

Attitude Measurement

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Abstract (147 words)

Attitudes refer to evaluative beliefs about, or stances toward, social objects. Being at the intersection of sociology and psychology, attitudes have been measured using a variety of methods, at times overlapping and occasionally contrasting in nature. Earlier writings on the attitude construct sought to position it in its rightful place among other social psychological concepts. Nowadays, attitudes are studied using explicit measures, implicit measures and psychophysiological measures. Major topics of discussion, particularly in the domain of explicit measurement, concern the design of attitude statements within survey research in a way that maximizes research outcomes. Ongoing debates also concern the influence of context on different attitude measures, and the improvement of implicit and physiological measures of attitude. Future research is aimed toward better understanding and designing attitude measures that are more applicable to non-Western contexts. The improvement of attitude measures for studying intergroup conflict is another salient concern.

Keywords (on submission): Allport, Attitudes, Context, Likert, Psychometrics, Scale, Survey, Thurstone

Main text

Attitudes refer to evaluative beliefs or stances toward an attitude object, which can be anything from other people to inanimate objects. The definition of attitudes changed over the past century, with the construct being defined as referring alternatively to stances, dispositions, evaluations, tendencies or even physical readiness for activity. Regardless of definitional emphasis, Allport (1935) argues that what made the attitude concept amenable to social scientific research was its neutrality vis-à-vis the nature-nurture debate. Attitudes were introduced in sociology through Thomas and Znaniecki's (1918) work, *The Polish Peasant in Europe and America*, where they conceptualized attitudes as the subjective factor mediating

between a specific situation and a person's behavior, and viewed attitudes as being influenced by persons' social backgrounds. It was then Allport's (1935) proclamation that attitudes are the most indispensable concept in social psychology that cemented the importance of the concept in the social sciences.

The fluidity of the concept, the interchangeable use of related terms, and reliance on subjective data meant that difficulties with measurement have been a salient concern since the earlier part of the twentieth century. Measures of explicit attitudes – that is, attitudes that can be avowed (see Harré & Secord 1972, p. 303) – commonly rely on self-report activities where participants state their view in some form. First attempts at measurement applied traditional scaling techniques. Such techniques employed elaborate procedures meant to produce a series of statements that can be given to the participants of interest to study their attitude toward a specific object. One of these procedures is known as Thurstone scaling (Thurstone 1928), of which there are multiple forms. In one of the more prominent techniques, researchers design a list of attitude statements concerning a particular issue (e.g. attitudes toward pacifism). Subsequently, these statements are presented to judges who position such statements on a scale (e.g. from 1 to 12) based on how strongly such statements favor or oppose the object/ position in question. The statements that end up with equal gaps between their values (averaged across judges) are then included in the final scale. Participants are then asked to mark whether they agree or disagree with each of the final statements, and an average is taken, which serves as an index of participants' attitude (Thurstone 1928). Alternatively, Rensis Likert proposed other scaling methods, most notably the summated rating scale (Likert 1932). Here, the researcher also starts off with a large list of statements. Participants are shown the statements and asked to rate them based on agreement, and the responses are coded numerically. The total score for each participant is then worked out based on the scores on individual items per participant. Items from the original list that are poorly correlated with the total score are removed from the final scale, which now consists of the relevant (highly correlated) items. When this final scale is applied in research, participants are asked to choose one of the following per item: “strongly approve,” “approve,” “undecided,” “disapprove,” “strongly disapprove” (Likert 1932). Other elaborate self-report methods include the semantic differential scale (Osgood et al. 1957) and Guttman scaling (Guttman 1944). A key advantage of these methods is that they reduce measurement error and rely on time-tested methods; a clear disadvantage chiefly concerns practicality in terms of costs and time (Krosnick et al. 2005, p. 33). Thus, whilst useful, such elaborate techniques eventually gave way to more practical ways of measuring explicit attitudes, such as single-item measures.

Nowadays, attitude measurement is usually done using either a single question, or else a set of questions, designed simply and aimed at generating valid, reliable and generalizable responses (Krosnick et al. 2005, p. 21). Single questions can be closed, eliciting fixed responses such as “yes,” “no,” and “don't know,” or else employing rating scales with labelled values (e.g. where “1” = “strongly disagree” and “5” = “strongly agree”). Alternatively, questions can be open-ended, where participants are free to elaborate. Closed questions are usually analysed quantitatively and open questions qualitatively. However, most research (e.g. surveys) relies on multiple-item measures that are checked for consistency and other statistical criteria, rather than singular items. Here, an index of respondents' attitude toward the object of interest is obtained by scoring the multiple-item measure, or *scale*. Using multiple items avoids over-reliance on just one item, which may unduly influence respondents due to its phrasing, potential irrelevance, and other drawbacks. On the other hand, the longer the list of items, the higher the risk of response sets, whereby respondents answer in patterned ways regardless of item content, to complete the task quickly among other reasons. Whichever measure is used, respondents are generally presented with attitude

items in a survey or during experimental research. They effectively need to understand the task and question asked of them, retrieve attitudinal stances from memory, form judgments if and as needed, and respond on the spot. Inevitably, such cognitive demands are deeply influenced by context, resulting in variable responses by the same subjects from time to time, and place to place (Schwarz 2008, p. 42).

