Workplace Learning and Performance Improvement in AHRD Journals

Mara Freeman, EunJee Kim, Eunok Alice Kim, Laura Valenziano, Jacqueline Gitonga, and Angela Benson
University of Illinois at Urbana-Champaign

Increasing interest in research on workplace learning and performance provides an ideal opportunity to examine how much research is actually published and to identify the focus of research in HRD. This study involved a content analysis of articles on workplace learning and performance published in the four AHRD journals. Results indicated studies addressing workplace learning and performance accounted for about one-third of all articles published in the AHRD journals.

Keywords: Workplace Learning, Performance Improvement, Content Analysis

Interests of learning and performance improvement in the workplace have been recognized as one of the traditional but distinct areas of HRD both in research and practice of the field. Within the increasing dynamics of the workplace, HRD professionals achieve their goals through maximizing the learner's effectiveness in the current job, facilitating individual mobility and increasing the learner's commitment to the organization by providing personal growth (Hogan & Warrenfeltz, 2003). Considering that the primary function of HRD is to enhance the knowledge, skills, and attitudes of individuals to enable them to perform current and future jobs in view of aiding the organization to achieve its strategic business goals (McGuire et al., 2001), it is critical for HRD to continue to investigate various forms of learning and performance improvement activities occurring in the workplace and reflect them in research-related efforts.

Workplace learning has been defined as the way in which individuals or groups acquire, interpret, reorganize, change or assimilate a related cluster of information, skills and feelings (Marsick, 1987; Watkins & Marsick, 1993). More specifically, some scholars include the processes and outcomes of learning that individual and groups of employees undertake under the auspices of a particular workplace (Holliday, 1998). Also, workplace learning encompasses what learners do rather than focusing solely on what trainers or developers do in organizations (Nadler & Nadler, 1989).

The prestigious professional association in the field of HRD, the Academy of Human Resource Development (AHRD) has been recognized as a community of researchers and practitioners that address new ideas and theories as well as discusses or sometimes debates critical issues in the field of HRD through publications and conferences. The four journals published from the Academy - *Advances in Developing Human Resources (ADHR)*, *Human Resource Development Review (HRDR), Human Resource Development International (HRDI)*, *Human Resource Development Quarterly (HRDQ)*, - present somewhat different characteristics in each journal and have different foci in each issue. However, what these journals have in common is that they address various learning and performance improvement issues in the diverse workplace.

Although a crucial part of AHRD's research agenda, the much regarded research on workplace learning and performance improvement seems to have few efforts that review its status quo. The researchers explored workplace learning and performance articles in the Academy of Human Resource Development journals to provide a map of where we are as a field and to indicate potential future directions for the learning and performance research paradigm of HRD (Gilley & Maycunich, 2000; Gradous, 1989; Jacobs, 1989; McLagan, 1989). With these goals, the purpose of this study was to examine how much research on workplace learning and performance has been published in four AHRD journals in 2004 and two quarters in 2005.

In order to investigate the current status of workplace learning and performance research present in the four AHRD journals, this study employed and modified the framework of Klein's (2002) study, which analyzed empirical articles of performance-related publications in Performance Improvement Quarterly between 1997 and 2000. His study sought to identify the quantity of empirical research articles published, the topics addressed through these studies, the types of methodologies used, the interventions being tested and how the interventions were evaluated.

The research questions guiding this study are similar to those in Klein (2002) and Conn and Gitonga (2004) study in that this study tried to identify the major topics and methodologies appeared in journals of AHRD. This study attempted to identify articles related to the topic of workplace learning and performance in AHRD journals

from 2004 – the first and second quarter of 2005. The researchers analyzed and determined the topics and methodological categories represented in each article. In addition, given the breadth of the HRD field and types of articles published in AHRD journals, the study also sought to examine disciplines/departments the authors represent.

Research Questions

The research questions examined in this study were:
1. How many articles related to workplace learning and performance improvement are found in AHRD publications?
2. What workplace learning and performance topics were most represented in AHRD publications?
3. What methodologies are used?
4. What disciplines/departments do the lead authors represent?
5. What types of organizational settings are represented in the research?

