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Huey-Wen Chou
National Central University

James Jiang University of Central Florida

Eric Wang National Central University

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Charismatic Leadership Style, Intragroup Conflict, And ERP **Implementation Team Performance**

Huey-Wen Chou Dept. of Information Management National Central University hwchou@mgt.ncu.edu.tw

James Jiang Dept. of Management **Information Systems** University of Central Florida National Central University jjiang@bus.ucf.edu

Eric Wang Dept. of Information Management ewang@mgt.ncu.edu.tw

Abstract

As organizations become increasingly dependent upon teams as the central unit of work in response to the growing demands for efficiency and flexibility, there are considerable challenges to be overcome for teams to work effectively. The present study investigates how charismatic leadership style and intragroup conflict affect ERP implementation team performance. Structured questionnaires including measures of the selected team variables were delivered to those companies on the TOP500 The Largest Corporations in Taiwan 2001 list that had implemented ERP systems. The results supported the proposed model and confirmed that leaders should demonstrate more charismatic behaviors to enhance better team performance. The negative relationship between intragoup conflict and overall team performance was also statistically supported. Further implications of the present study are given in the conclusion.

Keywords: intragroup conflict, charismatic leadership, ERP, team performance

1. Introduction

While cross-functional teams spreading rapidly in organizations as an overlay to an existing functional organization in response to growing demands for efficiency and flexibility, considerable challenges need to be overcome for teams to work effectively (Guzzo & Shea, 1992). The Enterprise Resource Planning (ERP) implementation team is one form of the cross-functional teams. The ERP implementation team is temporarily existed and task-oriented which is aimed at planning and execution of the enterprise ERP systems. The ERP systems are defined as "configurable information systems package that integrate information and information-based processes within/across functional areas in an organization" (Kumar & Van Hillegersberg, 2000). The implementation of ERP systems may involve the adoption of new process models and/or significant changes in organization structure, both of which imply a significant degree of intervention in organizational life.

Due to its complexity and scope, the ERP implementation is handled by a cross-functional team, composed of members of diverse backgrounds and interests. As a result, the ERP leaders' effectiveness and the conflicts among ERP team members have become the critical success factors for ERP implementation (Themistocleous, et al., 2001; Sauer, 1993; Lowry, Morgan, & FitzGerald, 1996; Herb, 2000; Densley, 1999). Unfortunately, it is generally recognized that technical employees lack leadership skills to effectively manage people (Jiang, et al., 2001). In

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spite of its importance, little attention has been paid to the nature of IS project leaders' leadership styles (Thite, 2000).

Leadership is critical to any group environment. Several studies have highlighted the essential leadership qualities and skills required by IS project managers to ensure success, such as the abilities to manage people, stress, emotions, bureaucracy, and communication. Among others, charismatic leadership behaviors are identified as the most critical leadership behaviors as far as satisfaction is concerned (Thite, 2000). Some researchers argued that charismatic leaders fuse each member's personal goals with the team or organizational mission. Team members identify at a personal level with the purpose and goals of the collective as a whole and therefore put more commitment to their teams, and subsequently produce better performance.

Conflict is the awareness on the part of the parties involved of discrepancies, incompatible wishes, or irreconcilable desires (Boulding, 1963). Conflict has been found to be multidimensional (Jehn, 1994, 1995). Researchers make a distinction between conflicts arising from cognitive, task-related conflicts and social-emotional conflicts arising from interpersonal disagreement not directly related to the task (Priem & Price, 1991; Pinkley, 1990).

Relationship conflict refers to tension, animosity, and annoyance among members within a group. The relationship conflict was found to be detrimental to the development of strategic consensus (Knight, et al., 1999), to individual and group performance and member satisfaction (Jehn, 1995; Shah & Jehn, 1993). Task conflicts are disagreements among group members' ideas and opinions about the task being performed. De Dreu and Van Vianen's (2001) and De Dreu and Weingart's (2003) meta-analysis of the role of relationship conflict on team performance and concluded that for team performance, task conflict and relationship are equally disruptive.

The purpose of this study is to examine the influence of project manager's charismatic leadership styles on project team's conflict and thus the team's overall performance during ERP implementation in Taiwan. More specifically, the study attempted to address the following questions:

- 1. Whether the charismatic leadership style has a negative relationship with the implementation team's intragroup conflict?
- 2. Whether the charismatic leadership style has a positive relationship with the ERP implementation team performance?
- 3. Whether the intragroup conflict has a negative relationship with the team performance?

