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Abstract

Although previous research has suggested that training approaches using behavior modeling yield better results than lecture-based approaches, these assumptions have not been tested in collectivist cultures. This study examined the effects of these alternative training methods for service knowledge and service behavior with a field experiment involving 117 Russian hotel employees. Despite no previous exposure to behavior modeling and no cultural context for service, the behavioral modeling training approach relative to the lecture-based approach yielded higher levels of both service knowledge and behavior. Since the setting was an English speaking hotel, difference in language ability were also considered and behavioral modeling was found to be a more effective training approach regardless of English ability. It also appears that service orientation is positively associated with both knowledge and behavior. The results indicate behavior modeling may be most helpful to those employees least predisposed to service or with lower language abilities.

Keywords

learning, theories, culture, behavior, model, service, knowledge, hotel, employee, experiment, study, Russian

Comments

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This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make results of research, conferences, and projects available to others interested in human resource management in preliminary form to encourage discussion and suggestions.

ABSTRACT

Although previous research has suggested that training approaches using behavior modeling yield better results than lecture-based approaches, these assumptions have not been tested in collectivist cultures. This study examined the effects of these alternative training methods for service knowledge and service behavior with a field experiment involving 117 Russian hotel employees. Despite no previous exposure to behavior modeling and no cultural context for service, the behavioral modeling training approach relative to the lecture-based approach yielded higher levels of both service knowledge and behavior. Since the setting was an English speaking hotel, difference in language ability were also considered and behavioral modeling was found to be a more effective training approach regardless of English ability. It also appears that service orientation is positively associated with both knowledge and behavior. The results indicate behavior modeling may be most helpful to those employees least predisposed to service or with lower language abilities.

As the twenty-first century approaches, services are becoming the dominant output of an emerging new economy (Bateson & Scrivens, 1989; Koepp, 1987); and simultaneously, market demographics are showing that as educational levels, discretionary income, and leisure time increase, consumer tastes are becoming more sophisticated (Fornell, 1992). Faced with a multitude of choices, consumers in the new economy are demanding quality, and no longer tolerate poor or inconsistent levels of service. Service levels consequently have become an important component of organizational strategy because they differentiate companies from their competitors and create perception benchmarks for both employees and customers (Heskett, 1986). Service levels have in fact been espoused as an important value added strategy necessary for survival (Davis, 1987) and maintaining and delivering these service levels has been called the "only true bottom line" determinant of sustainable competitive advantage (Hanan & Karp, 1987).

Maintaining consistently high levels of service however can be difficult because consumers often do not leave service businesses with any tangible evidence of their purchase. Rather, they leave with intangible perceptions based, for the most part, on their interactions with employees (Berry, 1980). These interactions are affected by employees' personality, technical skills, interpersonal skills, and knowledge of expected service standards. The dynamic nature of these interactions makes employees' roles in delivering consistently high service paramount.

For multi-national service corporations, maintaining service levels worldwide is often even more difficult because of the multitude of national cultures in which they operate. For example, consumer services, particularly the food and lodging industries, cannot easily traverse national boundaries because their organizational environments as well as their focus on service can conflict with national cultures (Sasser et al., 1976). This can be exceedingly challenging since these corporations are often faced with choosing employees from a pool of host-country nationals who have little or no cultural context for service behaviors (Welsh & Swerdlow, 1992).

This potential for a clash of cultures can affect the ability of these companies to develop employees who can provide value-added service (Franke et al., 1991). This is further exacerbated when these host-country nationals lack the experience or role models on which to draw for delivering such services. Such conditions are most likely in countries lacking a history of capitalism, such as Central and Eastern Europe. If host-country nationals have no prior experience with the service behaviors expected by the company, how can they exemplify the company's service standards?

For example, following the demise of communism, many Central and Eastern European countries moved toward privatized industry and companies were faced with the dilemma of

finding employees who could provide high levels of service. For multi-national service corporations this was extremely difficult because service standards in these countries were much lower than those in the west (Taylor, 1991). This dearth of service-oriented employees has been attributed to national culture-- under socialism, no service orientation could be found in the daily work lives of these employees and thus, dedication to high service levels in the workplace was difficult to achieve (Taylor, 1994).

To ensure that learned service skills are applied to all customer interactions, companies help create mental service models for their employees. Through role playing, behavior modeling may allow employees to learn service behaviors which they have not previously experienced. Despite little previous exposure to service, behavior modeling may produce employees with the necessary mental models to understand the company's service standards, develop the skills to achieve these standards, and ultimately, transfer them to the workplace. However, little evidence exists on the effects of behavior modeling in the former communist countries of Central and Eastern Europe. Moreover, no prior research has examined behavior modeling as applied to the development of service skills in these cultures. Thus, we know little about how such training works since experiential role models are rare in the society. Existing evidence of behavior modeling effects is highly encouraging (Decker & Nathan, 1985) but virtually all studies had the advantage of a culture where basic service levels are the norm.

This study has two objectives: 1) To compare alternative pedagogues for training service employees to improve both their interpersonal and task-related skills; and 2) To examine whether training can enhance service knowledge and behaviors in a nation which is regarded as having little service-oriented culture or history (Taylor, 1994).

THEORETICAL FRAMEWORK

Cross-cultural Training for Host-Country Nationals

When multi-national corporations expand their operations, they must implement cross-cultural training programs that heighten cultural awareness, and develop both diversity sensitivity and interpersonal skills. Such training has been advocated to dissipate cultural clashes and increase the effectiveness of cross-cultural interactions (Brislin, 1981; Bochner, 1982; Mendenhall & Oddou, 1986). However, much of the research attention has focused on developing the cross-cultural skills of expatriates embarking on overseas assignments (Black & Mendenhall, 1990) or developing expatriate language programs (Bennett, 1986). Yet, the challenges faced by multi-national corporations are much more comprehensive than those of

the expatriate. These corporations must also grapple with how to develop training programs that increase the performance of host-country nationals.

The workplace skills necessary for host-country nationals include: substantive knowledge, an understanding of the other culture, and the ability to demonstrate those behaviors that are deemed appropriate while suppressing those considered to be inappropriate (Albert, 1983). Training for such skills must couple cognitive and experiential learning (Albert, 1983; Harris & Moran, 1987). Since behavioral modeling accomplishes this, it has been advocated as a potential method of cross-cultural training (Black & Mendenhall, 1990). Unfortunately, with the exception of one cross-cultural training study of managers (Harrison, 1992), and a limited analysis of cross-cultural training methods (Sorcher & Spence, 1982), little empirical research has directly analyzed behavioral modeling as a cross-cultural training tool.

The Culture Context of Central and Eastern Europe

Most teaching in Central and Eastern Europe is lecture-based, (Cakrt, 1993), so the use of experiential learning is a very recent phenomenon. In fact, the most universal teaching style in this region involves the lecturer speaking, uninterrupted, for the entire length of the class. The lecturer has no interaction with students and simply transfers abstract concepts with little explanation or integration. The students are responsible for their own thinking and learning (Maric & Pendergast, 1993). For employees attempting to learn complex service roles or advanced language skills, such training may hinder the development of mental models necessary for transfer to the workplace.

Thus, Central and Eastern Europe provides a fertile environment for testing the effects of experiential learning among trainees who have little prior experience with such methods. Given the importance and difficulty of developing service skills in such a culture, enhanced knowledge of training effects is likely to be useful to organizations. It is also theoretically important to determine if such training works differently in former communist cultures than in the Western cultures where all prior studies have occurred.

Behavioral Modeling as an Experiential Learning Process

Lecture-based training is common beyond Central and Eastern Europe. In fact, conventional learning theory, emphasizing the accumulation of abstract concepts rather than practical knowledge, underlies many Western training programs. The learning process is often separated from the working process and the setting for learning is simply assumed not to matter (Brown & Duguid, 1991). Conventional training thus isolates knowledge from practice (Lave, 1988; Lave & Wenger, 1990) and the generalizability of learned knowledge to the workplace is dissipated (Brown & Duguid, 1991).

