Emerging Ideas

Theory Framework for Applied Disciplines: Boundaries, Contributing, Core, Useful, Novel, and Irrelevant Components

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Most applied disciplines are attempting to make significant advancements in articulating the theoretical foundation of their fields of study. The theory discussions and theory research in most applied disciplines are not held together in a manner that allows interpretation and integration. This article presents a holistic theory framework for applied disciplines to help scholars and practitioners create and critique the theory of an applied discipline as well as the contributing, core, useful, novel, and irrelevant theory components within it. Each of the six components in the framework are described and illustrated through relevant theory examples. The role that each component plays in advancing the theory and practice in an applied discipline is also examined.

Keywords: *theory; theory development; methodology; applied disciplines; HRD theory*

Within any discipline or field of study, rival views regarding its purposes and practices exist at almost every level. The rival perspectives can be very broad, such as the focus and the nature of the discipline itself, or narrow, such as the explanation of a simple elemental aspect of the discipline. In applied disciplines, where matters of both theory and practice are of great concern, the range of perspectives widens even further in an effort to satisfy the demands of both scholars and practitioners.

Having rival theories in a discipline is not a disturbing state of affairs. Not having well-developed theory is disturbing. This holds true when framing an entire discipline or when considering even the smallest phenomena within a discipline. The assumption is that theoretical challenges from within can only help to advance the theory. For applied disciplines rooted in professional practice (such as human resource development or management), a problem emerges that is less

likely to exist in more staid disciplines that are disconnected from practical matters (such as history, religion, or philosophy). The theory development challenge in applied disciplines is exacerbated by the dynamic that comes from practice and the relative youthfulness of most applied disciplines.

Beyond a few traditional academic disciplines, the majority of disciplines in contemporary institutions of higher learning are applied, dynamic, and relatively young—such as management, information technology, interior design, or dental hygiene. Applied disciplines almost always have both a strong theory component and a strong practice component. The focus of this article is on applied disciplines, the quest to bring disciplinary coherence to both the theory and practice of the applied disciplines, and in knowing that having such harmony is mandatory for both sound theory and sound practice.

Problem and Purpose

Most applied disciplines are attempting to make significant advancements in articulating the theoretical foundation of their fields of study. Management (Weick, 1979), human resource development (Swanson, 2001) and information science (Benbasat & Zmud, 1999) are just a few. The problem is that the theory discussions and theory research are not held together in a manner that allows interpretation and integration. Theory development related to the essence of a discipline can be laid up against a theory effort focused on an extremely narrow subphenomenon within the applied discipline with no discernable means of logically connecting the two. Without a theory framework, there is a sense of randomness and incoherence to theory discussions and developments. Van de Ven (1999) characterized this theory state as buzzing, blooming, and confusing.

In response to the problem, the purpose of this article is to theorize about theory by presenting a *theory framework for applied disciplines* to help scholars and practitioners think about, develop, and critique the status of the theory in their disciplines through a holistic perspective.

Background

The purpose of this section is to briefly review the background needed to create a theory framework for applied disciplines. Included is an overview of theory definitions, the theory connection to research and practice, and theory development research methodology.

Theory Definitions

Bacharach's (1989) definition of theory states that "a theory is a statement of relations among concepts within a set of boundary assumptions and constraints" (p. 496). Many definitions of theory use the words phenomenon or phenomena. For example, Torraco (1997) stated, "A theory explains what a

phenomenon is and how it works" (p. 115). Gioia and Pitre (1990) described theory as "a coherent description, explanation, and presentation of observed or experienced phenomena" (p. 587). Lynham (2000) described theory development as "the purposeful process or recurring cycle by which coherent description, explanations, and representations of observed or experienced phenomena are generated, verified, and refined" (p. 161).

Unfortunately, the popular use of the words *phenomenon* and *phenomena* often suggest a narrow realm of concern, event, or occurrence. It is important to note that a phenomenon can be long lasting, large and broad—such as democracy, global warming, and civil engineering. As an example, human resource development scholars can pay attention to training transfer theory while others focus on the theory of the broader realm of workplace learning, or even broader to the human resource development discipline itself.

Theory Connection to Research and Practice

Perspectives on the theory and practice linkage are wide ranging. In the lay world, theory is a very loose construct, even to the point of ridicule in noting that something is "just a theory"—an untested speculative idea or antithesis of reality. In the academic world, theories require extensive development and verification before it earns the label "theory." In an applied discipline, verification must take place in both the laboratory and in practice.

In the academic world there has been long tradition of talking about the connection between research and practice. The academic bias that research leads practice positions practice subservient to research. The dominant idea is to pursue research and then practice, not practice and then research. In 1988 Swanson proposed a *research and development cycle* that placed basic research, applied research, and development on the same plane and interacting. Thus, applied research could lead to either basic research or development (a form of innovative practice). Swanson (in Swanson & Holton, 1997, 2005) enhanced this model into the idea of *theory* being developed through research, development, and practice (see Figure 1).

The interplay between research, theory, and practice continues as a scholarly topic. Phillips (1998) talked about information science as an applied discipline having two primary objectives, one theoretical and one practical. Charges have been made about the lack of impact that information science research is having on practitioners (Benbasat & Zmud, 1999). Simultaneously, Moody (2000) reported that practitioners are not referring to scholarly work in information science and that there is a fundamental break between the research and practice in information science.

In an even more critical vein, Hunt (1994) derided marketing as an applied discipline unwilling to cope with the demands of theory, research, and practice to the point that marketing has made very few fundamental contributions. He goes on to observe that being an applied discipline has driven the field to focus
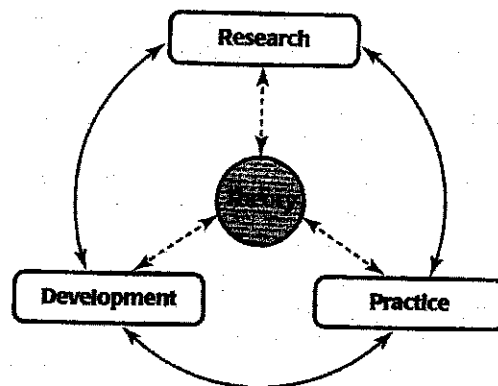
FIGURE I: Theory-Research-Development-Practice Cycle
SOURCE: R. A. Swanson (1997). HRD research: Don't go to work without. In R. A. Swanson & E. F. Holton III (Eds.), *Human resource development research handbook* (pp. 3–20). San Francisco: Berrett-Koehler.

on dysfunctional and unsuccessful relationships rather than those that are functional and successful.

Boyer (1990) argued strongly for the academic world to embrace research and practice through "the scholarship of discovery, the scholarship of integration, the scholarship of application, and the scholarship of teaching" (p. 16). In Van de Ven's (2007) recent argument for engaged scholarship, the purposeful connection between theory, research, and practice provides the rational and a methodology to carrying out such work. In discussing partnerships for integrating research and practice, Jacobs (1997, p. 53) noted the following guidelines for successful partnerships:

1. Expect research to be a part of all collaborations.
2. Derive research questions from practice.
3. Determine the use of the research up front.
4. Make collaborations a formal process.
5. Seek long-term collaborations.

Theory Research Methodology

Undergirding this discussion is the assumption that "theory development can be considered a research process for creating theory" (Torraco, 2005, p. 352). Robert Dubin's (1969) classic book, *Theory Building: A Practical Guide to the Construction and Testing of Theoretical Models*, presents the scholarly case for theory building research in applied disciplines without letting go of his quantitative-empirical research orientation. His basic eight-step

model has two major components—theory development and research operation (see Figure 2). Unlike Dubin's linear and detailed method, Lynham's (2002a) *Theory Building in Applied Disciplines* presents a general method of theory-building research in applied disciplines that is nonlinear and embraces quantitative and qualitative research methodologies in working through its five phases. The "general method" describes the full theory development process, the methodological options, and general research methodologies without going into detailed methodology procedures (Lynham, 2002b) (see Figure 3).

None of the theory development research methodologies, including the aforementioned, directly address theory in relation to bounding and defining the theory of the applied discipline itself. For example, Dubin's methodology has been commonly used to develop narrower theories in the realms such as work analysis (Torraco, 1994) and leadership (Lynham, 2000). The limitations of addressing more constrained phenomena have been to:

- Take a phenomena that is believed to fall within the realm of a particular discipline, without addressing the discipline itself, and exploring the theory of that phenomena
- Take a phenomena of an existing theory and extending the theory by subdividing it or increasing detail in terms of adding units
- Take a research-only or a practice-only approach to explain a phenomena

One result of these ongoing actions is to leave an applied discipline ill defined, without an overall solid theoretical foundation or framework. In short,
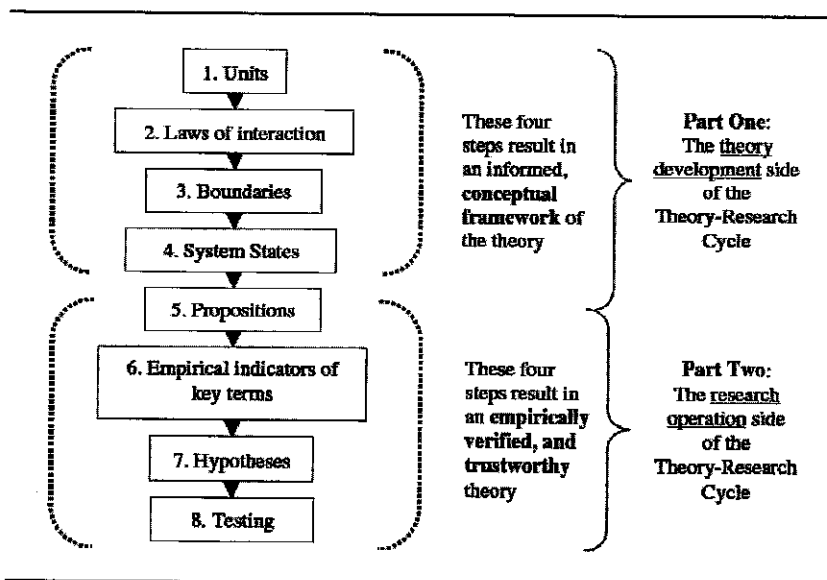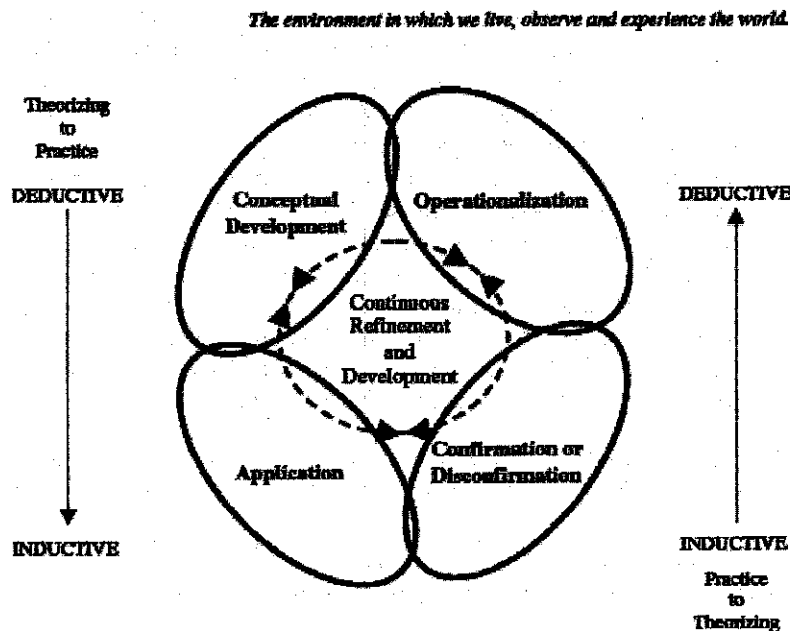

FIGURE 2:   Dubin's Theory-Building Method as an Eight-Step Theory-Research Cycle

The environment in which we live, observe and experience the world.

Theorizing
to
Practice

DEDUCTIVE

Conceptual
Development

Operationalization

DEDUCTIVE

Continuous
Refinement
and
Development

Application

Confirmation or
Disconfirmation

INDUCTIVE

INDUCTIVE

Practice
to
Theorizing

FIGURE 3:   The General Method of Theory-Building Research in Applied Disciplines
SOURCE: S. A. Lynham (2002b), p. 231.

subdiscipline theory development activity results in a discipline with numerous
specific theories that may apply in various situations, but without a unifying,
broad, and integrative theory that is critical to framing the discipline itself.

This discussion of theory definitions, theory connection to research and
practice, and theory research methodology leads to an important conclusion as
to the need for a holistic theory framework for applied disciplines.

Proposing a Theory Framework

Scholars rarely, if ever, set forth the core theory of their applied disciplines or
a formal theoretical structure for discussing, organizing, or advancing their
disciplinary view of theory and its components. In discussing their disciplines,
they have relied on (a) the perspective of being interdisciplinary and (b) on dead-
end philosophical debates as to the definition and purpose of the discipline.

An illustration of this is the scholarly exchange within the human resource
development discipline. Swanson (2001) put forth a theory of human resource
development (HRD) that (a) specified the definition and purpose of HRD, and
(b) identified three core contributing theory domains (psychological theory,

economic theory, and systems theory). He further identified three specific theories within each realm to be combined into a unique theory of HRD for explaining the discipline and how it works. A three-legged stool was used as a graphic icon for visualizing the three theory legs of the applied discipline and their integration as the seat of the stool.

