The Influence of National and Organizational Culture on the Use of Performance Improvement Interventions

Ramaswamy N. Vadivelu, PhD, and James D. Klein, PhD

In today's global economy, human performance technology (HPT) professionals must understand how to help organizations as they make the transition to an international marketplace. Many organizations are realizing that they must make changes in their "strategy, structure, design and performance" as they operate in different cultural settings (Sanchez & Curtis, 2000, p. 57). Therefore, HPT practitioners should develop and implement performance interventions that fit various cultures yet remain aligned with the core values and traits that characterize and differentiate corporations (Schneider & Barsoux, 1997).

In this context, the challenge for HPT is to gain a clear understanding of how factors like national and organizational culture influence the existing HPT framework (Addison & Wittkuhn, 2001; Carey, 1998). Specifically, studies examining the impact of culture on the use of HPT interventions are especially important because these are the strategies that practitioners rely on when they recommend solutions to performance problems. The issues involved with adapting human performance interventions to international settings are among the most challenging tasks facing the field (Laurent, 1986).

This exploratory study examined the influence of national and organizational culture on the use of various performance improvement interventions. Data on intervention use were collected from practitioners in the United States and South Asia. Results revealed that orientation programs, organizational communication, instructor-led training, and performance appraisals were among the most used interventions in both the United States and South Asia. Findings also indicated that factors such as organization size, location of headquarters, learning and development budget, and reporting structure are related to the use of interventions. Practitioners in South Asia predominantly had expertise in disciplines such as human resources, while those in the United States had experience in instructional design and human performance technology. These differences may influence the development and implementation of instructional and noninstructional interventions.

Factors Impacting Performance Improvement Interventions

National Culture and HPT

The theoretical frameworks of national cultures that Hofstede (1980, 1983, 1997) and Trompenaars (1993) proposed form the basis for much of the existing literature examining issues presented with the design and delivery of HPT interventions in a global context. 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 proposed six scales to help illustrate the average characteristics of managers in various national cultures: universalism—particularism, individualism—collectivism, affective neutral—affectivity, specificity—diffuseness, achievement—ascription, and internality—externality.

Several authors have addressed the use of performance interventions in various cultural settings For example, Marquardt (1998) analyzed Western practices related to elements of an action learning program such as the tendency to form groups that include people with different roles in an organization. He proposed possible non-Western cultural reactions to these elements and suggested that such practices might be a deterrent to people in other cultures because some equate status with the degree to which a person can express his or her opinion. Dunn and Marinetti (n.d.) proposed a culturally adaptive framework for designing e-learning programs. They suggested that the orientation section of a learning module should be intensive for cultures with high uncertainty avoidance and that collaborative elements like chat rooms and discussion boards are likely to have more impact in cultures that are affective and diffuse. Sanchez (2000) also suggested using cultural dimensions to adapt interventions for use in different settings. She recommended that interventions that include references to managerial influence and visions of the owner or founder are more effective in cultures with high uncertainty avoidance, while interventions that incorporate systems approaches are more effective in cultures with high collectivism. Milliman, Taylor, and Czaplewski (2002) discussed the effect of cultural dimensions on the implementation of performance feedback interventions. They explained how direct and assertive approaches to pointing out performance problems might lead to negative reactions in some cultures and how power distance traits might prevent individuals from explaining or proposing contradictory points of view.

Organizational Culture and HPT

Others propose that reliance on the concept of national cultures alone while considering the impact of interventions might be problematic (Kuchinke, 1999; Myers & Tan, 2002). These authors argue that treating cultures as countries is neither realistic nor accurate because there is usually more than one culture existing in one country at any given time (Douglas & Wildavsky, 1981). From an organizational theory perspective, this leads to the implication that contextual settings beyond national culture are also

prevalent in organizations, and they must be considered (Cheng, 1989; Ralston, Gustafson, Cheung, & Terpstra, 1993). This view is supported by Ripley, Hudson, Turner, and Osman-Gani (2006), who emphasized that analysis that

takes into account national culture, along with the impact of organizational cultural elements such as economic, legal, and political factors, is required to ensure the success of HPT interventions. They conducted a survey of work settings in seven countries and concluded that when the data were com-

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pared on a site-by-site basis (as compared to an overall country view), differences were observed that could not be accounted for using national culture alone.