However, when knowledge is put into the context that gives it meaning, greater learning occurs and information is more generalizable to the workplace (Brown et al., 1980; Pea, 1990). Social learning theory (Bandura, 1977) suggests that trainees are able to construct a personalized understanding of the information presented to them by drawing on a wide range of material (social, physical, and historical) and a multitude of past experiences. Behavioral modeling, founded on the theory of social learning (Bandura, 1977), provides the experience to give learned knowledge contextual meaning. On the most simplistic level, behavioral modeling has people observe a model, remember what the model did, practice what the model did, and use what they learned on the job (Decker & Nathan, 1985). Throughout the modeling process, other members of the group provide social reinforcement so that the behavior can be transferred to the workplace (Goldstein & Sorcher, 1974).

In routine work situations, trainees share common and automatic scripts that are based on past experience (Ashforth & Fried, 1988). Behavioral modeling allows trainees to develop these scripts by giving them new experiences that allow scripts to become automatic. Reliance on past experience is dissipated. Behavioral modeling is effective because it facilitates cognitive script transference and development (Gioia & Manz, 1985), while also allowing employees to gain experience with both task and role-based scripts (Ashforth & Fried, 1988). While these learning processes generally deal with rote material, extended periods of behavioral modeling may lead to learning more complex scripts.

For example, the time spent practicing, or modeling scripts is part of a vicarious learning process that leads to behavioral changes. These cognitive scripts are schema that contain a temporal sequence of actions or events leading to an outcome (Abelson, 1976, 1981; Shank & Abelson, 1977) and as part of a role play, they help create mental models which lead to performance outcomes. The longer the practice, the more elaborate, organized, and generalized the script can become (Fiske & Taylor, 1984; Lord & Foti, 1986). In addition to developing these cognitive skills (Laurel, 1971; Loughlin et al., 1969; Zimmerman & Rosenthal, 1974), behavioral modeling has also been shown to improve manual skills (Gerst, 1971; Bandura & Jeffery, 1973; Bandura et al., 1974; Jeffery, 1976), interpersonal skills (Dalton, 1973; Heitbrink, 1971; Rosen, 1978; Rosengren, 1972; Tureen, 1972; Wehrenberg, 1987; Decker & Nathan, 1985), and attitudes (Stone & Kelly, 1980).

In the service industry, complex scripts are important because employees reflect the corporate image and, through their abilities and interactions, reflect upon that image (Heskett, 1986). The quality of employees' interactions with customers can, at least to some extent, offset minor deficiencies in a non-interactive service dimension such as the facility (Saleh & Ryan,

1991). Indeed, a customer's service criteria might actually include the response of employees to a deficiency. A facility problem should not happen, but if it is quickly rectified by the employee, this can create a positive customer perception of service. Given the interpersonal nature of service, its reliance on both scripts and technical skills, and the increased importance of cross-cultural interactions, we hypothesize that:

H1: Participants who receive behavior modeling training will achieve higher a) service knowledge levels and b) service behaviors than participants in lecture-based training.

Individual Differences

Research examining employee differences in the training process has a long history (Adams, 1987). While it has been found that individual differences account for performance variance over time (Adams, 1957; Fleishman, 1960), few individual difference factors and their relationship to skill development have been examined (Eyring, Johnson, & Francis, 1993). In this study we will look at three main individual difference variables: 1) Language skills; 2) Service Orientation; and 3) Tenure. Each of these factors seem important to service skill development, especially in cultures with little experience with service economy norms.

Language

An employee's language ability allows them to convey and understand the job's technical language as well as the jargon that is unique to the organization. For example, Maccoby (1984) showed that language development was vital to the socialization of children because increased language skills facilitated the child's ability to understand their parent's guidance, explanations, and reasoning. This argument can be extended to the workplace, since employees require minimum levels of company-specific language to communicate with other employees, as well as managers (Manning, 1970). Further, Fisher (1986) has hypothesized that there is a cognitive component to learning a skill-based task, since workplace skills are embedded in organizational language. When the "official" language of the organization is different from the native language spoken by the employees, communication can be quite challenging if employees do not understand the "official" language. Since service organizations rely on their employees' abilities to communicate with customers, have highly interpersonal organizational environments, and couple skill-based tasks and language, we hypothesize that:

H2: Participants with greater language skill will achieve higher a) service knowledge levels and b) service behaviors than participants with less language skill.

Service Orientation

Cronbach (1967) first surmised that employees were either predisposed to service or not. Service orientation today is defined as a "set of attitudes and behaviors that affect the quality of interaction between ...employees and (customers)" (Hogan et al., 1984, p. 167). Service-oriented employees are described as "consistently attentive, pleasant, and courteous; they not only are responsive to customers needs but also are likable and popular" (Hogan & Hogan, 1986, p. 1). Employees who are more service-oriented tend to go beyond mere task-related requirements and establish positive relationships with customers. Less service-oriented employees focus solely on the completion of their job tasks (Gregory, 1990). In his research on employee turnover, Judge (1993) found that predispositions affected job satisfaction. An extension of this reasoning to service-oriented learning would seem to indicate that a predisposition to service orientation would increase the likelihood of learning service skills. Thus:

- H3: Participants having higher predispositions to service will achieve higher a) service knowledge levels and b) service behavior than those participants with lower predispositions to service.

Tenure

The newness of a job situation may influence how much learning must occur before an employee can effectively fulfill their job responsibilities (Hall, 1981). For example, human capital theory (Becker, 1964) has suggested that as managers gain experience, they gain a mastery of management skills and perspectives. This reasoning can be extended to service employees working in a service organization. Further, the more similar employees are in terms of their respective job tenure, the more similar their attitudes and behaviors should be (Schneider, 1987). Thus, it has been suggested that tenure can affect how employees perform and how much they absorb from a training program because tenure can serve as a benchmark for a potentially unmeasured variables that reflect the worker's familiarity with both the hotel and its customers.

This may make learning easier beyond the effects of language or service orientation. Thus, a person who has worked in a company for a long time may have amassed more "context" for learning. Since behavioral modeling works in part by helping to create that context, long-tenure employees might have an advantage. Conversely, it could also be argued that long-tenure employees may be less likely to benefit from such training because they have become entrenched in old patterns of behavior. Given these two competing hypotheses, we predict:

H4: Tenure will have a significant effect on a) service knowledge levels and b) service behavior.

Learning Style

The theory that individuals differ in their learning styles has a long history in both psychological and educational literature (Good & Brophy, 1986). Much of this research stream focuses on cognitive style as a determinant of learning style differences (Kagan & Kogen, 1970). For example, Lam-Phoon (1986) found significant learning style differences between male and female Asians and Caucasians; and Price (1987) found significant differences in the learning styles of adults from age eighteen to over age fifty-five. By extending this reasoning, learning style can affect how much employees can learn from a training program based upon a both how they learn and how the material is taught. Therefore, we predict that:

H5: Learning style will have a significant effect on a) service knowledge levels and b) service behavior.

METHOD

Setting

The hotel used for this study is a large world-class hotel located in Moscow, Russia. Formed as a Russian-American joint venture, the hotel has differentiated itself from other hotels in the market by providing Western-style service with a predominately English-speaking staff. Since the hotel's primary market is American business travelers, government officials, and tourists, the ability of employees to speak both English and maintain the hotel's high service levels is important.

Training employees about the hotel's guest service requirements and improving their English language skills is the responsibility of the training department. An English Language Program was developed to improve employee's English skills, and a Service Skills Module within the hotel's Employee Orientation Program was created to enhance service skill development. The goal of both programs was to instill the hotel's service philosophy and guest service expectations, while simultaneously increasing employees' abilities to interact with customers.

To expose employees to concepts of service, the Service Skills Module focused on the guest service skills the hotel considered necessary for high levels of guest service. These concepts were presented in a lecture-based format and employees were given handbooks to read at home. While the hotel's service philosophy was intended to permeate every aspect of the hotel, many employees did not know how to implement it, because the Service Skills Module

was overshadowed by the arduous task of improving English skills and consequently fell by the wayside. In fact, the entire Employee Orientation Program became little more than a cursory review of organizational rules and procedures.

