

## **Theory Building Research in HRD--Pushing the Envelope!**

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*The purpose of this innovative session is to foster a community of scholars interested in the advancement of theory building research in human resource development.*

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The Human Resource Development (HRD) profession is on the verge of a significant theory building thrust. A 1998 AHRD theory symposium titled, "The Discipline of Human Resource Development," attracted about 60 participants, many of whom have continued the dialogue and produced numerous publications. That symposium presented three espoused theories underlying the discipline of HRD. This 2000 symposium will focus on theory building research methodologies appropriate for HRD as well as the practical consequences of research-based theory. Four related topics in the context of HRD will receive attention: the Role of Theory Building, Philosophy Building Research, Theory Building Research, and Practical Consequences of Sound Philosophy and Theory.

### **Role of Theory Building in HRD**

We develop theories because aspects of the real world are so complex that they need to be conceptually simplified in order to be understood (Dubin, 1976). A well-constructed theory gives clarity to a complex phenomenon by providing a system for understanding its core ideas and interrelationships. For this reason, a simple, elegant theory that makes real world phenomena comprehensible is desired over a complex, elaborate theory. These fundamental assumptions provide the basis for a discussion among innovative session participants.

### **Philosophy Building Methodology for HRD**

The philosophical framework for HRD consists of three key components:

1. **Ontology:** the component that makes explicit the commonly held view of the nature of the world and phenomena of HRD (how we see our world);
2. **Epistemology:** the component that makes explicit the commonly held nature of knowledge in HRD, and the necessary and sufficient requirements to hold and claim knowledge in our field (how we think about our world);
3. **Axiology:** the component that makes explicit the commonly held view of how we ought to act in our field, our espoused aims, ideals and proper methodologies and methods for HRD inquiry and practice (how we should and actually act in research and practice).

These three components interact in a dynamic and systemic way, together forming the guiding framework for a congruent and coherent system of thought (Bohm, 1994) and practice in the HRD field.

There is an interactive and dynamic relationship among the key components integral to a sound philosophical framework for research and practice in HRD.

Although often thought of as a discipline of abstract thought with little practical utility, philosophy can play a very useful and purposeful role in HRD. To get a sense of this potential utility one needs to consider philosophy

as a system of thought and action (Bohm, 1985). That is as an activity or process of inquiry that is concerned with disciplined reflection, ways of thinking about certain questions, interpreting texts, trying out ideas and thinking of possible arguments for and against them, and wondering about how concepts really work.

Philosophy helps develop capacities for thinking (Honderich, 1995). At the heart of it, philosophy is a systematic examination of the assumptions that underlie action. It is not studied for the answers it provides, but for the questions it raises. Theories-in-use are investigated and analyzed to surface the essences of our thoughts and ideas that, ultimately, drive our actions. Magee (1971) told us that “one of the tasks of philosophy is mapping the logic of...discourse, laying it out, so to speak, so that a person can make his way about it successfully” (p. 45). Philosophy presents thought and action in an integrated, interactive system.

In fulfilling this role, it affords practice in criticism—for example, building counter arguments to common wisdoms (Root, 1993) and developing examples for questionable generalizations. It also develops responsiveness to concrete cases and an appreciation of the thinking expressed in these. Finally, it enables interpretation and theorizing, for example, by relating positions of one area of inquiry to those in another.

Philosophy thus provides us with practical ways of thinking about certain sorts of questions (questions of the nature of reality, truth and ethics) and the use of logical argument, disciplined reflection and theoretical reasoning in this questioning process. It helps us develop the practice of rational critical thinking about things concerning the nature of the world, justification of beliefs, and the conduct of life. Philosophy engages us in the interpretation of texts and the criticisms of common wisdoms that are often taken for granted.

#### *Implications for practice.*

Reflection about philosophy (ontology, epistemology, axiology) ensures that as practitioners we are leading a worthy “examined life”—acknowledging that beliefs about basic ends and principles lead to concrete conclusions and action. This process can be done unconsciously where it is subject to many hazards. Or, it can be done consciously where one (or an entire field) strives for clarification and alignment. This is not to say that this clarification process is ever finished-- it is a continual process where “new light is always dawning on the meaning of concepts at every level, with the consequence that the whole enterprise has to be forever examined” (Magee, 1971, p. 47).