Cseh, Ardichvili, Gasparishvili, Krisztián, and Nemeskéri (2004) conducted a study comparing sociocultural values and perceptions of organizational culture among over 3,000 employees in five countries and provided data suggesting that organizations develop a specific culture under the influence of both national cultures and contextual settings that include economic, social, and political conditions. In the context of design and the delivery of performance interventions within organizations, Hatala and Gumm (2006) identified five contextual factors that practitioners should consider—economic (e.g., budget, extent of financial rewards), social (e.g., influential leaders within an organization), communication (e.g., how it is viewed and used), leadership (e.g., how leaders are selected and developed), and political (e.g., what is deemed acceptable in the organization). They proposed a model to analyze the impact of these elements on the design and implementation of a competency-based training intervention in an organization.

Practitioner Expertise

In addition to cultural factors, the expertise of the person developing and implementing interventions has an impact on the strategies used. Researchers have documented that most HPT practitioners report a greater expertise using instructional rather than noninstructional interventions (Klein, 2002; Vadivelu & Klein, 2008; Van Tiem, 2004). This trend has been attributed to the fact that the field of HPT evolved from instructional design (Gayeski, 1998; Reiser, 2002). Due to the manner in which HPT has evolved, it is not unreasonable to assume that most practitioners from Western cultures have backgrounds primarily in instructional design and training. However, from a national cultural perspective, these factors might not be uniformly prevalent. Many practitioners in cultures such as South Asia have reported backgrounds in areas such as human resources, organizational behavior, and other broader management fields (Vadivelu & Klein, 2008). It is therefore worth examining whether this difference in expertise influences the use of certain interventions over others.

Purpose of This Study

The purpose of this exploratory research study was to examine the applicability and relevance of HPT interventions in different contextual and

cultural settings that exist in the workplace today. The study examines how geographical location (United States and South Asia), practitioner experience (academic qualification, area of expertise, and years of experience), and organizational demographics (size, location of headquarters, budget, and reporting structure) influence the use of HPT interventions in the workplace.

For making a cross-cultural comparison that would be worthwhile in terms of its applicability for practitioners, we obtained data from the United States and South Asia (e.g., India, Singapore, and Malaysia). These two areas are sufficiently different from each other based on the cultural modeling indices that Hofstede (1980, 1983, 1997) and Trompenaars (1993) proposed. In addition, these two areas are of crucial importance from an economic standpoint, as the primary source of offshore work has been the United States, and the preferred destination for much of this work has been to countries within South Asia. This research also extends previous work conducted by Vadivelu and Klein (2008) that examined the use of HPT competencies and intervention categories among practitioners in the United States and South Asia.

Method

Participants

The study participants were 104 practitioners from the fields of instructional design (ID), HPT, human resources (HR), and organization development (OD). Three professional organizations (American Society for Training and Development, International Society for Performance Improvement, and HRD Gateway) advertised a call for participation in their monthly newsletters. We received responses from 49 practitioners in the United States and 55 located in South Asia. Respondents reported varying degrees of work experience: 61 had 10 or more years, 24 had 5 to 10 years, and 19 had fewer than 5 years of experience. Respondents also had varying domain expertise: 20 indicated their expertise was in HPT, 37 specified expertise in ID, and 47 reported expertise in HR or OD. For level of education, 69 respondents had a master's degree, 23 had a bachelor's degree, and 12 had a doctoral degree. Almost all respondents (n=98) were full-time employees in their organizations.

In terms of company profile, 66 respondents were employed in organizations headquartered in the United States, 35 were employed in organizations with more than 10,000 employees, and 42 were employed in organizations that had fewer than 1,000 employees. Several respondents (n=32) reported that they were not aware of their organizational learning and development budget. Of the remaining respondents, 32 indicated that their organizations had over \$1 million (all dollar amounts are in U.S. dollars) budgeted, while the other 41 indicated that they had less than \$1 million allocated.

Survey Instrument

We developed and used a web-based survey as the primary data collection instrument in this study. It had 37 selected-response items and one

open-ended question that participants could use to add comments. The survey also allowed participants to respond with their contact number if they wished to participate in a follow-up interview. The survey had two main sections.

The demographic information section dealt with participants' experience, academic and professional training, and specific information regarding their organizations. The 11 questions were used to obtain demographic information from participants (primary job functions, academic qualification, years of professional experience within their identified field, areas of expertise), the size of their organization (number of employees), the head-quarters of their organization, their annual learning and development budget, the organization's reporting structure, and their current geographical location.

