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Armed Only With Paper and Pencil: “Low-Tech” Measures of Implicit Attitudes

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In the past 10 years there has been an explosion of interest in attitudes that is due, in no small part, to the development of implicit measures that are remarkably robust. In the present paper we discuss implicit measures that may be administered with nothing more than respondents, paper, and pencil. First we review the logic underlying the operation of these types of measures, and note similarities and differences with response-time based implicit measures. Then we review specific measures that have been used in attitude research, also touching on stereotyping and prejudice, and the self-concept.

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ARMED ONLY WITH PAPER AND PENCIL: "LOW-TECH" MEASURES OF IMPLICIT ATTITUDES

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EXTENDED ABSTRACT

Indirect measures of attitudes were developed to help researchers assess attitudes that respondents were unwilling or unable to report. To circumvent these "willing and able" problems researchers developed attitude measures that did not require respondents to intentionally retrieve stored attitudes. These indirect measures took a variety of different forms, but were similar in that none require the intentional recollection and reporting of stored evaluative tendencies.

In the present paper we discuss implicit measures that may be administered in a decidedly "low-tech" manner; these measures require nothing more than respondents, paper, and pencil. First we review the logic underlying the operation of these types of measures, and note similarities and differences with response-time based implicit measures. Then we review specific measures from attitude research. We also note how these measures may be applied to the study of consumer behavior.

Based on a variety of dual process or continuum-based models of social cognition (e.g., Fazio's, 1990, MODE model), we propose that implicit attitude measures may be differentiated by the amount of cognitive deliberation required by the measure. Many contemporary implicit measures are based on response time, or the speed with which respondents can perform some task, others severely constrain the amount of time in which respondents are permitted to respond, and are based on the number of errors respondents make (e.g., Draine & Greenwald, 1998). These measures are designed to tap respondents' automatic responses by minimizing the extent to which respondents carefully and deliberately process information. At the other extreme are partially structured implicit measures like the Thematic Apperception Test (Murray, 1965), wherein respondents are asked to write stories or describe scenes. Respondents may spend 20 seconds examining a stimulus, and then take five minutes or so to write approximately 200 words about the stimulus. These measures may tap automatic responses to some degree, but they do not constrain participants' information processing as contemporary implicit measures do, thereby allowing for much greater influence by controlled processes. Thus, different implicit measures may be best conceptualised as lying along a continuum of information processing levels.

Although measures at both ends of the continuum are largely implicit, they may nevertheless measure different aspects of the attitude construct, and this is the primary reason why level of information processing may be a useful way of parsing implicit measures. For this reason, and for the sake of simplicity, we refer to implicit measures as spontaneous or deliberative as a short-hand way of indicating where on the information processing continuum they appear to lie.

Implicit measures have traditionally been used primarily when social desirability concerns are expected to limit the efficacy of explicit measures. We believe, however, that implicit measures might be used fruitfully in addition to explicit measures, even when social desirability is not a concern (Vargas et al., 2004). Spontaneous and deliberative implicit measures may each tap unique aspects of attitudes beyond the evaluative component assessed by most explicit measures.

Implicit measures that require primarily spontaneous information processing, such as the IAT, rely on the automatic activation of attitudes. These measures likely tap the evaluative component of attitudes, as well as the accessibility of the evaluative component. Measures that require more deliberative information processing likely tap aspects of attitudes other than just evaluation and evaluative accessibility. Deliberative measures may tap the extent to which attitudes influence perceptions of, or cognitions about, attitude-relevant objects or events. For example, Vargas et al. (2004) developed deliberative implicit measures of attitudes that draw on individuals' tendencies to make social judgments that contrast others' behaviors away from their own attitudes. To the extent that these different measures of attitudes are not isomorphic with the associated evaluations and their accessibility, then deliberative implicit measures may predict unique variance beyond spontaneous implicit measures (and beyond explicit measures as well).

Behavior is driven by factors other than attitudes, and thus it seems reasonable to suggest that it is driven by attitudinal components other than the evaluative component. For example, different individuals may perceive a dog wandering the streets without either leash or owner as threatening, in need of assistance, cuddly, or a yard-defiling menace. These different perceptions of the dog are evaluative, but they are distinctly more complex than mere good or bad. And these different perceptions are likely to lead to different behaviors: flight, cautious approach, warm approach, or shoo-and-chase, respectively. Attitude measures that go beyond evaluative tendencies might help predict such different behaviors.

For these various reasons, pencil and paper-based deliberative implicit measures have a lot to offer. They have the potential to add predictive power beyond what can be achieved with explicit measures or spontaneous implicit measures, and they may often be useful even when social desirability concerns are minimal. Just as importantly, these measures are easy to use, they require no special equipment, and they can be administered to large groups of respondents at the same time, even in the field.

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