2. Literature review

Teams can be defined as "a social system of three or more people, which are embedded in an organization, whose members perceive themselves as such and are perceived as members by others, and who collaborate on a common task (teamwork) (Alderfer, 1987; Hackman, 1987)." According to Katzenbach and Smith's (1993) definition, teamwork represents "a set of values that encourages listening, responding constructively to views expressed by others, providing support and recognizing the achievement of others." In this study, the term *ERP* implementation team is referred to a small group which individuals work together outside of traditional hierarchical lines of authority on a temporary basis on the ERP implementation projects to reach some predetermined standards such as quality, within time and budgets.

Effective team performance derives from several fundamental characteristics (Zaccaro, Rittman, & Marks, 2001). First, team members need to successfully integrate their individual actions and therefore team processes become a critical determinant of tem performance. Intragroup conflict and leadership style are among these team process factors. Kotter (1988) noted that providing leadership means influencing others to take responsibility for identifying, developing, retaining, and motivating talented professionals on the team. The most popular leadership style is classification on transactional vs. transformational leadership style. The transactional leadership represents traditional views on leadership, which focuses on the contractual relationship between the leader and his/her subordinates on expected performance in return for certain rewards (Thite, 2000). The relationship between leader - follower is reduced to simple exchange of a certain quality of work for an adequate price. It is believed that such a cost-benefit exchange process will only lead to as expected outcomes and subordinate performance. On the other hand, the transformational leader, who sharply arouses the strength of needs of subordinates and motivate their followers to do more than they really expect they can do, increasing the sense of importance and value of the tasks, stimulating them to surpass their own interests and direct themselves to the interests of the team, organization or larger community and rising the level of change to the higher degree (Bass, 1985; Stoner, et al., 1992; Bowditch, et al., 1990; MacKenzie, et al., 2001).

Although there is no single leadership style applicable to all project situations, some IS researchers (Thite, 2000; Cheung, et al., 2001) have recommends behavioral charismatic for enhanced leadership effectiveness. For example, Cheung, et al.'s (2001) empirical survey carried in Hong Kong indicated that "charismatic" is the most critical leadership behaviors of the design team leader that impact the satisfaction of the team members. In fact, charismatic leadership style is often the most dominant style in Asia countries (Cheung, et al., 2001). Contemporary definitions suggest that charismatic leadership results in a strong internalization of the leader's values and goals by the followers, moral commitment to these values, and a tendency for followers to transcend their own self-interests for the sake of the collective (Bass, Meanwhile, Kayworth and Leidner (2001) discovered that highly effective team leaders would act as a mentoring role and exhibit a high degree of understanding (empathy) toward other team members. Other researchers (Katzenbach & Smith, 1993; Wade, et al., 1996) have also suggested that making the team members enthusiastic about the project, developing trust, building confidence and commitment, and acting as a role model as the critical behaviors for effective team leadership. In short, literature has suggested that the charismatic leadership style has been considered an effective behavior style for project managers.

About measuring the team's performance, it can be measured in terms of whether the team meets the objectives of predetermined quality, time, and cost standards (Schrader & Goepfert, 1996; Gemuenden & Lechler, 1997; Hoegl & Gemuenden, 2001), or the degree of team members' work satisfaction (Jones & Harrison, 1996; Hoegl & Gemuenden, 2001). Hackman (1990) proposed a three-dimensional model of group performance, which provides a comprehensive framework for the understanding of group performance and considers the group's contribution to: (1) its embedded organization; (2) itself; and (3) its composite members. The first dimension defines a group's performance as being measured by the extent to which the group meets the standards of quantity, quality, and timeliness. The second dimension focuses on the degree to which the process of carrying out the work enhances the capability of members to work together interdependently in the future. The third dimension measures the group's performance through the degree to which the group experience contributes to the growth and personal well-being of team members. Hirst and Bain (1999)

developed the Project Performance (PP) questionnaire to measure team performance. There are three subscales measuring different aspects of performance, namely, team performance, team viability, and members' satisfaction with performance. Kline and McGrath (1998) developed five criteria for evaluating team performance: problem solving, work quality, workload allocation, meeting objectives, and team attitude.

It is clear that team performance is not a uni-dimensional construct. In the present study, team performance is defined as the extent to which a team meets established quality standards that fall in the first and the third dimensions of Hackman's (1990) group performance model:

- 1. The degree to which the finished project meets expectations regarding the quality of the outcome.
- 2. The degree to which the team members are satisfied with how the project has progressed.

