Rasch Analysis for Surveys
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Surveys, questionnaires, and interview protocols that use rating scales to collect psychosocial information can be thought of as structured "conversations" between researchers and subjects. To construct a successful questionnaire, the researcher must develop a clear idea of the aim of the questionnaire, especially the inferences that are to be drawn from its use. The researcher must also be intimate with the language the intended subjects understand and use. Observed responses are local descriptions of a situation as perceived by the subject at a moment in time. From these passing responses, the researcher hopes to induce general inferences concerning reproducible processes of enduring psychosocial significance. The desired generalization requires that the observed responses can be fit into an overall metric, a linear variable, along which more-ness and less-ness have well defined quantitative and qualitative meanings. The Rasch Model meets these criteria.

Rasch analysis is a method for constructing from observed counts and categorical responses (like Likert scales) linear systems within which items and subjects can be measured unambiguously. The constructed variables contain the meaning of the structured "conversations." The measure of a subject on each variable summarizes that subject's statements about the variable to the extent that the subject shares a definition of the variable with other correspondents. These measures are the most succinct and reproducible report of the information collected by the questionnaire.

Rasch analysis facilitates the transmission of results to subsequent analyses, but now with the advantage of being linear measures with standard errors of the kind required by most statistical analyses. It also simplifies communication of results to therapists, educators, policy makers and the concerned public, in the form of graphical summaries of client populations and detailed individual client profiles.

A unique asset of Rasch analysis is its ability to detect idiosyncrasies — particular, specific departures of subjects and items from the shared understanding that is emerging from the ongoing research. These local departures have powerful diagnostic implications for the treatment of individual subjects. They also suggest new insights into the nature of the proposed variable and new possibilities for improving its definition and measurement.

[1985]