

“TYPES OF CONFLICT AND TEAM EFFECTIVENESS IN HOSPITAL”

**1. Assistant Professor in Public Health Department, School of Health, Ardabil University of Medical Sciences, Ardabil, Iran d.adham@arums.ac.ir*

*2. Assistant Professor in Health Services Management Department, School of Health Management and Medical Information Sciences, Tehran University of Medical Sciences, Tehran, Iran
h.seyedin@gmail.com*

**Corresponding author*

Assistant Professor in Public Health Department, School of Health, Ardabil University of Medical Sciences, Ardabil, Iran d.adham@arums.ac.ir

Abstract

Purpose: Although conflict has traditionally been considered destructive, recent studies have indicated that conflict management can contribute to effective teamwork. The present study explores conflict management as team effectiveness in hospitals. The authors examined how the contextual variables (task conflict, relationship conflict) are related to team effectiveness in hospital team managers.

Research Design: Data were collected from 35 hospital manager teams (including team coordinators and team members) at 40 hospitals in Tehran, Iran.

Results: Hierarchical regression analyses demonstrate, as expected, a positive relation between relationship conflict and team effectiveness and a negative relation between task conflict and team effectiveness. In addition, there are positive relations between the types of conflict and team effectiveness. Finally, a team's conflict management was partially mediated by the combination of task and relationship conflict and team effectiveness.

Conclusions: The present results provide additional empirical support for the notion that conflict management can be considered team effectiveness. The study should serve to encourage hospital administration researchers to focus more attention on characteristics of organizational and team context as related to team conflict management and team effectiveness.

Keywords: relationship conflict, task conflict, team effectiveness, hospital

Introduction

Most managers believe teamwork is important to the success of their department and organization(1). Research into team effectiveness has traditionally searched for characteristics of effective teams (2). There is a great interest in studying organizational teams. This interest is concerned with the increasing use of teams in hospitals(3). The importance of teamwork to delivering healthcare, a better understanding of how teams function effectively will be invaluable for educating and developing teams. Hospitals and other organizations can be dissected into anatomical and physiologic subsystems: space, equipment, personnel, tasks, policies and rules, hierarchy, cost control, governance, etc. These systems have to work together to achieve organizational goals and in doing so form healthy and effective beings. Hospital effectiveness has made enormous strides in the last two hundred years. Hospital management is much more sophisticated today.

Currently, two parts of hospital organization lag far behind: medical staff organization and governance. Physicians are only beginning to become interested in management and most trustees remain amateurs. Perhaps this is why studies in these areas show strong associations with hospital effectiveness. Perhaps in twenty years these areas will have improved sufficiently that these correlations will vanish. Healthcare teams are often large, due to norms of professional representation, regardless of contribution to patient care. Further, it is often unclear as to whether patients and their families are team members(4). The purpose of this paper is to report on relationship between types of conflict and team effectiveness in hospital management teams. While almost concentrated on types of conflict and team effectiveness in hospital management, this paper broadens the focus to include team effectiveness in hospital management. Also, while it is important to recognize team effectiveness sources and effects prior to exploring hospital management, this study addresses these foundational matters but then emphasizes types of conflict and team effectiveness in hospital management interventions and research articles on management teams were reviewed to determine the methods used to study these teams, with the aim of developing an understanding that can serve as the base for research of team effectiveness in hospital management.

There are many typologies have identified different types of teams. Work teams, Parallel teams, Project teams, Management teams. The research in management teams define effectiveness as firm performance and use objective measures. The most common rated variables are return on equity(5, 6) return on assets(7, 8) sales growth(9, 10) total return to shareholders change in sales and change in profitability.(10) Nevertheless, other studies consider decision quality(11, 12) contribution to decision(13) Share information(5) and task performance.(14, 15)

Variables at the team-level of analysis and rated with subjective measures. Attitudinal outcomes are also taken into account for assessing effectiveness of management teams. Specifically, some of these variables are consensus understanding and commitment to the decision(15) And satisfaction. Few studies focus on behavioral outcomes, although turnover from both the team and the firm is studied the most.