2.1 Research model

A proposed research model derived from the above literature review is depicted in Figure 1. Three constructs included in the research framework, including the <u>charismatic leadership style</u> which ERP project leader exhibits, <u>intragroup conflict</u> of the project team, and the overall <u>team performance</u>. The proposed model suggests that charismatic leadership will have a negative influence on the project team's intragroup conflict and a positive relationship with project team overall performance. Furthermore, we argue that the degree of intragroup conflict has a negative relationship with project team's overall performance. A more detailed of arguments are provided in the followings:

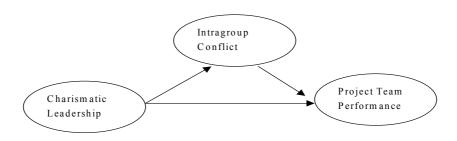


Figure 1. Research Model

2.1.1 Charismatic leadership style and intragroup conflict

Charismatic leaders excite and transform previously dispirited followers into active followers by heightening motivation and instilling a sense of purpose (Burns, 1978). The leader is idealized and becomes the model of behaviour who engenders followers commitment. Charismatic leadership style is often positively related to the effectiveness of the leader. For example, charismatic leaders have been shown to receive higher performance evaluations (McGrath, 1991) and have been rated by superiors as top performers (Hater & Bass, 1988). Based upon Zaccaro, Rittman, and Marks (2201) proposed team leadership theory, leader's functions (behaviors) will influence team motivational processes. Specially, leaders' planning and goal setting and motivating team members can reduce team members' conflict. Although there is no empirical evidence found in the IS literature, other study in management discipline

has shown that charismatic leadership is positively related to team members' efforts and commitment to the team (Kayworth & Leidner, 2001) and reduced intragroup conflict. Based upon the team leadership theory and the empirical findings discussed above, we, therefore, proposed the following hypothesis:

H1: The charismatic leadership style will negatively influence the extent of intragroup conflict in ERP implementation team.

2.1.2 Charismatic leadership style and team performance

Literature (Mackenzie, Podsakoff, & Rich, 2001; Kotter, 1988) has specified leadership as a central driver of team processes and team performance. In fact, many studies have examined leadership style effectiveness resulting from charismatic, when perhaps project team members' effectiveness is what interests most organizations. Some empirical studies have been done shows results such as team performance and its linkage to charismatic leadership in the U.S and abroad (DeGroot, Kiker, & Cross, 2000).

The ERP implementation projects often require intensive cross-functional coordination and cooperation. As a result, ERP project's success is heavily relied on human factors such as project leaders' and team members' efforts and commitments. Jiang, et al. (2001) and Thite (2000) found that project leadership is an important factor to the successful delivery of an information system. Specifically, the charismatic leadership style of ISD project managers has been argued as an effective management behavior to fuse team members' personal goals with team missions (Cheung, et al., 2001). Zaccaro, et al. (2001) also argued that the charismatic leadership style has direct effects on team performance. Based upon the team leadership theory and the empirical findings, we, therefore, proposed the following hypothesis:

H2: The charismatic leadership style will positively influence the ERP implementation team performance.

2.1.3 Intragroup conflict and team performance

Conflict is the awareness on the part of the parties involved of discrepancies, incompatible wishes, or irreconcilable desires (Boulding, 1963). Conflict can occur between individuals, groups, organizations, and even countries. Conflict has been found to be multidimensional (Jehn, 1994, 1995). Researchers make a distinction between conflicts arising from cognitive, task-related conflicts and social-emotional conflicts arising from interpersonal disagreement not directly related to the task (Guetzkow & Gyr, 1954, p. 369; Priem & Price, 1991; Pinkley, 1990).

Relationship conflict refers to tension, animosity, and annoyance among members within a group. It is concerned with insights that are unrelated to the task. The relationship conflict was found to be detrimental to the development of strategic consensus (Knight, et al., 1999), to individual and group performance and member satisfaction (Jehn, 1995; Shah & Jehn, 1993). De Dreu and Van Vianen (2001) conducted a meta-analysis of the role of relationship conflict on team performance and concluded that these two are negatively associated with an average correlation coefficient of -0.48.

