

Cross-Cultural Analysis of HPT

An Empirical Investigation of HPT Competencies in the Workplace in the United States and South Asia

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As globalization and trends such as outsourcing and offshoring continue to dominate the way organizations do business, HPT practitioners are realizing the need to manage procedures, methods and interventions in different regions of the world. Factors such as national culture, differences in business practices, and communication styles are posing challenges for the successful transition of performance improvement initiatives from one region of the world to another (Carey, 1998; Addison & Wittkuhn, 2001). Much of the literature on the effects of culture on human performance centers on the model of national cultures proposed by Hofstede (1980, 1983, 1997) and Trompenaars (1993). Hofstede's study of 116,000 IBM employees in 70 countries led him to suggest that four dimensions—*power distance*, *individualism*, *masculinity*, and *uncertainty avoidance*—could be used to model different cultures. Trompenaars obtained survey responses from approximately 15,000 participants in 47 countries and, to help illustrate average characteristics of managers in various national cultures, proposed six scales: *universalism-particularism*, *individualism-collectivism*, *affective neutral-affectivity*, *specificity-diffuseness*, *achievement-ascription*, and *internality-externality*. The basic assumption of these models is that accounting for the underlying cultural characteristics would enable performance improvement initiatives to be effective in a number of regions. Researchers have proposed designing

Recent research in the areas of human performance technology (HPT), organizational development, and cross-cultural training has suggested the need for developing managerial competencies that are effective in diverse cultural settings. Some competencies such as technical proficiency, knowledge of company systems, adaptability, and the ability to cope have been examined for their suitability in various cultures. However, there have been few efforts to examine the suitability and validity of HPT competencies in cross-cultural settings. This exploratory study investigates the application of HPT competencies across two regions of the world. On the basis of a survey of more than 100 industry professionals, we obtained data indicating the frequency of application of a set of core HPT competencies in the United States and South Asian regions. Findings revealed significant differences between how practitioners in these two regions apply performance analysis, cause analysis, and intervention design and development competencies. Results suggest that cultural differences might be affecting how practitioners in these regions are applying HPT. Possible areas for future studies are discussed.

performance support interventions that are adapted to specific regions on the basis of these cultural dimensions. For example, Sanchez (2000) suggested interventions that include reference to managerial influence and to the vision of the owner/founder would be more effective in cultures with high uncertainty avoidance, while interventions that incorporate systems approaches would be more effective in cultures with high collectivism.

A related point of view in the fields of HPT, organizational development, strategic human resource management, and cross-cultural training suggests that the key to dealing with cross-cultural effects on performance is to identify a set of core, generic managerial competencies and develop personnel who are proficient in these skills. This suggests that these core competencies are generalizable and will be effective wherever they are applied (Bartlett & Ghosal, 1989). In the context of HPT, Kayes, Kayes, and Yamazaki (2005a, 2005b) proposed a set of seven cross-cultural competencies—*valuing another culture, identifying local knowledge, listening and observing, ambiguity coping, translating knowledge, managing unintended consequences, and institutionalizing*—that they deemed essential for managers to successfully function in different cultures. Barham and Devine (1991) found that international managers rated skills such as adaptability, cultural sensitivity, and language proficiency to be crucial for success in multicultural environments (as cited in Harris & Kumra, 2000). In another study, Wills and Barham (1994) interviewed 60 managers from a number of countries and identified a core competency comprising three interlinking factors (cognitive complexity, emotional energy, and psychological maturity) that they determined essential for successful global managers.

These research studies propose two highly divergent views for dealing with cross-cultural performance improvement. One body of research suggests that the key is to adapt certain skills and competencies according to the culture where they are being applied. Another proposes the need for developing certain competencies that enable practitioners to be effective irrespective of the culture in which they are operating. Therefore, from the viewpoint of an HPT practitioner involved with managing performance improvement initiatives globally, it becomes important to examine whether core HPT competencies that have been proposed and used in predominantly U.S. workplaces are similarly effective in other countries and across cultures.