The interventions section had 25 Likert-type items that participants used to rate how frequently various HPT interventions are used to improve performance in their organization (see Table 1). Each item consisted of a statement describing a specific intervention. For example, respondents were asked to rate their use of job rotation, which was described as a process of changing work flow to ensure that employees are provided opportunities to develop new skills. Similarly, an item labeled conflict management was described as a system for constructive handling of conflicts. The survey randomly listed each intervention and its associated descriptive statement. For each intervention, respondents were asked to choose from a rating of 5 (very frequently used) to 1 (never used).

Interview Protocol

A follow-up interview was conducted with 12 of 23 participants who provided their contact information and expressed interest in being interviewed. We could not establish contact with the remaining 11 individuals. We did not do any purposive sampling of the participants due to the small sample size.

The initial section of the interview protocol consisted of demographic questions that elaborated on contextual aspects of the organization and the region where the respondent was based. The remaining section of the interview protocol solicited the interviewee's reactions to the results of the survey. Interview participants were selected from a sample of survey respondents: five were from the United States, and seven were from South Asia. They represented different demographic backgrounds. For example, we conducted interviews with practitioners having different job functions (training coordinator, manager, human resources) who were based in different locations. Participants also represented organizations that differed on demographic criteria such as number of employees and location of headquarters. The participants were from different industries: telecommunications, oil and gas, pharmaceuticals, and information technology consulting.

Procedures

An extensive review of relevant journals (e.g., *Performance Improvement, Performance Improvement Quarterly*) published over the past 10 years

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TABLE 1 INTERVENTION USE FOR U.S. AND SOUTH ASIAN RESPONDENTS					
INTERVENTIONS	UNITED STATES (N = 93)	SOUTH ASIA (N = 93)	OVERALL		
360-degree feedback	2.24	2.11	2.17		
Assessment centers	2.02	2.18	2.10		
Career pathing	2.27	2.39	2.33		
Coaching	2.53	2.34	2.44		
Compensation systems	2.82	3.34	3.08		
Competency modeling	2.38	2.50	2.44		
Conflict management	2.18	2.21	2.19		
E-learning	2.87	2.55	2.71		
Employee assistance	2.93	2.42	2.68		
Electronic performance support systems	2.09	2.29	2.19		
Ergonomics	2.47	2.13	2.30		
Instructor-led training	3.27	3.13	3.20		
Information systems	3.09	3.16	3.12		
Job aids	2.71	2.76	2.74		
Job rotation	1.87	2.26	2.06		
Leadership development	3.09	2.87	2.98		
Management development	2.84	2.66	2.75		
Motivation systems	2.69	2.87	2.78		
Organizational communication	3.31	3.39	3.35		
Orientation programs	3.38	3.53	3.45		
Performance appraisals	3.31	3.39	3.35		
Retirement planning	2.64	2.00	2.32		
Succession planning	2.40	2.34	2.37		
Team building	2.62	2.92	2.77		
Virtual communication	2.82	2.84	2.83		

Note. 5 = very frequently used. 1 = never used.

was conducted to obtain data on the type of HPT interventions that were being discussed in the field. We used this information to identify intervention categories that we deemed relevant to practitioners and then analyze them to yield a specific list of interventions. The second stage of the review was a cross-comparative analysis of the *Handbook of Human Performance Technology* (Stolovitch & Keeps, 1999), *Intervention Resource Guide* (Langdon, Whiteside, & McKenna, 1999), *Performance Intervention Maps* (Sanders &

Thiagarjan, 2001) and *Fundamentals of Performance Technology* (Van Tiem, Moseley, & Dessinger, 2004). We identified 25 specific interventions that were in agreement with the listings we obtained from the initial literature review and used these as the basis for designing the survey instrument.

A group of four HPT and ID professionals reviewed the initial instrument to determine the relevance, clarity, and accuracy of the interventions and their related descriptions. Two in the group were faculty members who were then teaching HPT and ID at a large east coast university and at a midwestern university, respectively; an ID technologist at a financial services organization; and a manager of distance learning programs at a midwestern business school. Minor editorial changes were made based on feedback from these reviewers.

Once the survey was completed, we sent invitations to participate to members of the American Society for Training and Development, the International Society for Performance Improvement (ISPI), and the HRD Gateway through their official monthly newsletters. We also sent an invitation through the newsletter for ISPI Certified Performance Technologists. In addition, we sent invitations to numerous informal networks, associations, and groups through the web. In anticipation of the interviews, we requested participants to submit their contact information if they wished to be interviewed. We conducted nine interviews by phone and three face-to-face.

