Facilitators and inhibitors of the transfer of knowledge between scientists and practitioners in human resource management: Leveraging cultural, individual, and institutional variables

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Available online: 10 Sep 2010
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Facilitators and inhibitors of the transfer of knowledge between scientists and practitioners in human resource management: Leveraging cultural, individual, and institutional variables

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Industrial-organizational psychologists in university settings and human resource managers in organizational settings comprise “two solitudes”. The psychologists toil at discovering theory and data to enable managers to increase an organization’s effectiveness. The managers are either unaware or unconvinced of the value of psychological theory and research. Eight prescriptive ways are suggested to facilitate reciprocal learning between these two solitudes. A triadic framework is discussed for removing the inhibitors that currently maintain the two solitudes.

Transfer of learning is a century-old problem in the behavioural sciences (Baldwin & Ford, 1988; Latham & Seijts, 1997). In organizational settings the problem is one of ensuring that the knowledge and skill acquired by trainees are applied effectively on an ongoing basis on the job. Among the solutions is the use of identical elements (Thorndike & Woodworth, 1901), common principles (McGehee & Thayer, 1961), and goal setting (Locke & Latham, 1990).
In the political arena, MacLennan (1945) coined the term “two solitudes” to describe Quebec and the Rest of Canada (ROC). This is because what he labelled as two collectives have protected and enhanced two distinctly different cultures, languages, and institutions within the same country; they have set mutually exclusive goals; and they have minimized communicating with, learning from and understanding one another. As a Canadian psychologist and a Canadian Vice President of Human Resources, we use the metaphor, two solitudes, in this paper to describe what has occurred in the latter half of the twentieth century between the scientists and the practitioners of human resource management.

As theory and empirically derived knowledge in industrial-organizational psychology have accumulated, transfer of learning between two solitudes has become an ongoing concern. The two solitudes are the organizational psychologists who toil at discovering theory and data to enable human resource managers to increase an organization’s effectiveness versus the human resource managers who are either unaware or unconvinced of the value of organizational psychology theory and research. Worse, many human resource managers are aware that many academics are not interested in pursuing topics that need answers in order for organizational decision makers to increase an organization’s effectiveness.

The purpose of this article is to suggest prescriptive ways to generate reciprocal learning between these two solitudes. The goal is similar in principle to that of transfer of learning, namely ensuring that the knowledge and skills discovered by industrial-organizational psychologists are applied on the job by human resource managers. The goal is dissimilar in that there is the reciprocal need of ensuring that the issues confronted on the job by human resource managers influence the research of the scientists who study human resource management practices. To accomplish this goal we looked back at the last quarter of the twentieth century as to what we perceive facilitated and hindered transfer of learning between the two solitudes. Reference is made to the Weyerhaeuser Company, where the first author, now an academic, had the title of staff psychologist. We used this retrospective examination to suggest what should facilitate transfer of learning so as to eliminate the two solitudes in the first decade of the twenty-first century. In doing so we also reference a second organization, namely, J. P. Morgan, where the second author, who is not an academic, was Vice President of Human Resources Management, Canada. The article begins with a presentation from the perspectives of the human resource manager and scientist of facilitators and inhibitors to the transfer of learning of which one category is cultural, three are person related, and four are institutional. The article concludes with a discussion of a triadic framework for bringing about reciprocal learning so that the inhibitors that maintain the two solitudes in the science and practice of human resources management disappear.
FACILITATORS AND INHIBITORS OF TRANSFER OF LEARNING

Culture

1. Set mutually interdependent goals. The two solitudes have been maintained, in part, by mutual distrust. Many academics throughout the twentieth century gave the impression implicitly, if not explicitly, that they had failed personally when their doctoral students chose a career in business or government rather than in a university setting. Many psychology departments and business schools continue to the present day to measure their influence in part by the perceived prestige of the universities who hire their doctoral students. Thus, the knowledge, skills, and abilities of these graduates remain primarily within the confines of a university rather than transferred to a business setting. Subsequently, many human resource managers continue to view academics as people who lack experience in industry and thus are incapable of making a meaningful contribution to society in any setting other than a university.