There have been several research studies on HPT competencies, but the majority of the literature deals with defining and identifying competencies for practitioners that are based on such criteria as desired accomplishments, value, and applicability in the industry (Gayeski, 1995; Gilbert, 1978; Spitzer, 1992; Stolovitch & Keeps, 1999). Other studies have looked at how academics and industry practitioners differ in their rating of the usability of certain competencies over others (Fox & Klein, 2003). However, very few efforts have been made to analyze

the suitability and validity of HPT competencies from a cultural perspective.

We attempted to gather data that would illustrate if HPT competencies were “generic” enough to find similar patterns of applicability in two contrasting regions of the world. The focus of this exploratory study was therefore to investigate and compare the effect of culture on application of HPT competencies in two cultures and identify some implications for practitioners operating in those areas.

For making a cross-cultural comparison that would be worthwhile from an organizational perspective, we examined professionals from the United States and South Asian regions (countries such as India, Singapore, and Malaysia). These two regions differ sufficiently from each other on the basis of the modeling indices put forth by Hofstede (1980, 1983, 1997) and Trompenaars (1993). In addition, the two regions are of crucial importance from an economic standpoint; the primary source of offshored work has been the United States and the preferred destination for this type of work has been to countries in South Asia.

A survey was developed to gather frequency of application of HPT competencies by practitioners from these two regions. We also gathered attitudes on the importance of 10 trends related to the fields of HPT, corporate training, and learning to understand if professionals from these two regions differed in their opinions and expectations in the context of some key and emerging trends. We anticipated some differences in South Asian ratings from a potential lack of awareness of the field of HPT and the various terms used by practitioners in United States. We therefore designed the survey to ensure that respondents were provided enough detail regarding each competency to avoid any misconceptions due to lack of understanding of the terminology used.

Method

Participants

A total of 109 participants responded to our survey. Among these individuals, 65 were from the United States and 44 were from South Asia. The participants in this study were professionals involved with training, learning, performance improvement, or similar functions within their organization. We anticipated that it would be unlikely that respondents (especially those from South Asia) would identify their job roles as exclusively dealing with HPT. Therefore we decided to obtain information regarding the participants’ job function to ensure that all respondents were involved with HPT-related job roles. Participants were given the option of selecting more than one job function; 60 respondents selected corporate training as a job function, 45 chose human resource development, 44 picked instructional design, 40 selected organizational development, and 30 people chose human performance technology. A few participants also indicated other areas, including knowledge management,

client relationship management, business process improvement, and learning management systems (LMS) architect.

We also obtained demographic information regarding the participants' years of professional experience within their identified field, the size of their organization (number of employees), and the number of countries in which their organization had a significant presence. In terms of years of experience, the data revealed that 42 percent had more than 10 years of experience in their chosen field, 34 percent reported 6–10 years of experience, and a further 21 percent reported experience ranging from 1 to 5 years. Only 3 percent of the participants reported less than a year of professional experience. In addition, 32 percent of the respondents reported that their organization employed between 100 and 1,000 people, 23 percent reported employee strength between 1,000 and 5,000, another 23 percent reported more than 5,000 people, and 17 percent reported that their organization employed fewer than 50 individuals. Furthermore, 33 percent of the participants reported that their organization had a presence in only 1 country, 41 percent reported a presence in 1 to 10 countries, and 26 percent reported operations in more than 10 countries.

Survey Instrument

A Web-based survey was designed and developed by the researchers and used as the primary data collection instrument in this study. It included 47 selected response items and one open-ended question that participants could use to add additional comments or concerns. The survey comprised four sections.

Demographic Information. This section dealt with the participant's background experience, as well as specific information regarding the organizations. Five questions were used to obtain demographic information from participants (primary job functions, y' professional experience within their identified field, the size of the organization in terms of number of employees, the number of countries in which their organization had a significant presence, and geographic location).

Competencies. This section included 24 Likert-type items that participants used to rate how frequently they applied various HPT competencies on their job. Each Likert-type item consisted of a statement describing a specific skill or competency whose frequency of application was being analyzed. Respondents were asked to choose from a competency application frequency rating of 1 (very rarely or never) to 4 (very often or always).

Intervention Design and Development. This section of the survey comprised eight items that asked participants to judge their use of major categories of HPT interventions on the job. A Likert scale similar to the one employed in the competencies section was used.

