

PAPER
03

Practitioner theories

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Typical approaches to theory by practitioners and experimentalists are compared. Some advantages of defining the relationship between them are identified, and such a definition is offered. The assumption that theory leads practice is then challenged. Ways in which practitioners build theories are discussed, and some more effective ways are presented.

The theories which are most valued by experimentalists differ in important respects from those which are of most use to practitioners. With some important exceptions the literature mostly ignores this.

In earlier years a copious literature examined the nature of theory. Well known authors in this field include Robert Dubin (1978), Hubert Blalock (1969), and Charles Lave and James March (1975) among many others. Many of these, including those listed above, were interested in relating conceptual theories to empirical evidence.

In comparison the current literature on theory is relatively meagre. Grounded theory (for instance, Glaser, 2001) and nursing theory (Walker and Avant, 1993) are the most common exceptions. Some authors such as Rita Schreiber and Phyllis Stern (2001) combine the two approaches by applying grounded theory to nursing. Much of the discussion is about theories as relationships between concepts or variables.

There would be value in a literature on theory, especially if it addressed the differences between the needs of practitioners and experimentalists. If the two types of theory can be related one to another, benefits might be expected to result. Practitioners might be more likely to make use of experimentally derived theories. Experimentalists might be able to draw on practitioner insights. This paper offers a way of relating the two sets of theory to one another. It is aimed most explicitly at practitioners and experimentalists in psychology, though I expect it to have wider application.

Symbolically, many experimentally derived theories can be symbolised as a set of “independent variables” which have a causal relationship with one or more “dependent variables”. The independent variables may be changed, either directly by the researcher or indirectly by other factors but measured by the researcher.

independent variables → dependent variable(s)

This form of theory lends itself to experimental test. Develop a hypothesis and set up a test of it. Observe the change in the dependent variable as a consequence of the changes you bring about in the independent variables. The hypothesis, in much current experimental research, is usually drawn from the literature.

Practitioners on the other hand are interested in practical outcomes. They want to know what actions will deliver those outcomes. Their actions are driven by assumptions, sometimes tacit, linking actions causally to outcomes.

When using theory which is grounded in experiential data, there is a sense in which theory and practice can be just two ways of looking at the same phenomena. The actor thinks and acts simultaneously. Thinking and acting each guide the other (cf. George Miller, Eugene Galanter and Karl Pribram, 1960). Some — perhaps most — of the thinking is tacit.

The theory is still causal, in a sense (cf. Chris Argyris, Robert Putnam and Diana McLain Smith, 1985). The causal link, however, is between actions and outcomes:

actions → outcomes

Since the link between actions and outcomes may depend upon the situation, this may be better rendered as

situation [actions → outcomes]

As it turns out, this can be regarded as a rendering of Chris Argyris's *theory of action*. He has written about it in a number of places, including in his seminal work with Don Schön in 1974. Argyris states that actors have theories of action which, stated fully, are as follows (Argyris and Schön, 1974:6).

[I]n situation *S*, if you want to achieve consequence *C*, under assumptions $a_1 \dots a_n$, do *A*

It is possible to draw a parallel between the dependent variable of the experimentalist and the outcome of the practitioner. Both practitioner and experimentalist, for example, may be interested in job satisfaction, or suicide, or group cohesion. The practitioner's outcome may be less precisely defined than the experimentalist's dependent variable, and may be a cluster of dependent variables. However, the similarity is enough that theories of action may be phrased in the same form as the experimental symbolisation specified earlier. In one instance, changes in a set of independent variables leads to a change in the dependent variable. In the other, it is action which produces this result.

independent variables → dependent variable(s)

actions → dependent variable(s)

It can perhaps be presumed that the actions are sometimes effective because they influence the same independent variables which are the experimenter's concern.

In other words, to use experimentally derived theories the practitioner must first take another step. The extra step is to devise actions which seem likely to impinge on the independent variables:

actions → independent variables → dependent variable(s)

Note that this requires substantial understanding both of the situation and of the actions which will influence the independent variables. (These are the "assumptions $a_1 \dots a_n$ " in Argyris and Schön's formulation above.) Most practitioners lack that understanding. Instead they work directly with often tacit theories which leave the independent variables unspecified.

From a practitioner's point of view there is a more natural approach to developing more elaborate theory. The practitioner can begin with what is already known — that is, the actions which produce the desired outcomes. The independent variables can remain unknown, and action can still result.

actions → (independent variables) → dependent variable(s)

Then, with careful reflection, it may eventually be possible to develop a growing knowledge of the independent variables as understanding improves.

If correct, this argument has an important implication for the relationship between theory and practice. As an undergraduate I was led to believe that theory leads practice, and in fact much of what I was taught took this assumption as a starting point. The educational philosophy was referred to as the "scientist-practitioner model". It assumed that science provided the base for practice. Further, the science was unavoidably quantitative and mostly experimental and

reductionist. It further assumed that one became a scientist first. Practice was for postgraduate work or for development during employment.

Argyris and Schön (1974:184) say it like this:

the professional school is responsible for developing basic theory that leads to the best technique, and practice is responsible for teaching, in some mysterious way, how to apply theory and technique effectively.

Argyris and Schön don't believe this works, and nor do I. Yet a web search of educational sites for "scientist practitioner" will reveal how common this approach still is in university psychology courses.

In contrast, my own experience is consistent with the explanation I offered earlier. For me, practice more often than not *precedes* theory. I can often do something before I can understand how or why I do it. I can often understand it before I can find the words to explain it to others.

I find further support for this position in the subsequent writing of Don Schön (1983, 1987). He acknowledges skilled performance by practitioners as "artistry". He agrees that we know more than we can say. In arguing as he does for the benefits of what he calls reflection-in-action he opens the door to the sort of process I have described.

I can summarise the argument symbolically. For the experimentalist a theory is a specification (or a set of them) which links independent variables (**iv**'s) to dependent variables (**dv**'s):

$$iv_1 + iv_2 + iv_3 + \dots \rightarrow dv$$

It is assumed that, to use this knowledge, the practitioner must devise actions (**a**) to bring about the necessary changes in the independent variables:

$$(a_1 \rightarrow iv_1) + (a_2 \rightarrow iv_2) + (a_3 \rightarrow iv_3) + \dots \rightarrow dv$$

Instead, practitioners work more directly with actions and outcomes:

$$a_1 + a_2 + a_3 + \dots \rightarrow dv$$

The independent variables are tacit, and not acknowledged:

$$a_1 (\rightarrow iv_1) + a_2 (\rightarrow iv_2) \dots \rightarrow dv$$

Through pursuing greater understanding (for instance through reflection in action) the practitioner may eventually learn to fill in some of the tacit independent variables.

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