McLean (1998) presented a rebuttal that argued for not constraining the profession as Swanson had. He presented a centipede and all its legs as a metaphor to support the idea that an applied discipline like HRD utilizes unlimited theories. He also presented a definition of HRD (McLean & McLean, 2001) that was more in keeping with his open and international view of HRD as a discipline.

Unlike the previous philosophical debate, the purpose of a holistic theory framework for applied disciplines is to help scholars and practitioners create and critique the theory of an applied discipline as well as the components within it for the purpose of advancing the discipline. A continuing reminder is that supporting the framework does not restrict the possibility of fully developed alternative theories constructions. Ideally, the *theory framework* will encourage more holistic theory development efforts in applied disciplines that would result in alternative views and theories of the discipline. The assumption is that there is not one disciplinary theory for any one discipline.

Theory Framework Design Criteria

Based on the prior discussions, the following general design criteria for an applied discipline theory framework are proposed for the purpose of establishing the framework components and their relationships:

- The theory framework should articulate the name of the discipline and the purpose of the discipline with enough precision to determine what could be considered to be within or outside the purview of that discipline.
- The theory framework should function at multiple levels from establishing and confirming disciplinary boundaries down to the smallest possible unit deemed logical and potentially useful.
- The theory framework should consider, mediate, and articulate researcher and practitioner perspectives in its language, components, and structure.

A Theory Framework for Applied Disciplines

The proposed *Theory Framework for Applied Disciplines* is made up of six components that are displayed in a graphic presentation (Figure 4). The approach in this section is first to present the six components and the overall graphic representation. Second, there is a follow-up with a description of each of the components, their relationships, and supporting graphic representations of those relationships.
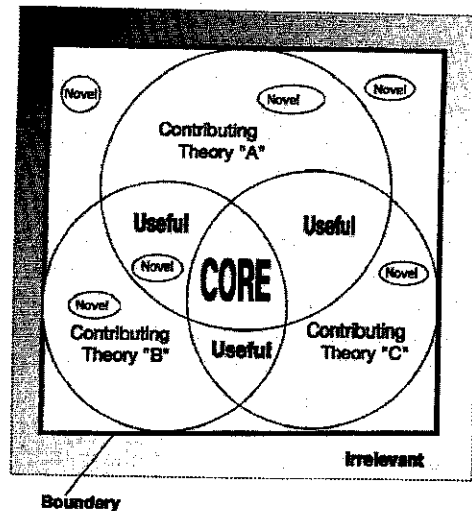
FIGURE 4:   Theory Framework for Applied Disciplines: Boundaries, Contributing, Core, Useful, Novel, and Irrelevant Components

The six components of the theory framework for applied disciplines are:

* *Boundary* of the theory for an applied discipline
* *Contributing* theory for an applied discipline
* *Core* theory for an applied discipline
* *Useful* theory for an applied discipline
* *Novel* theory for an applied discipline
* *Irrelevant* theory for an applied discipline

As a preface to the discussion of Figure 4 and its components, it is useful to note again that there can be alternative developed theories within any discipline—rivals if you will. And, it is important to note that Figure 4 represents a snapshot in time. Theory development in applied disciplines is a continuing process. As new research and practice information emerges and is considered, new snapshots result. The theory in applied disciplines is not static.

Description of the Theory Framework Components

Each of the six theory components for applied disciplines is described below. These descriptions establish the purpose and features of each component.

Boundary of the theory of an applied discipline. The boundary of the theory of an applied discipline is established by specifying its name, definition, and

purpose along with assumptions or beliefs that conceptually frame the theory and practice of that discipline.

Contributing theories for an applied discipline. The contributing theories are selected theories that fundamentally address the definition, purpose, and assumptions undergirding an applied discipline.

Core theory for an applied discipline. The core theory of an applied discipline is the intersection and integration of the contributing theories that operationalize the definition, purpose, and assumptions of an applied discipline.

Useful theory for an applied discipline. The theory of a phenomenon that is outside the core theory of an applied discipline and within the intersection of two contributing theories that has utility in explaining an important realm of practice within the discipline.

Novel theory for an applied discipline. The theory of a narrow phenomenon that is related to an aspect of the applied discipline under consideration that could logically provide an unusual explanation of how the phenomenon works.

Irrelevant theory for an applied discipline. Any theory that falls outside the theory boundary, contributing theories, core theory, and useful theory of the applied discipline under consideration with no compelling evidence as to its usefulness or logic supporting its potential for a novel contribution.

Relationships Between the Theory Components

Having briefly described each of the six theory-framework components, the purpose of this section is to discuss the six components and the relationships between the components as a means of creating a deeper understanding of the theory framework.