The research in management teams define effectiveness as firm performance and use objective measures. The most common rated variables are return on equity, return on assets, sales growth, total return to shareholders, change in sales and change in profitability(3). team members must integrate and synchronize strategies and activities to achieve the objections of the team (16). To better understand team effectiveness, team performance is evaluated in terms of inter-team productivity and intra-team productivity. Team effectiveness is based on team performance, which is the extent to which the groups' productive output meets the approval of customers,

interdependent functioning, which is the extent to which the team is inter-reliant on one another, and team satisfaction, which is the extent to which the team is satisfied with team membership(17). Other categorized dimensions related to group member behavior in problem-solving situations as socio-emotional, task, and negative reactions(18). Team effectiveness can be evaluated by five broad principal variables: performance, behavior, attitude, team member style, and corporate culture(1). The effectiveness of a health care team improves clinical outcomes, patient safety, the care environment for the patient and his or her family, and the work atmosphere and culture for practicing clinicians(19).

Team effectiveness is defined as performance and employee satisfaction (20). More explicitly, (21) defines it as the degree to which a group's output meets requirements in terms of quantity, quality, and timeliness (performance); the group experience improves its members' ability to work as a group in the future (behavior), and the group experience contributes to individual satisfaction (attitude). This definition makes team effectiveness a function of performance, attitude, and behavior. There are different models available in the literature to measure team effectiveness and each of them makes reference to specific and necessary characteristics for teams to become effective. Trying to identify the most relevant and common characteristics among these models, Adams et al.

Developed a framework to assist in the facilitation and measurement of effective teamwork(22). In this model, seven constructs were identified as characteristics that need to be present during the team process for it to be effective. The seven constructs are productive conflict resolution, mature communication, accountable interdependence, clearly defined goals, common purpose, role clarity and psychological safety.

A simple alternative representation of this relationship is shown in figure 1.

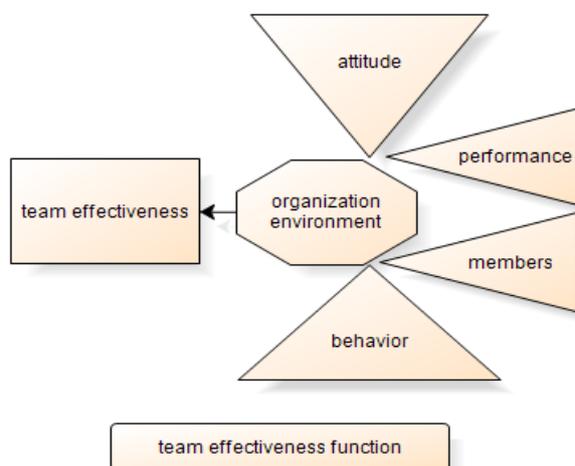


Figure 1: relationship of team effectiveness function

Teams in health care organizations have a long, established tradition. However, despite health teams' potential contributions to diagnosis, problem solving, and patient well-being, experienced team practitioners have warned of the teams' fragility.

It is important to remember that teams have thin skins; there are not many forces holding them together in relation to those potentially able to pull them apart. The forces that hold a team together are patient needs, institutional support, satisfaction with effective work, respect and friendship, and an understanding of the diagnostic process. professional rivalries,

misunderstanding the role of patient splitting, personal competitiveness, and lack of understanding of the collaborative problem solving process(23).

Hospitals have been offering health promotion in response to external social, political, and economic forces. These include community benefit laws, unsustainable health care spending, low rankings internationally for health status measures, decreasing workforce productivity, and desire for improved quality of life(24). The tasks of hospital management can be described as pertaining to two large areas: quality management and allocation of resources (25). Cooperation and communication has become even more important in health care, and teams can be seen at many levels in health care organizations, for example between professionals in primary health care and in special projects such as child protection. Inside and between departments in hospitals, communication and co-operation is necessary for the protection of both staff and patients, as regulation and public accountability becomes ever more unforgiving(26).