Trends. This section of the survey had participants rate the perceived importance of 10 major trends in the fields of corporate training, learning,

and performance improvement. The Likert scale used in this section had ratings ranging from 1 (*not important*) to 4 (*very important or critical*).

Procedures

An extensive literature review of relevant journals, especially *Performance Improvement (PI)* and *Performance Improvement Quarterly (PIQ)* over the past 10 years, was conducted. This was followed by analysis of established training and HPT models that enabled us to identify skills and competencies deemed relevant to professionals in the field. Major phases of HPT models were mapped out, and each phase was systematically deconstructed to yield various action statements that correlated with the competency being assessed. Further, a cross-comparative analysis of the *Handbook of Human Performance Technology* (Stolovitch & Keeps, 1999) enabled us to identify 24 major competencies that were in agreement with the existing literature. A similar procedure enabled us to identify eight categories of HPT interventions. These 32 items were the basis for designing the survey instrument. The generic HPT model followed by the International Society for Performance Improvement (ISPI) presents five major phases that we used to group competencies and interventions: *performance analysis* (seven competencies), *cause analysis* (eight competencies), *intervention design and development* (eight categories of interventions), *intervention implementation and change management* (six competencies), and *evaluation* (three competencies).

A listing of 10 current trends was obtained through interviews with training and performance improvement professionals and a perusal of literature from various sources such as the *eLearning Guild*, *Chief Learning Officer* magazine, ISPI journals, and relevant publications from the American Society for Training and Development (ASTD) over the past two years.

The Web-based survey instrument was designed so that it tracked the participant's IP address and e-mailed the responses to a specified address. The IP address was used to collate the responses. The whole instrument was initially submitted to four training professionals for a review of content relevance, clarity, and accuracy. Because we created action statements to describe the competencies being assessed in the survey, we asked these professionals to review the accuracy and clarity of the definitions. On the basis of the feedback received from these reviewers, we made these major changes:

- ◆ The trends section of the survey was edited so that knowledge management and EPSS were grouped together and strategic analysis was included as an item of interest.
- ◆ The third item in the demographic information section was edited so that respondents were now forced to choose a single location ("What is your primary/regular work location? Check one").

- ◆ In the intervention design and development section, the ordering of instructional and noninstructional performance support interventions was changed so that respondents could identify the differences more easily.

The survey was then pilot tested for a week by 30 individuals spread across the United States and South Asia. This was done to assess proper functioning of the survey instrument and verify the accuracy of data capture. From the tester feedback, we made some minor formatting changes that helped enhance the survey appearance and clarity, and we improved participant comprehension of the survey process.

Once the survey was finalized, three major professional organizations—ASTD, ISPI, and the Human Resources Development (HRD) Gateway—agreed to assist us with our study. Invitations to participate went to members of these organizations through their official monthly newsletters. An invitation was also sent through the newsletter for ISPI certified performance technologists (CPTs). In addition, invitations to the survey were sent to numerous informal networks, associations, and groups through the World Wide Web. The cover letter that introduced the survey had a direct hyperlink to the survey instrument and also gave a brief outline of the research project, its purpose, and its significance. Contact information of the principal researcher was also provided in case participants wanted additional information regarding the study. The cover letters were sent through e-mails that were personally addressed to the target audience. The first page of the survey instrument informed participants that the survey was coded to ensure confidentiality. The 47 questions of the survey were spread across three pages. The participants had to complete one page and submit their responses to be taken to the next page. In anticipation of a follow-up study, we requested participants to submit their contact information if they so wished.

Data Analysis

The competencies in the survey were initially aggregated and analyzed in terms of five major phases: performance analysis, cause analysis, intervention design and development, intervention implementation, and evaluation. Competencies involving intervention design and development were analyzed in terms of respondent's use of the eight categories of intervention on the job. A similar, but separate, analysis was carried out for the 10 items in the trends section of the survey. Descriptive statistics were obtained on responses to the 32 competencies and 10 trends in the survey. Aggregate summaries and mean scores were computed for ratings in the United States and South Asian groups. One-way analysis of variance (ANOVA) was conducted on sections of the survey, with the factor being geographic location with two levels (United States and South Asia). The criterion measure was the participant rating on appropriate competencies. To compensate for the large number of comparisons within each group, we

employed a conservative alpha value of .01 when testing for significant differences.