Honing the six theory-framework components is an iterative process. Developing and testing a single component in context of the others will advance a theory as it continues to evolve. Iterations of component refinement should have an eye toward harmonizing and articulating all six of the theory components. In the spirit of Weick's (1995) discussion as to the nature of theory, each theory framework component—when pursued—is an approximation of a theory and the interim developmental struggles. He goes on to say that "theorizing consists of activities like abstracting, generalizing, relating, selecting, explaining, synthesizing, and idealizing" (Weick, 1995, p. 389). In a related vein, Osigweh (1989) presents a detailed discourse on concept formation and concept stretching—climbing and descending a ladder of abstraction—that parallels journey through the theory framework components.

Boundary and Irrelevant Components

Two essential components of the theory framework for applied disciplines include the boundary of the theory component and the irrelevant theory
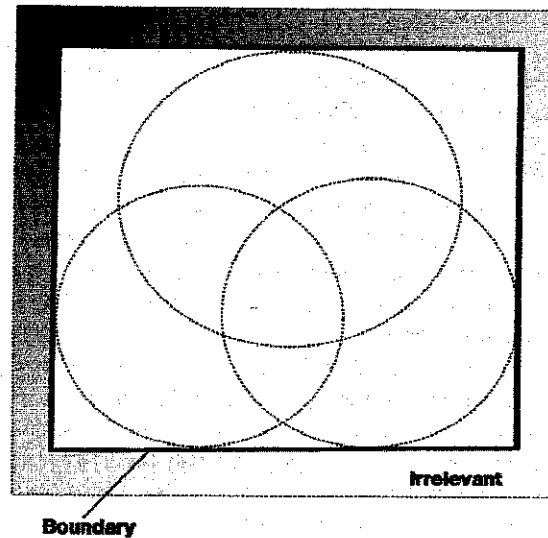
FIGURE 5:   Theory Framework for Applied Disciplines: Boundary and Irrelevant
             Theories

component. These are illustrated in Figure 5. The demarcation between the
two establishes what is potentially in and what is out of the applied discipline
and represents a fundamental decision. This first framework task mirrors Jim
Collin's (2005) analysis of organizations advancing from good to great that
require disciplined people, disciplined thought, and disciplined action. The
bold boundary line in Figure 5 visualizes that disciplined demarcation. It is
purposefully not a dotted or permeable line. Yet, over time, with new learning
from research and practice, the boundary line can change.

   Clearly, many of the messy arguments within applied disciplines that
attempt to satisfy the scholars and the practitioners find that setting this bound-
ary is a contentious realm. Imagine if you are in the discipline of criminal jus-
tice with policing as a major realm of practice. Some could argue safety as the
outcome, some could argue community building as the outcome, and others
could argue safety as the outcome with community building as a means to that
end. Each of these perspectives could be developed into complete alternative
theories of the criminal justice discipline.

   As noted earlier, the boundary of the theory of an applied discipline is
established by specifying its name, definition, and purpose along with
assumptions that conceptually frame the theory and practice of that disci-
pline. Theory development scholars in applied disciplines talk passionately

about the importance of understanding the research and practice of the field. Boundary setting calls upon both. Drawing upon one's reservoir of knowledge and experience shapes the boundary response. While choosing (or affirming) the name of a discipline and defining it are fundamentally important, it is important to acknowledge that these acts are necessarily imbedded in the valued knowledge and experience of the theorist.

As a person dedicated to the HRD profession for almost 40 years, there has been an evolution of knowledge and experience that has led me to the following definition: *HRD is a process of developing and unleashing human expertise through training and development and organization development for the purpose of improving performance.*

Each word and set of words is deeply rooted in formal knowledge and experience and my personal knowledge and experience. Examples include: the notion of HRD as a process, not profession or organizational function; the notion of human expertise, not just knowledge; the notion of systems/ organization, not just individuals; and the notion of performance as a purpose that is of value to both the organization and the individual. These points and others evolved and meshed into a functional HRD definition that serves to establish disciplinary boundaries.

Early in my career I was committed to career development as a primary component of HRD. In the 1970s and 1980s, I had a chance to become very familiar with career development programs sponsored by General Motors and Honeywell. They were excellent. The economy changed, the implicit lifetime employment contract with workers dissolved, and company-sponsored career development programs disappeared. Some career development programs remain in companies, but they are mostly career management programs for meeting company objectives, not individual employee objectives. Conceptually I removed career development from HRD and gave it to adult education. Adult education is a discipline that focuses on individual development, not the organization or system. This fundamental shift in my definition and boundary of HRD came from the practice side, not the research side of the discipline. This dynamic struggle is representative of the process of harmonizing research and practice in applied disciplines.