From its inception, the Employee Orientation Program was well received and many employees enrolled. The Employee Orientation Program was taught by instructors who used British-English textbooks, grammar principles and vocabulary, and taught from a lecture-based approach. From the perspective of the Western managers, the Employee Orientation Program was far from successful; although the hotel featured a cadre of employees with higher English language skills than many other hotels, these skills did not meet corporate standards. These same managers also felt that the service provided at the hotel was not at acceptable levels.

Training Intervention

In response to managerial concerns about employees' skills and language abilities, a training program, known as the Service Skills and English Language Program, based on the Service Skills Module and the Employee Orientation Program was created. The goal of the Service Skills and English Language Program was to couple technical skill training with American-English training, thereby providing a context for employees to understand that the two were important in the workplace. While the Service Skills and English Language Program had been conceived solely as a behavioral modeling based program, the researchers were allowed to create control (lecture-based) and experimental (behavior modeling) conditions. To fully assess the benefits of using a behavior modeling approach to training, the lecture-based and behavior modeling classes covered the same service vocabulary and service principles, only training method varied (Table 1) The new Service Skills and English Language Program lasted for twelve weeks, with classes meeting twice a week for one hour and forty-five minutes per session.

Table 1
Comparison of Training Classes

	<u>Behavior Modeling</u>	<u>Lecture-based</u>
20 Minutes (Review Old Material)	<ul style="list-style-type: none"> • Interactive Drills • Role Play Exercises 	<ul style="list-style-type: none"> • •
40 Minutes (Introduce New Material)	<ul style="list-style-type: none"> • Introduce Vocabulary with Actual Three-Dimensional Items or Pictures of Items • Demonstrations • Situational Dialogues • Role Play Exercises • Games • Simulations 	<ul style="list-style-type: none"> • Write Words on Board • Describe Meaning of Words
30 Minutes (Incorporate Old and New Material)	<ul style="list-style-type: none"> • Situational Dialogues • Role Play Exercises 	<ul style="list-style-type: none"> • Phonetics Lectures • Written Vocabulary Identifications • Write Words on Board • Describe Meaning of Words

Trainers and Program Content Design

Six instructors were assigned to the Service Skills and English Language Program and divided into two groups. One group continued to teach from the lecture-based format, while the other used behavior modeling techniques. In designing the new program, behavior modeling instructors were first exposed to the basic methodologies of the English as a Second Language program: 1) the sole use of English during class; 2) the use of props; and 3) the use of behavior modeling techniques. To prepare new vocabulary, both lecture-based and behavior modeling instructors interviewed Western managers to acquire the vocabulary, expressions, and other communication cues necessary to achieve quality service levels and improve service interactions. They also spent time observing employees. Finally, they combined service elements from the Service Skills Module with outside sources such as English textbooks developed for hotels and restaurants, American magazines and television programs, and English instructors from other hotels, in an effort to see what skills other hotels and restaurants were teaching their employees.

Subjects

While 175 employees were selected to participate in the Service Skills and English Language Program, 123 employees actually completed the 12-week program. Six subjects were dropped from the final sample because their raw scores on the Validity scale of the Hogan

Personality Inventory were below 10, meaning that they had completed the inventory so carelessly that their overall profile was invalid (Hogan & Hogan, 1992). As a result, 117 employees were included in the final statistical analysis. Participating employees represented all departments, all English abilities, and both sexes (male = 60; female = 57). Participation was voluntary, and employees were compensated for classes held outside working hours.

In the workplace, employees placed in the experimental behavior modeling group naturally interacted with employees in the lecture-based group. As a consequence, several employees in the lecture-based group asked to be switched to the more interactive behavior modeling group. The training department stated that it was not possible for all employees to be in the behavior modeling group, but that in next session all classes would use a behavior modeling approach. Further, the next session would be open to all employees. This process was similar to a technique used by Latham and Saari (1979), who told the control group that while it was not possible at present, they would receive the desired training in the future, thus, neither group was aware that the training program was an experiment. Still it is possible that some contamination occurred, which will be discussed in the limitations.

Experimental Design

To measure the effects of behavior modeling, a quasi-controlled between-subjects experiment was designed. Since it was suspected that English ability would affect responses to the training interventions, a block design was utilized. To determine block assignments, subjects self-assessed their English language skills as either beginner or intermediate. Training groups were assigned randomly after employees were distributed to beginner and intermediate blocks, thus neutralizing the effects of remaining variation and allowing for an unbiased comparison between training interventions. In all, eight classes were used for this study and a balanced design was achieved (Table 2).

Managerial evaluations and instructor assessments were obtained to confirm employees' evaluations of their English ability and managerial evaluations of employees' English ability. All assessment measures showed that those employees classified as beginners scored significantly lower than intermediates on all assessments, as will be discussed later.

Table 2
Class Distribution

Beginning English Level Control Group		Beginning English Level Experimental Group	
Class 1	n = 15	Class 3	n = 15
Class 2	<u>n = 15</u> n = 30	Class 4	<u>n = 15</u> n = 30
Intermediate English Level Control Group		Intermediate English Level Experimental Group	
Class 5	n = 14	Class 7	n = 14
Class 6	<u>n = 14</u> n = 28	Class 8	<u>n = 15</u> n = 29

Measures

To assess service skill levels, a written test was administered. The Service Skill and English Knowledge (SSELK) test was used as the service skill dependent variable. To assess the quality of In-class Behavior (ICB), a subjective evaluation was utilized. The ICB was used as the behavior dependent variable. The two major independent variables included the Service Orientation Inventory (SOI) (Hogan & Hogan, 1986) was used to assess predispositions toward service, and the Productivity Environmental Preference Survey (PEPS) (Price et al, 1991) was used to assess learning style preferences. While the SSELK was written and administered in English, the SOI and PEPS were translated following standard back-translation procedures (Breslin, 1970). After translation, the measures were field tested on a sample of 20 employees who were undergoing a food and beverage training program. All independent variables measuring employee demographics were obtained from personnel information.

Service Skills and English Language Knowledge (SSELK)

Hypothetical hotel situations were created to assess employees' knowledge of the hotel's service philosophy, as well as their English abilities. The questions reflected the four primary service philosophies of the hotel: 1) anticipating guests' needs and exceeding their expectations; 2) communicating effectively with guests and co-workers; 3) working as a team with co-workers to serve guests; 4) handling difficult situations effectively. For example:

Situation: A guest stops by the front desk to mention that the window shade in her room has fallen down for the third time.

Employee Response:

- a) I'm sorry, but you need to call maintenance to come and fix it.
- b) I'm sorry, I'll call maintenance to fix it right away. (Correct Answer)
- c) That's not my responsibility.

Situation: You are a food server and guests that are not seated in your section ask for their check.

Employee Response:

- a) I can't do it right now.
- b) I'm not your waiter.
- c) Certainly, I'll bring it right away. (Correct Answer)

The SSELK measure was administered on the first day of class and it was re-administered on the last day of class. In this way, pre- and post-measures of SSELK were obtained. The SSELK is scored on a 100 point scale.

We examined the psychometric properties of the 22-item knowledge instrument, to identify observable constructs. Four constructs were found that matched the four previously mentioned service philosophies. Five of the 22 questions were eliminated because they tested knowledge of rules rather than service principles (e.g. Questions dealing with cleanliness and the dress code). To statistically confirm this a priori analysis, a principle component factor analysis was undertaken (Norusis, 1993) and will be discussed in the results section.