Decades of research has now given us useful knowledge on conflict(27, 28). At early studies, Jehn(29) and Pelled, Eisenhardt & Xin (30) have explored how team diversity functions, and proposed the mediating effect of different types of conflict, namely task conflict and relationship conflict. It suggests that conflict plays a central role to understand the effects of team diversity on team outcomes. However, both studies ignored the potential association between task and relationship conflict. Simons and Peterson(31) found that task conflict affected relationship conflict due to the bias of attribution process. Relevant to this article was the study conducted by Liang, Liu, Lin and Lin (32) which found, in a Chinese context, the complex relationships among team diversity, conflict and project performance. Following this vein, this study took the dynamic nature of conflict into account, and then reexamined the relationships among team diversity, conflict and team effectiveness in a Chinese context. Basically, conflict encompassed substantive conflict related to task and affective conflict associated with emotion. Since Jehn has developed valid questionnaire to measure task conflict and relationship conflict separately, the present study followed this categorization. By definition, task conflict is derived from different opinions on job and contributes to constructive regards, whereas relationship conflict is due to interpersonal incompatibility which leads to tension and friction(28) . Empirical research has confirmed two conflicts result in different consequence (28-30), in which task conflict has positive effect on performance because divergent viewpoints increase the likelihood of arriving at optimal solutions to problems(12), while relationship conflict is generally associated with negative outcomes because of impeding members' cognitive functioning and information processing by increasing their stress and anxiety levels(28). Conflict is the process flowing from the tension between team members through real or perceived differences(33, 34) .Although the effects of task conflict contrast starkly with relationship conflict, it is problematic to suggest that management simply encourages task conflict and discourage relationship conflict when there is significant positive correlation between task conflict and relationship conflict(29, 30, 35, 36). This phenomenon could be explained by misattribution process. Simon and Peterson argued task conflict induced relationship conflict when misattribution of task conflict occurred. This misattribution could be enhanced by some causes(31). Some research showed that misattribution might be enhanced in certain context (37, 38).

Therefore, task conflict and relationship conflict agitates team effectiveness expectably, and vice versa. This leads to the following hypotheses:

Hypothesis 1: Task conflict has positive effect on team effectiveness in hospital management team.

Hypothesis 2: Relationship conflict has positive effect on team effectiveness in hospital management team.

Hypothesis 3: type of conflict has positive effect on team effectiveness in hospital management team.

Hypothesis 4: type of conflict has positive effect on team effectiveness with manager in hospital management team.

Hypothesis 5: type of conflict has positive effect on team effectiveness with members in hospital management team.

These existing studies show the direct effect of diversity on team performance, and the influence of conflict between these relationships. It is known that diversity has a direct effect on team performance; the moderating role of diversity is not earlier investigated. In this study the direct effect of conflict on team performance will be investigated. And the moderating effect of social category diversity on this relationship. There are several linkages between conflict, diversity and team performance. In this study the linkages are differently investigated then in existing research. A different view of the association of conflict and social category diversity with team performance will be examined. The following research model is shaped:

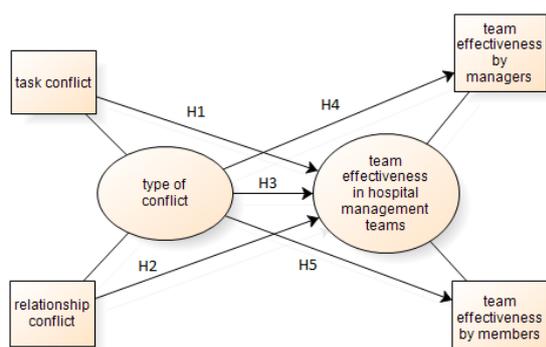


Fig2. Conceptual framework

Research method

Sample and data collection procedure

A sample of 312 top and middle managers, working in 35 different hospital management teams in Tehran educational hospitals (Iran), participated in this study. The average age of team members was 49.19 years and 66.3 percent were male. Questionnaires were sent to 40 teams for completion. Participants were predominantly male (66/7%), and mainly participants (98%) graduated with a university or higher educational degree. In terms of tenure, respondents generally had six years of working experience with their team. A total of 623 sets of questionnaires were sent out and 312 pairs were returned and analyzed.

Measures

The original versions of the measures were translated into Persian by the authors and then back-translated by bilingual foreign language expert. Finally, the translation was reviewed for appropriateness by five experts from health services management professional in order to ensure the content and face validity of the instruments (Brislin, 1980).

Conflict types

Scales for task and relational conflict were taken from previous studies(39). The four task-conflict items measured the extent that the team engaged in discussion of opposing views and other task conflicts. Subjects were asked to rate on a 5-point scale (1 = strongly agree, 5 = strongly disagree) their degree of agreement to the statements. The coefficient alpha of the task-conflict scale using data at the individual level was 0.73. Relational conflict had four items with similar anchors to measure the extent to which the team had personality differences and other interpersonal conflicts. The coefficient alpha of the relational conflict scale was 0.82