Adding to this problem is that members of both solitudes view each other as pursuing self-serving interests. This is due largely to cultural differences. The academic is seen by industry members as wanting to pursue narrowly defined issues that will affect an easily measured dependent variable, and hence lead to a publication; the human resource manager is viewed by many academics as wanting to pursue broadly defined objectives that will affect a fuzzily conceived “bottom line” and hence will lead to a salary increase or promotion. Working together can jeopardize the attainment of both goals—a rational reason perceived by both parties for maintaining the two solitudes.

A solution for overcoming this distrust is to set mutually interdependent goals. Two facilitators for the setting of interdependent goals are for members of both parties to be members of the same team, and for their effectiveness to be measured on the same yardstick. For example, the first author joined the American Pulpwood Association upon completion of his master’s thesis, and he joined the Weyerhaeuser Company upon completion of his doctorate. That the thesis and dissertation were sponsored by and conducted within these two respective organizations facilitated research support. And that the thesis/dissertation committees, organizational decision makers, and journal editors agreed on the relevance of the dependent “bottom line” measures (employee productivity) minimized suspicion that one solitude was being exploited by another. Further, the first author’s thesis adviser was hired as a consultant to the American Pulpwood Association; his dissertation adviser was hired as a consultant to the
Weyerhaeuser Company. The value that human resource management placed on finding proven ways to increase employee productivity coincided with the researcher’s value to do publishable research. Values influence what people do.

**Person variables**

2. **Stop, look, and listen; be seen as a team player.** “Are we doing this project for the academician or for the company?” This question has been asked on numerous occasions by numerous human resource managers. The suspicion is frequently due to researchers taking the initiative to attack issues that they believe need to be resolved. Such questions subside when researchers in organizational settings learn to listen first, and speak second. There is an art to becoming “proactively reactive” to organizational needs. It is accomplished by stopping to hear the concerns of organizational decision makers before making suggestions. This can lead researchers to being invited to join ad hoc teams that are formed to problem solve a question of concern to one or more members of senior management. “What does one logging crew do that results in high productivity while another crew goes out of business?” (Latham & Wexley, 1977); “How can we increase their productivity?” (Latham & Kinne, 1974; Latham & Locke, 1975; Ronan, Latham, & Kinne, 1973); “How can we motivate engineers/scientists to achieve excellence in the eyes of line management?” (Latham, Mitchell, & Dossett, 1978); “I can step on more mountain beaver than those employees can catch. What can we do about those people?” (Latham & Dossett, 1978).

It is difficult to hear the question or concern of human resource managers, see the contextual issues, know who is the primary person who is asking the question, offer suggestions, and subsequently receive an invitation to join the team unless the researcher is a member of the organization where the issues arise, a group member who is evaluated by the same senior manager on the same criteria as every other member who is on the team. To this day the first author has found it easier to conduct field research while he was an employee of the American Pulpwood Association and Weyerhaeuser than he has as an employee of a university. As an outsider to organizations, he proposes ideas that he hopes some decision maker in some organization will find of interest; as an organizational insider he responded to concerns that he knew one or more key decision makers wanted/needed answers. At J. P. Morgan, a former professor in a university was subsequently employed for years as a managing director. In that capacity he mastered the art of “leading from behind”. He did this by sitting literally at the table where J. P. Morgan’s senior management voiced their concerns; he massaged those issues and proposed solutions that took into
account Morgan’s culture and the institutions and people who influence and are influenced by it. Similar roles are occupied full time by behavioural scientists in organizations such as General Electric, IBM, Microsoft, and State Farm Insurance.

3. Find a champion who is an influential member in the other solitude. The research question becomes important, the research process is seen as doable, and the results are quickly implemented when there is a champion of the academic’s research who is a member of the other solitude. The organizational champion must be an individual who has a fundamental respect for data. The champion must value facts rather than hunches or intuition to unanswered issues that affect the organization’s effectiveness. A desire for data usually leads to an appreciation for empirical research.

Human resource managers at companies such as J. P. Morgan also want champions from the behavioural sciences to keep them informed of leading-edge knowledge that will enable them to compete effectively with rival organizations. Close alliances exist with behavioural scientists who keep human resource managers informed of “sound” research findings. To form such alliances across the two solitudes, however, requires the ability to communicate effectively.