Results

National Culture

Table 1 shows the average ratings for participants from U.S. and South Asian cultures, as well as overall ratings for the 25 interventions listed on the survey. Regardless of national culture, findings show that orientation programs, organizational communication, instructor-led training, and performance appraisals are among the most commonly used performance interventions.

Responses are more diverse for the least used interventions. Among U.S. respondents, the least used interventions are job rotation, assessment centers, and electronic performance support systems (EPSS), while the least used interventions among South Asian practitioners are retirement planning, 360-degree feedback, and ergonomics. Furthermore, practitioners in South Asia use team-building and compensation systems more than practitioners in the United States do.

Organizational Culture

Table 2 lists average ratings grouped by learning and development budget, organization size, location of the organization's headquarters, and the presence or absence of a direct reporting structure for employee learning and development. These findings show:

 Impact of budget. Respondents from organizations with an annual budget greater than \$500,000 for learning and development

TABLE 2 INTERVENTION USE BY ORGANIZATIONAL CHARACTERISTICS							
INTERVENTIONS	BUDGET		SIZE		DIRECT REPORT	HEADQUARTER LOCATION	
	\$500,000 OR LESS	MORE THAN \$500,000	5,000 OR FEWER EMPLOYEES	MORE THAN 5,000 EMPLOYEES	YES	UNITED STATES	SOUTHEAST ASIA
360-degree feedback	1.75	2.41	1.87	2.71	3.23	3.05	3.19
Assessment centers	2.21	2.13	2.15	2.17	2.59	2.39	2.57
Career pathing	2.46	2.36	2.34	2.46	2.20	2.11	2.00
Coaching	2.54	2.49	2.46	2.54	2.93	2.86	2.71
Compensation systems	2.63	3.33	2.86	3.50	3.50	3.44	3.19
Competency modeling	2.25	2.54	2.41	2.50	2.30	2.25	2.30
Conflict management	2.13	2.29	2.21	2.26	2.57	2.33	2.38
E-Learning	2.29	2.92	2.43	3.08	2.41	2.46	2.19
Employee assistance	2.63	2.72	2.59	2.79	3.45	3.45	3.00
Electronic performance support systems	1.92	2.18	1.98	2.30	2.82	2.67	2.81
Ergonomics	2.29	2.33	2.31	2.33	2.14	2.25	2.14
Instructor-led training	2.92	3.36	3.06	3.46	2.43	2.60	1.86
Information systems	3.17	3.43	3.17	3.64	2.80	3.05	2.29
Job aids	2.58	2.92	2.60	3.09	3.43	3.44	3.19
Job rotation	2.13	2.05	2.15	1.96	2.09	1.98	2.30
Leadership development	2.88	3.21	2.88	3.38	2.84	2.89	2.43
Management development	2.63	2.92	2.64	3.08	2.59	2.56	2.24
Motivation systems	2.67	2.87	2.70	3.04	2.93	2.82	2.60
Organizational communication	3.25	3.41	3.26	3.50	2.84	2.96	2.48
Orientation programs	3.08	3.74	3.32	3.79	2.25	2.47	1.62

Table 2 INTERVENTION USE BY ORGANIZATIONAL CHARACTERISTICS (CONTINUED)							
INTERVENTIONS	BUDGET		SIZE		DIRECT REPORT	HEADQUARTER LOCATION	
	\$500,000 OR LESS	MORE THAN \$500,000	5,000 OR FEWER EMPLOYEES	MORETHAN 5,000 EMPLOYEES	YES	UNITED STATES	SOUTHEAST ASIA
Performance appraisals	3.08	3.46	3.19	3.54	2.70	2.89	2.43
Retirement planning	2.21	2.59	2.36	2.54	3.30	3.28	3.05
Succession planning	2.25	2.59	2.29	2.67	2.50	2.37	2.33
Team building	2.71	2.79	2.77	2.71	3.64	3.61	3.38
Virtual communication	2.79	2.77	2.68	3.00	3.23	3.07	2.76

indicated that they use 360-degree feedback, compensation systems, e-learning, and orientation programs more often than those working in companies with smaller budgets.

- Impact of organization size. Practitioners working in organizations with more than 5,000 employees indicated greater use of compensation systems, e-learning, and 360-degree feedback. The smaller-sized organizations appear to use most of the interventions listed on the survey to a lesser degree than larger organizations, with the exception of job rotation and team building.
- Impact of reporting structure. The presence of a separate department with clear reporting and responsibility for learning and development correlated with higher use of every intervention when compared to use in organizations without a direct report.
- Impact of headquarters location. Practitioners from U.S.-based organizations indicated a proportionally higher use of orientation programs and information systems.

Multiple Regression Analyses

We conducted multiple regression analyses to predict intervention use based on variations in national culture, organizational culture, and practitioner expertise. To account for Type 1 error, only those interventions that had two or more factors significantly correlated at the .01 level were analyzed. Findings for six interventions are presented below:

◆ 360-degree feedback. Organizational size and location of headquarters were significantly correlated with the use of 360-degree feedback. The overall regression model for this intervention was significant [F(2,92) = 14.7, p < .001] and accounted for 25% of the total variation in the use of 360-degree feedback. Organizational size had more</p>

- impact on use of 360-degree feedback ($R^2 = .11, p < .01$) than location of headquarters ($R^2 = .06, p < .01$) though both were significant predictors of the use of this intervention.
- ♦ *E-Learning*. The location of headquarters, number of employees, and size of learning and development budget were significantly correlated with the use of e-learning. The overall regression model for this intervention was statistically significant [F(3,91)=8.5, p<.001] and accounted for 23% of the variation in the use of e-learning. The location of headquarters ($R^2=.06, p<.01$) and number of employees ($R^2=.04, p<.05$) were significant predictors of the use of this intervention.
- ♦ Compensation systems. Reporting structure, size of learning and development budget, and years of practitioner work experience were significantly correlated with the use of compensation systems. The overall regression model for this intervention was statistically significant [F(3, 92) = 7.2, p < .001] and accounted for 20% of the total variation in use of compensation systems. Reporting structure $(R^2 = .06, p < .01)$, size of budget $(R^2 = .06, p < .01)$, and practitioner experience $(R^2 = .04, p < .05)$ were significant predictors of the use of this intervention.
- Orientation programs. Reporting structure and size of learning and development budget were significantly correlated with the use of orientation programs. The overall regression model for this intervention was statistically significant [F(2, 91) = 8.5, p < .001] and accounted for 16% of the variation in the use of orientation programs. Both predictor variables were significantly related to the use of this intervention, although reporting structure had a slightly larger effect $(R^2 = .08, p < .01)$ than size of budget $(R^2 = .07, p < .01)$.
- ♦ *Employee assistance.* The locations of the organization and its head-quarters were significantly correlated with the use of employee assistance programs. The overall regression model for this intervention was statistically significant [F(2,92) = 6.8, p < .01] and accounted for 13% of the variation in the use of employee assistance programs. However, neither variable significantly predicted their use.
- Retirement planning. The locations of the organization and its head-quarters were also significantly correlated with the use retirement planning programs. The overall regression model for this intervention was statistically significant [F(2,92)=6.8,p<.01] and accounted for 10% of the variation in the use of retirement planning programs. However, neither variable significantly predicted its use.

Practitioner Interviews

The primary researcher conducted interviews with seven practitioners based in South Asia and five located in the United States. Inductive coding was used to categorize these data. Six main themes were found: (1) leadership

buy-in, (2) practitioner expertise, (3) culture and language, (4) regulatory and industry issues, (5) organizational maturity, and (6) global presence.

Most interviewees indicated that leadership buy-in was a key component affecting the deployment of any intervention within their organization. For example, 11 of the 12 interviewees indicated that it was easier to implement an intervention when leadership shared their vision. Eight suggested that budget was not an issue if there was leadership buy-in, and 7 mentioned that interventions required a champion in management. One interviewee reinforced this belief by explaining, "Regardless of the leadership's maturity and awareness of interventions, today's practitioner must have the ability to convince their leadership that a specific intervention is the appropriate solution for a problem. Just having domain expertise is not enough."

Practitioner expertise was another category to emerge from the data. Six interviewees indicated that they had breadth but little depth of knowledge about interventions. Five others mentioned that they were generalists, not specialists, in performance improvement. Four, however, did say that specialization was starting to appear in their company. Five interviewees pointed out that they had to look outside their own organization for expertise, and four suggested that their company shared experts across locations through overseas assignments. An interviewee pointed out, "We usually go to our parent organization or to outside help whenever there is a specialist intervention being implemented. I feel that our peers in the U.S. dictate the specialist agenda for the most part."

