

Theory Criteria and Evaluation Resource

Theory Committee
Academy of Human Resource Development
www.theorypractice.net

1. Selected source citation:

Patterson, C. H. (1983), Theories of counseling and psychotherapy. Philadelphia: Harper & Row, pp xx-xxi.

2. Stated purpose of selected source:

“Theories cannot be evaluated as to their correctness or validity until they are tested. A theory may be good without being totally correct; in fact, few, if any, theories, even after considerable testing, can be accepted as valid in any complete or absolute sense. A good theory, however, is more likely to be true than a poor one. Certain formal criteria have been proposed for evaluating a theory” (Patterson, 1983, p. xx).

3. Direct quotation of the theory criteria or evaluation:

- 1) *Importance.* A theory should not be trivial but should be significant. It should be applicable to more than a limited, restricted situation, such as the behavior of rats in a T maze or the learning of nonsense syllables. It should have some relevance to life or to real behavior. Importance is very difficult to evaluate, however, since the criteria are vague or subjective. Acceptance by competent professionals or recognition and persistence in the professional literature may be indicative of importance. Also, if a theory meets other formal criteria, it is probably important.
- 2) *Preciseness and Clarity.* A theory should be understandable, internally consistent, and free from ambiguities. Clarity may be tested by the ease of relating the theory to data or to practice, or the ease of developing hypotheses, or making predictions from it and specifying methods of testing them.
- 3) *Parsimony or Simplicity.* Parsimony has long been accepted as a characteristic of a good theory. This means that the theory contains a minimum of complexity and few assumptions. Maddi questions this criterion, however, and suggests that one cannot determine which of two theories is most parsimonious until everything is known about the area to which the theory applies. He also questions its value on the grounds that the most parsimonious theory on the basis of current data might not be the best theory: “It is distinctly possible that a theory which looks parsimonious in explaining today’s facts may be actually such and oversimplification in terms of explaining all human functioning as to be wholly inadequate to cope with tomorrow’s facts without major overhaul.” Nevertheless, it might be maintained that the phenomena of the world and of nature of relatively simple in terms of basic principles. The law of parsimony appears to be the most widely violated in theory construction. This may be because of the stage of

knowledge we have reaches, where diversity and complexity are more apparent than are the underlying unity and consistency. Hall and Lindzey propose that parsimony is important only after the criteria of comprehensiveness and verifiability have been met. “This becomes an issue only under circumstances where two theories generate exactly the same consequences”.

- 4) *Comprehensiveness*. A theory should be complete, covering the area of interest and including all known data in the field. The area of interest, however, can be restricted.
- 5) *Operationality*. A theory should be capable of being reduced to procedures for testing its propositions or predictions. Its concepts must be precise enough to be measurable. A strict operationalism can be restrictive, however, as Maddi points out, when a concept is defined by a restricted or limited measurement operation. A current lack of measurement to operationalize a concept should not rule out the use of a concept that is essential for a theory. The concept first should be defined and then a method of measurement, chosen or developed. Not all the concepts of a theory need to be operational; concepts may be used to indicate relationships and organization among concepts.
- 6) *Empirical Validity or Verifiability*. The preceding criteria are rational in nature and do not directly relate to the correctness or validity of a theory. Eventually, however, a theory must be supported by experience and experiments that confirm it; that is, in addition to its consistency with or ability to account for what is already known, it must generate new knowledge. However, a good theory that is disconfirmed by experiment may lead indirectly to new knowledge by stimulating the development of a better theory.
- 7) *Fruitfulness*. The capacity of a theory to lead to predictions that can be tested, leading to the development of new knowledge, has often been referred to as its fruitfulness. A theory can be fruitful even if it is not capable of leading to specific predictions. It may provoke thinking and the development of new ideas or theories, sometimes because it leads to disbelief or resistance in others.
- 8) *Practicality*. There is a final criterion of a good theory, which is seldom mentioned or recognized; that is, it should be useful to practitioners in organizing their thinking and practice by providing a conceptual framework for practice. A theory allows the practitioner to move beyond the empirical level of trial-and-error application of techniques to the rational application of principles. Practitioners too often think of theory as something that is irrelevant to what they do, unrelated to practice or to real life. Yet, as Lewin, the developer of topological psychology, is reputed to have said, “there is nothing as practical as a good theory.” Operating on the basis of a theory is the difference between being a technician and a professional.

4. Contributor: (name & year)

Thomas J. Chermack, 2007

5. Contributor's comment of reflection:

In the context of theory development in applied disciplines, Patterson's are probably the most often cited and often referred to criteria. Patterson's criteria do little to aid in informing or improving the theory development process, but they do provide a clear and concise list of elements on which to judge a theory once it is formed and some testing has been conducted. Clearly, Patterson's criteria reflect a quantitative, hypothesis-testing approach to assessing theory, and this orientation should be reflected in the appropriate application of these criteria to theory that is developed from this perspective. Scholars should take care to recognize this bias before using these criteria in the context of theory developed from alternative perspectives.

6. Classification of this source (Check all that apply)

- Theory end-product
- Theory development process
- Theory evaluation
- Other: _____