Boundary assumptions help moderate and extend the interpretation of word choices made in the definition and purpose of the applied discipline. In this HRD example I am using, I put forth the following HRD disciplinary assumptions:

1. Organizations are human-made entities that rely on human expertise in order to establish and achieve their goals.
2. Human expertise is developed and maintained through HRD processes for the mutual long-term and short-term benefits of sponsoring organizations and individuals involved.
3. HRD professionals are advocates of individual, team, work-process, and organizational integrity.

These assumptions were deemed to be very critical in communicating to scholars and practitioners the human aspects of my HRD definition and purpose. The ideas of organizations and performance are often wrongly interpreted as proxies for oppression and exploitation and these assumptions are an attempt to lend intended interpretation of the definition and purpose of HRD.

The polar opposite response to setting boundaries for HRD has been a refusal to define HRD (Lee, 2001). Support for this position invokes the limitations that boundaries impose with the argument that the field is still evolving or ever evolving, and therefore it is futile to take on the boundary challenge. I contend that this refusal to engage maintains a state of disciplinary immaturity.

Boundary and Contributing Components

Identifying the contributing theory realms for an applied discipline is an exercise in intellectual focus and restraint. The inclination is to embrace multiple theories, big and small, into a theoretical toolbox. This strategy results in a hodgepodge of potentially useful theories that has little utility in clearly framing or advancing the discipline itself. It is important to note that any theory that is useful in addressing a specific problem in an applied discipline has a place somewhere in the theory framework, but not at this level. The contributing theories are selected theories that fundamentally address the definition, purpose, and assumptions undergirding an applied discipline.

Fundamental contributing theories are graphically illustrated in Figure 6 as circles within the boundary. The challenge is to identify the two to five fundamental contributing theories domains that are essential in helping to explain the essential phenomena of the discipline as set out in the boundary definition, purpose, and assumptions. For the HRD example, a broad theory realm of psychology was judged to be appropriate and the narrower realm of Gestalt psychology as not appropriate.

The two to five selected contributing theory realms should be fundamental to the applied discipline, but they do not need to be equal in importance. One or more can dominate. Figure 6 illustrates three fundamental contributing theory realms with the largest contributing theory being theory "A." For HRD, I have identified psychological, economic, and systems theories as the three fundamental contributing theory realms (rival HRD theory descriptions will have other choices). The selected contributing theories and their integration are proposed to serve as the theoretical basis of the HRD discipline. These three theory realms, more than others, were believed to address the HRD definition, purpose, and assumptions. They also addressed HRD aspects of people, people interactions, organizations, performance, learning, expertise, work systems, system, and change. The three selected contributing theories consider how humans function, how systems function, and how the economy
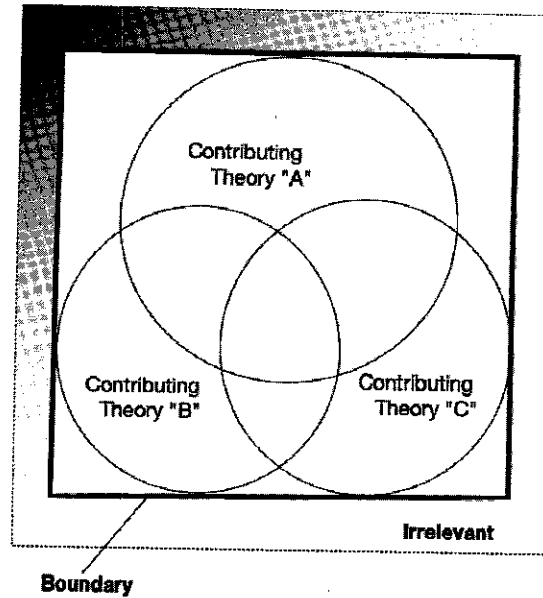
FIGURE 6:   Theory Framework for Applied Disciplines: Contributing Theories

functions. Once selected, the three theory realms are uniquely integrated to further clarify the boundary definition, purpose, and assumptions of HRD.

Carefully rejecting attractive, but less appropriate, theory realms for inclusion as fundamental contributing theories is a bold step. The anticipated clarity and power from integrating the chosen contributing theories helps in rejecting alternative theory realms. In the HRD example, sociological theory was rejected because in many ways sociology is already a form of integration of the three selected theory realms and exists for the purpose of understanding existing groups, not necessarily for the purpose of developing systems or individuals. This rejection was done with the realization that specific sociological theories and tools have great utility for specific aspects of HRD and that can be called upon as useful theories.