In-class Behavior Evaluations (ICB)

To monitor the ability of employees to use what they were learning, after every class, all instructors evaluated each employee's in-class behavior with a four item scale. The four-item assessment scale was designed to assess underlying behavioral quality. Instructors assessed each student immediately after each session on four items reflecting: 1) Preparation, 2) Attentiveness, 3) Initiative, and 4) Participation. These characteristics were used because they were similar to the characteristics managers used to assess behavior on the job. Each characteristic was scored on a five-point Likert scale with 'none' anchored at zero and 'high' anchored at five. While instructors assessed students after each class, the organization only received a weekly summary of scores. While these weekly summaries were used to determine inter-item consistency, for this study, only the scores from the first and last week were used. The scores from the first two weeks of classes were used to derive ICB pre-measures and scores from the last two weeks of classes were used to derive ICB post-measures.

Service Orientation Index

The Service Orientation Index (SOI) of the Hogan Personality Inventory was administered to identify levels of service orientation among employees (Hogan & Hogan, 1992). The SOI is used to identify employees who are pleasant, courteous, cooperative, and helpful in dealing with customers, clients, and co-workers. Using self-ratings, the SOI analyzes each employee's level of Adjustment (which measures the degree to which a person appears calm

and accepting or, conversely, self-critical and tense), Likeability (which measures the degree to which a person is seen as perceptive, tactful, and socially sensitive), and Prudence (which measures the degree to which a person seems conscientious, comforting, and dependable). These three constructs were deemed necessary for good service (Hogan & Hogan, 1992). The SOI score is based on a total of 14 points and is self-rated.

Productivity Environmental Preference Survey

The Productivity Environmental Preference Survey (PEPS) was used to identify the environmental conditions under which these employees were likely to learn (Price et al., 1991). The PEPS scale does not measure underlying psychological motivation, value systems, or the quality of the attitudes. It reveals how an employee prefers to produce or learn best, rather than why. It describes how an adult prefers to produce or learn, rather than the skills that are used to do so (Price et al., 1991).

A priori theory indicated that not all of the PEPS scales would be useful for determining a preference toward behavior modeling training. Thus, a learning style index was created to measure a behavior modeling preference. It was assumed that employees with preferences toward behavior modeling would prefer to learn with their peers (since role plays would be utilized); would be less inclined to prefer a dominant authority figure in the training process; would prefer to learn in several ways (role plays, simulations, games); would prefer to use simulations with props (a tactile preference); and would prefer experiential learning (a kinesthetic preference). The PEPS scores from these scales were aggregated to create the index. The score for each PEPS scale is based on a total of 60 points.

Analysis

Ordinary least-squares regression analysis and moderator analysis with dummy variables were used to examine both the relative effects and the independent effects of training (Hardy, 1993). A dummy variable was created to represent the training intervention: Training Type was set equal to 1 for subjects in behavior modeling and to 0 for subjects in lecture-based training. A dummy variable was also created to control for English skill levels: English was set to 0 for beginners and to 1 for intermediates. To test the interactive effects between variables, derived variables were created: 1) Training Type*English Skills; 2) Training Type*SOI; 3) SOI*English Skills; and 4) SOI*Training Type*English Skills.

When the SSELK was the dependent variable, the predictor variables included type of training intervention, managerial evaluation of English skills, SOI, PEPS, and individual demographic variables (Sex, Age, Tenure at Hotel, Educational Level). When In-class Behavior was the dependent variable, the same variables plus the SSELK measures were used. This was

done to control effects of knowledge on in-class behavior. Initial levels of the dependent variable (SSELK) were used to control for baseline levels of knowledge at the onset of the training program.

RESULTS

Descriptive Statistics and Manipulation Check

Managerial evaluations and instructor assessments were obtained to confirm the employees' self-assessment of English skills and subsequent placement in an appropriate class. These self-assessments were confirmed by a t-test of mean differences between employee evaluations of their English ability and managerial evaluations (Table 3). All assessment measures showed that those employees classified as beginners scored significantly lower than intermediates on all assessments.

Table 3
Comparison of English Levels

	Beginner n = 61	Intermediate n = 56	Mean Difference	t-value df=115
Pre Knowledge				
M	21.22	40.71	19.49	-12.35*
SD	8.44	7.60		
Pre In-Class Behavior				
M	0.90	1.91	1.01	-9.25*
SD	0.57	0.61		
Managerial Evaluation				
M	0.59	1.42	.83	-6.98*
SD	0.52	0.75		

Note: *p<.01

Table 4 summarizes each type of training and each English level and provides a break-down of the descriptive statistics for each of the four training groups. It is apparent from these statistics that all independent variables, except for tenure at the hotel and the PEPS measure, were similar across all groups. This similarity reduced the potential for these independent variables to affect between-subjects effects. However, the t-test for equality of tenure and PEPS between the two training groups reached statistical significance. However, given the small absolute difference between these groups, the effect of this bias should be minimal.

Table 4
Means and Standard Deviations (Mean/SD) for Independent variables

Variable	Age	Sex	Tenure	Education	SOI	PEPS
Training Type						
Traditional (n=58)	24.8/4.5	.5/.3	12.6/6.5	13.1/2.1	11.0/2.2	209.9/15.0
Behav. Model. (n=59)	24.9/5.3	.5/.7	9.8/7.0*	13.7/2.0	10.7/2.6	203.6/18.7*
English Level						
Beginner (n=61)	25.0/4.6	.5/.3	11.2/6.7	13.0/2.1	10.9/2.1	208.6/14.9
Intermediate (n=56)	24.7/5.1	.5/.3	11.1/6.8	13.2/2.0	10.8/2.3	205.1/18.0
Group						
1	25.1/3.6	.5/.3	12.8/7.0	13.3/2.1	10.9/2.0	209.9/17.1
2	24.5/5.1	.5/.3	12.2/6.1	13.0/2.1	11.1/2.3	210.0/13.2
3	25.0/5.4	.5/.3	9.7/6.1	12.8/2.1	10.9/2.1	207.4/12.8
4	24.9/5.3	.6/.3	10.0/7.1	13.5/1.9	10.6/2.2	200.0/20.9
Full Sample (n= 117)	24.9/4.9	.5/.4	11.1/6.6	13.1/2.1	10.9/2.1	206.7/16.6

Note: * t-value for means is $p < .01$. Group 1 = Beginner English & Lecture-based Training; Group 2 = Intermediate English & Lecture-based Training; Group 3 = Beginner English & Behavior Modeling; Group 4 = Intermediate English & Behavior Modeling. Age and Education are measured in years; Tenure is measured in months. Sex coded 0 = Female, 1 = Male.

Scale Reliabilities

Table 5 presents the Cronbach Alpha's for the multi-dimensional scales along the diagonal. The overall reliability of the SSELK pre- and post- measure increased after the five questions were dropped (pre: 0.7771 to 0.8051; post: 0.7440 to 0.7888).

As previously mentioned the ICB scores were aggregated by the hotel on a monthly basis. Reliabilities for the four-item measure each month were 0.7145, 0.7862, and 0.7551, respectively. Scores were also highly reliable between months. In addition to the scores being highly reliable between months, the scores obtained for the In-class Behavior pre- and post-measures were also highly reliable. As previously discussed, the scores from the first two class meetings were averaged to derive the pre-measure (Cronbach's alpha = 0.7341), and the scores from the last two class meetings were averaged to derive the post-measure (Cronbach's alpha = 0.7442).

The overall reliability of the SOI normative sample (N = 11, 259) is 0.69 (Hogan & Hogan, 1992) and for this study (n = 117) is 0.57. Thus, the reliability for the Russian sample was slightly lower than but comparable to the normative sample. This moderate reliability reflects the fact that the SOI is composed of HICs taken from three independent personality

scales. Further, it was found (Hogan Assessment Systems, 1994) that one item on the scale was problematic because it had a negative item-total correlation with another item included in the scale thus reducing the SOI alpha. Nonetheless, the item was retained for analysis, because scores were provided by Hogan Assessment Systems and could not be recalculated.