Results

Competencies

Table 1 shows the average ratings of participants from the United States and South Asian regions for the competencies grouped into the five major phases of HPT. Overall, participants in South Asia had higher average ratings in terms of their perceived application of competencies in each of the five phases compared to participants from the United States.

A one-way ANOVA conducted on each response category revealed significant differences in how professionals in the United States and South Asia rated their on-the-job application of performance analysis ($F [1, 107] = 6.11, p < .001$), cause analysis ($F [1, 107] = 6.39, p < .001$), and intervention design and development ($F [1, 92] = 9.92, p < .001$). No differences were found in the respondents' rating of intervention implementation/change management and evaluation competencies.

Follow-up ANOVAs were conducted on each of the individual items under the three phases of performance analysis, cause analysis, and intervention design and development. We report the results of these analyses here.

Performance Analysis. The competency dealing with identification of "workers' skills, knowledge, capacity, motivation, or expectations with regard to a job requirement" received the highest overall rating (overall $M = 2.92$), while "identify or formulate the vision, mission, or goals of an organization" had the lowest rating (overall $M = 2.34$). Significant differences were observed between participants from the United States and South Asia on four of the seven items in the performance analysis phase (see Table 2). Respondents from South Asia responded more positively than those from the United States on all four significant items. The item dealing with work analysis was observed to have the highest effect size ($R+2+ = .099$) and the one dealing with organizational analysis had the lowest ($R+2+ = .054$).

TABLE 1
OVERALL MEANS ACROSS UNITED STATES AND SOUTH ASIA ON FIVE PHASES OF HPT

HPT Phases	U.S. ($n = 65$)	South Asia ($n = 44$)
Performance analysis*	2.54	2.87
Cause analysis*	2.62	2.99
Intervention design and development*	2.39	2.74
Intervention implementation and change management	2.71	2.88
Evaluation	2.56	2.73

* $p \leq .01$.

TABLE 2
PERFORMANCE ANALYSIS COMPETENCIES ACROSS THE UNITED STATES AND SOUTH ASIA

Competencies	U.S.	South Asia	Overall Mean	R ²
Identify or formulate the vision, mission, or goals of an organization.*	2.13	2.50	2.34	.054
Identify how or where performance should change in an organization.	2.69	3.07	2.88	—
Identify workers' skills, knowledge, capacity, motivation, or expectations with regard to a job requirement.*	2.72	3.11	2.92	.056
Identify stakeholders (such as employees, clients, vendors) that are critical to the success of an organization.	3.02	2.70	2.86	—
Analyze a job to determine if it was structured to help workers achieve optimal performance.*	2.17	2.79	2.48	.099
Identify performance issues or problems at the organizational level and at the department level.	2.72	3.09	2.91	—
Analyze an organization's performance requirements and compare them to the organization's objectives and capabilities.*	2.29	2.80	2.54	.077

* $p \leq .01$.

Cause Analysis. The item dealing with analyzing “whether workers have the necessary skills and knowledge to perform their job” was rated the highest in both regions (overall $M = 2.98$), while the one dealing with determining whether “workers have the incentives, rewards, or consequences that are aligned with desired job performance” received the lowest rating (overall $M = 2.55$). Significant differences were observed between participants from the United States and South Asia on two of the eight items in the cause analysis phase (see Table 3). Respondents from South Asia responded more positively than those from the United States on both significant items. The item dealing with analysis of worker motivation had the highest effect size ($R+2+ = .111$) and the one dealing with analysis of worker capacity had the lowest ($R+2+ = .083$).

