Chapter 6
Revisiting Issues, Limitations, and Opportunities in Cross–Cultural Research on Collaborative Software in Information Systems: A Critical Literature Update

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ABSTRACT
Previously, Zhang and Lowry (2008) analyzed the issues, limitations, and opportunities in cross-cultural research on collaborative software in information systems. This chapter revisits the issues discussed in that paper and adds to them an analysis of the research done since their analysis, which covered the years leading up to 2005. Five additional articles, published between 2005 and the end of 2008 have been added to their original analysis. Since the beginning of 2005, research has extended to new countries and cultures, and has covered a previously unexplored task type. New insights and opportunities are discussed. Previously, Zhang and Lowry (2008) found seven common failures in CSW-supported cultural research. This update analyzes five new papers against these seven failures and finds their recent research encouraging. The main contribution of this chapter is filling in the gap between the current state of this particular area of research and the previous state at the beginning of 2005 when the analysis of Zhang and Lowry was completed.

DOI: 10.4018/978-1-60566-920-5.ch006

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INTRODUCTION

Globalization has affected business by increasing marketplace competitiveness, restructuring organizational boundaries, and creating new challenges for managers who deal with multinational companies or international alliances. Businesses often use multicultural collaborative groups working in distributed environments to cope with uncertainty, change, ambiguous problem definitions, and rapidly changing information (e.g., Vick, 1998). A critical need exists for managers “to develop a new repertoire of skills and abilities to manage and/or work with people whose cultures and value systems can be significantly different from those at home” (Tung, 1995, p. 485). Thus, “understanding the potential advantages and disadvantages of this diversity is important for organizations” (Staples & Zhao, 2006, p. 403).

Improving group processes and outcomes has been one of the most highly investigated research issues of the past two decades. The advance of information technologies makes it possible for distributed teams to be supported through collaborative technologies such as group support systems (GSS) and computer-mediated communication (CMC), which are collectively known as collaborative software (CSW). CSW refers to computer systems that combine communication and decision-support technologies to facilitate the formulation and execution of various group activities. These distributed, computer-supported groups are often referred to as virtual teams.

In this study we are primarily concerned with cultural effects on virtual teams. Information technology is not “culturally neutral and may come to symbolize a host of different values driven by underlying assumptions and their meaning, use, and consequences” (Leidner & Kayworth, 2006, p. 359). Only a small number of studies have empirically and theoretically examined cultural effects. To advance this knowledge, we review and critique existing research that specifically addresses cultural effects on CSW-supported group processes and outcomes. We hope that our attempts at assimilation and analysis of existing studies will stimulate further research along this line.

The scarcity of literature in this area makes meta-analysis infeasible. Thus, our review and discussion are offered from a descriptive and critical perspective that aim to provide a roadmap for researchers. In addition, we focus only on studies that include (1) participants from different cultures, (2) the use of CSW in face-to-face (FtF) and/or distributed settings, and (3) culture as a key conceptual construct. Our coverage includes papers published before 2009 in the following journals and conference proceedings in information systems (IS) and management fields (Table 1).

In the remainder of the chapter, we discuss underlying cultural theories, research methodologies, and findings of the studies we reviewed. We then provide insights into the limitations of existing studies and highlight some directions for future research.

CULTURE AND COLLABORATIVE SOFTWARE

In general, CSW has been proven useful in alleviating problems associated with intercultural communication primarily by reducing many behaviors that might offend members of other cultures (Aiken, Martin, Shirani, & Singleton, 1994; Gray & Olfman, 1989). Few studies both advance theories involving culture and employ empirical data to test assumptions and hypotheses. In an earlier review of 230 CSW studies (Fjermestad & Hiltz, 1999), only nine were found that included culture as either an independent variable (IV) or a moderator. The benefits of CSW identified mostly from research on Western cultures may not be manifest in different cultures under the same circumstances. For example, Kim et al. (1990) report that some incentives used to motivate North American workers can be counterproductive in collectivistic cultures.