Methodology

This study was grounded in a content analysis as the purpose of this study is to describe the results of a study conducted to determine the focus of research published in the four scholarly journals of AHRD on workplace learning and performance improvement. According to Neuendorf (2001), a content analysis is relying on the scientific method by employing the unit of analysis and/or the unit of data collection. In this study, the units of analysis are the articles in AHRD journals. Neuendorf (2001) presented four types of content analysis, one of which is a quantitative analysis. The goal of any quantitative analysis is to produce counts for key categories, and measurement of the amounts of other variables (Weber, 1990). In either case, this is a numerical process of which it has as its goal a numerically based summary of a chosen message set. In the context of this study, the content analysis approach was qualitative, but the results were quantitative in nature. This study employed the typical process of content analysis research which includes conceptualization, operationalizations, training and pilot reliability, and tabulation and reporting (Neuendorf, 2001).

Articles from AHRD's four journals, *Advances in Developing Human Resources (ADHR), Human Resource Development Review (HRDR), Human Resource Development International (HRDI), Human Resource Development Quarterly (HRDQ)*, were analyzed for this study. Articles from 2004 and the first two issues of 2005 were examined. Book reviews, forums and conference proceedings were not analyzed.

Four doctoral students in the Department of Human Resource Education at the University of Illinois at Urbana-Champaign independently reviewed each article in the selected issues of the four journals, and tabulated their findings. To ensure inter-rater reliability, each journal issue was reviewed by at least two researchers. The researchers then compared their respective article lists. Where differences existed between the researchers' findings, both researchers re-reviewed the article in question, discussed their findings, and made a decision regarding proper categorization.

Prior to this reviewing, the researchers created categories by which to classify the articles. These "keywords" were created by discussing and agreeing upon parameters for the terms "Workplace Learning and Performance". By this method, the following 15 keyword categories were created as seen in Table 1:

Table 1. *Keyword Categories*

1. Work-related Learning	Learning that is closely linked to a work setting and that is formally supported by the organization that has a strategic investment in the training of its employees (ex. professional development, work-based learning)
2. Formal Learning	Learning that is conducted by a educational or training organization and leads to some form of recognized certification such as a degree, diploma, or certificate (ex. a formal mentoring program)
3. Informal Learning	Learning that occurs in everyday life and may not even be recognized as learning by the individual (ex. mentoring, coaching.)
4. Incidental Learning*	Learning that occurs as an unintentional byproduct of some other activity
5. Action Learning*	A process by which a group of people come together to help each other learn from their experiences
6. Experiential Learning*	Learning that occurs when learners learn by doing, and are active in constructing their own knowledge

Table 1. *Keyword Categories (Con't)*

7. Just-in-time Learning*	Training that is delivered when and where learners need it, and allows learning to customize their own learning experiences taking into account their own personal demographics
8. On-the-job Learning	Learning that involves integrated tasks and functions, informal communication, and a team-based work structure (ex. learning at work/in the workplace, training and development in the workplace)
9. Self-directed Learning	Learning that is characterized by the learner independently managing the time and effort that goes into their learning, and independently assessing the quality and products of their learning
10. Transformative Learning*	Occurs when the learner experiences a deep shift in their thoughts, feelings, and actions
11. Quality of Work-Life Learning*	Learning that involves improving the quality of organizational life (ex. a basket-weaving class)
12. Workforce Performance	Occurs when individual and workgroup goals are aligned with corporate goals (ex. team/group performance, holistic organization performance)
13. Human Performance Improvement	A systematic process of discovering and analyzing human performance improvement gaps (ex. organizational development, performance systems)
14. Competency Based Performance	Knowledge, skills, and attitudes that are measured for individual proficiency in a particular task or purpose (ex. evaluation)
15. Others	Not directly related as synonyms – ex. Computer based learning

*No articles were found that fit into these starred categories.

As each researcher reviewed each article, they initially looked for these terms and concepts to determine whether the article qualified for inclusion in the study. If an article did not fit into a more specific category (such as formal or informal learning), it was placed into a broader category, such as workplace performance.

In addition to examining the articles for these concepts and tracking the number of times each category appeared, the researchers classified the methodological category used in each article into one of the following categories:

1. Description – provides information about a specific project, method, course, or intervention with no use of data to draw conclusions
2. Literature Review – summarizes a body of literature as a critique or to draw implications for practice
3. Empirical Research – reports on a research study that used data to draw conclusions
4. Conceptual – formulates or edits an idea, concept, or theory

These categories were adopted from Klein (2002) with the addition of the "Conceptual" category in place of the "Editorial/Commentary" category.