An example of falsely limiting the contributing theories is the organizational reengineering movement of the early1990s (Hammer, 1990; Hammer & Champy, 1993). This organizational change strategy was based on elementary systems theory with economic theory overtones and a total disregard for psychological theory. I predicted the widespread failure of reengineering in organizations and they great majority did fail (Swanson, 1993). The contributing theories to organizational reengineering we not inclusive enough to match the organizational complexities it purported to advance.

In the academic world, it seems as though scholars are inclined to include too many contributing theories to their applied discipline, whereas practitioners are often guilty of including too few.

Useful and Core Components

Identifying useful and core theory for an applied discipline is the pinnacle defining aspect of the theory framework. Careful selections of useful theories within each contributing theory realm is based on (a) the mindful understanding of the established boundary and (b) understandings as to the intellectual and functional interactions between the selected contributing theory realms. Cohen (1991) advises that such "application always requires judgment and clinical insight in addition to theoretical knowledge" (p. 332).

Figures 6 and 7 illustrate the contributing theory realms as overlapping into a Venn diagram. The overlaps in the Venn diagram visually create the components of core and useful theory. Useful theory for an applied discipline is based on two to five specific selected subtheories from each of the contributing theory realms. These selections within any one contributing theory realm should fundamentally address the definition, purpose, and assumptions undergirding an applied discipline. The overlaps among the specific contributing theories inform all six of the theory framework components.

The core theory of an applied discipline is the intersection and integration of all the selected contributing subtheories and conceptually explains the
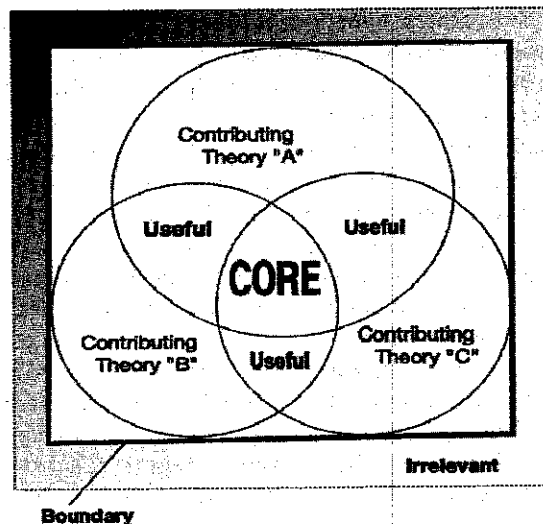
FIGURE 7:   Theory Framework for Applied Disciplines: Core and Useful Theory

definition, purpose, and assumptions of an applied discipline. This is the heart of an applied discipline. It calls upon multiple theories and their unique integration for understanding how the discipline works. The core theory proposition is that the integration of the pure intersection of the contributing theories represents the essential theory of the applied discipline.

Useful theory for an applied discipline is the theory of phenomena outside the core theory and within the intersection of two or more selected contributing theories. Useful theory has the capacity to explain selected important realms of practice within the discipline, but not the applied discipline as a whole.

In a similar manner, Korte (unpublished manuscript) illustrates the integration on multiple theories within an applied discipline for the purpose of establishing the core theory (see Figure 8).

In the HRD example, there are three contributing theory realms: psychology, economics, and systems. The selected specific theories within each contributing theory realm and the theory propositions for each are as follows:

Contributing theory of psychology
- Gestalt psychology theory: HRD must clarify the goals of individual contributors, work-process owners, work teams, and organization leaders.
- Behavioral psychology theory: HRD must develop the knowledge and expertise.
- Cognitive psychology theory: HRD must harmonize the goals and behaviors among individual contributors, work-process owners, work teams, and organization leaders.
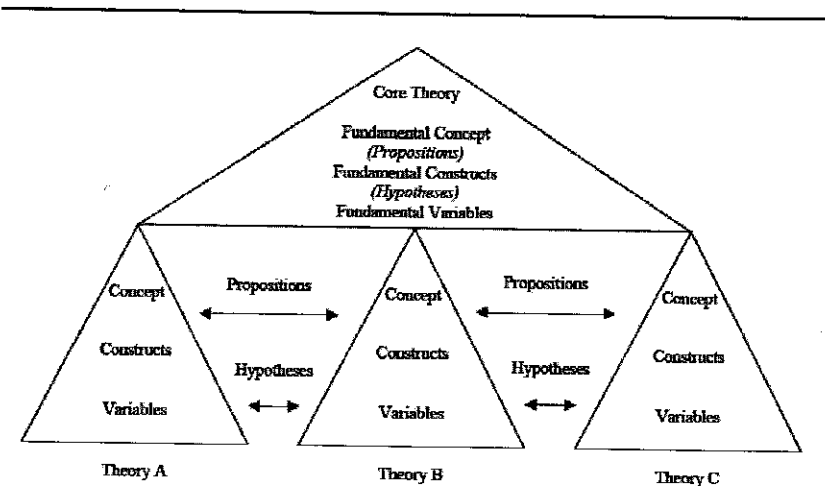
FIGURE 8: Formulating a Core Theory of a Discipline by Integrating Component Theories
SOURCE: Adapted from Bacharach (1989).