Many recognized the importance of culture and language in interventions. All seven interviewees based in South Asia noted how the family or the social system affects performance. "We tend to have a high need for affinity, affiliation in whatever we do," one interviewee pointed out. There was discussion about the preference for a teacher-learner type of framework in all learning and development contexts, which posed challenges to the adoption of alternate learning methodologies. Four interviewees also addressed how learning styles or language difference have an impact on the effectiveness of e-learning. One interviewee mentioned, "Most of our online catalogue has e-learning modules that involve voices with heavy accents, and that puts off a good number of my learners. They tend to discount some of those things immediately."

Some interviewees raised the topic of regulatory issues. All seven South Asians noted the impact of tax structures when they discussed the use of compensation systems, and two specifically mentioned government involvement in retirement planning. One interviewee from South Asia explained, "Retirement is not something people here look forward to and plan for like the U.S.," and retirement-related initiatives in the workplace were predominantly only those that were being mandated by the government. There was much less interest or involvement from the employees with these kinds of interventions. This seemed to be linked with the observation that most employees "are young, live for the here-and-now," with the implication that these employees had a preference for more cash now rather than more staggered benefits.

Some interviewees recognized the issue of organizational maturity. Six mentioned that interventions are more successful in mature organizations, and five indicated that less mature companies have to be convinced that interventions will improve performance. Finally, some interviewees discussed global presence. Five pointed out that international companies are able to share best practices, and four said that global organizations provide practitioners with access and exposure to a wide range of interventions.

Discussion

As business practices change to reflect the increasing multiculturalism of consumers and employees, HPT practitioners must better equip themselves so they can add strategic and operational value to their organization's efforts. Research on the role of national culture in management (Kirkman, Lowe, & Gibson, 2006) seeks to understand the degree to which culture alone influences organizational outcomes. Much of this work has relied on Hofstede's (1980, 1997) development of national culture indices for countries. However, recent research has started to question the validity of adapting management practices and interventions based on national culture indices alone (Kuchinke, 1999; Osman-Gani, 2000). Researchers are starting to agree that interventions should be designed to account for various organizational, cultural, and contextual aspects that are specific to the organization and to the region in which the organization is operating.

Interventions

In this section, we look at the impact of national culture, practitioner characteristics, and organizational demographics on the use of different interventions by performance technologists in organizations. We seek to identify key trends and use patterns of various interventions and provide some context as to how organizational and national culture, along with practitioner characteristics, influence the use of these interventions.

360-Degree Feedback. This intervention refers to providing development feedback obtained from several sources, including subordinates, peers, and managers. It is typically implemented when there is a desire to facilitate behavioral changes in individuals or team members (Edwards & Ewen, 1996). Results of our study show that 360-degree feedback is among the least used intervention by practitioners in South Asia. Individuals from South Asian cultures tend to view their relationships with supervisors in a different light from those from achievement-oriented cultures such as the United States. In South Asia, respect for managers is seen as "a measurement of one's commitment to the organization" (Trompenaars, 1993, p. 105). Thus, it is not surprising that there is less use of an intervention that requires employees to provide direct feedback about their supervisors.

We also found that practitioners in larger organizations use this intervention more often than those in smaller organizations. The use of 360-

degree feedback requires the development of in-house tools or the purchase of off-the-shelf programs to manage the feedback process. There is also substantial work in designing questionnaires to obtain feedback, identifying respondents, and extracting required information from the results. This translates to significant costs; smaller organizations probably do not have enough of a business case to implement a full-fledged 360-process and have to make do with less formalized feedback mechanisms.

E-Learning. Our findings revealed that location of headquarters, number of employees, and size of learning and development budget are significantly related to the use of e-learning. These results are to be expected, as e-learning is recommended when there is a large target audience and the audience is distributed across locations (Sanders & Thiagarajan,

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2001). Typically the monetary costs and the time required to design, produce, distribute, revise, and deploy this intervention are quite high. It is therefore reasonable to expect that most large companies are able to leverage their economies of scale and look to e-learning as a solution. For smaller companies with limited resources, the cost-benefit ratio for designing and deploying an e-learning solution is arguably higher when compared to an instructor-led solution.