4. Become bilingual. An inhibitor to removing barriers between the two solitudes is language. Human resource managers view many academics as having mastered the language of obfuscation. Academics are perceived as making seemingly straightforward explanations complex. They are seen as confusing the words “quality” and “precision” with that of “hard” and “abstruse”. Consequently, academics make it easy for nonacademics to ignore them. Adding to their self infliction, many academics buttress their conclusions with statistical techniques, the appropriateness of which they, on many occasions, cannot agree on among themselves. The final coup de grâce to their lack of credibility with human resource managers is that even the most straightforward conclusions are hedged within contingencies, boundary conditions, and a perceived whining for the need for “more research”. In short, the research community is for the most part uniform and consistent in their treatment of diverse audiences. They are in a word, unilingual.

To become understood and credible in Weyerhaeuser, the first author stopped doing “research” and started doing “projects”. He stopped doing “measurement”, and he started “documentation”. He stopped advocating “the need for further research” and started talking about “the need for additional ideas”. He no longer presented a statistical analysis; he always showed a graph. He no longer discussed the necessity of a control group; he always showed what failed to occur with comparison others. For example,
when crews who set specific high productivity goals had lower performance than they had prior to setting them, a graph documented how productivity was significantly worse among the crews who failed to set goals. The graph also showed how hurricanes and floods can be a boundary condition, a moderator variable, and a situational constraint.

Similarly, at J. P. Morgan, the academics to whom attention is paid are those researchers who have unique ways of phrasing and presenting things in memorable ways. They use language that captures the attention and imagination of the organization’s decision makers without concern for the precision required by a scholarly audience.

Human resource managers too must become bilingual if they are to achieve their goal of joining their respective organization’s strategic management team. To do this they must move beyond traditional administrative duties. They must possess leading-edge knowledge and skill in the behavioural sciences to move organizational strategy to employee action steps. They must therefore know how to redefine employee attitudes and behaviours with the ongoing reassessment by senior management of organizational priorities. They must know ways to bring about employee embracement of innovation on all fronts—not just to adopting new technology, but also to organizational structures, management strategy, and innovative human resource practices that are needed to make the new technologies work. Failure to adopt these complementary innovations means failure to realize the productivity potential of the new technologies. And failure is likely if human resource managers can neither understand nor be understood by their counterparts in the scientific community. Canada is currently ranked number one in the world on the Human Development Index developed by the United Nations to measure well-being, yet Canada’s employee productivity is weak relative to other nations in the economic Group of Seven (Public Research Secretariat, 1996). If Canada’s human resources are to become competitive in a global economy, human resource managers must learn to communicate with the behavioural scientists who study those resources. The probability of this occurring is likely to increase if members of both solitudes are evaluated in their respective institutions on their ability and motivation to do so.

Institutional

5. Measure the desired behaviour. “That which gets measured gets done” is a maxim attributed to the late Mason Haire. Measurement conveys cogently what an organization truly values versus what it states it values. Academics are measured annually on their number of publications in top-tier journals. Little or no reward is given to them for publishing in outlets read primarily by practitioners. Consequently, most academics publish their
research almost exclusively in outlets that are read primarily by their peers. Similarly, human resource managers are rarely, if ever, rewarded for speaking to or writing for a scholarly audience. Consequently, they seldom do so. Thus, written communication between these two solitudes is minimal.

Feedback moderates goal setting (Locke & Latham, 1990). To foster commitment to a goal to maximize communication between the two solitudes, people must be rewarded. Universities must value and hence measure the number of publications that academics have in practitioner outlets. Similarly, human resource managers who speak to scholarly societies must be rewarded by their organization for doing so. The benefit for organizations such as J. P. Morgan is an increase in the probability that academics will study systematically issues of primary importance to organizations rather than to journal editors. Human resource managers, in turn, should be measured on the extent to which they are aware of and implement leading-edge ideas from the academic sector. This will not only benefit the organization, it will minimize technical obsolescence on the part of the manager.