The PEPS was used to identify the environmental conditions under which hotel employees were most likely to learn. For this study, scores from five of the PEPS scales were aggregated to create a learning preference inventory that measured a preference for behavior modeling. Based on a normative sample ($n = 900$) (Price et al, 1991), the reliabilities for those individual PEPS components used in the learning preference inventory included: Learning Alone/Peer Oriented (0.84), Authority-Oriented Learner (0.44), Several ways (0.78), Tactile Preferences (0.58), and Kinesthetic Preferences (0.82). Since the reliability of the Authority-Oriented Learner and Tactile Preferences components were low, they were not included in further model building. On the sample from this study, the reliability analysis of the other three scales taken together was extremely low: -0.4474, indicating that the learning style inventory was not a reliable measure of a preference for behavior modeling. These findings were similar to that of Murray-Harvey (1994) who also found the PEPS reliability to be low.

Table 5
The Pearson Product-Moment Correlation Matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(1) Training	NA																	
(2) English Ability	0.03	NA																
(3) Age	0.01	0.04	NA															
(4) Sex	0.04	-0.06	-0.15	NA														
(5) Education	-0.02	-0.06	-0.16	0.77**	NA													
(6) Tenure	-0.21*	0.01	-0.01	0.06	0.08	NA												
(7) SOI	-0.06	0.02	0.13	-0.06	-0.08	-0.01	(0.57)											
(8) Alone/Peer	-0.12	0.19*	-0.11	0.00	-0.15	-0.02	0.15	(0.84)										
(9) Several	-0.03	-0.08	0.04	0.02	0.06	0.03	-0.19*	-0.51	(0.78)									
(10) Kinesthetic	-0.13	0.14	-0.04	0.02	-0.08	0.12	-0.18	0.23*	0.18	(0.82)^								
(11) SSELKPre	-0.09	0.76**	0.07	0.09	-0.05	-0.04	0.02	0.18	-0.05	0.12	(0.809)							
(12) SSELKPost	0.36**	0.57**	0.15	0.03	-0.93	-0.06	0.53	0.18	-0.14	-0.03	0.48**	(0.789)						
(13) ICBPre	-0.12	0.77**	0.03	0.15	0.04	0.00	0.05	0.21*	-0.105	0.12	0.93**	0.49**	(0.734)					
(14) ICBPost	0.27**	0.59**	1.0	-0.02	-0.08	-0.02	0.51**	0.19*	-0.15	-0.01	0.45**	0.94**	0.47**	(0.744)				
(15) SOI*EngAbil	0.03	1.0**	0.06	0.06	-0.07	0.00	0.19*	0.21*	-0.10	0.13	0.74**	0.64**	0.76**	0.65**	(NA)			
(16) SOI*Training	0.96**	0.04	0.07	0.05	-0.01	-0.20*	0.14	-0.10	-0.08	-0.19*	-0.07	0.44**	-0.090	0.35**	0.08	(NA)		
(17) Train*EngAbil	0.57**	0.60**	0.02	-0.05	-0.11	-0.13	0.02	0.04	-0.02	0.01	0.44**	0.50**	0.38**	0.48**	0.58**	0.57**	(NA)	
(18) SOI*Train*Eng	0.57**	0.59**	0.05	-0.04	-0.10	-0.15	0.12	0.04	-0.05	-0.01	0.44**	0.54**	0.38**	0.51**	0.61**	0.59**	0.98**	(NA)

Note: N = 117. Training coded 0 = lecture-based, 1 = Behavior Modeling. English Ability coded 0 = Beginner, 1 = Intermediate. Sex coded 0 = Female, 1 = Male. NA = Not Available, ^ = Normative.

*p < .05. **p<.01.

Correlations

Table 5 also displays the correlations between variables. Since the learning style inventory shows no relationship with the dependent variables and because as previously discussed, many of the scales used for the learning style inventory were unreliable, the overall PEPS learning style inventory is dropped from all further analysis. The three PEPS subscales with acceptable reliabilities will be included in all model building to provide insight into the effect of different learning preferences.

An unexpected correlation was discovered in this analysis: there was a very pronounced tendency for males to be better-educated. These measures were correlated at 0.78 and the potential exists for multi-collinearity between these variables. While no tangible reason for this phenomenon can be discerned, gender was nonetheless dropped from further analysis to avoid multi-collinearity.

As expected, the SSELK and the ICB pre-measures were highly associated with English ability and SOL. While these associations were expected, the inter-correlations between the SSELK and ICB at both the pre- and post-measurement point were quite high. While increased levels of ICB may lead to higher levels of SSELK, the level of these associations could also indicate that both SSELK and the ICB measures may have assessed the same trait. The unexpected strength of these relationships could have resulted from the non-blind nature of assessment on the In-class Behavior measure. Since the teachers were grading the SSELK, they had been exposed to a benchmark measure prior to assessing In-class Behavior. Further, the possibility does exist that the strength of the relationship between the SSELK and In-class Behavior measures was the result of another causal relationship which was not addressed by this study. Nonetheless, we retained both dependent variables because prior theory and evidence treats them as separate constructs, and including both variables would shed light on the existence of underlying relationships between the ICB measure and other independent variables. The derived interaction variables were highly associated with training, English skill level, the SSELK pre-measure, and the In-class Behavior pre-measure. These associations were expected, based on the associations uncovered between the dependent and independent variables.

Regression Analyses Service Knowledge

Table 6 shows that training type and service orientation (SOI) were very significant and positive predictors of post-SSELK, even after controlling for the effects of prior knowledge. However, as expected, prior knowledge (Pre-SSELK) also reached significance as a predictor.

English ability reached significance, indicating a main effect and thus, supporting hypotheses 1a and 2a.

When the SOI variable was added to the regression, the R^2 increased from 51.28 to 67.69 percent and this change was significant at 0.001. Employees with a higher predisposition for service achieved higher post-training service knowledge than those with lower predispositions service, regardless of the training intervention, thus supporting hypothesis 3a. Given the non-significant effect of both tenure and learning styles, hypotheses 4a and 5a are not supported.

The significant main effect for behavior modeling training suggests generally improved knowledge for all subjects. However, the negative and significant coefficients on the interaction between behavior modeling training and SOI, as well as between behavior modeling training and English Ability suggests that those with lower pre-training service dispositions and language skills benefited more from behavior modeling training than those higher on these attributes. Thus, beyond being generally effective, it may be that behavior modeling training is most helpful to those with the least advantages at the onset of training.

Table 6
Predicting Post-Training Service Knowledge

Variable	B	SE B	Beta	T	Sig T
Education	-2.41779E-04	.003666	-.003242	-.066	.9476
Tenure	5.55352E-04	.001139	.023738	.487	.6270
Age	.001607	.001590	.049878	1.010	.3147
PEPS: Alone/Peer	7.28534E-04	.001038	.043108	.702	.4845
PEPS: Ways	6.56635E-04	.001051	.036985	.625	.5337
PEPS: Kinesthetic	4.47338E-04	.001608	.014985	.278	.7814
Pre-SSELK	.260350	.088867	.216379	2.930	.0042
English Ability	.291697	.112792	.939547	2.586	.0111
SOI	.049782	.006287	.689464	7.919	.0000
Training	.382451	.100663	1.232942	3.799	.0002
Training* EnglishAbil	-.295624	.154198	-.823013	-1.917	.0580
EnglishAbil*SOI	-.012648	.009969	-.459121	-1.269	.2074
Training*SOI	-.020417	.009173	-.735121	-2.226	.0282
Training* SOI*EngAb	.020788	.013903	.647964	1.495	.1379
(Constant)	-.175412	.147183		-1.192	.2361

Multiple R = 0.88121	R Square = 0.77653	Adjusted R Square = 0.74586
Standard Error = 0.07852	F = 25.31688	Signif F = 0.0000
Degrees of Freedom Regression = 14		Degrees of Freedom Residual = 102

In-class Behaviors (ICB)

As shown in Table 7, training and service orientation were very significant and positive predictors of post-ICB, even after controlling for the effects of prior knowledge. These were the same variables that exerted influence on the knowledge model. Thus, we find support for hypotheses 1 b and 2b. Interestingly, prior behavior did not play a significant role in predicting post-behavior.