However, striving for alignment between the key components of philosophy and being grounded in those articulated by the discipline of HRD will undoubtedly result in better and more consistent practice. This is especially relevant in HRD, an applied field driven by its practice, where theory sometime lags behind the challenges being faced in organizations. Philosophy provides some structure on which to make decisions when research is not there to support a practice or policy. Magee (1971) identified the importance of philosophy to complement science when he explained:

Conclusions about what to do is a mixture of judgements about the “excellencies to be produced” combined with empirical or scientific knowledge about how to produce them. It is important to notice that we cannot derive the list of prescriptions, excellencies, that are a set of value judgements about what to do, from the descriptive, empirical, knowledge accounts of what the facts usually are. It is, in short, not possible to go directly from scientific understanding to policy and practice. Practice is always a combination of prescriptive convictions and descriptive understanding. (p. 46)

The logic of philosophy allows us to engage in thinking that is at once disciplined and imaginatively creative. We are able to apply philosophical methods to practical problems and ascertain what the issues are and how different assumptions affect the problem. In addition, we can use philosophy to analyze and interpret practice. In these ways the idealism of philosophy can be used to improve practical problems. The act of philosophy cultivates the capacities and appetite for reflection, for exchange and debate of ideas, for life-long learning, and for dealing with problems for which there are no easy answers.

#### *Implications for research and theory-building.*

Research and theory-building are only parts of an overall context that drives HRD. How we see the world and what we recognize as knowledge in HRD fundamentally affects the methodologies we employ to research and build theory. A too limited view of ontology and epistemology can limit the scope and utility of HRD. A too broad view can lead to the slippery slope of relativism where there are few standards. Philosophy ultimately requires us to

consider what knowledge and theory really are. When placed within a context of assumptions about reality and nature our current views of these things may or may not change. Marsick (1990) stated:

...if we are to describe accurately and explain the world we research, then, as we work we must test our assumptions about what we view as knowledge, whether our view is compatible with the nature of organizations and the phenomena we are researching, and how we believe we should go about researching these phenomena. (p. 33)

It is important to acknowledge how science and philosophy complement one another and proceed on a journey that demands work in both areas from HRD scholars. Philosophy is not more or less important than science, it is just different. While science tells us what the world contains, philosophy asks about different ways to classify these things. While science produces knowledge, philosophy asks what we can know and how. While science provides new knowledge of the observable based on experimental tests, philosophy suggests “rules” for the stuff of reality and how it is organized. Philosophy looks behind science and analyzes concepts/notions and methods that are used. It pushes a discipline such as HRD to strive for even more than good research. In this way, philosophy may suggest important standards of rigor for research and theory building that have yet to be considered.

### *Implications for Evolution of HRD*

Philosophy also plays an important role in the future of HRD. HRD continues to deal with perennial issues that threaten its stability and future effectiveness. One such issue is the purpose of HRD that has been extensively discussed during the last five years. Philosophy provides a framework for articulating the purpose of the field. Surfacing and clarifying key assumptions about ontology, in particular, provides a set of criteria to guide future discussions of what is and isn't HRD. We can analyze different schools of thought emerging in HRD (i.e. performance, learning, integrity) to see where they come together and where they do not. Philosophy can be a rigorous backdrop for judging whether and to what extent the field can accommodate multiple definitions and purposes. This same set of criteria can also be used to balance the long- and short-term interests of HRD—helping us to do both for the optimization of the field. Philosophy can be an important mechanism to guide the nature of conversations that need to continually be held in HRD. This will enhance the mature growth of HRD.

### **Theory Building Methodology for HRD**

The process of theory development itself has been discussed in the context of theory building as a research method for HRD (Torraco, 1997). Torraco emphasized the important roles theory serves, especially in applied disciplines like HRD. He reviewed several methodologies for theory building, including the theory building models of Dubin (1978), Snow (1973) and Weick (1989). Case study research and grounded theory were also discussed as valuable resources for theory building in HRD. Torraco observed that the richness and complexity of the organizational contexts served by HRD require theory-based interventions guided by insights from grounded theory and case study research.