Task conflicts are disagreements among group members' ideas and opinions about the task being performed. Although literature in the past ten years have suggested that task conflict is in general beneficial to team effectiveness under certain conditions (Jehn, 1995; Simons & Peterson, 2000), its negative effects, such as interfered with consensus, distracted team

members from their goal and hindered performance, were found as well (Amason, 1996; Hambrick, Cho, & Chen, 1996). De Dreu and Weingart's (2003) meta-analysis concluded that for team performance, task conflict and relationship are equally disruptive.

Deriving from previous literature we therein propose that intragroup conflict, a sum of task conflict and relationship conflict, will have negative relationship with group performance:

H3: Intragroup conflict, as a sum of task conflict and relationship conflict, is negatively associated with ERP implementation team performance.

3. Research method

3.1 Sample and measures

Companies that have implemented or are implementing ERP systems among the *TOP500 The Largest Corporations in Taiwan 2001 list* were sent a structured questionnaire. Single informant was used to collect information on charismatic leadership style, intragroup (task and relationship) conflict, and team performance. Before questionnaire was delivered to the respondents, each individual company was approached twice to locate the right respondent and explain the research theme to the respondent. Among 300 companies surveyed, 106 returned the questionnaire, which makes a 35.3% response rate. Three out of those returned were identified as invalid and resulted in a 34.3% of valid response rate.

Since team is used as the unit of analysis, the scales are measured at the team level. The questionnaire contains 4 sections. The first section aimed at collecting company profiles, background information on ERP systems, and ERP team composition. The following three sections measure types and degrees in each conflict type that respondents experienced in the ERP implementation team, charismatic leadership style, and the team performance that the respondent perceived. All measures were translated to Chinese by the researchers and content validity was justified in a priori. The questionnaire was revised and finalized in a pilot test with three MIS professors and two pretests with ERP practitioners.

<u>Charismatic leadership style</u>: The questionnaire developed by Cheung, et al. (2001) and reused from Bass's (1985) Multifactor Leadership Questionnaire, was adapted to measure the charismatic leadership style. The wordings of some items were refined to adapt to the ERP project team context. A five-point response scale was used (from 1 = never to 5 = always) to measure the frequency of the charismatic leadership behaviors.

<u>Task and relationship conflicts</u>. The Intragroup Conflict Scale (Jehn, 1995) containing six items is employed in the present study. The scale has been shown to effectively measure cognitive and affective conflicts. The measure has been widely used in the literature and has been proven to have an acceptable validity score.

<u>Team performance</u>. In the present study, team performance is defined as the extent to which a team is able to meet established quality. It is evaluated from the following dimensions: the degree to which the finished project meets expectations regarding the quality of the outcome and the degree to which that team members are satisfied with the team progress. Five items from Gemuenden and Lechler (1997) and Hoegl and Gemuenden (2001) were employed to measure the team performance. Question such as "From the company's perspective, all project goals were achieved" was used. Each question was measured on a five-point Likert scale (from 1 = strongly disagree to 5 = strongly agree). Table 1 summarizes scale information and

corresponding reliability coefficients.

Table 1. Summary of operational measures and their reliability coefficients

Constructs	Dimensions		Cronbach's α		Scale Name
Intragroup	Task	3	0.8419		Intragroup Conflict Scale
conflict	Relationship	3	0.9326	0.9024	(Jehn, 1995)
Charismatic leadership style	-	6	0.9278		Cheung, et al.(2001)
Team performance	-	5	0.8	783	Gemuenden and Lechler (1997) Hoegl and Gemuenden (2001)

Statistical analysis packages, including EQS for Windows 5.3 and SPSS for Windows 10.0, were used to analyze the data. Descriptive statistics, ANOVA, factor analysis, and regression analysis techniques were employed. Simple and multiple regression analysis were performed to empirically test the proposed hypotheses.

4. Data analysis and results

4.1 Background information on ERP systems

Among the 106 respondent companies, more than half of respondent companies have been implement over 7 ERP system modules. 21.4% of respondent companies have fully implemented the ERP systems. 63.7% of ERP systems came from local vendors in Taiwan, such as DSC (15.6%), IE (5.8%), ProYoung (5.8%), the rests were foreign vendors, such as SAP (10.7%), Oracle (13.6%). Background information on ERP systems is displayed in Table 2.