When the SOI variable was added to the regression, the R^2 increased from 40.23. to 52.98 percent and this change was significant at 0.000. Employees with a higher predisposition for service achieved higher post-ICB scores than those with lower predispositions service, regardless of the training intervention, thus supporting hypothesis 3b. Given the non-significant effect of both tenure and learning style, hypotheses 4b and 5b are not supported. In contrast to the knowledge results, no interaction terms were significant predictors of behaviors.

Table 7
Predicting Post-Training Class Behaviors

Variable	B	SE B	Beta	T	Sig T
Education	-3.19446E-04	.025790	-7.198E-04	-.012	.9901
Tenure	.004791	.007901	.034415	.606	.5456
Age	.002551	.011050	.013308	.231	.8179
PEPS: Alone/Peer	.002216	.007229	.022039	.307	.7598
PEPS: Ways	6.61488E-04	.007312	.006261	.090	.9281
PEPS: Kinesthetic	.004493	.011187	.025291	.402	.6888
English Ability	1.647165	.784223	.891552	2.100	.0382
SOI	.276749	.043739	.644096	6.327	.0000
Training	1.579380	.700356	.855613	2.255	.0263
Pre-ICB	.101472	.106285	.085581	.955	.3420
Training* EngAbil	-.654107	1.07266	-.306013	-.610	.5434
English Ability*SOI	-.054406	.069371	-.331872	-.784	.4347
Training*SOI	-.081957	.063836	-.495889	-1.284	.2021
Training* SOI*EngA	.037859	.096603	.198301	.392	.6959
(Constant)	-.671826	1.017727		-.660	.5107

Multiple R = 0.83328

R Square = 0.69436

Adjusted R Square = 0.65241

Standard Error = 0.54647

F = 16.55172

Signif F = 0.0000

Degrees of Freedom Regression = 14

Degrees of Freedom Residual = 102

Mean Training Effects

Table 8 shows average scores on the dependent measures for both the behavior modeling group and lecture-based group. On the basis of these results, the difference between scores on the pre- and post-scores measures were expressed in terms of standard deviation units (Bretz & Thompsett, 1992). The results show that both behavior modeling and lecture-based training had positive effects, resulting in higher means on the post-measures than on the pre-measures. However, the training effect was greater in the behavior modeling groups.

Further, differences in mean scores on the SSELK and ICB were apparent between both training groups. The t-test for the equality of means between the behavior modeling and lecture-based groups on both the pre- and post-measures reached statistical significance. On the pre-measures the means were higher for the lecture-based group, while on the post-measures the means were higher for the behavior modeling group. Thus, the behavior-modeling group showed greater increases in scores, supporting hypotheses 1a and 1b.

Following similar procedures, Table 9 presents average scores on the dependent measures across the beginner and intermediate English skill levels. Mean scores on the pre- and post-training SSELK and In-class Behavior measures were higher for those with more English skill (all t-values statistically significant). Despite these differences, training had a positive effect on SSELK, for both English levels. Although the difference between the two English groups were slight, those with higher English skills did achieve a higher training effect in both training approaches, on both outcome measures. Thus, employees with higher pre-training English skills achieved higher scores on the SSELK and ICB pre- and post-measures than those employees with lower pre-training English skills. Further, employees with higher English skills increased their scores on the SSELK and ICB more than those employees with lower English skills- supporting hypotheses 2a and 2b.

Table 8
Knowledge and In-class Behavior Scores based on Type of Training

	BM (N=59)	Traditional (N = 58)	Mean Difference	t-value df = 115
Pre Knowledge				
M	29.40	31.72	-2.32	-.97
SD	14.1	11.7		
Post Knowledge				
M	77.46	66.29	11.17	4.14*
SD	10.07	15.99		
Training Effect	3.98	2.50		
Pre In-Class Behavior				
M	1.36	1.53	-.17	-1.24
SD	.80	.75		
Post In-Class Behavior				
M	4.03	3.53	.50	3.01
SD	.83	.96		
Training Effect	3.26	2.33		

Note. Effect = (post M- pre M)/avg. SD
 p<.01

Table 9
Knowledge and In-Class Behavior Scores based on English Levels

Variable	Beginner (N=61)	Intermediate (N = 56)	Mean Difference	t-value df = 115
Pre SSELK				
M	21.22	40.71	9.40	12.35*
SD	8.44	7.60		
Post SSELK				
M 63.44	81.16	17.72	7.45	
SD 12.68	11.87			
Training Effect	4.00	4.15		
Pre In-Class Behavior				
M	.90	1.91	1.01	13.02*
SD	.57	.61		
Post In-Class Behavior				
M	3.03	4.23	1.20	7.79*
SD	.80	.78		
Training Effect	3.09	3.31		

Note: Effect = (post - pre)/ average SD
 *p<.01

DISCUSSION

Implications

The present study attempted to provide evidence that training improves service knowledge and behaviors in collectivist cultures, focusing on a sample of actual Russian hotel employees, undergoing authentic service training. The study extends behavior modeling and social learning theory because prior research had not examined how behavioral modeling would

work in a cultural context lacking natural behavior models. Our results suggest that behavior modeling may well provide results generalizable to different cultures, especially pertaining to workplace and language training. The non-significant effect of tenure in the regressions could suggest that tenure does not provide a "context" for learning nor does tenure increase the likelihood that behaviors will become entrenched. Another possibility may simply be that these effects offset each other.

Our results are encouraging for the application of social learning theory and behavioral modeling to this environment, while also bolstering previous research that suggests behavior modeling is effective for "western" cultures. While both traditional and behavioral-modeling training were effective, behavioral modeling was significantly more effective for both levels of English ability. It also appears that service orientation is positively associated with knowledge acquisition in this context. This is a potentially important finding, because it suggests that the measure of service orientation used here can be applied across cultures, and that knowing the service orientation of the work group may be useful in designing future training endeavors. The significant interaction terms in the knowledge regressions also suggest that behavior modeling may be most helpful to those least predisposed to service, or those least language facile, perhaps implying that training compensates for disadvantages among trainees.

For organizations, the practical implications of this study revolve around creating effective service training and development programs. Our results suggest that language ability is a key factor in the level of knowledge and service behaviors attained by these employees. While employees of all language levels benefited from the training, those with greater language skills both began and concluded both training approaches at higher knowledge and behavior levels. This is not a surprising result, considering the importance of language in a learning environment, but to date we have little empirical evidence regarding the importance of language ability across cultures. This evidence suggests that organizations would do well to embed language learning within programs that provide functional job learning. A similar proposition arose in studies of literacy training in the U.S. (Rosow & Zager, 1990). Thus, the present results emphasize the importance of language facility and its relationship to training success not only for non-U.S. workers, but also for U.S. contexts in which worker populations may have limited language skills.

Similarly, service orientation appears to enhance learning. Organizations might do well to assess service orientation among their workers, not only for its direct effects on job behaviors, but for its effects on the impact of training as well. In this sample, behavior modeling

provides the most advantages over traditional training for those with less language skill and service predisposition.

Finally, the main result of the study suggests that while training is generally effective, behavior-modeling training based on social learning theory is consistently more effective. In the context of this study, employee training had been based on a traditional model because that was what both host-country managers and employees had experienced in their own education. Even among U.S. managers, a traditional lecture-based training design is probably frequently the only option considered. The present results suggest that carefully designed behavior-modeling training that includes role-playing and active learning may significantly enhance the success of service organizations in a global environment.

Limitations

Unique Population

Given the circumstances surrounding the study (e.g. a joint-venture hotel, the Russian culture, a training department in transition, the political climate, the unique interplay of English and service, etc.), a threat to external validity may exist. Mayer and Russell (1987) raised concerns regarding the internal, external, and construct threats to the validity of behavioral improvements achieved through behavior modeling, still this study does have important features enhancing generalizability. Since this research was conducted in conjunction with an organizational training program, rather than in the laboratory, the results may be more generalizable to other training programs. While the population was unique, the employees in the behavioral modeling group were not significantly different from those employees in the control group thus reducing the threat of unobserved variable effects. It is also possible that the different experimental groups interacted outside of the training, which may have caused contamination. However, this would tend to mask any differences between the groups and the design was apparently powerful enough to detect significant differences despite the possibility of contamination.