Orientation Programs. Orientation programs address the processes put in place for introducing and welcoming new employees to an organization. Formal orientation systems require an investment of time and money, as well as the involvement of various groups within an organization. It is not surprising that the size of the learning and development budget and the reporting structure are significantly related to the use of this intervention.

Compensation Systems. Compensation systems refers to bonus, stock, salary increases, and other such policies that are created for motivating and rewarding employee performance. A formal compensation system provides sufficient information to employees so they clearly understand the system used to evaluate individual performance and rewards (Schuster & Zingheim, 1996). Compensation systems are uniquely representative of an organization's culture; they take into account a variety of factors that include industry benchmarks, cost of living, and health insurance.

Our results show that compensation systems are different in South Asia from those in the United States. Others have suggested that employees in South Asia and the United States appear to have different cultural tendencies that likely have an impact on the use of this intervention. For example, the principle of performance-based salary is accepted in individualistic cultures such as in the United States, while the principle of equal pay is important in collectivist cultures found in South Asian countries such as India (Early & Erez, 1997). An increased use of compensation systems in South Asia could also be attributed to federal tax laws and financial regulations that require organizations to periodically restructure their employee compensation

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systems to meet employee preferences for benefits and compensation. For example, almost all interviewees from South Asia indicated that they design compensation systems that maximize take-home pay for employees at the cost of other benefits. They suggested that South Asian employees typically prefer to have more money and that their organization looks to create unique ways to maximize salary while scaling back on noncash benefits.

In comparison, the compensation system in the United States appears to be generally standard, with fewer opportunities for customization and change. Practitioners working in organizations that are based in different geographical regions therefore have to ensure they implement compensation systems that reflect their organization's core philosophy and policies. However, they still have to adapt it to account for differences in practices and regulations due to differences in location.

Retirement Planning. Retirement planning refers to programs that facilitate the establishment of retirement goals and help employees gather information about potential sources of retirement income (Sanders & Thiagarajan, 2001). Organizations incorporate retirement planning incentives as part of employees' benefits packages. We observed significantly more use of this intervention among practitioners in the United States and in organizations headquartered there. This finding likely relates to differences in the types of employer-sponsored retirement benefits offered in different countries. For example, typical retirement plans in the United States require companies to be accountable for plans; they are often complex and provide increased investment options. Practitioners in these organizations therefore are more actively involved in implementing and maintaining retirement plans. In comparison, there are very few employersponsored retirement plans in countries located in South Asia. The opportunities for organizations in this region of the world to get involved with retirement plans in a meaningful manner are limited; governmentmandated retirement plans in South Asia provide very few investment options (Palande, 2009). It is therefore not surprising to see more involvement by U.S. practitioners and in organizations based in the United States.

A related observation is that the average median age of workers in South Asia is 25.1, whereas it is 36.7 in the United States. These differences in age and maturity potentially lead to varying priorities on retirement and long-term income goals. Interviewees in our study substantiated this observation, with respondents from South Asia stating that the younger workforce in their region favors organizations that provide higher immediate returns versus those that provide long-term benefits.

Employee Assistance. Employee assistance programs typically provide counseling services for various personal, lifestyle, and work-related issues (Solomon, 2000). We found that the use of this intervention was significantly higher in the United States and in U.S.-based organizations than in South Asia. Due to the strong cultural sensitivity to therapy and anger management

(Bhagat, Steverson, & Segovis, 2007), it is not surprising to see this intervention being used and acknowledged much less in South Asia. Two interviewees pointed out that these interventions were more likely to be used in organizations in South Asia

only because they were mandated by their U.S. headquarters.

Other Interventions. The previous six interventions were selected for multiple regression analyses because they had two or more factors significantly correlated at the .01 level. Here we look at two

There are very few employer-sponsored retirement plans in countries located in South Asia.

interventions of current interest to the HPT field, team building and EPSS, with the observations based on descriptive statistics and practitioner interviews.

Team-building interventions involve the design of specific activities that analyze the strength and weaknesses in a work team and help prepare them for ongoing effectiveness (Thiagarajan & Parker, 1999). We found that team building is used more often by practitioners in South Asian cultures than those in the United States. South Asian cultures are collectivist in nature, which implies that group harmony and teamwork take precedence over individual accomplishment and recognition (Early & Erez, 1997; Trompenaars, 1993). Interviewees from South Asia indicated that they saw a strong need for affiliation and affinity by employees in the workplace and that they used this intervention to reinforce the perception of teams and family in the workplace.