Table 2. Background information on ERP systems

Characteristics	Categories Categories		Responses	Percentage
	1~5		38	46.6
Number of modules	6~10		62	50.5
	>10		3	2.9
		DSC	16	15.6
ERP system vendor type	Domestic vendor	ΙE	6	5.8
		Proyoung	6	5.8
		Fast	2	1.9
		Others	36	35.0
	Foreign vendor	SAP	11	10.7
		Oracle	14	13.6
		JDE	2	1.9
		Baan	1	1.0
		Others	9	8.7

4.2 Background information on ERP implementation teams

Detailed information on ERP implementation teams is summarized in Table 3. More than half

(52.4%) of ERP implementation project teams have more than 10 people in implementing ERP systems, while most of the team members' average tenure in that company is above 3 years (77.5%). The ERP implement experience of the ERP team leader in respondent's company is perceived to be "no experience" in the relative majority (41.2%), while the leaders perceived to be "very experienced" is relatively rare (14.4%). 56 of the 103 respondents companies assign the information department manager to be the ERP project team leader.

Table 3. Background information on ERP teams

Characteristics Categories Responses Percent				
Characteristics	Categories	Responses	Percentage	
Size of ERP implementation team	<5	19	18.4	
	6~10	35	34.0	
	11~20	25	24.3	
	>20	24	23.3	
	1~3	23	22.4	
	3~5	31	30.1	
Average tenure of team members	5~7	21	20.4	
Average tenure of team members	7~9	16	15.5	
	>9	11	10.7	
	N/A	1	1.0	
	1	40	38.8	
	2	3	2.9	
	3	7	6.8	
Leader's experience on	4	6	5.8	
ERP implementation	5	19	18.4	
(From 1=no experience to 7=very experienced)	6	8	7.8	
	7	14	13.6	
	N/A	6	5.8	
	Information	56	54.4	
	Production	4	3.9	
	Accounting/Finance	11	10.7	
Leader's affiliation	Human resource	2	1.9	
	Marketing	1	1.0	
	Others	28	27.2	
	N/A	1	1.0	

4.3 Background information on respondent companies

Information on company profiles is shown in Table 4. The respondents companies comprise various industries, such as electronic product (21.4%), information product (11.7%), iron and steel industry (10.7%), other various manufacturing (16.5%) and service industries (10.7%). 21.6% of respondents companies own more than 1000 employees, while 52% of respondents companies own more than 350 employees. 35% of them own an information department with more than 10 employees. 63.6% of respondents companies own capital above 500 million NT dollars. Finally, the average established years of all respondents companies is more than 20 years.

Table 4. Background information on respondent companies

Characteristics	Categories	Responses	Percentage
Industry type	Electronic product	22	21.4

Characteristics	Characteristics Categories		Percentage
	Information product	12	11.7
	Iron and steel	11	10.7
	Others	58	56.3
	<100	18	17.6
	101~300	31	30.1
Total number of employees	301~500	19	18.4
	501~1000	13	12.6
	>1000	22	21.4
Number of ampleyees in	<10	72	69.9
Number of employee in information Dep.	11~50	24	23.3
miormation Dep.	>50	7	6.7

4.4 Validity and reliability

Factor analysis was used to assess the scale validity. A factor analysis (with varimax rotation) produced a single factor solution for the two multi-item constructs: charismatic leadership style and team performance. A two-, three- factor solution was found for intragroup conflict and conflict management strategy constructs respectively.

<u>Inragroup conflict</u>: The factorial validity of Jehn's measure was assessed using principal components extraction and varimax rotation. The resulting two-factor structure, i.e. task conflict (3 items) and relationship conflict (3 items), is consistent with the literature, with eigenvalues of 2.856 and 2.302 explaining 95.2% and 76.7% of the variation in the two factors respectively. The item loadings in relation to the two factors ranged from 0.855 to 0.921 for the first factor and 0.747 to 0.869 for the second.

<u>Charismatic leadership style</u>: The factorial validity of this measure was assessed using principal components extraction and varimax rotation. The resulting one-factor structure is consistent with the literature, with eigenvalues of 4.412 explaining 73.53% of the variation. The item loadings in relation to the factor ranged from 0.773 to 0.893.

<u>Team performance</u>: Five items extracted from two measures were examined to assess the scale validity. The factor analysis confirmed a one-factor structure (item loadings of 0.765 to 0.859). The eigenvalue was 3.375 explaining 67.5% of the variance.

In addition to the aforementioned factorial analysis, Table 5 presents the descriptive statistics and the intercorrelation matrix among the study variables. In all of the 10 entries examined, the squared correlations, representing the shared variances among the variables, were found not to exceed the average variance explained. This suggests that our measures are distinct and uni-dimensional. In sum, the convergent and discriminant validity of all measures is satisfactory.

