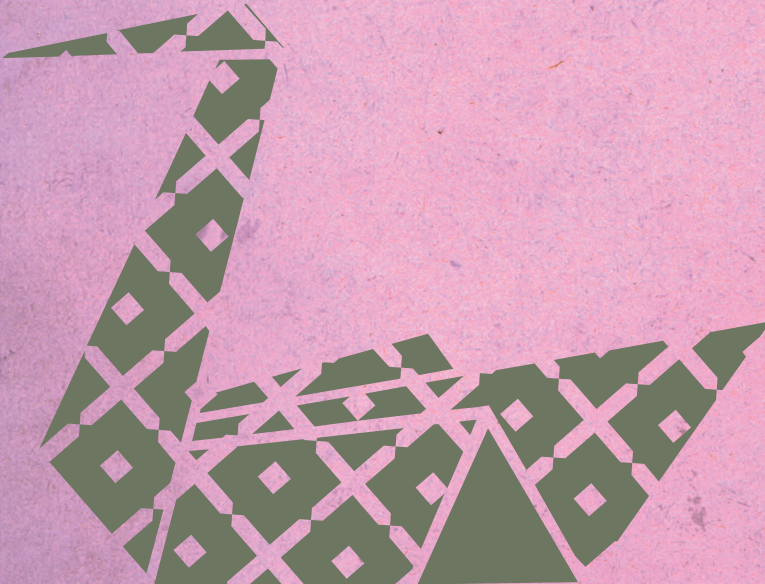


Implicit Measures

for Social and Personality Psychology

Laurie A. Rudman



The SAGE Library of Methods in Social and Personality Psychology



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Introduction to Implicit Assessment

Whether you are opening your mail, answering your phone, or browsing the Internet, the odds that you will be asked to report your attitudes toward a product, a politician, or a social issue are high. Given the plethora of opinion surveys confronting the average citizen on a daily basis, she or he might reasonably presume that measuring attitudes is a snap. Simply provide clear, precise questions and a scale to respond with (often ranging from 1 = *strongly disagree* to 7 = *strongly agree*), then crunch the numbers. Easy, right? Nothing could be further from the truth.

The problem is getting at the truth. Unlike geologists, attitude researchers cannot whip out a measuring tape and wrap it around a rock. Rocks have the enviable property of not shifting around when you measure them. Attitudes are mental constructs, not tangible things, so measuring them is always an inferential endeavor. You cannot peer inside people's heads to "see" how they evaluate something. Even if you could, attitudes are not stored away in a mental drawer (like a pair of socks), to be taken out when researchers ask how you feel about X. They are slippery and they shape-shift, depending on context. "Context is king" when it comes to attitudes, meaning they can be altered by systematic factors, such as how the questions are framed and what order they come in, as well as random factors, such as people's moods, the weather, and current events (Eagly & Chaiken, 1993). All of which can make attitude assessment agonizingly hard to achieve. The difficulty mounts when you consider that, until recently, researchers have had to take it on faith that what people report on a questionnaire reflects their true attitudes. But when people have control over their responses (by, say, circling a number), two immediate concerns arise, dubbed the "willing and able" problem. First, people may not be willing to report their honest opinion; and second, they may not be able to introspect adequately to surmise what their attitude is (Nisbett & Wilson, 1977; Wilson & Dunn, 2004).

The fact that people can edit (or distort) their explicit attitudes has long made attitude researchers wary of taking people's self-reports at face value, particularly when the topics being considered impinge on people's morality (Crowne & Marlowe, 1960; Gaertner & Dovidio, 1986; Paulhus, 1984; Dovidio & Fazio, 1992; Thurstone, 1928). Attitudes toward behaviors that are illegal (e.g., stealing

and drug use) or immoral (e.g., lying and cheating) are prominent examples, as are attitudes toward anything having to do with sex or religion. Because we are social creatures, it is human nature to present oneself in a manner that will be viewed favorably by others.