Given the cognitive steps and effort required for answering self-report measures, the occasions for bias to influence results are multiple. Sources of bias include context effects, where the order of the attitude items, or the order of the possible responses to such questions, influences respondents' answers (Schwarz 2008, p. 44). Moreover, respondents may want to give socially desirable responses. To reduce response bias – where participants give inexact or false answers, whether intentionally or not – attitude items should be designed by using simple, unambiguous phrasing that does not lead respondents to answer in a specific way. Items designed specifically to reveal respondents exhibiting high levels of social desirability are also used (Crowne & Marlowe 1960). Other foci of research concern: the adequate number of points and labels on rating scales; whether neutral points should be options on rating scales; and ways of reducing acquiescence, that is, the tendency for respondents to answer affirmatively to questions regardless of content (Krosnick et al. 2005, p. 35-50).

Whilst self-report measures have improved over the years and continue to be used extensively in social research, implicit measures have also gained traction, especially in the noughties. Explicit self-report measures presume that people can and do communicate their attitudinal positions accurately; contrarily, implicit measures of attitude address the drawbacks of this presumption. Their goal is to reduce intentional sources of bias and to investigate facets of attitudes that are unavailable to introspective awareness (Bohner & Dickel 2011). One oft-used implicit measure is the Implicit Association Test (IAT; Greenwald et al. 1998). In the IAT, participants categorise stimuli (which can be descriptors, images, etc.) into target categories, such as “white” or “black”, and evaluative categories, such as “good” or “bad”, using the left-hand or right-hand keys. The left key is related to one of the targets and one of the evaluations (e.g., “white” and “good”), whereas the right key is reserved for the other combination. By giving respondents the same task with reversed combinations, and measuring differences in response time across tasks, researchers obtain an index of implicit attitudes. The idea is that respondents tend to respond quicker to combinations that correspond with their implicit attitudes (Bohner & Dickel 2011). Another dominant implicit measure employs affective priming (Fazio et al. 1995), where the goal is to see which attitudes tend to be elicited following the presence of specific stimuli. In psychology, implicit attitudes are also measured using psychophysiological and neuroscientific measures. Implicit measures have the clear advantage of shedding light on attitudes people are unwilling or unable to report well. Nevertheless, different implicit measures are still highly sensitive to context, and correlations across different implicit measures tend to be low (Krosnick 2005, p. 62). Furthermore, there is ongoing debate concerning how best to model attitudinal processes, such that one accounts for the divergences observed between explicit and implicit measures of attitude. Such divergences may be the result of the propositional processes underlying explicit attitudes, and the associative processes underlying implicit attitudes (Bohner & Dickel 2011). Whether implicit measures really tap into attitudes, or else knowledge of common cultural representations, is also debatable.

Over time, it became increasingly acknowledged that attitudes can be studied using different measures, and that varying forms of measurement incur characteristic advantages and disadvantages. This is because attitudes can simply be inferred, and not directly observed (Himmelfarb 1993, p. 23). Accordingly, the context sensitivity of attitude measurements remains of central importance in current and future research. Specifically, researchers seek to

better understand how social contexts surrounding attitude formation and avowal influence the utilized measures. Similarly, research efforts are being directed toward understanding the relative stability of certain attitudes as opposed to others (see Eagly & Chaiken 2005, p. 746). Better elucidation of the gap between the results of attitude research, and their correspondence with behaviour is required, together with an understanding of how behaviours, in turn, influence attitudes (Eagly & Chaiken 2005, p. 761). Importantly, Western modes of attitude research may be lacking when it comes to attitude functioning, and hence measurement, in non-Western cultures. This is particularly the case for cultures where representations of individualism are not hegemonic, thus warranting future research (Albarracín & Shavitt 2018). Finally, attitude measurement can benefit from a renewed appreciation of attitude scaling techniques, applied to specific domains, such as intergroup conflict. Here, the challenge of administering valid and reliable attitude measures is similarly compounded by cultural differences in reactions to the measures themselves.

Cross-references

SEE ALSO: Attitudes and Behavior; Idiographic/Nomothetic; Methods; Mind; Psychology; Public Opinion; Social Psychology; Survey Research; Theory and Methods; Values

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