Table 5. Correlation matrix, descriptive statistics, and extracted variance of variables

· · · · · ·	1	2	3	4
Charismatic leadership style	.7353**	308**	390**	.501**
Relationship conflict		.7905**	.636**	523**
Task conflict			.6718**	539**
Team performance				.6478**
Mean	21.030	7.058	9.418	17.039
Std. Dev.	4.812	2.376	2.008	3.605

- Note: 1. Diagonal elements represent the average variance extracted. Off-diagonal elements represent the correlations between variables. For adequate discriminant validity, the diagonal elements should be greater than the square of the entries in corresponding columns and rows.
- 2. ** Correlation is significant at the 0.01 level; * correlation is significant at the 0.05 level.

Cronbach's was used to measure the internal consistency of the scale items. The reliability measures of the scales employed in the study are summarized in Table 1. The α coefficients of the charismatic leadership style, intragroup conflict, and team performance are 0.9278, 0.9024, and 0.8783 respectively. All scales employed in the present study demonstrate strong reliability.

4.5 Hypothesis testing

Hypothesis 1 was examined by a simple regression. Hypothesis 1 proposes a negative relationship between charismatic leadership style and intragroup conflict. The significant results supported the hypothesis (B = -0.387, p < 0.01, Adj. $R^2 = 0.141$).

Hypotheses 2 and 3 were examined by a multiple regression. Hypothesis 2 proposes a positive relationship between charismatic leadership style and team performance whereas hypothesis 3 proposes a negative relationship between intragroup conflict and team performance. Both hypotheses were supported (B = 0.318, p < 0.01; $\Delta R^2 = 0.251$, p < 0.01 for the former; B = -0.475, $\Delta R^2 = 0.192$, p < 0.01 for the latter).

5. Discussions and conclusion

The present study focuses on exploring the relationship between team process factors and the team performance. Specifically, our study examined the effects of charismatic leadership style and intragroup conflict on ERP implementation team performance. The resulting findings support the hypothesized relationships illustrated in Figure 1. Three hypotheses have been empirically examined and the results are summarized in Table 6.

Table 6. Summary of Hypotheses Tests.

Hypothesis	\mathbf{B}^*	Conclusion
H1: Charismatic Leadership → Intragroup conflict	-0.387	Supported
H2: Charismatic Leadership → Project Team Performance	0.318	Supported
H3: Intragroup conflict→ Project Team Performance	-0.415	Supported

^{*:} Represents the standardized regression coefficient.

The results found that charismatic leadership style of ERP team leaders significantly influence the level of intragroup conflict, which, in turn, affects the ERP team overall performance. The significant negative effects of charismatic leadership style on the conflict suggest that groups of more charismatic leadership style tend to have less conflict. The strong relationship between charismatic leadership style and team performance is consistent with team leadership theories (Hirokawa, 1980; McGrath, 1991). Nevertheless, how to promote more charismatic leadership style is not examined in the present study and would worth further investigation.

Conflict is a critical group process variable, often serving as a mediator between antecedents of group behavior and group outcomes (Pearson, Ensley, & Amason, 2002; Barki & Harwick,

2001). In the past literature, there has been a shift in the view of task conflict in groups, as a stressful and harmful event toward a more optimistic view as possibly functional and stimulating. Contrary to the optimistic view, De Dreu and Weingart's (2003) study found that for team performance, task conflict and relationship are equally disruptive. Other cross-cultural studies (Cai & Fink, 2002; Nibler & Harris, 2003) found that the distinction between task conflict and relationship conflict is culture specific. They suggested that both types of conflict have negative effects on performance under collectivist society. Our study results confirmed with De Dreu and Weingart (2003) and Cai and Fink (2002) that task conflict is as stressful and harmful as relationship conflict in the collectivist Taiwan society.

5.1 Implications

The present study provided several important implications for business managers in the implementation of ERP systems. First, a qualified leader is found to be critical to ERP project team performance. In addition to the ERP project team leaders' technical proficiency, top management should emphasize more on the characteristics of the project leaders' leadership style. Second, the results have specifically indicated that the potential benefits of the selection and training of ISD project managers by providing clues on a "charismatic leadership model." If charismatic leadership behavior is to extract higher level of project team's performance, more research is needed that examines how this occurs.

Presently, the majority of studies look at leader effectiveness resulting from charismatic, when perhaps project team performance is of greater interest to most organizations. In this study, intragroup conflict was identified as a mediator between charismatic leadership behavior and project team performance. Other variables needed to be identified to show the charismatic leadership effect on project teams. This is an area of research that should be examined further.