Intervention Design and Development. Among the categories, instructional performance support interventions received the highest overall ratings (overall $M = 3.44$), while financial system interventions received the lowest (overall $M = 1.63$). Significant differences were observed between participants from the United States and South Asia on five of the eight items in the intervention design and development phase (see Table 4). With the exception of the item dealing with instructional interventions, respondents from South Asia responded more positively than those from the United States on four of the five significant items. The item dealing with human resource development interventions was observed to have the

TABLE 3

CAUSE ANALYSIS COMPETENCIES ACROSS THE UNITED STATES AND SOUTH ASIA

Competencies	U.S.	South Asia	Overall Mean	R ²
Analyze if workers have the incentives, rewards, or consequences that are aligned with desired job performance.	2.33	2.77	2.55	—
Determine if workers have the required environmental support, resources, or tools to perform their job.	2.66	3.07	2.86	—
Determine whether performance issues occur because of a lack of environmental support.	2.70	2.84	2.77	—
Determine if workers have the capacity to perform their job.*	2.52	3.05	2.78	.083
Analyze whether workers have the necessary data, information, or feedback to perform their job.	2.77	3.02	2.89	—
Determine whether performance issues occur because of a lack of required behavioral skills.	2.83	3.07	2.95	—
Analyze if workers are motivated to perform their job.*	2.32	2.95	2.64	.111
Analyze whether workers have the necessary skills and knowledge to perform their job.	2.84	3.12	2.98	—

* $p \leq .01$.

highest effect size ($R^2 = .148$) and the one dealing with instructional performance interventions the lowest ($R^2 = .065$).

Trends. Table 5 shows the average ratings of participants from the United States and South Asian regions for the trends section of the survey. Participants in the United States rated “e-learning” as the most important trend and “business process outsourcing/globalization” as the least important trend. Participants in South Asia rated “cost-benefit analysis” as the most important trend while “learning standards/interoperability” was rated the least important. The most important trend overall was “strategic analysis” (overall $M = 3.22$).

A one-way ANOVA conducted on each response item revealed significant differences in how professionals in the United States and South Asia rated the importance of 2 of these 10 trends. Respondents from South Asia responded significantly more positively than those from the United States on items related to business process outsourcing and cost-benefit analysis.

Discussion

Results suggest that almost all the HPT competencies surveyed in this study are applied and used on the job by the respondents. The overall mean ratings for the five major HPT phases ranged from 2.39 to 2.71 for respondents from the United States, while it ranged from 2.73 to 2.99 for those from South Asia. These HPT competencies therefore appear to be

TABLE 4
INTERVENTION DESIGN AND DEVELOPMENT COMPETENCIES ACROSS THE UNITED STATES AND SOUTH ASIA

Intervention Competencies	U.S.	South Asia	Overall Mean	R ²
Work design interventions* (job specifications, quality control, ergonomics, etc.)	1.84	2.58	2.21	.146
Instructional performance support interventions* (training, distance learning, action learning, etc.)	3.55	3.13	3.44	.065
Noninstructional performance support interventions (job aids, electronic performance support systems [EPSS], knowledge management [KM], etc.)	2.98	2.52	2.75	—
Human resource development interventions* (staffing and selection, performance appraisals, leadership development, etc.)	2.21	3.12	2.67	.148
Interventions dealing with organizational communication* (information systems, conflict resolution, networking and collaboration, etc.)	2.16	2.91	2.54	.128
Organizational design and development interventions (strategic planning, reengineering, culture and diversity, etc.)	2.42	2.79	2.61	—
Personal development interventions (mentoring and coaching, feedback, career assessment, etc.)	2.62	3.09	2.86	—
Financial system interventions* (financial forecasting, capital investment and spending, mergers, acquisitions, joint ventures, etc.)	1.40	1.85	1.63	.084

* $p \leq .01$.

relevant and to an extent generic, in terms of their applicability in business and organizational development initiatives in South Asia and the United States.

In terms of performance analysis, “identifying the vision, mission, or goals of an organization” had the lowest overall rating among participants from both regions. This is not an especially surprising result; HPT practitioners are arguably less likely to be involved with formulating organizational vision and mission statements, irrespective of region, and it is even less probable that they do it often. The competency involved with “identifying worker’s skill, knowledge, and capacity with regard to a job requirement” had the highest overall mean score, and it was among those rated significantly different between the two regions. Interestingly, this competency was the highest-rated within South Asia but not within the United States. Respondents from South Asia therefore indicated that they are involved more frequently with worker analysis. This trend was also repeated in the cause analysis phase, where competencies related to “analyzing worker motivation” and “analyzing worker capacity” were rated differently between the two regions, with South Asia indicating a higher frequency of using both of these competencies compared to the United States.

