

## Management Research FRONTIERS

The way employees from different cultures respond to work anxieties intrigues one professor. The impact of IT on healthcare fascinates two others.



**D**rs. David L. Ford Jr., Mark Thoun and Indranil Baradhan unveil results of recent research in this regular feature that showcases scholarly expertise of School of Management faculty members. Their abstracts reveal the potential significance and practical applications of their studies.

### Coping With Workplace Stress

#### ORGANIZATIONAL STRESS, PSYCHOLOGICAL STRAIN AND WORK OUTCOMES IN SIX NATIONAL CONTEXTS: A CLOSER LOOK AT THE MODERATING INFLUENCES OF COPING STYLES AND DECISION LATITUDE

By Dr. David L. Ford Jr., Dr. Rabi Bhagat, Dr. Balaji Krishnan and Dr. Karen Moustafa Leonard

Professor Ford is interested in organizational behavior across cultures, and his areas of expertise include international business, leadership development, quality of work life, and effective foundations of interpersonal dynamics. The following abstract is based on a research article by Dr. Ford and his colleagues, Professor Rabi Bhagat and Associate Professor Balaji Krishnan of the University of Memphis and Assistant Professor Karen Moustafa Leonard of Indiana University-Purdue University Fort Wayne. The article is in press at *Cross Cultural Management: An International Journal*.

This study investigated the moderating effects of (a) problem-focused coping, (b) emotion-focused coping, and (c) decision latitude, on the relationship between three fac-

ets of role stress (that is, role ambiguity, role conflict, role overload) and psychological strain in six national contexts. The objective of the research was to examine the relative efficacy of each moderator for ameliorating the level of psychological strain experienced by professional workers in six countries that differed on the cultural dimension of individualism-collectivism. Problem-focused coping involves proactive efforts to reduce or manage distress associated with the stress experience (for example, active problem-solving, information-seeking efforts or behavioral efforts directed at managing distress). Emotion-focused coping involves intrapsychic efforts to reduce or manage distress (for example, intellectualization, social isolation, suppression, optimistic comparison or restricted expectations). Decision latitude is the amount of discretion or control that an individual has or is permitted to have by the organization in meeting her or his job demands.

The results indicated that problem-focused coping and decision latitude were better at reducing the level of expe-



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rienced psychological strain under conditions of high role stress in the two individualistic countries in the study (New Zealand and the United States), while emotion-focused coping was a better moderator in the collectivistic countries of Japan and Spain. None of the three moderators had a significant effect on the role stress-psychological strain relationships in Germany and South Africa — the two countries in the study that had scores in midrange of the individualism-collectivism continuum. These findings suggest that employees with different collectivist orientations may adopt different frames of reference when evaluating their workplace, which, in turn, influences the extent to which they experience distress when the work environment becomes stressful.

Research that examines the predictive efficacies of various culture-specific coping styles is quite important in this era of globalization. It has been known for some time that non-Western and collectivistic societies cope with work and personal life stresses using strategies and methods that are not necessarily found or regarded as effective in Western cultures. Our future work in this area will attempt to incorporate these perspectives in order to grasp the complete significance of culture-specific roots of coping in different national contexts. A different version of the study, involving an expanded set of countries and additional predictor and outcome variables, was presented in August at the 2009 Academy of Management Meeting in Chicago.

Does IT Help or Hinder Hospital Patient Care?

#### THE EFFECT OF INFORMATION SYSTEMS ON THE QUALITY AND COST OF HEALTHCARE: A LONGITUDINAL STUDY OF U.S. HOSPITALS

By Dr. Mark Thouin and Dr. Indranil Bardhan

Associate Professor Bardhan recently returned from a sabbatical in Dallas at UT Southwestern Medical School, where the Department of Clinical Sciences gave him a grant to study healthcare informatics. That discipline employs computer and information sciences to optimize the acquisition and use of healthcare data. He also studied the application of emerging information technologies (ITs) for clinical care and research. Dr. Bardhan teaches an SOM course on healthcare informatics. His research and teaching often focus on healthcare ITs, their role in improving the effectiveness and quality of patient care, and costs associated with healthcare systems in the United States.

Recently, he co-authored an article with Dr. Mark Thouin, director of SOM's management information systems

program. Dr. Thouin's research specialty is evaluating the clinical and administrative value of healthcare ITs, a topic he has researched for five years. The two professors' work will appear in the *Proceedings of the Thirtieth International Conference on Information Systems*, December 2009. The conference will be held in Phoenix. For a copy of their paper, contact [barathan@utdallas.edu](mailto:barathan@utdallas.edu).

Understanding factors affecting the efficiency of clinical healthcare is of critical importance because healthcare-provider processes directly affect patient outcomes. This study focuses on the adoption and use of hospital information systems and their impact on the quality and costs associated with delivery of patient care. We examined the effect of clinical and administrative information technology (IT) use on hospital financial performance, thereby providing insight into the relationship between IT costs and quality of healthcare processes.

We obtained archival data on hospital IT usage and combined it with data on hospital quality-of-care processes to analyze a panel of 2,848 U.S. hospitals across a three-year period. Specifically, we studied the impact of clinical and administrative IT usage on four patient-care processes: *treatment of acute myocardial infarction, heart failure and pneumonia, and prevention of surgical infection*. The hospital information systems in our study represented four functional processes: *clinical, financial, administration and human-resource management*. We used hospital operating expense per bed as a proxy for operating costs associated with the hospital.

Preliminary results indicate a positive impact of clinical information systems, patient-scheduling applications and human-resource-management information systems on the quality of patient-care processes. The quality of all four processes increased as the usage of hospital IT increased. However, the increased quality came at a cost, because clinical- and patient-scheduling systems usage was associated with increased operating expenses.

Another significant finding was that not-for-profit hospitals have higher quality processes for treating heart attack, heart failure and pneumonia, and for preventing surgical infection than for-profit hospitals. However, for-profit hospitals experience significantly lower costs than not-for-profit hospitals, thus providing evidence of the effect of profit motives on operational expenses per bed. Our findings have significant policy implications as they demonstrate the cost-quality tradeoff associated with the use of IT in hospitals.



Mark Thouin



Indranil Bardhan