5.2 Limitations

This study serves as a first step in this area and a few limitations should be addressed. Firstly, since this is a cross-sectional study, the causality among the variables studied cannot be assumed. Secondly, the data were collected from a single informant at each company participated. Although telephone interviews with the respondents were made beforehand to ensure that the respondents being very aware of his (her) reports to the measures were on behalf of the team level perceptions, the use of single informant responding on "behalf" the team is nevertheless among one of the major limits of the present study. Thirdly, our measures of charismatic leadership style, intragroup conflict, and team performance suffer from a common methods problem. In addition, there exists a recall bias as data were collected after the ERP implementation teams completed their missions. Last, due to cultural differences, the research results should not be over-generalized to other areas without further study.

In conclusion, this study places an important spotlight on understanding the impacts of group factors on ERP implementation team performance. While this context may limit the generalizability of the results, the investigation of factors that aid or impede its success seems particularly important.

Reference

Alderfer, C. P. (1987). "An inter-group perspective on group dynamics," In J. W. Lorsch, ed. *Handbook of Organization al Behavior*. Prentice-Hall, Englewood Cliffs, NJ, pp. 190-222.

Amason, A.C. (1996). "Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams," *Academy of Management Journal*, 39, pp. 123-148.

- Bass, B. M. (1985). Leadership and Performance Beyond Expectations. New York: Free Press.
- Bass, B. M. (1990). From Transactional to Transformational Leadership: Learning to Share the Vision. Organizational Dynamics, Winter.
- Boulding, K. (1963). Conflict and Defense. New York: Harper and Row.
- Bowditch, J. L. and Buono, A. F. (1990). *Primer on Organizational Behavior*. John Wiley and Sons, New York.
- Burns, J. M. (1978). Leadership. New York: Harper & Row.
- Cheung, S. O., Ng, S. T., Lam, K. C., and Yue, W. M. (2001). "A satisfying leadership behavior model for design consultants," *International Journal of Project Management*, 19(7), pp. 421-429.
- De Dreu, C.K.W. and Weingart, L.R. (2003). "Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis," *Journal of Applied Psychology*, 88(4), pp. 741-749.
- De Dreu, C.K.W. and Van Vianen, A.E.M. (2001). "Managing relationship conflict and the effectiveness of organizational teams," *Journal of Organizational Behavior*, 22, pp. 309-328.
- DeGroot, T., Kiker, D. S., and Cross, T. C. (2000). "A meta-analysis to review organizational outcomes related charismatic leadership," *Canadian Journal of Administrative Sciences*, 17(4), pp. 356-371.
- Densley, B. (1999). "The magnificent seven: Getting the biggest bang from the ERP buck," In Proceeding of the First International Workshop EMRPS99, Eder, J., Maiden, N. and Missikoff, M. (eds)(Istituto de analisi dei Sistemi ed Informatica, CNR Roma), pp. 59-65.
- Gemuenden, H.G. and Lechler, T. (1997). "Success factors of project management: The critical few," Reviewed paper, *Portland Internat. Conf. Management of Eng. Tech.* Portland, Oregon July 27-31.
- Guzzo, RA. and Shea, G.P. (1992). "Group performance and intergroup relations in organizations." In M.D. Dunnette and L.M. Hough (Eds.) *Handbook of Industrial and Organizational Psychology*, pp. 269-313, Palo Alto, CA: Consulting Psychologists Press.
- Hackman, J.R. (1987). "The design of work teams," In J. W. Lorsch, ed. *Handbook of Organization al Behavior*, Prentice-Hall, Englewood Cliffs, NJ, pp. 67-102.
- Hackman, J.R. (Ed.) (1990). Groups that Work (and those that don't): Creating Conditions for Effective Teamwork. San Francisco: Jossey-Bass.
- Hambrick, D., Cho, T., and Chen, M. (1996). "The influence of top management team heterogeneity on firms' competitive movers," *Administrative Science Quarterly*, 41, pp. 659-684.
- Hater, J.J. and Bass, B.M. (1988). "Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership," *Journal of Applied Psychology*, 73, pp. 695–702.
- Herb, K. (2000). "Ensuring E-Business Success by Learning from ERP Failures," *IT Professional*, 2(1), pp. 22–27.