Each researcher also kept note of the disciplines of the main authors of each article. To identify academic backgrounds of scholars who published workplace learning and performance in the four AHRD journals, the following criteria were used. First, only the information of first authors was retrieved. There are often several authors in an article but to give each article an equal ratio of importance and considering key contributions first authors make, the information of the first author were analyzed. Second, in reviewing articles, information about author disciplines is not directly available in many articles. Thus, for consistency, the departments where the first authors are working, instead of disciplines, were included for the analysis. Third, only the current departments where the first authors are working were counted.

Finally, the researchers attempted to categorize each article according to its organizational setting; however, this classification quickly proved difficult in most of the articles due to their conceptual nature, and so this research question was discarded.

Findings

This content analysis research revealed the information on the quantity, the topics, methodological categories of articles, and disciplines/departments of leading authors of articles published in the four AHRD journals in 2004 through June 2005. These data indicate that research studies on workplace learning and performance accounted for 31% of all articles published in the four AHRD journals during this period.

Quantity of articles on Workplace Learning and Performance Improvement in AHRD Journals

A total of 156 articles from 24 issues of the four journals were analyzed and 48 articles were determined to fit the criteria for inclusion in the analysis. Of the 48 articles in the issues of ADHR that were reviewed, 20 articles (41%) were identified as meeting the criteria for inclusion in this study. There were 28 articles in the issues of HRDR that were reviewed. Of these, 11 of the articles (39%) met the criteria for inclusion in this study. In HRDI, of the 51 articles that were reviewed, 6 articles (12%) were selected for analysis. Also, of the 28 articles that were reviewed from HRDQ, 11 articles (39%) were included for analysis. See Table 2 for complete breakdown of publications.

Table 2. *Total Number of AHRD Publications from 2004-June 2005 that Contained Workplace Learning and Performance Research*

	Number of Articles Reviewed	Number of Articles that Fit Criteria	% of Articles that Fit Criteria	% of Articles that Fit Criteria in Each Journal
ADHR	49	20	41% (20/49)	42% (20/48)
HRDR	28	11	39% (11/28)	23% (11/48)
HRDI	51	6	12% (6/51)	12% (6/48)
HRDQ	28	11	39% (11/28)	23% (11/48)
TOTAL	156	48	31% (48/156)	100%

Topics of Workplace Learning and Performance Improvement

The researchers' second research question involved determining what workplace learning and performance topics were most represented in the AHRD publications. After the analyses, it was found that there were 72 workplace and performance topics addressed in the 48 articles published in ADHR, HRDR, HRDI, and HRDQ that were determined to fit the criteria for inclusion in the analysis. As seen in Table 3, the most heavily emphasized topics were work-related learning (16), workplace/workforce performance (10), human performance improvement (10), and on-the job training/learning (8). The data also shows that these topics were most represented in the ADHR and HRDR journals.

Table 3. *Workplace learning and Performance Topics Represented in the AHRD Journals*

Topics	ADHR	HRDR	HRDI	HRDQ	Total
Work-Related Learning	7	3	2	4	16
Workplace/Workforce Performance	8	2	0	0	10
Human Performance Improvement	3	5	0	2	10
On-The-Job Learning	5	1	2	0	8
Total	23	11	4	6	44

Methodological Categories

The third research question of this study asked what methodological categories were most represented in the AHRD journals. Table 4 shows that of the 48 articles identified as meeting the criteria for inclusion in this study, 27 out of 48, (56%) were classified as using a conceptual methodology. Of these, 12 (60%) were in *Advances in Developing Human Resources (ADHR)*, 10 (91%) were in *Human Resource Development Review (HRDR)*, 4 (67%) were in *Human Resource Development International (HRDI)*, and 1 (9%) were in *Human Resource Development Quarterly (HRDQ)*.