Finally, since to date there has not been a study of this population of employees, these results serve as an important data point for future research. However, in response to the recommendations of Jackson and Schuler (1995) regarding human resource management, studies and following in the research tradition of Bretz and Thompsett (1992), this study evaluates training programs with a rigorous design in the field. Certainly, further research would be useful, especially comparisons between trainees in different cultures who receive similar training.

Measures

The translation of independent measures may have biased results of the SOI and PEPS. Although these measures were translated following standard forward-backward translation procedures, it is possible that the employees were unable to fully understand and answer the questions in the measures. Furthermore, the potential exists that employees completed these measures with the belief that their answers would impact their job or their salary-- they may have answered the question based on what they thought managers wanted to hear. This may explain the low reliability of some PEPS scales.

A more fundamental problem with the dependent measures was brought out in the regression analysis. The In-class Behavior measure is problematic, because it is a subjective measure and employees were not assessed blindly. Subjective observations can be problematic (Miller, 1977). Such observations cannot provide answers to the antecedent conditions necessary for increases in service to be produced, nor are such observations easily reproduced (Elmes et. al, 1992). The instructors assessing employees were privy to employees' scores on the SSELK pre- and post-measures. Thus, their knowledge of employees' scores on the SSELK could have influenced their assessment of employees on the In-class Behavior measure. Such a bias may explain the high collinearity between knowledge and behavior.

The SSELK instrument used twenty-two questions to measure four constructs. Because of the number of items included in the study, the SSELK only contained either 4 or 5 items per construct. The relatively short length of this instrument, and the subsequent, small number of items per construct, may have decreased reliability. More items would have produced more reliable scales, permitted greater clarification of the constructs and possibly permitted greater differentiation between constructs. However, organizational constraints prevented such a test. Despite these concerns, the SSELK measure had a high internal reliability and as a comprehensive measure it seems to have measured service knowledge as defined by the hotel.

Future Research

Future research might fruitfully build upon the present study by enhancing the design, generalizability, and measurement sophistication of the constructs. From a design standpoint, the most pressing need is for studies that simultaneously apply similar organizational interventions to employees from different cultures. Promising environments for such research might include locations in which employees from the home country and expatriate employees work together. It would be interesting, for example, to examine the differences in the response to the training examined here, by comparing American workers employed in a Russian hotel or restaurant to their Russian co-workers. While the numbers of Western employees in Russian

hotels may be too small to make such a study feasible, other major Central European cities, such as Prague, Budapest, and Warsaw may well offer such opportunities, due to recent inflows of young American and Western European workers. Future research might also enhance the generalizability of these findings by applying this training design to workers in other countries, industries, and cultures. The results from the present study are intriguing, and appear logical in light of the theory; however, they represent only one group of workers in a single organization. Constructive replication would be fruitful.

It is likely that future research can enhance understanding by creating measures that exhibit more stable and reliable structures, and provide evidence of that stability and reliability across difference cultures and languages. Also, future research might also incorporate the effects of employee attitudes on service performance, and the potential effect that training has on attitudes. For example, since Schmit and Allscheid (1995) have made the link between employee attitudes and customer satisfaction, it might be possible that by giving employees greater skills, they may perform better and thus gain satisfaction from the work, and thus exude more attractive customer service.

Conclusions

Increasing globalization and service industry growth means that organizations will require service-enhancement methods that can span multiple cultures. To date, much of our theory and knowledge about work force enhancement methods is based on samples of workers from cultures with capitalist economies and "western" cultures. Some of the thorniest issues facing managers will involve enhancing service behaviors among host-country nationals who have little cultural context for such concepts and few role models on which to draw. The importance of language ability, and its relationship to learning and development will also take on increasing importance. Thus, it is necessary to amass greater empirical evidence to determine if existing theories and interventions generalize to service knowledge and behaviors across cultures. This study provides one step in that process.

REFERENCES

- Abelson, R.P. (1976). Script processing in attitude formations and decision making. In U.S. Carroll & W. Payne (Eds.), Cognition and Social Behavior, (pp. 33-45). Hillsdale, NJ: Erlbaum.
- Abelson, R.P. (1981). Psychological status of the script concept. American Psychologist, 36, 715-729.
- Adams, J.A. (1987). Historical review and appraisal of research on the learning, retention, and transfer of human motor skills. Psychological Bulletin, 101, 41-74.
- Adams, J.A. (1957). The relationship between certain measures of ability and the acquisition of a psychomotor criterion response. Journal of General Psychology, 56, 121-134.
- Alliger, G.M., & Janak, E.A. (1989). Kirkpatrick's levels of training criteria: Thirty years later. Personnel Psychology, 42, 331-342.
- Ashforth, B.E., & Fried, Y. (1988). The mindlessness of organizations, Human Relations, 41(4), 305-325.
- Bandura, A. (1977). Social learning theory. Englewood Cliffs, N.J.: Prentice-Hall.
- Bandura, A., & Jeffery, R.W. (1973). Role of symbolic coding and rehearsal process in observational learning. Journal of Personality and Social Psychology, 26, 122-130.
- Bandura, A., Jeffery, R., & Bachicha, D.L. (1974). Analysis of memory codes and cumulative rehearsal in observational learning. Journal of Personality and Social Psychology, 8, 99-108.
- Bateson, J., & Scrivens, E. (1989). Service and selling- Are they compatible? In Service excellence: Marketing's impact on performance. Eighth Annual Services Marketing Conference Proceedings. Chicago: American Marketing Associations, 150-162.
- Black J.S., & Mendenhall, M. (1990). Cross-cultural training effectiveness: A review and a theoretical framework for future research, Academy of Management Review, 115(1), 113-136.
- Berry, L.L. (1980). Service marketing is different. Business Week, (May-June), pp. 24-29.
- Bochner, S. (1982). Cultures in contact: Studies in cross-cultural interaction. New York: Pergamon Press.
- Bretz, R.D., & Thompsett, R.E. (1992). Comparing traditional and integrative learning methods in organizational training programs. Journal of Applied Psychology, 77(6), 941-951.
- Brislin, R.W. (1981). Cross-cultural encounters. New York: Pergamon Press.
- Brown, J., & Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. Organization Science, 2(1), 40-57.

- Brown, J., Collins, A., & Duguid, p. (1989). Situated cognition and the culture of learning. Education Researcher, 18, 32-42.
- Campbell, J.P. (1971). Personnel training and development. Annual Review of Psychology, 22, 565-602.
- Campbell, J.P. (1988). Training design for productivity development. In Campbell, J.P., & R.J. Campbell. (Eds.), Productivity in organizations, (pp. 177-215). San Francisco, Jossey-Bass.
- Cascio, W.F. (1989). Using utility analysis to assess training outcome. In Goldstein, I.L. (Ed.), Training and development in organizations (pp.63-88). San Francisco: Jossey-Bass.
- Cronbach, L.J. (1967). How can instruction be adapted to individual differences? In R.M. Gagne (Ed.). Learning and individual differences. Columbia, Ohio: Merrill.
- Dalton, R.F. (1973). An application of principles of social learning to training in communication of empathy. Dissertation Abstracts International, 33, 5597-A. (University microfilm No. 73-7422).
- Davis, S. (1987). Future perfect. New York, New York: Addison-Wesley.
- Decker, P.J., & Nathan, B.R. (1985). Behavior modeling training: Principles and applications. New York, New York: Praeger.
- Elmes, D.G., Kantowitz, B.H., & Roediger, H.L. (1992). Research methods in psychology. St. Paul, Minnesota: West Publishing.
- Fisher, C.D. (1986). Organizational socialization: An integrative review. Research in Personnel and Human Resource Management, 4, 101-145.
- Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. Journal of Marketing, 56, 6-21.
- Franke, R.H., Hofstede, G., & Bond, M.H. (1991). Cultural roots of economic performance: A research note. Strategic Management Journal, 12(Summer), 165-73.
- Gerst, M.S. (1971). Symbolic coding processes in observational learning. Journal of Personality and Social Psychology, 19, 7-17.
- Gioia, D.A., & Manz, C.C. (1985). Linking cognition and behavior: A script processing interpretation of vicarious learning, Academy of Management Review, 10, 527-39.
- Goldstein, A.P., & Sorcher, M. (1974). Changing supervisor behavior. New York, New York: Pergamon.
- Good, T.L., & Brophy, J.E. (1986). Educational psychology (3rd Edition). New York: Longman.