TABLE 5
TRENDS ACROSS THE UNITED STATES AND SOUTH ASIA

Trends	U.S.	South Asia	Overall Mean
Learning management systems (LMS)/learning management content systems (LMCS)	3.02	2.85	2.94
Learning standards (AICC, SCORM)/interoperability	2.38	2.53	2.46
Business process outsourcing/globalization trends*	2.05	2.76	2.41
Knowledge management/electronic performance support systems (EPSS)	2.84	3.26	3.05
Return on investment (ROI) metrics/business analytics	2.72	3.15	2.94
E-Learning	3.15	2.85	3.00
Instructional design	3.03	3.00	3.02
Quality assurance/quality control	3.05	3.27	3.16
Strategic analysis	3.02	3.41	3.22
Operating costs/cost-benefit analysis/reduction in operating costs for training*	2.84	3.42	3.13

* $p \leq .01$.

Robertson (2004) notes that skills related to performance analysis and cause analysis phases of HPT are “relationship-driven.” Professionals involved with these kinds of tasks are involved with developing effective relationships with workers and stakeholders, and they are typically responsible for establishing trust with employees and enabling clear and honest channels of communication. It is interesting and worthwhile to observe that the higher use and focus on such employee-centered analysis competencies in South Asia might be related to a key cultural difference between these two regions.

Empirical data from the studies of Hofstede (1980, 1983, 1997) and Trompenaars (1993) indicates that South Asian countries are typically characterized as “high context”, “particularist” or “diffuse” cultures, implying that organizations in these cultures place a high degree of importance on relationships with employees. In such cultures, organizations tend to view increases or decreases in performance to be a direct reflection of the status of the relationship that is maintained with employees (Trompenaars, 1993). Performance objectives and goals are viewed as personal and individual traits (Addison & Wittkuhn, 2001) and are not the only basis for making objective and logical decisions to reduce performance gaps. Carey (1998) notes that in these cultures, information is communicated from the employees to the practitioners “through the relationships of senders and receivers,” and she adds that practitioners need to “spend time building relationships.” On the other hand, Western cultures have been characterized as “low context,” “universalist,” or “specific,” where improvements in individual and organizational performance are primarily achieved by objectively

benchmarking output against performance objectives and goals (Hofstede, 1980, 1983; Trompenaars, 1993). The systematic framework through which HPT is applied in the United States, where a key tenet is to quantify inadequate performance and make objective decisions that are based on performance goals, might not be very effective in cultures such as South Asia. These cultural differences may explain why practitioners in South Asia and the United States apply analysis competencies differently.

Turning to performance interventions, analysis of the ratings among the eight intervention categories yielded some common trends. For example, respondents from both regions rated experience with design or development of instructional performance support interventions the highest and financial system interventions the lowest. Developing financial system interventions (such as financial forecasting and cash flow analysis) involves specialized knowledge, and HPT practitioners have reported very low expertise in such areas (Van Tiem, 2004). This possibly accounts for its low rating in both regions; practitioners are less likely to be directly involved with actual design and implementation of these interventions compared to other intervention categories.

Respondents from the United States rated application of both categories of performance support interventions (instructional and noninstructional) higher than those from South Asia. In fact, these were the only two cases in the survey where the ratings from the U.S. region were higher than those from South Asia. This is an interesting result because it could potentially relate to a basic difference in the actual practice of HPT owing to differences in the academic background and expertise of the respondents. Practitioners from the United States with advanced degrees in the field are likely to be graduates of focused academic programs dealing with HPT, corporate training, or instructional design and technology. However, these academic programs are not generally prevalent in South Asia. Typical practitioners from these regions are potentially graduates of programs focusing on human resources management, business analysis, organizational development, and other related areas.