Similarly, topics such as prejudice and discrimination (e.g., attitudes and behaviors toward minority groups) have become moral issues. In the United States, legislative changes during the 1960s and 1970s outlawed discrimination based on race, gender, age, ethnicity, and religious orientation. It became illegal, as well as immoral, to discriminate against people based on their group membership. As a result, scores on explicit (i.e., self-report) measures of prejudice have steadily decreased (Judd, Park, Ryan, Brauer, & Kraus, 1995; Schuman, Steeh, Bobo, & Krysan, 1997), while normative pressures to be egalitarian have increased (Dunton & Fazio, 1997; Plant & Devine, 1998). In fact, many people sincerely believe they are not biased (Pronin, 2007). At the same time, Americans are inundated with cultural messages that, for example, people of color are relatively poor, uneducated, and more likely to be in trouble with the law. These messages are likely to permeate our mental apparatus even when we refuse to endorse them (Devine, 1989).

To circumvent these problems, social psychologists have devised innovative techniques to measure *implicit attitudes*, that is, attitudes that people may not be aware of, or that they are unwilling to report. The most advanced techniques rely on response latencies (i.e., reaction times) when people perform various tasks, rather than deliberate responses. The researcher does not ask people what they think or feel. Instead, people's attention is focused not on the attitude object, but on performing an objective task; attitudes are then inferred from systematic variations in task performance (Cook & Selltiz, 1964). Collectively known as *implicit measures*, response latency methods solve the willing and able problem because (1) people are less able to control their responses and (2) they can reveal attitudes that people may not even know they possess.

The ability to measure attitudes and beliefs in ways that bypass deliberate, and often distorted, responses has afforded remarkable new insights into the human mind and spawned a new discipline: implicit social cognition. Because of their advantages, implicit measures have been widely heralded, and popularly used. Searching PsycINFO for the two most widely used implicit measures (evaluative priming and the Implicit Association Test) in the title, abstract, or keywords revealed over 890 results.¹ Because they represent a state-of-the-art assessment tool, they are an important topic for behavioral scientists to learn about.

Goals of the Implicit Measures Volume

The primary objective of this volume in the series is to teach nonexperts how to use implicit measures in their own research. To do this, I will take an approach

that is more practical than theoretical, with the aim of answering such basic questions as: how do you design and validate such a measure? What are the best practices to avoid common errors? How do you interpret and report the results? How have other researchers effectively used implicit measures? The goal is that after reading this volume, you will be able to build and administer your own implicit measures. You should also be able to use this volume as a reference as your research progresses.

In this volume, I will focus on the two most prominent implicit measures: evaluative priming and the Implicit Association Test (IAT). Although there are many differences between them, each employs reaction time tasks that measure people's attitudes indirectly. There are many other types of implicit measures, but evaluative priming and the IAT have received the lion's share of research attention and both have shown the ability to predict behavior (i.e., they yield *predictive utility*). Because behavioral scientists are interested in accurately predicting human behavior, predictive utility is the "gold standard" by which any new assessment technique is evaluated. However, it is not the only kind of validity, and evaluative priming and the IAT have also shown substantial *known groups* validity (i.e., they distinguish well between groups that are "known to differ"). For several types of behaviors, particularly those that impinge on morality, evaluative priming and the IAT have shown better predictive utility and known groups validity, compared with self-reports (for reviews, see Fazio & Olson, 2003; Nosek, Greenwald, & Banaji, 2007; Greenwald, Poehlman, Uhlmann, & Banaji, 2009). Finally, the underlying processes that drive their effects are likely to be similar, albeit not identical. For these reasons, they were chosen as the best candidates for this volume.

Basic Terminology and Assumptions

To begin, a brief discussion of basic terminology and assumptions is needed to provide some background. First, an *attitude* is a psychological tendency to evaluate a given object with some degree of favor or disfavor (Eagly & Chaiken, 1993). Second, an *attitude object* is a broad term that encompasses physical objects but also anything that can be evaluated. The self, others, specific people, groups of people, social issues, situations, and goals are just a few examples. Even attitudes can serve as attitude objects (e.g., attitudes toward prejudice). Third, if you ask people how they feel about X, you are using *explicit* measures (a.k.a. self-reports, surveys, and questionnaires). By contrast, if you do not ask people directly how they feel, but instead infer their attitudes on the basis of how they behave or perform a task, you are using an *indirect* measure (Cook & Selltitz, 1964). A classic behavioral example is measuring how far away people choose to sit when they are told they are going to interact with someone (e.g., of a different race: Bogardus, 1927; Goff, Steele, & Davies, 2008). Fourth, if you use an indirect technique that