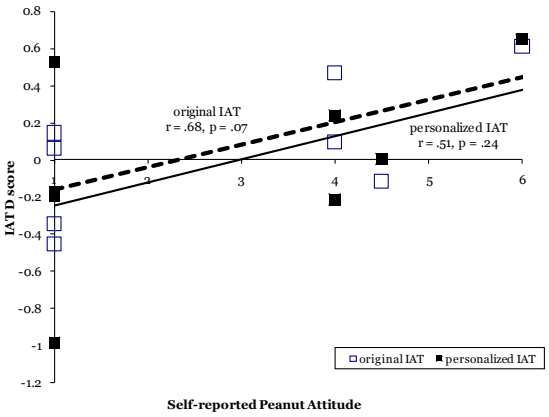
One study from Nosek and Hansen (2008a; Study 2) and Nosek and Hansen (2008b; Study 7) examined attitudes toward peanuts versus shellfish – two common food allergies – using self-reported attitudes and both personalized and original IAT designs. The whole study included 235 participants and is summarized in the two original reports. This supplement is a subanalysis of 8 participants in the same that reported having a peanut allergy. Olson and Fazio (2004) speculated that people with peanut allergies would show positivity toward peanuts on the original IAT because of positive cultural evaluations of peanuts while they simultaneously reported an intense distaste for peanuts. And, removing the influence of cultural knowledge would result in a personalized IAT that showed an intense dislike of peanuts among members of this group.

## Results and Discussion

An analysis of mean IAT scores showed attitudes indistinguishable from zero toward peanuts relative to shellfish whether using the original IAT ($M$ = .059, $SD$ = .37, Cohen's $d$ = .15, $t(7)$ = .45, $p$ = .67) and the personalized IAT ($M$ = -.026, $SD$ = .55, Cohen's $d$ = -.03, $t(6)$ = -.12, $p$ = .91). In other words, neither version of the task showed strong negativity toward peanuts as might be expected of people with peanut allergies.

Further examination of the individual scores suggests why this might have occurred. The Figure presents IAT scores by self-reported peanut attitudes (semantic differential score, not relative to shellfish) among people with peanut allergies. Relationships between self-reported peanut attitudes and IAT scores were positive and strong (original IAT $r$ = .69, $p$ = .07; personalized IAT $r$ = .51, $p$ = .24) suggesting that there is variation in attitudes toward peanuts among those with peanut allergies, and the IATs and self-reported peanut attitudes similarly reflected this variation. It appears that there may be different types of people with peanut allergies – those who despise peanuts, and those who pine for them. In one bulletin board posting, a participant with a peanut allergy noted that she had an adult-onset peanut allergy and that "peanut butter cups used to be my absolute favorite treat." Those positive associations may still persist in some despite the inability to consume the nuts. In this small sample, the IAT appears to reflect meaningful variation in the peanut attitudes of people with peanut allergies.

**Figure. Relationship between self-reported attitudes (semantic differential) and the original and personalized IATs among people with peanut allergies.**




Note: The Figure presents only one of the explicit attitude measures for comparison with IAT scores. Other explicit attitude items showed similar effects whether considering attitudes toward peanuts exclusively (r's range = .51-.82) or attitudes toward peanuts relative to shellfish (r's range = .46-.89).

## References

Nosek, B. A., & Hansen, J. J. (2008a). The associations in our heads belong to us: Searching for attitudes and knowledge in implicit evaluation. *Cognition and Emotion*.

Nosek, B. A., & Hansen, J. J. (2008b). Personalizing the Implicit Association Test increases explicit evaluation of target concepts. *European Journal of Personality Assessment*.

Olson, M. A., & Fazio, R. H. (2004). Reducing the influence of extra-personal associations on the Implicit Association Test: Personalizing the IAT. *Journal of Personality and Social Psychology, 86*, 653-667.