Throughout the latter half of the twentieth century, many top scholars in psychology departments and business schools eschewed teaching in the university’s executive programs. The faculty who did so were seen as inferior scholars. At the dawn of the new millennium, this cultural value has changed dramatically. Many deans of business schools, in their quest for financial sources of revenue, now measure faculty on the ability to teach effectively in executive programs. It has become a core competency in the hiring and granting of tenure to faculty. Faculty in those institutions now work on communication skills that will enable them to disseminate their research findings in ways that will be understood and subsequently implemented by an audience of executives. Education is critical for understanding and appreciating ideas different from one’s own.

6. Educate the other solitude. Many universities in the latter half of the twentieth century, especially business schools, have done much to facilitate the transfer of learning from the behavioural sciences to organizational decision makers. They have done this through human resource management and organizational behaviour courses required of MBA and Executive MBA students to earn their degree. The result has been the hiring of people with an MBA by organizations such as J. P. Morgan to lead their respective organization’s human resource management departments.

As a former assistant dean of executive education, the second author formed partnerships between the business school and asundry industries. The common thread among these partnerships was inculcating leadership skills to enable the building of teams that can develop and implement
customer driven strategies in financially profitable ways. The participants in
these programs were influential leaders in their respective organizations.
They also influenced the research of the academics who taught them (e.g.,
Daghighi & Latham, 1996; Latham, Daghighi, & Locke, 1997).

A remaining step is for organizations such as J. P. Morgan to
systematically educate academicians. The pursuit of answers to questions
of importance to organizations can be outsourced to psychology depart-
ments and business schools. Before this can be done effectively, academi-
cians need to be educated by companies on the genesis of an issue as well as
the culture, people, and institutional factors that surround it. The likelihood
of productive collaboration will increase as people from both solitudes are
educated by the same institutions to think and communicate in similar ways.

7. **Fund collaborative problem solving.** The institutional setting from
which funds are provided influences the research that is conducted. In
Canada, research funding comes almost exclusively from the Federal
government (e.g., Social Sciences and Humanities Research Council of
Canada—SSHRC). The grants allow researchers the freedom to pursue
topics of idiosyncratic interest that have been approved by their academic
peers who review the proposals anonymously. Once the grant is received, the
researcher is free to study subject matter different from that which was
proposed as the grant is awarded on the perceived probability of the grant
writer doing publishable research that will contribute knowledge to the field.
Alternatively, funding from business should facilitate collaborative problem
solving between members of the two solitudes. In addition, it should
facilitate a thematic orientation that has more permanency and less
researcher idiosyncracy than the current funding from government. It could
support programmatic research in such areas as productivity improvement.
It would thus increase alignment between what human resource managers
want with what human resource researchers do. The alignment between
them would occur primarily on the dependent variable (e.g., employee
attendance, perceptions of justice, customer loyalty, embracement of new
technology). Research creativity would continue in the ongoing discovery of
predictors and independent variables that affect them.

8. **Create heterogeneous virtual teams.** Heterogeneous virtual teams
composed of human resource managers and scientists should increase
alignment on cultural differences in the value placed on time in business
versus business schools. An inhibitor of the transfer of knowledge to
practice is the inability or lack of desire for business to wait for useful results
from the scientific community. Human resource managers, acting on behalf
of their institutions, operate at a faster pace than their counterparts in
universities in the need to improve business practices in an increasingly
globally competitive marketplace. Once an idea is implemented successfully, business instantly looks for other ideas, regardless of the source, in their quest of continuous improvement. Thus, business is vulnerable to the adoption of fads that lack substance. This occurs while academics are systematically nurturing and manipulating narrowly defined hypotheses to test and replicate their validity. Funding from business of heterogeneous teams should accelerate idea generation and thus yield a wider array of methods and techniques to predict, understand, and influence behaviour in the workplace than the current state of government funding of research in Canada. The purpose of these teams would be to test the generality of theories and concepts using increasingly sensitive methodology to yield sophisticated interpretation of complex organizational behaviour in a timely manner. Findings from experiments/simulations with high internal validity could be tested for external validity in business settings. Results from case studies, correlational designs, and field experiments in business would suggest hypotheses to be tested in subsequent laboratory settings before being tested further in organizations (McGrath, 1964). Heterogeneous teams should lead to an increase in systems generated research that looks at the reciprocal determinism among cultural, person, and institutional variables on behaviour in organizational settings as this is the reality in which the human resource managers function; it is the reality in which organizational psychologists, working collaboratively with managers, can make significant research contributions to the human resource management field.