In contrast, one interviewee from the United States suggested that teambuilding activities were usually recommended in the United States when there was a perceived inefficiency or performance problem within a work group, thus giving rise to a negative perception for the use of this intervention. We see these aspects reflected in the comparatively higher use of team building by practitioners in South Asia than those in the United States.

Electronic performance support systems refer to software programs that provide just-in-time, on-demand information necessary for accomplishing tasks without the requirement for training (Gery, 1991). In accordance with findings for e-learning, our results show that EPSS use is more common in large organizations with substantial budgets. Like e-learning, this is likely due to issues related to high initial costs and the size of the target audience.

Limitations

Because we used a survey as the primary method of data collection, several limitations need to be considered when interpreting the results of this study. We needed a requisite sample of 370 responses when assuming a representative population of 10,000 practitioners, a confidence level of 95%, and a confidence interval of 5%. We had only around a 100 responses in this study. It is worth replicating this study with a larger sample size to validate some of these findings. Increasing the number of interviews will lend richer

and more contextual data that can be used to triangulate some of our findings.

Another limitation is the exclusion of the organization's industry in the data analysis. For example, two interviewees, from the oil and gas and the pharmaceutical industries, discussed the prevalent use of job rotation interventions in their organizations. Two other interviewees indicated the challenges with the use of job rotation in their organizations (semiconductors and technology consulting). It is therefore worth analyzing if industry sector has any significant impact on intervention use.

Implications for HPT Practitioners

This investigative study was conducted to obtain empirical data on the use of performance improvement interventions. We obtained data on national and organizational culture to discern any significant factors that either supported or acted as a barrier to the successful deployment of various interventions. This study yielded interesting information on cultural differences in the perception and use of compensation systems and retirement planning in U.S. and South Asian regions. As the workforce starts to age in South Asia, government and individual attitudes toward retirement planning will likely shift, and a more focused study on these two interventions alone has the potential to yield useful data for practitioners looking to operate in these regions.

The impact of different cultural styles and learning preferences on the use and adoption of e-learning and EPSS systems needs to be investigated further. As organizations in South Asia grow in size, the argument and requirement for large-scale instructional interventions such as e-learning become more compelling; practitioners will need to be equipped with appropriate tools for customizing these solutions so that they can be successful in meeting client needs. Differences in academic expertise among practitioners and lack of specialist educational opportunities in South Asia are leading to different trends in the use and adoption of several performance improvement interventions. More in-depth studies analyzing these issues can provide a conceptual framework for practitioners to gauge the readiness and appropriateness of various interventions in different cultural and organizational settings.

Performance technologists should pay close attention to the size and scope of their organization and conduct cost-benefit analyses before recommending the use of certain categories of interventions. The business case for using interventions like e-learning and EPSS is stronger for practitioners operating in larger organizations. Global organizations operating in more regions across the world appear to be more open to different performance support interventions than localized entities. Furthermore, leadership buyin is a strong requirement for the success of any intervention. Therefore, practitioners must develop strategies and skill sets for obtaining leadership

and management buy-in to ensure the success of any performance improvement strategy they undertake.

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RAMASWAMY N. VADIVELU

Ramaswamy N. Vadivelu, PhD, is a staff engineer in the engineering development group at Qualcomm's corporate headquarters in San Diego, California. He oversees global engineering development for Qualcomm's offices at sites in the United States, India, and Asia-Pacific and is involved with creating and implementing engineering learning, organizational development, and performance improvement initiatives across Qualcomm. His research interests are primarily around the global application of HPT. He holds a master's degree in electrical engineering and a PhD in educational technology (with a focus on HPT), both from Arizona State University. *Mailing address*: Qualcomm, 5775 Morehouse Drive, San Diego, CA 92121–1714. *E-mail*: vadivelu@qualcomm.com

JAMES D. KLEIN

James D. Klein, PhD, is a professor of learning, technology, and psychology in education at Arizona State University—Tempe. He has been recognized as an outstanding alumnus of the instructional systems program at Florida State University and for his service to the Design and Development Division of the Association for Educational Communications and Technology. He has served on the International Board of Standards for Training, Performance and Instruction and as development editor of Educational Technology Research and Development. His research, teaching, and consulting activities are in the areas of instructional design, strategies for active learning, and performance improvement. Mailing address: Arizona State University, Box 870611, Tempe, AZ 85287–0611. E-mail: james.klein@asu.edu

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