- Hirst, G. (1999). *The Relationship Between Team Communication and R&D Project Performance: A Five Factor Model*. Doctoral dissertation, the Melbourne Business School, University of Melbourne.
- Hoegl, M. and Gemuenden, H.G. (2001). "Teamwork quality and the success of innovative projects: A theoretical concept and empirical evidence," *Organization Science*, 12(4), pp. 435-449.
- Jehn, K.A. (1995). "A multimethod examination of the benefits and detriments of intragroup conflict," *Administrative Science Quarterly*, 4(2), pp. 256-282.
- Jehn, K.A. (1994). "Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict," *International Journal of Conflict Management*, 5, pp. 223-238.
- Jiang, J.J, Klein, G., and Chen, H.G. (2001). "The relative influence of IS project implementation policies and project leadership on eventual outcomes," *Project Management Journal*, 32(3), pp. 49-55.
- Jones, M.C. and Harrison, A.W. (1996). "IS project team performance: An empirical assessment," *Information & Management*, 31, pp. 57-65.
- Katzenbach, J. and Smith, D. (1993, Mar-Apr), "The discipline of teams," *Harvard Business Review*, pp.111-110.
- Kayworth, T. R. and Leidner, D. E. (2001). "Leadership effectiveness in global virtual teams," *Journal of Management Information Systems*, 18(3), pp. 7-40.
- Kline, T.J.B. and McGrath, J.L. (1998), "Development and validation of five criteria for evaluating team performance," *Organizational Development Journal*, 16(3), pp. 19-27.
- Knight, D., Pearce, C.L., Smith, K.G., Olian, J.D., Sims, H.P., Smith, K.A., and Flood, P. (1999). "Top management team diversity, group process, and strategic consensus," *Strategic Management Journal*, 20, pp. 445-465.
- Kotter, J. (1988). *The Leadership Factor*. New York: Free Press.
- Kumar, K. and Van Hillegersberg, J. (2000). "ERP experiences and evolution," *Communications of the ACM*, 43, p. 4.
- Lowry, G.R., Morgan, G.W., and FitzGerald, D.G. (1996). "Identifying excellence in leading Australian-owned information technology forms: five emerging themes," 17th Australasian Conference on Information Systems, University of Tasmania, Hobart.
- Mackenzie, S.B., Podsakoff, P.M., and Rich, G.A. (2001). "Transformational and transactional leadership and salesperson performance," *Journal of Academy of Marketing Science*, 29(2), pp. 115-134.
- Pinkley, R.L. (1990). "Dimensions of conflict frame: Disputant interpretations of conflict," *Organization Science Quarterly*, 75, pp. 117-126.
- Priem, R. and Price, K. (1991). "Process and outcome expectations for the dialectical inquiry, devil's advocacy, and consensus techniques of strategic decision making," *Group and Organizational Studies*, 16, pp. 206-225.
- Sauer, C. (1993). Why Informations Fail: A Case Study Approach. UK: Alfred Waller.

- Schrader, S. and Goepfert, J. (1996). "Structuring manufacturer-supplier interaction in new product development teams: An empirical analysis," In H. G. Gemuenden, T. Ritter, A. Walter, (eds.) *Proc.* 12th Internat. Conf. Industrial Marketing and purchasing (1). Universitaet Karlsruhe, Karlsruhe, Germany, 557-598.
- Shah, P.P. and Jehn, K.A. (1993). "Do friends perform better than acquaintances? The interaction of friendship, conflict, and task," *Group Decision and Negotiation*, 2, pp. 149-165.
- Simons, T.L. and Peterson, R. (2000). "Task conflict and relationship conflict in top management teams: The privotal role of intragroup trust," *Journal of Applied Psychology*, 85, pp. 102-111.
- Stoner, J.A.F. and Freeman, R.E. (1992). *Management*. Prentice Hall, Inc., New Jersey.
- Themistocleous, M., Irani, Z., O'Keefe, R.M., and Paul, R. (2001). "ERP problems and application integration issues: An Empirical Survey," *Proceedings of the 34nd Hawaii International Conference on System Sciences*, 9, January 03 06, Maui, Hawaii.
- Thite, M. (2000). "Leadership styles in information technology projects," *International Journal of Project Management*, 18, pp. 235-241.
- Wade, D., Mention, C., and Jolly, J. (1996). *Teams: Who Needs Them and Why?* Houston, TX: Gulf Publishing.
- Zaccaro, S.J., Rittman, A.L. and Marks, M.A. (2001). "Team leadership," *Leadership Quarterly*, 12(4), pp. 451-483.