Team effectiveness

As with other work team research (40-42), obtaining objective work outcome measures proved impossible. Companies did not collect team-level productivity data, and the objective data, even if available, would not be comparable across companies. Therefore, we used managerial ratings of team performance as the outcome measure. Pritchard(21) argued that ratings can measure the extent users of the team outputs find them effective. For example, groups that develop low resource-wastage rates are not productive if their organization requires them to effectiveness. In addition, team managers should be informed about the group's performance(43). The managers who supervised the team were asked to rate the effectiveness of the team using a 6-item scale developed from Van Der Vegt et al. (44). The coefficient alpha for this 6-item team effectiveness scale was 0.80. In addition, team members also evaluated the extent that the team was effective in terms of motivating group members to do their jobs well. Although team members may not be in a very good position to measure how their outputs are valued by the organization, they are in a good position to rate how their groups help them become committed and involved. This 5-item measure was derived from previous studies (45, 46). The coefficient alpha of this self-rating scale of team effectiveness was 0.83. Two native-Persian members of the research team translated the questionnaires, originally written in English, into Persian. To ensure conceptual consistency, the questionnaires were back-translated into English to check for possible deviation(47). The questionnaires were pre-tested to make sure that respondents clearly understood every phrase, concept, and question. To prevent and eliminate potential concern for being involved in evaluating others, participants were assured that their responses would be held totally confidential.

Measure assessment

The estimate of a measurement model employs confirmatory factor analysis (CFA), which reveals that all factor loadings are greater than .40, normalized residuals are less than 2.58, and modification indices are less than 3.84. The measurement model also provides an acceptable fit to the data ($\chi^2 = 72.19$); goodness-of fit index [GFI] =.94; confirmatory fit index [CFI] =.95; root mean squared error of approximation [RMSEA] =.077). As noted previously, the reliability estimates (CR and AVE) for the different multi item constructs appear is for task and

relationship conflict is 0.80, 0.50 and 0.89, 0.69. The investigation of whether a single-factor model provides a better fit of the data results in a CFA for the single-factor model that does not fit the data well ($\chi^2 = 72.19$; GFI=.94; CFI=.97; RMSEA=.077), giving credence to the premise that common method bias is not a likely threat. The scales offer convergent validity; the factor loadings are significant in the measurement model(48), and the AVE estimates are equal to or higher than .50 (49).

Analysis

The phrasing of all questions focused on the team as the unit of analysis. Thus, this study aggregated perceived task conflict and relationship conflict to the team effectiveness by calculating a team mean. For measures that were initially taken at the individual level, it is important to justify the aggregating process. First, one-way analysis of variance was performed to determine whether between-group differences were significant than within-group difference (50). All of the variables were passed in this test. In addition, it is necessary to prove agreement or consensus among within-team responses before aggregating them to the group level. Therefore, within-group agreement (rwg) index developed by James, Demaree, and Wolf (1984) was computed for each measure we wished to aggregate. The mean value of rwg indexes were above the generally acceptable level for good agreement of .70 (51). Structural equation modeling is the series of multiple regressions which combined factor analysis and multiple regression analysis for examining the complex relationships among multiple variables. Hence, to test the relationships among bio-demographic task conflict, relationship conflict and team effectiveness that this research hypothesized, SEM was conducted.

Results

Hypotheses testing

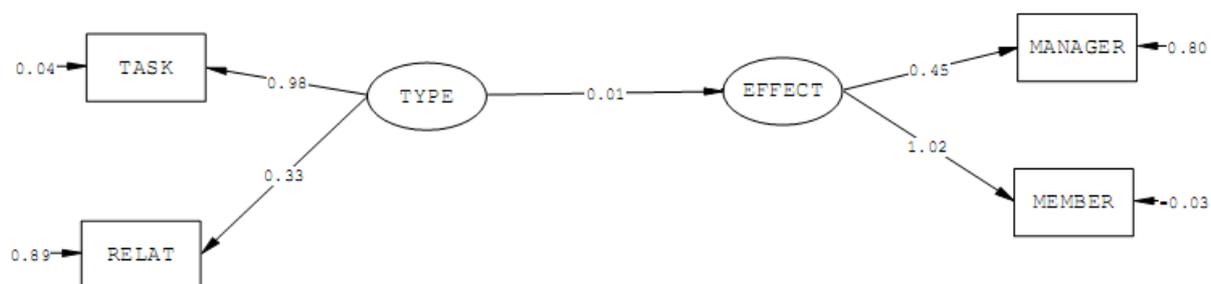
Table 1 presents the means, SDs, and correlations of the study variables. The results show that bio-demographic diversity was positively related to relationship conflict ($r = .060$) but correlated to team task conflict and effectiveness negatively ($r = -.006$ and $r = -.031$). However, having an education diversity within teams was not related to the relationship conflict, task conflict and team effectiveness. Likewise, task conflict was not related to team effectiveness. As for relationship conflict, the results showed that it was negatively related to team effectiveness ($r = -.075$).

