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The Nature of Evaluation Part II: Training

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An earlier article addressed the role of evaluation, the basic logic, and a description of how the field is structured (Scriven, 1999). This article describes some of the basic *logic-of-evaluation* skills and some of the basic methodological skills that need to be mastered in order to practice the art and science of evaluation.

Much work in the Big Six evaluation fields - program, personnel, performance, policy, proposal, and product evaluation - falls within the area of applied social psychology, and much of that -- e.g., the evaluation of large social interventions -- would be impossible without training in the methods and mathematics that foundations requirements in graduate psychology now cover. But there is at least one other completely different kind of reason for thinking the connection between psychology and evaluation is an intimate one, namely the highly specific phenomena of reactions to evaluation by those being evaluated and those for whom the evaluation is done. Dealing with these is an important part of developing applied skills in evaluation. However, the standard training provided in standard psychology programs will not put the graduate in a position where s/he can deal competently with common phenomena in evaluation. Nor should this be regarded as a matter for clinical training, although it is related, and although there are times when the phenomenology comes very close to the clinically relevant level.

Logic-of-evaluation skills

The following list indicates some of the topics from the logic of evaluation that must also be dealt with in some detail.

1. Understanding the differences and connections between evaluation and other kinds of research and investigation, especially: description, classification/diagnosis, generalization, prediction, explanation, justification, and recommendation. Hence, understanding the different types of research design and data inputs required for each of these.

2. Understanding the difference between:

- i. grading, ranking, scoring, and apportioning (the basic evaluative procedures);
- ii. merit (or quality), worth (or value), and significance (or importance)--the basic evaluative predicates.

Hence, understanding the differences between investigative designs aimed at establishing conclusions of these (theoretically 12, but actually about 6) different types. Specific case: understanding the function of 'significance levels' in statistics by contrast with significance determination in scientific or social research.

3. Understanding the arguments that purported to establish the impossibility of scientific demonstrations of evaluative conclusions, and the reasons they failed. (The 'Science is only descriptive' argument; the 'Values are always subjective' argument; the 'Naturalistic fallacy' argument.) Understanding why the usual arguments against value-free science also fail (the 'Scientists show their values in choosing their field/research problems' argument; the 'Science is used for good or bad purposes' argument.) Understanding why these arguments are not just philosophical exercises but reflections of common client/audience confusions that need to be dealt with.

4. Understanding the difference between (i) holistic (black box) evaluation (ii) analytic evaluation; and between the three kinds of analytic evaluation--dimensional, component, and theory-driven evaluation; and how to choose between them in approaching a particular evaluation problem.

5. Understanding the formative/summative distinction, and some of the arguments for thinking that a third category should be included to make up a complete classification of all evaluations.

6. Understanding the nature of needs assessment and its difference from market research; and how to design a valid needs assessment.

7. Understanding the logic of checklists, especially the difference between checklists of (i) desiderata and (ii) necessitata; and the logical requirements for validity of each kind.

8. Understanding the differences and connections between objectivity and: (i) bias, (ii) preference/valuing/valencing; (iii) commitment; (iv) expertise. The fallacy of irrelevant expertise in selecting evaluators. The views of realists and constructivists about objectivity.
9. Understanding the range of evaluation approaches on the scale from fully distanced to highly interactive, and the 'off-scale' entries of description and evaluation training; all with their attendant advantages and disadvantages.
10. Understanding the difference between the kind of evidence required to establish causation and that required to demonstrate culpability.
11. Understanding how and why evaluation developed from (i) a practice to (ii) a highly skilled/professional practice to (iii) a field-specific discipline and finally (iv) to a transdiscipline.
12. Understanding how evaluation theory developed from the primitive identification of evaluation with monitoring to its present complex form, including goal-free evaluation; and understanding some of the leading positions taken by influential theorists along the way and today.

Methodological Skills

The following is a list of some methodological skills of great importance in evaluation which are rarely, if ever, covered in the core curriculum of psychology graduate curricula.

1. The Key Evaluation Checklist approach, including details of how to determine the five mainline checkpoints (Outcomes, Process, Costs, Comparisons, Generalizability).
2. Meta-evaluation procedures; the four approaches (recheck, redo, do differently, special checklists).
3. Cost analysis, especially of non-money costs.
4. Skills from qualitative research, notably the determination of causality in non-experimental research, e.g., in medicine (the lung cancer case and the paresis case), and in history (the causes of unpreparedness at Pearl Harbor).
5. Some intradisciplinary skills, especially theory evaluation.
6. How to identify relevant values for a particular evaluation and deal with highly controversial values and issues e.g., in evaluating family planning programs, or in dismissal procedures.
7. How to report to non-peer clients, stakeholders and audiences, especially using non-text media.
8. The psychology of evaluation, especially managing evaluation anxiety.
9. Some field-specific skills, in e.g., technology assessment, personnel evaluation, business evaluation, non-profit management, developmental evaluation, proposal evaluation, evaluative questionnaire design, etc.

Additional Reading

Chelimsky, E and Shadish W.R (eds) (1997) *Evaluation for the 21st Century : A Handbook*. Sage Publications. [\[amazon\]](#)

Joint Committee on Standards for Educational Evaluation (1998). *Program Evaluation Standards : How to Assess Evaluations of Educational Programs*. Corwin Press. [\[amazon\]](#)

Scriven, M. (1991) *Evaluation Thesaurus* 4th edition. Sage Publications. [\[amazon\]](#)

Scriven, Michael (1999). The Nature of Evaluation Part I: Relation to psychology. *Practical Assessment, Research & Evaluation*, 6(11). [Available online: <http://pareonline.net/getvn.asp?v=6&n=11>].

Shadish W. R. (Chair) (1998) *Guiding Principles for Evaluators*. A Report from the American Evaluation Association Task Force on Guiding Principles for Evaluators. [available online <http://www.eval.org/EvaluationDocuments/aeaprin6.html>].

Shadish, William (1998). Some Evaluation Questions. *Practical Assessment, Research & Evaluation*, 6(3). [Available online: <http://pareonline.net/getvn.asp?v=6&n=3>].

Descriptors: *Evaluation Methods; Evaluation Problems; Evaluation Utilization; *Evaluators; Program Evaluation; Research Methodology; Theories; *Training

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