Research has indicated there is an alignment between the frequency of use of different interventions and the expertise of practitioners (Van Tiem, 2004). Graduates of HRD-related programs are likely to have awareness and experience with design of a category of interventions, indicated by use of such categories as work design, human resource development, and organizational communication in South Asia. Practitioners in the United States, on the other hand, appear to be primarily focused on instructional and noninstructional performance support interventions. These preliminary results suggest that typical HPT practitioners from South Asia are possibly involved in more generic human resource job roles, potentially responsible for a range of HRD activities within their organizations. Respondents from the United States, on the other hand, appear to be involved with more specific job roles,

primarily dealing with training and performance improvement initiatives. Indeed, when we examined the demographic item regarding the respondent's specified job role in the survey across the two regions, we observed that the most common job role was identified as human resource development in South Asia, while it was corporate training for the United States.

As mentioned earlier, respondents from the United States indicated lower frequencies of application of all the competencies mentioned in our survey, with the exception of instructional and noninstructional performance support interventions. Additionally, the rating for instructional performance support interventions was the only statistically different rating that we obtained between the two regions, with the U.S. ratings ($M = 3.55$) higher than the South Asia ratings ($M = 3.13$). This was an interesting result, especially considering the observation that "many HP technologists view training as a last resort, to be employed when no other means of achieving improved performance will work" (Brethower, 1999, p. 115). Our results seem to suggest that HPT practitioners in the United States continue to be predominantly involved with implementation of training or instructional interventions.

The results of the trends section of the survey indicated some other key differences among respondents from the United States and South Asia. Business process outsourcing (BPO)/globalization and cost-benefit analysis were the two statistically different trends; both were rated higher by respondents from South Asia than by those from the United States. A large portion of the recent economic growth in the South Asian region has been due to outsourcing, and it is expected that trends related to BPO and globalization will be rated much more critical by practitioners in this region. Possibly aligned with this issue is the similarly higher rating observed for cost-benefit analysis. Because South Asia remains more of a service-oriented economy, predominantly serving the needs of clients from the United States and other European countries, organizations have an obvious short-term advantage in maintaining low overhead for training and performance improvement initiatives.

It is also worthwhile to note that cost-benefit analysis had the highest rating among all the surveyed trends in South Asia. In the United States, the highest rating was observed for trends related to e-learning, indicating the increasing focus and value placed on e-learning activities and solutions by practitioners in this region.

Finally, strategic analysis had the highest overall rating among both regions. This indicates that HPT practitioners in these regions are starting to function as business partners, in more strategic job profiles and not just restricting themselves to traditional training and other related support roles.

HPT practitioners have cautioned that most of the processes and theories covered within the field are based on Western values and American culture (Addison & Wittkuhn, 2001; Carey, 1999). From our findings, we conclude that although the majority of the surveyed

competencies appear to be applicable in South Asia and in the United States, culture does appear to affect some differences in how HPT is being applied by practitioners. It would be useful to validate these results further by obtaining information on *how* these competencies are actually being implemented by the respondents. Observing practitioners on the job in South Asia and comparing their usage with those in the United States would potentially yield useful insights on the actual cultural tendencies that are affecting use of HPT in the workplace.

Further, it would be interesting to replicate this study and analyze usage of these competencies on the basis of some essential organizational and demographic criteria, in addition to national culture. Researchers such as Reynolds and Nadler (1993) and Osman-Gani (2000) have proposed the need for considering national cultures in conjunction with other organization-specific contextual features while attempting to transition performance improvement strategies between regions. Addison and Wittkuhn (2001) have proposed tools such as the culture audit (a systematic framework for getting to know an organization's unique cultural traits) and the systems model (an approach for adapting existing HPT models for use in various cultures) for addressing the impact of culture on performance improvement. Future research should focus on analyzing organizational and practitioner characteristics in conjunction with national cultures. For example, research that builds on existing intervention research and analyzes differences in academic degrees, expertise, job roles, and frequency of applying competencies of practitioners in numerous regions of the world would yield potentially rich information on trends involved with application of HPT competencies in the workplace.

As HPT moves into a more strategic role in an increasingly global arena, results of cross-cultural research could evolve into a key tool for practitioners. This information will enable HPT practitioners to address issues related to culture and help them be successful in improving performance of individuals and groups in different regions of the world.