Table1: Correlations among variables

	Mean	SD	1	2	3	4	5	6	7	8	9
1.age	2.9647	.79914									
2.education	4.2532	.86556	.557*								
3.sex	1.3365	.47328	.275*	-.256**							
4.Years of management	2.4295	1.07358	.374*	.014	-.013						
5.Manager level	4.5385	1.59736	-.025	.031	-.036	-.064					
6.task conflict	2.8510	.81745	-.006	-.004	-.086	.061	-.060				
7.relationship conflict	2.8438	.86267	.060	-.022	-.078	.098	-.075	.320**			
8.effectiveness by managers	3.3275	.79097	-.075	-.065	-.019	-.001	.157**	.360**	.420**		
9. effectiveness by members	2.6343	.82859	.032	-.028	-.036	.132*	-.129*	.527**	.388**	.333**	
10.effectiveness	3.0124	.66039	-.031	-.058	-.033	.075	.176**	.536**	.496**	.843**	.788**

** P< 0.01; * P< 0.05

To testing the hypotheses that proposed, authors used team effectiveness as dependent variable and then included bio-demographic diversity and task related diversity as predictors. In addition, relationship conflict and task conflict were set as mediators in which were affected by bio-demographic diversity and task diversity respectively, and influenced team effectiveness after controlling for the effect of the control variables.



Chi-Square=72.19, df=26, P-value=0.00000, RMSEA=0.077

Fig. 2 Structural equation model estimates (standardized)

TASK= task conflict, RELAT= relationship conflict, TYPE=types of conflict, EFFECT=effectiveness, MANAGER=effectiveness by manager, MEMBER=effectiveness by members

X²/df = 2.77, GFI = 0.88, AGFI = 0.90, NFI = 0.93, RMSEA = 0.077.

To test the mediating process, we assessed Baron and Kenny's (1986) three mediating conditions with SEM. According the results of SEM, bio-demographic diversity had negative effect on team effectiveness (b= .275/p<.01) while task conflict diversity was not significantly related to team effectiveness (b= -.006/p>.05). Therefore, hypothesis 2 was partially supported, and only the path of bio-demographic diversity to team effectiveness satisfied the first condition. In addition, after involving the task conflict and relationship conflict as show in figure 2, the path coefficient of relationship conflict to team effectiveness was negative and significant (b= .527/p<.05), and

task conflict was positively and marginally correlated to team effectiveness ($b = .536/p < .10$). It represented the second condition was satisfied. Thus, hypothesis 3 received partial support. As for hypothesis 1 which declared reciprocal phenomena between relationship conflict and task conflict, the results revealed that relationship conflict had negative effect ($b = -.388/p < .001$) on task conflict while the effect of task conflict on relationship conflict was not significant ($b = .843/p > .05$).

Discussion

In proposing and testing the framework presented in this article, it provided some Practical insights for team management and organization. First, the findings show that bio-demographic diversity affected team effectiveness in negative way.

Second, the effect of task conflict on team effectiveness was not significant. The possible explanation was that the teams collected in this research were highly integrated, so that team had get used to the pattern on how task should be done. Thus, neither team effectiveness nor task conflict was affected by task related diversity in anticipating way.

Third, the findings revealed relationship conflict affected team effectiveness negatively while task conflict had positive effect. The nature of relationship conflict which was derived from interpersonal incompatibility caused the team might waste time and resources to deal with these detrimental atmospheres. As a consequence, team effectiveness could not be promoted. However, the effect of task conflict performed in positive way toward the team effectiveness. This finding followed the perspective of cognitive diversity which suggested that task conflict concentrated on the argument about task, facilitated the better decision quality, and then advanced the team output (31, 52). Since the both types of conflict occurred simultaneously and performed oppositely, team leader should manage conflict in discreet way.

Finally, past studies (53) have suggested that task conflict mediated the relationship between task-related diversity and team outcomes, and the relationship between bio-demographic diversity was mediated by relationship conflict. Following these logic research findings provided the solid evidence to confirm the relationship conflict, task conflict and team effectiveness. Specifically, the interesting finding in the full model represented in the present study was that task conflict did not result from task related diversity, relationship conflict triggered task conflict instead. Literally, it represented that the relationship conflict impacted team effectiveness negatively and induced task conflict which progressed team effectiveness as well. Understanding the dual path of relationship conflict is helpful to manage conflict effectively.

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