Weinberger (1998) reviewed commonly held theories of HRD including learning theory, organizational learning, the learning organization, the theory of performance improvement, systems theory, and economic theory. Holton (1999) proposed a taxonomy of performance improvement domains and characterized HRD's unique capabilities for “whole systems performance improvement. Swanson (1999) framed the discipline of HRD within the context of performance improvement in his discussion of the context of HRD work. He suggested component theories for HRD and a research agenda to advance the theory base of HRD for performance improvement. Lamenting the current state of performance improvement practice that Swanson sees as experiencing a “theory application deficit disorder,” he offered the domains of economics, psychology and systems theory as the appropriate components of theory development of HRD for performance improvement.

Theorists must rely on both their theory building and domain-specific expertise to develop the concepts and interconnecting matrices that constitute theory. Yet, the literature available to guide theorists on methods of theory building is sparse and uneven. How does the theorist know which theory building methodology to use? In the following sections, positivistic theory-building methods, case study approaches to theory-building, and grounded theory are discussed as alternative methodologies for theory building. A discussion will be facilitated to allow session participants to discuss the domain (content area) of theory building they are interested in and to match their theory-building research objectives with the appropriate theory-building methodology.

### *Theory-building Methods.*

Kaplan (1964) discussed theory building as a vehicle for the advancement of knowledge in any discipline where knowledge growth occurs both by intention and by extension. Knowledge growth by intention occurs when a partial explanation of a whole domain is made more and more complete. Early theories explain key portions of the domain, and, in doing so, highlight the need for subsequent theories. Knowledge growth in the domain is likened to gradually adding light to a dark room or bringing a microscopic field into sharper focus. In the field of HRD, knowledge growth by intention is occurring in organization development (OD), which was once based almost exclusively on "normative-reeducative" change strategies and group process interventions. The demands of today's business environment require OD to further integrate its therapeutic intervention model and normative perspective with a realistic human resource investment perspective. The theory base of OD is expanding to provide a broader foundation for the strategic value of OD (Beer & Walton, 1990).

Knowledge growth by extension occurs when a relatively complete explanation of a particular domain is then carried over and applied to adjoining domains. A metaphor for theory building by extension is the creation of a mural scene by scene. The development and application of general systems theory to a wide range of professional disciplines illustrates this type of knowledge growth. Originally developed by the German biologist von Bertalanffy (1950), general systems theory was then applied to the fields of economics (Boulding, 1956) and mathematics (Rapoport, 1956), later to the study of organizations (Katz and Kahn, 1968) and human performance technology (Gilbert, 1978), and recently to field of HRD (Jacobs, 1989).

Snow (1973) offered a three-phase, process model for theory building. Patterned after an early model for describing the operation of human memory, Snow's model is composed of: (a) recognizing metaphors, (b) constructing *models*, and (c) organizing metatheories. The initial, loose conceptions of the theorist (metaphors) are further developed into formal representations (models) that are presented in graphic-pictorial, geometric, or symbolic-mathematical form. A metatheory develops as one or more successful models in the same area become widely confirmed and accepted as accurate descriptions of important phenomena. Snow applied his theory building model to research on teaching. Using his three-phase model to build a theory of teaching, Snow identified the Bayesian sheepdog as a metaphor for the teacher's role in guiding the direction and development of a "flock" of students. The metaphor was further developed into an analytical model of key teacher-student interactions while maintaining the image of teacher as shepherd. Snow suggested that this evolving theory of teaching might become incorporated into a grander metatheory of teaching through integration with existing theories of behaviorism, instructional design, and human problem solving. Snow's three phases of theory building were used to model the role of a teacher, thus explaining and clarifying sophisticated classroom interactions.

Snow defined metatheories as families or categories of theories that arise when an original theory stimulates further research leading to descendent and derivative theories that apply to the same domain. Metatheories become foundational structures upon which individual related theories can be built. Metatheories of interest to HRD that have given rise to related theories include learning theory, psychoanalytic theory, human capital theory, and general systems theory.