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APPENDIX A

Survey Listing of Demographic Items

1. Which best describes your job function? (Check all that apply.)
 - Human performance technology
 - Corporate training
 - Organizational development
 - Human resource development
 - Instructional design
 - Other
2. How many years of professional experience do you have in one or more of the areas mentioned above?
 - Less than 1
 - 1–5
 - 6–10
 - More than 10
3. What is your primary/regular work location? (Check one.)
 - South/Southeast Asia
 - USA and Canada
4. How many employees does your organization have?
 - 1–50
 - 51–100
 - 101–500
 - 501–999
 - 1,000–4999
 - More than 5,000
5. How many countries does your organization have a presence in?
 - 1
 - 2–5
 - 6–10
 - More than 10

APPENDIX B

Survey Listing of HPT Competencies

1. Identify or formulate the vision, mission, or goals of an organization.
2. Analyze if workers have the incentives, rewards, or consequences that are aligned with desired job performance.
3. Determine if workers have the required environmental support, resources, or tools to perform their job.
4. Redesign jobs or been involved with organizational reengineering initiatives to assist with the implementation of an intervention.

5. Solve problems and issues arising due to the implementation of an intervention within an organization.
6. Determine whether performance issues occur due to a lack of environmental support.
7. Develop organizational communication materials that illustrate benefits of an intervention.
8. Determine if workers have the capacity to perform their job.
9. Identify how or where performance should change in an organization.
10. Design or select a range of interventions to best meet the need(s) revealed by a performance analysis.
11. Form networks and alliances that help improve performance in the workplace.
12. Identify workers' skills, knowledge, capacity, motivation, or expectations with regard to a job requirement.
13. Conduct confirmative evaluation to determine the impact of a performance intervention on the organization.
14. Develop or maintain organizational structures that enable employees to learn new skills and knowledge.
15. Identify stakeholders (such as employees, clients, vendors) that are critical to the success of an organization.
16. Conduct formative evaluation during the design or development of a performance intervention.
17. Analyze a job to determine if it was structured to help workers achieve optimal performance.
18. Analyze whether workers have the necessary data, information, or feedback to perform their job.
19. Identify performance issues or problems at the organizational level and at the department level.
20. Determine whether performance issues occur because of a lack of required behavioral skills.
21. Conduct summative evaluation of a performance intervention or of the processes involved in performance improvement.
22. Analyze an organization's performance requirements and compared them to the organization's objectives and capabilities.
23. Analyze if workers are motivated to perform their job.
24. Analyze whether workers have the necessary skills and knowledge to perform their job.

APPENDIX C

Survey Listing of HPT Intervention Categories

1. Work design interventions

- Examples include job specifications, quality control, ergonomics, safety engineering, interface design, job rotation, and work methods
2. Instructional performance support interventions
Examples include training, distance learning, and action learning
 3. Noninstructional performance support interventions
Examples include job aids, electronic performance support systems [EPSS], knowledge management (KM), documentation and standards
 4. Human resource development interventions
Examples include staffing and selection, compensation and benefits, retirement planning, performance appraisals, leadership development, and incentives and rewards
 5. Interventions dealing with organizational communication
Examples include information systems, conflict resolution, suggestion and grievance systems, networking and collaboration
 6. Organizational design and development interventions
Examples include strategic planning, globalization, reengineering, culture and diversity, ethics, spirituality, benchmarking, team-building
 7. Personal development interventions
Examples include mentoring and coaching, feedback, career development, career assessment
 8. Financial system interventions
Examples include financial forecasting, capital investment and spending, cash flow analysis, mergers, acquisitions, joint ventures

APPENDIX D

Survey Listing of Trends

1. Learning management systems (LMS)/learning management content systems [LMCS]
2. Learning standards (AICC, SCORM)/interoperability
3. Business process outsourcing/globalization trends
4. Knowledge management/electronic performance support systems (EPSS)
5. Return on investment (ROI) metrics/business analytics
6. E-learning
7. Instructional design
8. Quality assurance/quality control
9. Strategic analysis
10. Operating costs/cost-benefit analysis/reduction in operating costs for training

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