- Gregory, K., Kam, S., Gregory, K., Kwan, J., & Mehran, A. (1993). Service orientation: A job specific construct or a personality construct? Paper presented at the meeting of the Eighth Annual Meeting of the Society for Industrial and Organizational Psychology, San Francisco, California.
- Haccoun, R.R., & Hamtiaux, T. (1994). Optimizing knowledge tests for inferring learning acquisition levels in single groups training evaluation designs: The internal referencing strategy. Personnel Psychology, 47, 593-604.
- Hanan, M., & Karp, P. (1987). Customer satisfaction: How to maximize, measure, and market your company's "ultimate product". New York, New York: AMACOM.
- Harrison, J.K. (1992). Individual and combined effects of behavior modeling and cultural assimilator in cross-cultural management training. Journal of Applied Psychology, 77(6), 952-962.
- Hardy, F. (1993). Regression with dummy variables. Sage Publications, Newbury Park: California.
- Heitbrink, P.G. (1971). The effectiveness of behavior modeling and instruction in vocational counseling with schizophrenic and normal subjects. Dissertation Abstracts International, 32(6-B), 3636(No. 72-1322).
- Heskett, J.L. (1986). A strategic service vision: Basic elements. In Managing in the Service Economy, Cambridge, Massachusetts: Harvard Business School Press.
- Hogan Assessment Systems (1994). Personal Correspondence.
- Hogan, J., & Hogan, J. (1992). Hogan personality inventory manual. Tulsa, Oklahoma: Hogan Assessment Systems.
- Hogan, J., & Hogan, J. (1986). Hogan personnel selection series manual. Minneapolis, Minnesota: National Computer Systems.
- Hogan, J., Hogan, R., & Busch, C.M. (1984). How to measure service orientation. Journal of Applied Psychology, 69(1), 167-173.
- Jackson, S.E., & Schuler, R.S. (1995). Understanding human resource management in the context of organizations and their environments. Annual Review of Psychology, 46, 237-264.
- Jeffery, R. W. (1976). The influence of symbolic and motor rehearsal on observational learning. Journal of Research in Personality, 10, 116-127.
- Judge, T. (1993). Does affective disposition moderate the relationship between job satisfaction and voluntary turnover? Journal of Applied Psychology, 78(3), 395-401.
- Kagan, J., & Kogen (1970). Individual variation on cognitive processes. In P. Mussen (Ed.). Carmichael's manual of child psychology (3rd, Ed.). New York: Wiley.

- Kirkpatrick, D.L. (1978). Evaluating in-house training programs. Training and Development Journal, 32(9), 6-9.
- Koepp, S. (1987, February 2). Pul-eeze! Will somebody help me? Time, 48-53.
- Lam-Phoon, S. (1986). A comparative study of the learning styles of Southeast Asian and American Caucasian college students of two Seventh-Day Adventist campuses. (Doctoral dissertation, Andrews University).
- Lave, J. (1988). Cognition in practice: Mind, mathematics, and culture in everyday life, New York: Cambridge University Press.
- Lave, J., & Wenger, E. (1990). Situated learning: Legitimate peripheral participation, IRL report 90-0013, Palo Alto, CA: Institute for Research on Learning.
- Lamel, P.A. (1971). Imitation learning of information processing. Journal of Experimental Child Psychology, 12, 223-227.
- Loughlin, P.R., Moss, I.L., & Miller, S.M. (1969). Information-processing in children as a function of adult model, stimulus display, school grade, and sex. Journal of Educational Psychology, 60, 188-93.
- Maccoby, E.E. (1984). Socialization and developmental change. Child Development, 55, 317-328.
- Manning, P.K. (1970). Talking and becoming: A view of organizational socialization. In J.D. Douglas (Ed.), Understanding everyday life, (pp. 239-256), Chicago, IL: Aldine.
- Mayer, S.J., & Russell, J.S. (1987). Behavior modeling training in organizations: Concerns and conclusions. Journal of Management, 13, 21-40.
- Mendenhall, M., & Oddou, G. (1986). Acculturation profiles of expatriate managers: Implications for cross-cultural training programs. Columbia Journal of World Business, 21(4), 73-79.
- Miller, D.B. (1977). Roles of naturalistic observation in comparative psychology. American Psychologist, 32, 211-219.
- Pea, R.D. (1990). Distributed cognition, IRL Report 90-0015, Palo Alto, CA: Institute for Research on Learning.
- Price, G.E. (1987). Changes in learning style for a random sample of individuals ages 18 and older who responded to the productivity environmental preference survey. Unpublished research.
- Price, G.E., Dunn, R., & Dunn, K. (1991). Productivity environmental preference survey. Lawrence, Kansas: Price Systems.
- Rosen, J. (1978). The efficacy of modeling and instructional techniques for counselor acquisition of nonverbal empathy skills. Dissertation Abstracts International, 39, 5334-A. (University microfilm no, 7906027).

- Rosengren, T.M. (1972). A leaderless group model designed to increase self-reliant verbal behavior. Dissertation Abstracts International, 33-03-A.
- Rosow, J.M., & Zager, R. (1990). Training: The competitive edge. San Francisco, California: Jossey-Bass Publishers.
- Sackett, P.R., & Mullen, E.J. (1993). Beyond formal experimental design: Towards an expanded view of the training evaluation process. Personnel Psychology, 46, 613-627.
- Sasser, W.E., Jr., Olsen, R.P., & Wyckoff, D.D. (1986). Management of service operations: Text and cases, Boston, Massachusetts: Allyn & Bacon.
- Schmit, M.J., & Allscheid, S.P. (1995). Employee attitudes and customer satisfaction: Making theoretical and empirical connections. Personnel Psychology, 48, 521-536.
- Shank, R.C., & Abelson, R.P. (1977). Scripts, plans, Goals. & Understanding, Hillsdale, NJ: Erlbaum.
- Stone, G.L., & Kelley, K. (1980). Effects of helping skills on attitudes toward psychological counseling. Paper presented at the Iowa Educational Research and Evaluation Meeting, Iowa City, Iowa.
- Taylor, D.W. (1994). Strategic planning, Russian style. Cornell Hotel and Restaurant Administration Quarterly, 35(1), 82-89.
- Taylor, D.W. (1991). Reform and the Soviet Hotelier: Strategic Planning at the Big Red Hotel. Unpublished Master's Thesis, Cornell University, Ithaca.
- Tureen, R. G. (1972). Comparison of left and right-hand performances in tactuo-spatial perception. (Doctoral dissertation, Wayne State University, 1969). Dissertation Abstracts International, 32, 7327-B. (University microfilm no. 72-16, 236).
- Wehrenberg, S.B. (1987). Front-line interpersonal skills a must in today's service economy. Personnel Journal, 66(1), 115-118.
- Welsh, D., & Swerdlow, S. (1992). Hospitality, Russian style: Nine communication challenge. Cornell Hotel and Restaurant Administration Quarterly, 33(6), 64-72.
- Wexley, K.N., & Latham, G.P. (1991). Developing and training human resources in organizations. New York: Harper Collins.
- Zimmerman, B.J., & Rosenthal, T. (1974). Observational learning of rule-governed behavior by children. Psychology Bulletin, 81, 29-42.