



Chapter XIV

Organizational Control Mode, Cognitive Activity & Performance Reliability: The Case of a National Hospital in Japan

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ABSTRACT

Objectives: Improvement of service quality and security is required in any business area in society. The purposes of this chapter are to identify and to verify our study hypotheses that cognitive activities, work environment and organizational climate/culture are highly related with human performance reliability and that human performance reliability was predicted by organizational control mode. This chapter will also emphasize that it is important to focus on the implication of latent variables perceived for tacit knowledge as well as articulate knowledge in knowledge management. Methods: The subjects surveyed in the case study are 356 clinical nurses and healthcare providers working in a national hospital in Japan. The questionnaires used were prepared by referring to the methodologies developed by Hollnagel et al. for assessing human reliability. Results: The score of improved reliability in strategic organizational control mode was the highest, while the one in scrambled mode was the lowest among four control modes of organization. Performance reliability was significantly influenced

by organizational climate and work environment as well as cognitive activities of the participants. This was the similar trend observed in industry. In concluding, the latent factors, i.e., the variables in the genotype embedded deep in a complex organization, were the determinants for predicting human performance reliability in this case study. These results suggested that the variables in the genotype representing cognitive activities, nursing work environment and organizational safety climate were important factors as well as the variables in the phenotype which were observable.

INTRODUCTION

Organizational performance may be shaped by multi-factorial causes emerging in the synergetic process of individual, organization and technology. Improvement of healthcare performance is required for providing appropriate quality of care and security for clients/customers who have a large variety of needs, some of which require a long term of continuous healthcare. Our major concern in this chapter is on the quality of healthcare in terms of security which is delivered in a hospital under the external and internal pressures of diversity and uncertainty in financial, technical and organizational environments. Risk assessments carried out in the hospitals in Japan are not adequately programmed. Some trends in the occurrence of individual erroneous action were reported in Japan (Japanese Ministry of Health, Labor & Welfare, 2003; Tokyo Women's Medical University, 2003), in Europe and the US (WHO, 2000; WHO, 2001), but adequate countermeasures against organizational behavior have not yet developed because of the complex and uncertain structure of the problems (McKee & Healy, 2002). The contextuality of individual erroneous action is to be disclosed and to be asked the reason why she/he has to take such an action. Focuses were placed on organizational management design for the identification of the relation between performance reliability and organizational control mode and for enhancing healthcare quality and security as one of the solutions in hospitals changing for coping with problematic situations of organizational management. This chapter is organized into two parts. First, we explain key concepts in this chapter, i.e., organizational control mode and cognitive activity in the relation with performance reliability. Second, we summarize the case study carried out in a national hospital in Japan by illustrating the linkages among cognitive activity of clinical demands, work environment and organizational climate. Finally, we emphasize the importance of the latent variables embedded in the organizational environment and the assessment of performance reliability influenced by the organizational control mode as mentioned in the case study.

PERFORMANCE RELIABILITY AND ORGANIZATIONAL CONTROL MODES

Most of the erroneous actions and inefficient actions in social services cause the organizational situation insufficiently supported for service/care-providers to take action. Higher job-competency of an individual is primarily required in any job areas in society and care-providers, like other professional workers, are continuously required to develop their professional knowledge and to enhance their practical skills in the course

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