**DISCUSSION**

Bandura (1977, 1986) posited a triadic theory of reciprocal determinism involving cognition, the environment, and behaviour for understanding, predicting, and influencing what people think, feel, and do. Similarly, the transfer of learning between the two solitudes, namely, the psychologists who study human resource management practices while minimizing their involvement in nonuniversity settings, and the human resource managers who make ongoing decisions without reference to psychological theory or empirical research can, be understood, predicted, and influenced using a triadic framework. This framework involves cultural, individual, and institutional variables that are interlocking determinants of one another. Obviously the relative influence exerted by these three interdependent variables will differ in various organizational settings. Nevertheless, planned systematic changes to one or more of them should accelerate transfer of learning between the organizational psychologist and the human resource manager.

An organization’s culture affects and is affected by both the employee and the institutional variables that support it. With regard to people, the
cultural factors that affect the human resource generalists in business versus those that affect their human resource specialist counterparts in university settings are not unlike the differences between European and North American behavioural science communities described by Roe (1998). The reasons can be understood in terms of the institutions in which human resource management is practised versus studied. The natural habitat, the institutional incentives, and the organizational cultures in the two solitudes define their respective work ethic. It is the cultural values of a university regarding academic freedom that enables and encourages psychologists to pursue a topic of interest primarily to them alone; it is the business culture that requires the human resource manager to focus solely on issues relevant to the organization’s overall effectiveness. Consequently, many human resource managers perceive an increase in the rigour of scientific discovery with a decrease in the relevance or interest for them of the question that is being answered. The culture in which they work allows them little or no tolerance for rigorously derived conclusions coached in uncertainty (e.g., “...on the other hand...”). Human resource managers want to “sniff conviction” from the researcher who usually values uncertainty and ambiguity for their opportunities for justifying “more research”.

Cultural differences affect not only the way reality is perceived, they affect the ways in which problems are formulated within the two solitudes, and the respective roles of the human resource scientist versus the human resource manager. Scientific institutions in Canada as well as the United States reinforce a culture that values empirical and objective measurement. The resulting effect on the individual psychologist is evident by the subsequent emphasis given to such micro issues as psychometrically sound selection and appraisal instruments. In valuing data and measurement, psychologists in North America are reinforced by granting agencies and refereed journals for preferring relatively simple models to account for relatively straightforward issues. The North American university culture values primarily theories that are verifiable.

Human resource managers are not necessarily adverse to these issues, but they are more interested and more comfortable than their scientist counterparts with subjective interpretation. Rationalism is as important to them as empirically collected facts. They perceive an academic theory as helpful only to the extent that it explains a phenomenon in an intellectually meaningful way, even if the theory can not be supported or rejected by objective data. They are more interested in complex issues such as the discovery of ways to create a culture in which the very best people can be attracted, developed, and retained to do their very best work than they are in the psychometric properties of a scale that measures an organization’s climate. Whereas organizational psychologists place greater
value on measurement and quantitative analyses and are more analytical than their human resource counterparts in the business community, human resource managers place more value on meaning and qualitative methods, and are more contemplative than their counterparts in the scientific community.

The advancement of knowledge in human resource management can occur through integration of these cultural, institutional, and individual differences. Access to qualitative data obtained easily by human resource managers educated in the behavioural sciences will enrich interpretation of quantitative analyses. Quantitative analyses conducted relatively easily by academics will enable human resource managers to document the extent to which change in organizational settings has occurred, is enduring versus transient, and has brought about the result that was intended.

Through integration, scientists and managers should benefit from a diversity of ideas that will enable them to discuss and develop ideas and methodologies to increase their understanding of behaviour in organizational settings. Thus, transfer of learning can occur reciprocally metaphorically through identical elements, such as a common language as well as common principles. Through reciprocal learning, human resource managers and scientists can change two diverse cultures into a “mosaic” rather than a “melting pot” where there is cultural integration based on a common set of core values as well as mutual appreciation of the differences that maintain the respective cultures of the business community and the business school. This mosaic should lead to a stronger human resource management field in this new millennium than the maintenance of two solitudes in the past one.

REFERENCES


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