Table 4. *Types of Categories Used in Workplace Learning and Performance Articles Published in AHRD Journals from 2004 – June 2005*

	Descriptions		Literature Review		Empirical		Conceptual	
	No.	%	No.	%	No.	%	No.	%
ADHR	0	0%	1	5%	7	35%	12	60%
HRDR	1	9%	0	0%	0	0%	10	91%
HRDI	0	0%	0	0%	2	33%	4	67%
HRDQ	0	0%	0	0%	10	91%	1	9%
TOTAL	1	2%	1	2%	19	40%	27	56%

Of the remaining articles, 19, or 40% of them were classified as using an empirical methodology. Of these 19, 7 (35%) were in *Advances in Developing Human Resources (ADHR)*, 0 (0%) were in *Human Resource Development Review (HRDR)*, 2 (33%) were in *Human Resource Development International (HRDI)*, and 10 (91%) were in *Human Resource Development Quarterly (HRDQ)*.

Only one article was classified as using a descriptive methodology, and it was in *Human Resource Development Review (HRDR)*. Also, only one article was classified as using a literature review, and it was in *Advances in Developing Human Resources (ADHR)*.

Lead Authors' Departments

The researchers' fourth research questions investigated what departments the lead authors of the AHRD publication represent. A variety of departments and disciplines were found. The researchers put the names of the departments and disciplines in the spreadsheet and then categorized them into four groups: HRD/Adult Education, Management/Business/HRM (human resource management), Education, and others. Adult education could be categorized as a part of education not combined with HRD. However, it was found that many authors were from departments that combined HRD and adult education program. Thus, adult education was added to the HRD category in the analysis. The following Table 5 summarizes the results.

Table 5. *Departments the First Authors Represent*

	HRD/Adult Ed.		Management/HRM		Education		Others	
	No.	%	No.	%	No.	%	No.	%
ADHR	13	65%	6	30%	1	5%	0	0%
HRDR	3	27%	5	45%	2	18%	1	9%
HRDI	2	33%	1	17%	1	17%	2	34%
HRDQ	5	45%	5	45%	1	9%	0	0%
TOTAL	23	48%	17	35%	5	10%	3	7%

The majority of scholars that published articles on workplace learning and performance in the AHRD journals were in the fields of HRD/adult education and management/business/HRM. HRD/adult education scholars were the majority (65%) in AHRD and were 27% in HRDR, 33% in HRDI, and 45% in HRDQ.

The departments of management, business, and HRM were another department that published a large amount of articles on workplace learning and performance in the ADHR journals. Researchers from those departments consisted of 45% in HRDR and 45% in HRDQ. Researchers in education/educational technology departments ranked third in all of those journals (10% total). Other departments included department of nursing and department of behavioral science.

Conclusions

The goal of this study was to identify articles on workplace learning and performance in AHRD's journals and examine the quantity and topics of research on workplace learning and performance, the type of methodological categories used, and the disciplines that the authors hailed from. Using the content analysis technique, the four AHRD journals in 2004 and the first and second quarters of 2005 were reviewed.

Four major findings stand out in this study. First of all, results of the study show that recent workplace learning and performance related articles were in the minority of articles published in AHRD's journals (48 out of 156). Considering the fact that AHRD serves academia, business, government and industry professionals, the four AHRD journals need to encourage increased publications in the areas of workplace learning and performance improvement initiatives.

Second, the researchers found that work-related learning, workplace/workforce performance, and human performance improvement were the three main categories of workplace learning and performance improvement found among the 48 articles. Given that the area of workplace learning and performance improvement is quite broad, more research is needed in the less-publicized areas, such as transformative learning and computer-based learning.

Third, to the researchers' surprise, most articles on workplace learning and performance were conceptual. Considering AHRD is a leading scholarly organization that addresses issues related to workplace learning and performance improvements, more empirical studies are needed.

Fourth, it was found that researchers from three major disciplines are publishing the workplace learning and performance articles in AHRD journals: HRD/adult education, management/business/HRM, and education. These results are somewhat expected considering that HRD programs in many institutions have roots in education and that departments of business and management traditionally covered human resources issues. However, taking into account the interdisciplinary aspects of HRD (Swanson, 2001), it might be more beneficial to HRD to pull more

from researchers in a broader variety of disciplines such as industrial psychology, sociology, educational technology, and anthropology. These researchers may be an untapped source for more HRD related research,

Limitations of the Research

There are several limitations associated with this study. First, this study only covered one and half year of articles and so generalized prediction of the trends cannot be drawn from the results. Analyzing longer periods of time would provide readers with a more comprehensive picture of research trends on workplace learning and performance.