Weick (1989) argued that high quality theories are created through "disciplined imagination" on the part of the theorist. The inadequacy of theories in organizational studies has resulted, according to Weick, from the inability of theorists to accurately represent the process of theorizing. Weick characterizes theory building as disciplined imagination, "where the 'discipline' in theorizing comes from the consistent application of selection criteria to trial-and-error thinking and the 'imagination' in theorizing comes from deliberate diversity introduced into the problem statement, thought trials, and selection criteria that comprise that thinking" (p. 516). Theories of higher quality are produced when theorists pay particular attention to three aspects of theory building: (a) accurate statements of the problem to be addressed by the theory are specified, (b) many diverse conjectures about how to solve the problem are offered, and (c) a large number of diverse criteria for selecting among these conjectures are applied. By elaborating on what the theorist actually does in working through the problem statement, thought trials, and selection criteria needed for theory building, Weick adds clarity and structure to the nebulous process of theory building.

More so than any of the theory building strategies discussed so far, Dubin's (1978) eight-phase methodology for theory building lays out an explicit roadmap for the theorist to follow. The methodology offered by Dubin, a well known writer on theory and theory building, is frequently used as a template for building theories in the behavioral sciences. The eight phases of theory building are: (1) units (i.e., concepts) of the theory, (2) laws of interaction (among the concepts), (3) boundaries of the theory (the boundaries within which the theory is expected to apply), (4) system states of the theory (conditions under which the theory is operative), (5) propositions of the theory (logical deductions about the theory in operation), (6) empirical indicators (empirical measures used to

make the propositions testable), (7) hypotheses (statements about the predicted values and relationships among the units), and (8) research (the empirical test of the predicted values and relationships). The first five phases of the methodology represent the theory building component of Dubin's model, and the last three phases represent the process of taking the theory into real world contexts to conduct empirical research. Although theorists must consider the entire scope of Dubin's model for effective theory building, theory building and empirical research are often separated, and each of these is conducted as a distinct research effort.

The theory that emerges is not seen as the discovery of some preexisting reality "out there." Theory is considered an interpretation, and is, therefore limited in both a temporal and contextual sense. Theory grounded in practice can never be established forever, and its validity is eroded as contemporary social reality changes. These limitations notwithstanding, such grounded theory can provide concise theoretical formulations for the complex phenomena encountered in organizations.

### **Practical Consequences of Research-based HRD Theory**

Practical consequences of sound HRD theory are the true motivation for the pursuit of theory-building research. Having said this, the popular notion of philosophy and theory being disconnected from practical matters continues to this day. Within HRD there is an overt resistance to specifying its theory beyond personally held values and truisms. HRD is a profession rife with gimmicks and exaggerated claims (Swanson, 1997). Edward O. Wilson, renowned scholar, informed us "... that new ideas are commonplace, and almost always wrong. Most flashes of insight lead nowhere and statistically have a half-life of hours or maybe days (1998, p. 55). "Nothing in science-- nothing in life, for that matter-- makes sense without theory (Wilson, 1998, p. 52)."

While theories are initially a product of human imagination, the practical consequences of research-based theory, according to Wilson (1998), are focused on the following practical factors:

1. Repeatability: the same phenomenon is confirmed or discarded.
2. Economy: information that is both simple and aesthetically pleasing.
3. Mensuration: using accepted scales, generalizations about the phenomenon are rendered unambiguous.
4. Heuristics: new knowledge initiates further discovery and provides additional test of the original principles.
5. Consilience: explanations of phenomena most likely to survive as a result of their connection to and consistency with other phenomena.

HRD, as an applied discipline, presents the demand of connecting theory and practice. As an applied discipline, HRD also recognizes that the contributions of practice and development efforts to HRD theory as well as contributions from research (Swanson, 1997). Swanson refers to this relationship as a Theory-Research-Development-Practice Cycle "that allows ideas to be progressively refined as they evolve from concepts to practices and practice to concepts" (1997, p. 13).

### **Conclusion**

The very best community of HRD scholars interested in advancing the theory in the profession would be logically made up of theory building researchers and reflective practitioners. As an applied discipline, HRD has many practitioners and developers capable of serving as partners in advancing the theory of HRD. It would also seem logical that the Academy of Human Resource Development could serve as the catalysts and host to such a continuing effort.

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