Contributing theory of economics
- Scarce resource theory: HRD must justify its own use of scarce resources.
- Sustainable resource theory: HRD must add value to creating long-term sustainable economic performance.
- Human capital theory: HRD must add short-term and long-term value from investments in the development of knowledge and expertise in individuals and groups.

Contributing theory of systems
- General systems theory: HRD must understand how it and other subsystems connect and disconnect from the host organization.
- Chaos theory: HRD must help its host organization retain its purpose and effectiveness given the chaos it faces.
- Futures theory: HRD must help its host organization shape alternative futures.

Novel Theory for an Applied Discipline

Novel theory is defined as the theory of a narrow phenomenon that is related to an aspect of the applied discipline under consideration that could logically provide an unusual explanation. In that applied disciplines must hold court in both the scholarly and practitioner worlds, it must remain agile. In talking about organizational and management theory, Van de Ven (1999) noted the argument that "organizations are dynamic, nonlinear, and pluralistic" (p .120).

The demands of practice and inclusion of any theory, no matter how novel, is a healthy characteristic of an applied discipline. The continuing recognition of the challenges coming from practice and the search for solutions—with or without theory—is simply the way it is. With research and theory, novel responses can more quickly be discarded or integrated into the theory framework. Figure 4 illustrates novel theory as being relatively small in overall importance to the discipline and potentially falling anywhere within the boundary component. Without the theory and research, fringe novel theories can overrun applied fields of practice that do not have a theory framework to value and judge their appropriate status.

One More Time: Irrelevant Theory for an Applied Discipline

Irrelevant theory is any theory that falls outside the theory boundary, contributing theories, core theory, and useful theory of the applied discipline under consideration with no compelling evidence as to its usefulness or logic supporting its novel potential.

Utility of the Theory Framework for Advancing an Applied Discipline

Most applied disciplines have numerous paradigms explaining their disciplinary purpose and features. Although paradigms are useful worldviews

communicating general perspectives (Lincoln, 1985), they have limitations. Paradigms communicate and guide, but they are weak in terms of explanatory power.

The utility of the theory framework and its six components—fully pursued—provides the mental scaffolding for the structural advancement and articulation of the theory of an applied discipline. This is an important contribution in that most serious thinkers in applied disciplines have primarily relied on inadequate means to do their theorizing—persuasive arguments supplemented with paradigms of graphic models to advance their disciplinary understanding.

It is fair to say that theory development research methodology is ominous, if not oppressive. Take a look at Dubin's (1969) or Cohen's (1991) theory research methodologies if you have doubts. Leaders and scholars of most applied disciplines usually respond in the following ways:

1. Do not engage in theory development research. The void of theory research in most applied disciplines is obvious to most consumers of the literature.
2. Choose small or disciplinary subset phenomena and engage in an extensive program of research in that realm. An example here is Chermack and Burt's (in press) concentration on the focused area of scenario planning through an extensive dedicated program of theory research.
3. Go directly to the reflective practitioner audience through popular books. The classic model here comes from Harvard publishing a nonrefereed journal article in the *Harvard Business Review* and conveniently following it with a full-blown book from Harvard Business Press. This common strategy by consultants and publishers bypasses the demanding theory development research way of explaining phenomena.

The theory framework for applied disciplines provides an important disciplined means of gathering and synthesizing the fruits of research and experience for advancing an applied discipline. The theory framework provides wholeness to developing and connecting the components. The theory framework does not replace the theory development journey described through Lynham's (2002b) general method of theory building research in applied disciplines and other prescribed theory research methods. For example, as Chermack and Burt's scenario planning theory research continues to develop and mature, it could ultimately be viewed by HRD as a useful or contributing theory.

Conclusion

The purpose of this article was to present a theory framework for applied disciplines to help scholars and practitioners think about a holistic framework for the theory of an applied discipline and the core, useful, novel, and irrelevant theory within it. There has been an effort at describing the features of each of the six theory framework components. One limitation in this presentation is the absence of definitive quality standards for the theory framework components and their relationships.

The next step is test the capacity of the theory framework for applied disciplines to deliver on its purpose. This can be achieved by applying it across numerous applied disciplines for the purpose of affirmation or revision.

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