Second, only journal articles were reviewed; AHRD international conference proceedings were not included in the analysis. Considering the tendency for papers in conference proceedings to reflect more recent studies, and that only limited numbers of articles are published within the four AHRD journals, caution should be taken in interpreting the results as reflection of the overall research within AHRD.

Thirdly, the organizational settings of the articles examined in this research could not be accurately identified due to the conceptual nature of many of the articles; thus, this classification was not included in the analyses of this research.

Implications of the Research and Contributions to HRD

This study sought to examine the areas of workplace learning and performance that have been studied in the AHRD community by analyzing the four AHRD journals to determine the quantity, topics, type of methodological categories, and departments of the authors of the articles.

The result of this study contributes to human resource development (HRD) in several ways. First, though the study is not exhaustive in analysis of AHRD publications, this study provides a snapshot of scholarly production of the AHRD community. This will help identify future areas of research needed in the field of HRD.

Secondly, the finding that most AHRD articles on workplace learning and performance were conceptual is an indication that more empirical work is needed in the field.

Third, it was expected that most of the researchers that are publishing in the AHRD journals are from HRD fields. Considering the interdisciplinary aspects of HRD, however, the absence of other disciplines need to be considered. In order to develop the field, AHRD should make an effort to pull research interests in HRD from scholars in other fields and collaborate with them as well.

Finally, this study gives a greater understanding of who creates and disseminates new knowledge about HRD through disciplined inquiries. This will help HRD practitioners and scholars become more informed about the AHRD academic community.

Although this study shows an interesting perspective of research in AHRD, the limitations of the study offer several future directions for similar research. Other suggestions for future research include expanding the analyses into related areas, such as the American Society of Training and Development (ASTD) journals and magazines and publications from Strategic Human Resource Management (SHRM), to gain a more comprehensive picture of HRD studies. Finally, it is very important to discover what the topics of the other two-thirds of the articles reviewed in this study were.

References

Conn, C.A., & Gitonga, J. (2004). The status of training and performance research in AECT Journals. *TechTrends. 48(2),* 16-21.

Gilley, J.W., & Maycunich, A. (2000). *Organizational learning, performance, and change.* Cambridge, MA: Perseus.

Gradous, D. B. (1989). *Systems theory applied to human resource development.* (Ed.) Alexandria, VA: ASTD Press.

Hogan, R. & Warrenfeltz, R. (2003). Educating the modern manager. *Academy of Management Learning and Education, 2*(1). 74-84.

Holliday, R. (1998) Wagga Wagga: Charles Sturt University. *EEB 703 Workplace learning. Module 1: Foundational concepts; Module 2: Foundational concepts Topic 3 to 7; Module 3: Facilitating workplace learning.*

Jacobs, R. L. (1989). Systems theory applied to human resource development. In D. Gradous (Ed.), *Systems Theory Applied Human Resource Development* (pp.27-60). Alexander, VA: ASTD Press.

Klein, J. D. (2002). Empirical research on performance improvement. *Performance Improvement Quarterly, 15(1). 99-110.*

McGuire, D., O'Donnell, D., Garavan, T.N., & Murphy, J. (2001). Framing human resource development: An exploration of definitional perspectives utilizing discourse analysis. Paper presented at the Irish Academy of Management Conference University of Ulster, Magee College, 6-7th September 2001.

McLagan, P.A. (1989). Systems Model 2000: Matching systems theory to future HRD issues. In D. B. Gradous, (ED.), *Systems theory applied to human resource development* (pp. 61-90). Alexander, VA: ASTD Press..

Marsick, V. J. (1987). *New paradigms for learning in the workplace. In Learning in the workplace, ed. by V.J. Marsick.* London: Croom Helm.

Nadler, L., & Nadler, Z. (1989). *Developing human resources.* San Francisco: Jossey-Bass.

Neuendorf, K. A. (2001). *The content analysis guidebook*. Thousand Oaks, CA: Sage Publications.

Rummler, G. A., & Brache, A. P. (1995). *Improving performance: How to manage the white space on the organizational chart.* San Francisco: Jossey-Bass.

Swanson, R. A. (2001). *Foundations of human resource development.* San Francisco: Berrett-Koehler Publishers, Inc.

Watkins, K. E. & Marsick, V. J. (1993). *Sculpting the learning organization*. San Francisco, Jossey-Bass.

Weber, R. P. (1990). *Basic content analysis* (2nd ed.). Newbury Park, CA: Sage.