



Structural characteristics, process, and effectiveness of cross-functional teams in hospitals: Testing the I–P–O model

Mei-Ling Wang^{a,*}, Wan-Yu Chen^b, Yen-Yu Lin^c, Bi-Fen Hsu^d

^a Hungkuang University, Department of Health-Business Administration, Taiwan, ROC

^b Transworld Institute of Technology, Department of Business Administration, Taiwan, ROC

^c MingDao University, Department of Hospitality Management, Taiwan, ROC

^d National Yunlin University of Science & Technology, Department of Business Administration, Taiwan, ROC

ARTICLE INFO

Available online 21 February 2010

Keywords:

Team structural characteristics

Team process

Team effectiveness

ABSTRACT

Hospitals are served by a variety of different specialists and technicians, including doctors, nurses, pharmacists, medical technicians, radiologists, etc. To provide good healthcare services, teamwork among this workforce is of great importance, and the management of cross-functional teams consisting of specialists and technicians is a significant issue. This study, based on McGrath's Input–Process–Output team theoretical model, explores some essential variables of teams in hospitals, including team structural characteristics, team process, and team effectiveness. Using 109 valid questionnaires samples from 20 hospitals in Taiwan, we explored these three main variables. First, we examined team structural characteristics, in terms of team size, diversity, norms, and cohesion. Second, we divided team process into two factors: members' cooperation and bottom–up communication. Finally, we measured team effectiveness in terms of performance and satisfaction. We found that (1) for team structural characteristics, only team norms affect team effectiveness; (2) team process affects team effectiveness; (3) team norms and team cohesion affect team process; and (4) team process fully mediates between team structural characteristics and satisfaction and mediates partially between team structural characteristics and performance.

© 2010 Elsevier Inc. All rights reserved.

1. Introduction

Today's businesses strive to create organizational structures that are flexible, efficient, and responsive. Studies have shown that work teams are especially capable of strengthening an organization's problem-solving capabilities, increasing productivity, improving work effectiveness, better utilizing resources, lowering costs, and reducing human resources (Parker, 1990). The team is also an organization's best strategic choice for coping with complex and variable environments (Mohrman, Cohen, & Mohrman, 1995).

Hospitals are labor-intensive organizations. As the number of medical technicians increases and healthcare grows more complicated, large hospitals have become one of the most complex institutions in society (Chang, Tan, & Huang, 1996). Since a hospital houses many types of professionals, such as doctors, nurses, pharmacists, medical technicians, radiologists, etc., hospital organizations often use work teams as a way to assure smooth cooperation and improve effectiveness. In recent years, stiff competition in the healthcare industry and rapid changes in government funding policies have put new pressures on hospitals. Given excellent communication and joint decision making, the existence of internal teams with common goals and complementary technical capabilities can enable any hospital to face these challenges with greater ease.

* Corresponding author. Tel.: +886 4 26318652x3218; fax: +886 4 26337652.

E-mail address: mlw317@ms22.hinet.net (M.-L. Wang).

Amidst a chaotic healthcare environment and organizational structure divisions, integration of hospital departments has become a critical goal in which hospital teams play an important role. Inspired by organizations' reliance on team-based work structures (Devine, Clayton, Philips, Dunford, & Meiner, 1999), a great deal of research has focused on understanding factors that might explain how and why teams achieve desired outcomes (Turner, 2001). Actual observation of hospitals of all sizes shows that with the exception of the usual medical teams, hospital management tends to neglect the important role played by cross-functional teams. In fact, hospitals are unprepared to manage such teams. This study probes the links among structural characteristics, operations, and effectiveness of hospitals' cross-functional teams with the goal of contributing to team management in hospitals.

Many scholars believed Input–Process–Outcome model (I–P–O model) is a good predictive model about team effectiveness (Mathieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000). Although I–P–O model was adopted expansively, its utility was still disputed. The degree of utility about I–P–O team model is related to team variables. One of the purposes in this study is to explore the application of I–P–O team model.

2. Theoretical framework and hypotheses

2.1. Hospital teams: committees and working groups

What characteristics define teams? Studies had shown that individual team members are mutually dependent, although each contributes different but complementary professional capabilities (Robbins, 1996; Salas, Dickinson, Converse, & Tannenbaum, 1992). In terms of team performance evaluation and incentives, a team's overall performance is typically examined when evaluating members' individual performance and determining their compensation (Hackman, 1987).

Hospital teams, with the exception of medical teams, typically include quality-control teams, which have become increasingly popular in recent years (Hung, 1998). Chang et al. (1996) note that hospitals often organize committees and working groups to take charge of studying special problems to improve decision making. To meet the challenges of changing medical systems, many hospitals often create intra-organizational working groups to take charge of analyzing, planning, and implementing systems. Thus, it appears that committees and working groups serve as the most common, formalized modes of hospitals teams today.

2.2. Team effectiveness

Many studies use performance and attitude as the two major indicators when assessing team effectiveness (Barrick, Stewart, Neubert, & Mount, 1998; Gladstein, 1984; Kahai, Sosik, & Avolio, 1997). Performance is generally assessed as subjective performance (Hackman, 1987; Katzenbach & Smith, 1993) or in terms of objective, quantifiable standards (Hackman, 1987; Katzenbach & Smith, 1993; Mohrman et al., 1995; Salas et al., 1992). Attitude is measured as the degree of work satisfaction (Jewell & Reitz, 1981; Shaw & Barrett-Power, 1998).

If team effectiveness is studied in terms of cooperation, its evaluation is also commonly based on performance and attitude (LePine, Hanson, Borman, & Motowidlo, 2000; Song, Montoya-Weiss, & Schmidt, 1997; Tjosvold, 1988a,b). However, Hoevemeyer (1993) believes that free and open communication may also be an indication of team effectiveness. He explains that meetings, a team's major communication activity, play an important role in communication (Hsu, 1998).

Assessments of team effectiveness will be based on performance and attitude and must include the team leader and members' participation. However, in consideration of the nature of committees and working groups in hospitals, "attitude" will also be analyzed, not only in terms of degree of satisfaction for cooperation, but also by studying degree of satisfaction in meetings.

2.3. Team structural characteristics and team effectiveness

This study is based primarily on McGrath's (1964) Input–Process–Output team theory model and will analyze the relationships between "input: team structural characteristics," "process: team process" and "output: team effectiveness."

As mutual contacts among individual team members differ, each team has different structural characteristics. Team structural characteristics include team size, member diversity, team norms (Campion, Medsker, & Higgs, 1993; Shortell & Kaluzny, 2005) and team cohesion (Cosier, 1981; Schwenk, 1983). Team size refers to the minimum number of people required to complete a task (Campion et al., 1993). Members who belong to a smaller team may have less attitude of "free-riding" or "social-loafing" (Fleishamn, 1980; Jones, 1984). Team size seems to relate to team task characteristics—task complexity for example, more complex tasks require more skills and knowledge to complete; however, in terms of professional work, appropriate team size may be necessary. Teamwork demands a high degree of cooperation, and excess personnel only create burdens (Campion et al., 1993). For teams in hospital, we hypothesize team size has negative effects on team effectiveness.

H1.1. Team size has negative predictive effects on team effectiveness.

Team diversity refers to the degree of difference between members' capabilities and experiences (Campion et al., 1993). A team requires members with diverse capabilities and experiences, since complementarity among members has positive effects on performance (Carr, 1992). For creative or intellectual task, the value of team diversity to team effectiveness is very significant (Guzzo and Shea, 1992). Although because team members whose different professional background are easy to have different opinions or conflict process, team diversity may have positive effect through team members' communication with each other.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات