Effective Conflict Management in Family Managed Businesses:
A Case Study in the Indian Diaspora

Sajal Kabiraj, J Shanmugan, Mohammad Faiz

Abstract:

This study examines the application of Rahim Organizational Conflict Inventory-II (ROCI-II), one of the most popular instruments used to measure five styles of handling interpersonal conflict in organizational setup, for owner-managers of Indian family-owned-and-managed businesses. The construct of five factorially independent scales, i.e. conflict handling styles (integrating, obliging, dominating, avoiding, and compromising) have been applied in the organizations at various levels. This study attempts to explore the suitability of ROCI-II instrument in the family business context, by assessing the styles obtained from a sample of 124 owner-managers of family businesses and comparing them with the instrument's five styles. The instrument comprises 28 variables on a 5-point Likert scale. The findings of factor analysis of the primary data of 28 variables are compared with the ROCI-II scales, comprising 5 conflict management styles. After conducting a Wilcoxon Test it is confirmed that the ROCI–II scales fit well with the family business owner-managers in allocating the 28 variables into 5 factors, which are similar to the 5 conflict management styles and the difference between them is insignificant.

Keywords: Conflict, Management style, Family managed business.

Introduction

Conflict is pervasive in organizations. It is an "interactive state" manifested in disagreement, differences, or incompatibility, within or between individuals and groups (Rahim, 1985).
The term conflict is ambiguous. In the conflict literature, definitions of "conflict" are divergent, having fundamentally different sets of explanatory variables. Conflict by capturing its essence as "a struggle over values and claims to scare status, power, and resources in which the aims of the opponents are to neutralize, injure, or eliminate their rivals" (Coser, 1956). Conflict is defined conceptually as a "breakdown in the standard mechanisms of decision making," i.e. as a malfunction of the system (March and Simon, 1958). Conflict's omnipresence and importance of conflict management has been acknowledged in diverse fields including psychology, communication, organizational behavior and marketing (Deutsch 1990; Pondy 1967; Pruitt and Rubin 1986; Putnam and Poole 1987; Thomas 1976, 1992b; Wall and Callister, 1995).

Conflict seems to be one of the distinct characteristics of family businesses (the terminology used for "family owned-and-managed businesses throughout this discussion). Highly publicized family disputes and volatile family conflicts that have destroyed families and business may be the reasons for such a reputation (Levinson, 1971; Sorenson, 1999). Family businesses are the most prevalent form of business through all of history, and occupy a leading role in the economic and social life of all the free market economies. However, only recently the subject of family business has been recognized and given importance by the academicians, scholars, practitioners and owners of family businesses (Wortman, 1995). Scholarly literature on family business conflict, draws upon the research on organizational conflict. Extant research on conflict and its management in family business comprise case descriptions and theoretical articles, but data-based studies are sparse (Harvey & Evans, 1994; Levinson, 1971; Kaye, 1991).

Studies on the management of organizational conflict has taken two directions: one is to measure the "amount of conflict" at various levels and to explore the sources of such conflicts, and another is to relate the "styles of handling interpersonal conflict" of the participants and their effects on quality of problem solution or attainment of social system objectives (Rahim, 1985). The distinction between the two approaches is essential for a proper understanding of the nature of conflict management. Our focus of the research paper is on the styles of handling interpersonal conflict, also described as conflict-handling modes or strategies of managing conflict (Robbins, 1978; Thomas 1976).

The purpose of this study is to examine the applicability of one of the most popular instruments to measure the styles of handling interpersonal conflict in organizational setting, Rahim Organizational Conflict Inventory-II (ROCI-II), for owner-managers of family businesses. This study evaluates the instrument for its suitability in the milieu of Indian family business, for the participants that are owners and also function as managers. Family businesses differ distinctly from non-family owned and managed businesses. The study elaborates on conflict and management, distinctiveness of family business, and ROCI-II. For investigation, factor analysis is conducted for the primary data and the resultant factors are compared with the original construct of five styles of handling conflict. A Wilcoxon Test is conducted to confirm that the ROCI-II scales fit in the family business context.

Organizational Conflict

Definitions of conflict are diverse. Kilmann and Thomas (1974) observe the diversity in conflict definitions as: "conflict" as a condition of objective incompatibility between values and goals (Bernard, 1951), and as the behavior of deliberately interfering with another's goal achievement (Schmidt et al, 1972). Conflict behavior is explained in terms of objective conflict of interest (Axelrod, 1970), personal styles (Blake and Mouton, 1964), reactions to threats (Deutsch and Krauss, 1962), and cognitive distortions (Osgood, 1961). Wall & Callister (1995) comment that conflict is generally held as a process in which one party perceives that its interests are

being opposed or negatively affected by another party. Conflict is also looked at in two basic ways: the medical model, which assumes that conflict is like a disease, the less there is, the better; and another is frictional model which assumes that interaction naturally leads to conflict, and it is to be expected and managed constructively (Roark and Wilkinson, 1979).

In last few decades the complexities of managing organizations and the people within those organizations has increased with the increased prevalence of conflict in organizations (Konovsky and McDonald, 1989). The extant research on organizational conflict constitutes a large body of literature (Thompson, 1990; Tjosvold, 1991). In early and middle of twentieth century, researchers treated conflict as a general social phenomenon, with implications for the understanding of conflict within and between organizations (Boulding, 1962; Coser, 1956; Schelling, 1961). Organizational conflict has assumed an important role in general theories of management and organizational behavior, and has been the focus of numerous empirical studies of organization. Guetzkow and Gyr (1954) propose that two types of conflicts, "affective" and "substantive" predominantly exist in the organizations. Affective conflict refers to conflict in interpersonal relations, whereas substantive conflict involves the group's task. Pondy (1967) comments that conflict may not necessarily be functional or dysfunctional. The effects of conflicts must be evaluated relative to some set of values such as productivity, stability, adaptability as organizational values.

Family Business and Conflict

Everyone has to cope with numerous and varied conflicts may be at the individual level or the organizational level, or in the family business. Family businesses are different from other kinds of businesses because they combine the family and the business, the two overlapping subsystems. The conceptual model depicted in two circles in Figure 1, indicates that each of these subsystems or "circles" has its own needs and goals, norms, membership rules, value structures, and organizational structures (Beckhard and Dyer, 1983; Lansberg, 1983). Families are governed by equality, inclusiveness, and caring feelings. Businesses are governed by meritocracy, selectivity, and critical analysis.

Donnelly (1964) defines the family business as "one which has been closely identified with at least two generations of a family and when this link has had a mutual influence on company policy and on the interests and objectives of the family". Neubauer and Lank (1998) define a family business as "a proprietorship, partnership, corporation or any form of business association where voting control is in the hands of a given family". The definitions of family business express the unique characteristics that differentiate them from non-family managed businesses such as: (1) the controlling ownership lies in the hands of a given family, (2) the family has an influence on the firm's decision making, and (3) the members of the controlling block-holder i.e. the family members, are bonded by family ties (Gersick et al., 1997; Hoy & Verser, 1994; Lansberg, 1999; Taguiri & Davis, 1996)

Although family businesses are pervasive, their life expectancy is a significant area of research. As observed from an 'evolutionary' perspective: "30% of family businesses make it to the second generation, 10-15% make it to the third generation and 3-5% make it to the fourth generation," it is crucial to understand the interdependencies between family and business systems, ownership and management and the forces that make strategic decisions and execution more complex (Aronoff, 1999). Family businesses have a complex set of problems that are not completely addressed by classical management theories (Davis and Stern, 1980) One of the major causes of shortened life cycle of the family businesses is family conflict. The overlap of the two subsystems, the family and the business lead to fundamental differences and create opportunities for conflict in decision-making regarding employment, compensation, inheritance, reinvestment, and so on. When decisions like these are not resolved effectively over a period of time, conflict mounts and the result can destroy both the family and the business.

Conflict Management

In a survey, reported that managers spend a full 20% of their time dealing with conflict (Thomas and Schmidt,1976). Successful managers have found to be spending more time managing conflict than unsuccessful managers. It is therefore no surprise that the researchers have investigated various ways to treat organizational conflict. Organizations of various sizes and functions report conflict management training to be of considerable importance to their employees (Shockley-Zalabak, 1984). In order to respond to the demand for skills training, several scholars have attempted to identify the most successful conflict management strategies (Burke, 1970, Deautsch, 1973; Kilmann & Thomas, 1977; Putnam & Wilson, 1982, Rahim and Bonoma, 1979; Hall, 1969). Some researchers have suggested total elimination of conflict as the best way to handle conflict, where as others have suggested that the conflict may have some value (Janis, 1972; Robbins, 1978) and that organization should manage rather than eliminate conflict. An absence of conflict in organizations may be perceived as a sign that no activity is taking place or that conflict is being suppressed. The positive consequences of conflict are noted by several researchers (Assael, 1969; Janis, 1972) If the organizational conflict is left uncontrolled, it may have dysfunctional effects. When conflicts in the organizations are dealt early when there are mere signals of needed change seldom, they seldom reach an intolerable or destructive level. However, the longer conflicts are suppressed or ignored, the greater the possibility of them becoming destructive (Roark and Wilkinson, 1979). "Conflict management can require intervention to reduce conflict if there is too much, or intervention to promote conflict if there is too little"(Brown, 1983)

Management of organizational conflict involves the diagnosis of and intervention in conflict at intrapersonal, interpersonal, intragroup, and intergroup levels (Rahim 1985). Most recommendations for organizational conflicts still relate to conflict resolution, reduction, or minimization. However, organizational conflict must not necessarily be reduced or eliminated, but managed. The differences between resolution

and management of conflict is more than semantic (Boulding, 1968; Robbins, 1978). Reduction or elimination of conflict is termed as conflict resolution, whereas the management of conflict does not necessarily imply reduction in the amount of conflict.

For family businesses, as family and business are entwined as an entity, family norms for resolving conflict set the tone for conflict management norms in the business in two ways . First, the founder or the owner usually establishes norms for interaction in the business (Sonnenfeld and Spence, 1989). He considers the business as an extension of his dreams, vision, and aspirations. His values and practices become norms for the organization. These norms include how decisions are made and conflicts are resolved (Dyer, 1986; Ket de Vries, 1993). Second, family norms have even more influence when multiple family members work in the business (Kaye, 1991). If family manages conflict through proactive problem-solving approach, it may provide the basis for positive problem-solving orientation in the business, especially needed for succession planning and transition between generations (Dunn, 1995, Lansberg & Astrachan, 1994, Seymore, 1993). In contrast, arguable and non-agreeable conflict management norms within the family may encourage contention within the business. Nepotism and different coalitions with employees to promote personal agenda are such examples. Scholars and researchers therefore agree that managing conflict is important to the success of a family business (Dyer, 1994; Harvey & Evans, 1995; Kaye, 1991; Ward, 1987)

Styles of Handling Interpersonal Conflict

Much conflict research and theory has focused on conflict resolution leading to reduction or termination of conflict (Brett, 1984; Brown, 1992; Thomas, 1992). A number of conflict interventions and resolution tactics have been designed to eliminate conflict before it occurs. Conflict management, on the other hand, emphasizes organizational learning to maximize the constructive aspects of conflict while minimizing its detrimental consequences.

Research on conflict management styles of handling interpersonal conflict, also described as conflict-handling modes or conflict strategies, is substantial (Blake & Mouton, 1964; Rahim, 1983a; Rahim & Psenicka, 1984; Thomas, 1992). Blake and Mouton (1964) conceptualized a two-dimensional model of handling interpersonal conflict based on concern for people and concern for the production of others. These two dimensions frame five styles of conflict management – forcing, confrontation, compromise, withdrawal, and smoothing – each differing in its location along one or both dimensions. Thomas (1976) reinterpreted and extended these modes. Rahim (1983), and Rahim and Bonoma (1979) differentiated the styles of handling interpersonal conflicts into two dimensions, concern for self and concern for others, which has become one of the most popular concept of conflict management styles.

Discussions on conflict strategies typically stem from administering and interpreting a conflict style instrument (Shockley-Zalabak, 1984). The two dimensions - concern for self-interests and concern for the other party or the relationship - have been incorporated into a variety of questionnaires, the best known of which are Thomas-Kilmann (1974) Conflict MODE instrument, Hall's (1969) Conflict Management Survey(CMS), and Rahim's (1983a) Organizational Conflict Inventory-II (ROCI-II). These instruments reflect different assumptions about effectiveness and about the situational nature of conflict management preferences. Some of the instruments focus on the measurement of ways in which people react to conflict situations (Kilmann & Thomas, 1977; Rahim, 1983a), others focus on evaluation of communication and interpersonal strategies, or ways of coping with interpersonal conflict within the family (Putnam and Wilson, 1982).

The Rahim Organizational Conflict Inventory-II (ROCI-II)

In a complex organization, the members may get number of constraints imposed on them that can affect their styles of handling interpersonal conflict. One of the major constraints may be the hierarchical relationship between organizational members. Rahim (1986b) investigated that the styles of handling interpersonal conflict of an organizational member are affected by his or her referent role as supervisor, subordinate, or peer. Previous studies have dealt with subordinates and superiors (Musser, 1982), but Rahim's study was the first published investigation of the styles of conflict management used by managers with all three arties – superiors, subordinates, and peers. Rahim (1985) posits an effective management of organizational conflict involves diagnosis and intervention. This combination of diagnostic and intervention approaches to organizational conflicts contributes to the uniqueness of the ROCI-II instrument.

The ROCI-II is one of the more recently developed instruments and noted for its emphasis on individual predispositions, its belief in maintaining a balance in the amount of conflict in the organization, and its concern for effectiveness in managing conflicts. The conceptual framework of ROCI-II is in alignment with the objective of this study to measure conflict management styles of owner-mangers of Indian family businesses. ROCI-II is found to be the most appropriate instrument with its two dimensional construct relevant to family businesses. In family business, the family members are bound by familial ties and also represent hierarchical structure among themselves as managers and decision makers. In ROCI-II, the first dimension indicates the degree (high or low) to which a person attempts to satisfy his or her concern. The second dimension explains the degree (high or low) to which a person wants to satisfy the concern of others. Therefore these dimensions appear to be suitable for family business context similar to the organizational context. Figure 2 depicts a two-dimensional model of styles of handling interpersonal conflicts. Combination of the two dimensions results in five specific styles of handling conflict, as explained below:

1.	Integrating: high concern for self and others. This involves openness, exchange of information, and examination of differences to reach an effective solution acceptable to both parties. It is associated with problem solving which may lead to creative solutions.
2.	Obliging: low concern for self and high concern for others. This style is associated with attempting to play down

the differences and emphasizing commonalities to satisfy the concern of the other party.

3. Dominating: high concern for self and low concern for others. This style has been identified with win-lose orientation or with forcing behavior to win one's position.

4. Avoiding: low concern for self and others. It is associated with withdrawal, buck-passing, or sidestepping situations. An avoiding person fails to satisfy is or her own concern as well as the concern of the other party.

5. Compromising: intermediate in concern for self and others. It involves give-and-take whereby both parties give up something to make a mutually acceptable decision.

Assessing the ROCI-II

Context of the conflict is a critical variable in assessing conflict management behaviors.

The ROCI-II scale is assessed here for its conceptual and theoretical development and the instrument is discussed below.

Conceptualization of Conflict Dispositions

The ROCI-II is associated with a comprehensive model for diagnosing organizational conflict that links the concept of conflict styles to other important organizational variables. (Rahim, 1985, 1986a; Rahim & Bonoma, 1979). According to Rahim (1985, 1986a), through indexing the amount of conflict at various levels of the organization, an estimation of how close the organization is to the moderate degree of conflict required for an optimum level of organization effectiveness can be made. By analyzing the conflict-handling styles of organizational members, information about the appropriateness and effectiveness of each style for particular situation can be obtained. The ultimate advantage in investigating both the amount of conflict and style of conflict management is that "effectiveness can be maximized if a moderate amount of conflict is maintained and organizational members use different styles of conflict depending on situations" (Rahim, 1986a).

Role of Communication

Rahim (1985) posits an effective management of organizational conflict involves diagnosis and intervention. A combination of diagnostic and intervention approaches to organizational conflicts contributes to the uniqueness of the ROCI-II model. In addition, an examination of the structural and behavioral approaches to intervention (Rahim, 1986a) reveals the role of communication in organizational conflict (Weider-Hatfield, 1988). Rahim's approach to conflict styles as a behavioral intervention treats communication in conflict from the perceptions or cognitive abilities of the members. Styles are treated as orientation towards conflict and sets of strategies and tactics for achieving a variety of goals. Such an approach is reflective of the psychological perspective of communication in interpersonal conflict (Putnam & Poole, 1987).

Instrument Development

The ROCI-II (Rahim, 1983a) was designed on the basis of lengthy and repeated feedback from the subjects and factor analyses of various sets of items. The conceptualization and operationalization of the constructs of the five styles of handling interpersonal conflict in ROCI-II were developed on the basis of literature and data in the United States.

The ROCI-II (Rahim, 1985) instrument contains three forms for measuring the self-report of the styles of handling conflict of an organizational member with his or her superior(s) (Form A), subordinates (Form B), and peers (Form C). The instrument uses a 5-point Likert scale to measure the amount of conflict at the three levels and the five styles of handling interpersonal conflict. The items range from strongly agree to strongly disagree, the higher the score, the greater the proportion of use of the conflict style (Weider-Hatfield, 1988). The five styles derived from the two dimensions are labeled integrating (IN), collaboration; obliging (OB), accommodating; dominating (DO), competing; avoiding (AV), withdrawal; and compromising (CO). The instrument contains 28 items (7 for IN, 6 for OB, 5 for DO, 6 for AV, and 4 for CO). Each form has same items, differ only in reference to conflict with a boss, subordinates, or peers (Rahim, 1983a).

Psychometric Properties of the ROCI-II

The ROCI-II is used in the conflict management workshops and training programs. It has been compared with and assessed by other researchers for its internal reliability, predictive validity and factor structure of the items. The results, as reported by the author (Rahim, 1983a), and other researchers (Weider-Hatfield, 1988; King & Miles, 1990) are discussed below.

Reliability

The most frequently reported reliability estimates on ROCI-II questionnaire are Cronbach alpha coefficients of internal consistency. Rahim (1983a) has reported Cronbach alpha coefficients for five styles between .70 and .80. Nunnally (1978) has suggested a minimum standard of .80 for internal consistency, however Rahim (1983a) argues that these estimates are as satisfactory as those for other conflict instruments. The test-retest results over a period of one week, showed moderate to good evidence of reliability for all subscales except compromise.

Factor Structure

Although there is evidence (Rahim, 1983a, 1983b) that the ROCI-II assesses five conflict styles, other studies have shown mixed response. Separate factor analyses by Rahim (1983a, 1983b) using a sample of 1,219 managers, splitting the sample into two groups, and using four rotation methods, yielded almost identical five-factor structures. Table 1 depicts the final factor loadings of five styles. Correlations among the unweighted scale scores for the five factors were less than $r = .33$.

Patrick (1987) conducted factor analysis of 539 student responses to ROCI-II and showed general support for the five factors. However, other research (Eschelman, 1982; Richardson & Hammock, 1987) has not clearly replicated Rahim's

factor structure. The results suggest from both the factor analyses and correlations among the five styles, that the instrument might be assessing three, not five, factors such as: dominating (DO), which appears to be a unique dimension, integrating (IN), which combines he items of both, integrating and compromising (CO) scales, and avoiding (AV), which combines items from both, avoiding and obliging (OB) scales. Correlations among the five subscales ranged from -.42 to .77, with three of the interscale correlations exceeding .60.

Weider-Hatfield (1988) notes that the analyses of the factor structure and correlations among the five subscales provide mixed support for the presence of five factors Also, the high correlations among the scores rise the question whether similar subscales are measuring the same artifact. More research is needed with confirmatory factor analysis and other cluster techniques to find out about the overlapping variance among the related subscales.

Content Validity

Two major standards for ensuring the content validity of the test items, as suggested by Nunnally (1978) are, item representativeness and sensible scale construction (Weider-Hatfield, 1988). Rahim's approach in selecting items seems careful and methodical. In the self-administered instrument, the items are worded in a manner that facilitates ease in understanding and completing the instrument.

Construct Validity

Carmines & Zeller (1979) report that Rahim's measure of conflict styles is related to similar and communication-related theoretical constructs. Researchers (Hodges, 1987; Richardson & Hammock, 1987; Young, 1985) have found significant positive relationships between dominating scores and tolerance for conflict, dominating scores and respondents' self-reports of engaging in assertive behavior, positive relationship between integrating and noble-self orientation; significant negative relationship between tolerance for conflict and both avoiding and obliging, integrating and rhetorical sensitivity. As a whole, these studies present convincing evidence that Rahim's five conflict styles are linked to other relevant constructs in the conflict domain (Weider-Hatfield, 1988).

Predictive validity

The ROCI-II is assumed to predict conflict management behavior, although it is not specified by Rahim the behavior his instrument is intended to predict. Till date, the research done on effectiveness of the ROCI-II in predicting conflict behavior is meager. Most studies focus on respondents' propensity to behave and their perceptions of the behaviors they employ. As a result, "perceptions of message behaviors are substituted for the actual communication of a style" (Putnam & Poole, 1987). Womack (1988) notes that predictive validity is the most difficult standard for any self-report instrument to meet. For ROCI-II, additional research to demonstrate predictive validity is needed.

The Method

Primary data selection, administration, and analysis are detailed below.

The Instrument

As mentioned earlier, the objective of this study is to apply the ROCI-II instrument in Indian family business context and assess its appropriateness in finding the five styles of conflict management for the family business owner-managers. As ROCI-II was used for the first time to the family business segment of respondents, we expected that the primary sample would construct independent scales (as derived from factor analysis) to measure the five styles of handling conflict in similar lines as developed by Rahim (1983a).

The ROCI-II is designed for the superior, subordinates and peers groups. In family businesses, although hierarchical positions may exist between family members, the underlying tone of relationship is that the members are equal, at par, being the family. Therefore, we developed a modified version of ROCI-II (Form C for peers), which we address in the study as ROCI-II FB. In ROCI-II FB, the term "peer" was interchanged with the term "family member(s)". Some items of the scale were modified with Indian English lexicon to make the respondents' comprehension of the items easy. Rahim confirmed that the changes made in the ROCI-II FB would not affect the psychometric properties of the scales.

Besides 28 items for the five styles, ROCI-II also records respondents' age, gender, education, work experience, organization size, category, hierarchical position and functional area. These details were also obtained from the respondents in the ROCI-II FB.

Sample and Procedure

The target sample for the study consists of owner-managers of family businesses in India. Published data available for the businesses that can be called "family businesses," satisfying the definitional criteria of generational, ownership, and management control aspects of the family business, is only of stock exchange listed companies. A large segment of businesses are in the form of proprietorship, partnership and private limited companies, where ownership holding details are not published for public viewing. Under the circumstances, selecting sample from published secondary sources was found to be inappropriate. Therefore, a collective database of 600 businesses from two All India industry associations was shortlisted. The companies prima facie qualified as family business. In each business, the ROCI-II FB questionnaire was sent to one top level executive, belonging to the owner family. 170 responses were received and they were further screened for their definitional criteria qualification. 124 useful responses were selected for data analysis.

Analysis and Results

Rahim (1983b) reported the factor analysis of responses to the 35 conflict items from the national sample of 1,219 ex-

ecutives. The analysis was obtained using principal factoring with iteration and varimax rotation. Eight factors were extracted with eigenvalues > 1.00. In the final instrument 28 items with factor loadings > .40 were selected. Table 1 depicts the factor structure matrix for 28 items of ROCI-II.

We analyzed responses to the 28 conflict items from an all Indian sample of 124 family business owner-managers using principal component factoring with varimax rotation. The analysis extracted nine factors with eigenvalues > 1.00 (Rahim & Bonoma, 1979; Rahim, 1983b). Item 1 (Q1) showed communality less than .50, and was dropped for the second iteration. 27 items were again factor analyzed, giving nine factors with eigenvalues > 1.00. The first five factors were consistent with priory expectations. 27 items with factor loadings > .40 were retained in the final factor analysis. Table 2 depicts the factor structure matrix for ROCI-II FB.

A visual comparison of Table 1 and Table 2, given below, indicate that our analysis of ROCI-II FB extracted nine factors from which the first 5 factors clearly indicated the five styles of conflict in the order as avoiding, compromising, dominating, integrating, and obliging. However we found cross-loadings in five items, and the higher of the two loading values was selected as the factor loading. Negative loadings represented reverse relationship. There were 8 items loaded between factors 6, 7, 8, and 9. These items, depicted in Table 3, had to be assessed to ensure that there was no difference in the conflict management styles of ROCI-II and ROCI-II FB, representing our primary data. Wilcoxon Signed-Ranked test, a non-parametric test was conducted to match the observations of the two instruments and provide the insight whether the two instruments differed in measuring the independent scales generated from factor analysis of five types of conflict.

Wilcoxon Signed-Ranked Test

This is the non-parametric alternative to Matched-sample test. In a matched-sample test each experimental unit generates a paired or two matched observations, one from each population, 1 and 2. The difference between the matched observations provides insight to the difference in the two populations. The t test is used to test the null hypothesis of no difference between population means. However, if the differences are not normally distributed, the non-parametric Wilcoxon signed rank test can be used as an alternative.

We wanted to compare how different is the ROCI-II, measuring five conflict styles in the organizational setting, from the conflict styles measure in the family business environment, as collected from our primary data. For this, we identified the variables (items) which represent the five styles interpersonal conflict as developed by the ROCI–II and tried locating the extent to which these match with the data collected on the same variables after conducting factor analysis. The results are given in Table 3. From the above, we identified the number of variables that are considered for ROCI – II and the number of variables that match from our primary data of ROCI–II FB. The factors are compared in Table 4.
Based on the results of Table 4, we performed a Wilcoxon Test on a sample of 5 factors. All the differences between

ROCI–II and the number of variables that were common with our primary data of ROCI-II FB were positive. The hypotheses that we form are as follows:
H0: No difference in Conflict Management Styles between ROCI–II and ROCI-II FB
H1: There exists difference in Conflict Management Styles between ROCI–II and ROCI-II FB
If the factors representing five styles in each of the two instruments are identical, we would expect that the positive differences cancel out with the negative differences and the sum of the signed ranked values will be approximately equal to zero. In the given case, we notice that ROCI-II FB always falls short of the number of variables as compared to ROCI–II. Hence, the difference is always positive. Thus, we need to test whether the sum of signed ranks (T = + 15 in our case) is significantly difference from zero.
We assume that the population distribution of the differences in these paired samples is symmetric and that we want to test the null hypothesis that this distribution is centered at 0. As there are no cases where the differences are equal to zero, we rank the 5 factors (their differences) in ascending order with ties assigned the average of the ranks they occupy. The sums of the ranks corresponding to positive and negative differences (in our case, there are no negative differences) are calculated, and the smaller of these sums is the Wilcoxon singed rank statistic T, that is,

$$T = \min(T+, T-)$$

where,   T+ = Sum of positive ranks;
         T – = Sum of negative ranks;
         N = Number of non-zero differences
The null hypothesis is rejected if T is less than or equal to the value as per the Wilcoxon Table (for small sample).
As per the table we observe that the T⬚ = 1, at a significance level of 5%. In our case, T = min(T+, T–) = 15, which is greater than 1. The results are depicted in Table 5.
Hence, we can say the null hypothesis of no significant difference is accepted. We conclude that there is no significant difference in the variables considered under ROCI–II and ROCI-II FB, after conducting factor analysis.

Discussion

The results showed that factorially independent scales of ROCI-II to measure the five styles of handling interpersonal organizational conflicts were applicable to family business context. We viewed our efforts exploratory and therefore chose not to test formal hypotheses or conduct a detailed statistical analysis using multivariate techniques. The contexts of the application of the ROCI-II and participants profile being dissimilar to some extent, our study was focused only on assessing the five-styles factors of ROCI-II to measure conflicts.
In family businesses, the family and the business are so entwined that the potential for discord is greater than in family businesses compared to other governance forms (Lee & Rogoff, 1996). We were guided by the concern about the paucity of data-based study on conflict in the family business literature. Given the results of the study, ROCI-II emerges as a suitable instrument to assess five styles (integrating, obliging, dominating, avoiding, and compromising) of handling interpersonal conflicts on two dimensions of concern for self

and concern for others.

The context of the application of the ROCI-II and the profile of the participants, who belonged to the family businesses being dissimilar, our study was focused only on assessing the five-styles factors of ROCI-II to measure conflicts. The results showed that factorially independent scales of ROCI-II to measure the five styles of handling interpersonal organizational conflicts were also applicable to family business context.

Directions for Future Research

We believe that the stream of research on organizational conflict management should be extended to the field of conflict management in family businesses. The present study focused on assessing the suitability of ROCI-II. Further investigation should be carried out to assess other psychometric properties and predictive validity of scales. Other prevalent conflict styles instruments should also be assessed for suitability to the Indian family business context. Furthermore, our results indicate that a larger sample size of owner-managers of family businesses could make the analysis robust and prove a useful extension of previous research.

References

Aronoff, C. E. (1999). Family business survival: Understanding the statistics "only 30%."
Family Business Advisor, Vol. 8(7), 1 and 6.

Assael, H. (1969). Constructive role of interorganizational conflict, Administrative Science
Quarterly, Vol. 14, pp. 573-582.

Axelrod, R. (1970). Conflict of Interest, Chicago, III,: Markham.

Beckhard, R., and W. G. Dyer, Jr. (1983). Managing continuity in the family-owned business, Organizational Dynamics, Vol. 12(1), pp. 5-12.

Bernard, J. (1951). The conceptualization of intergroup relations, Social Forces, Vol. 29, pp. 243-251.

Blake, R. R., and Mouton J. S. (1964). The Managerial Grid, Houston, Texas: Gulf Publishing.

Boulding K. (1962). Conflict and defense. New York: Harper.

Boulding K. (1968). Preface to a special issue, Journal of Conflict Resolution, Vol. 12, pp. 409-411.

Brett, J. M. (1984). Managing organizational conflict, Professional Psychology: Research and Practice, Vol. 15, pp. 644-678.

Brown, L. D. (1983). Managing conflict at organizational interfaces. Reading, MA: Addison-Wesley.

Brown, L. D. (1992). Normative conflict management theo-

ries: Past, present, and future, Journal of Organizational Behavior, Vol. 13, pp. 303-309.

Burke, R. J. (1970). Methods of resolving superior-subordinate conflict: The constructive use of subordinate differences and disagreements, Organizational Behavior and Human Performance, Vol. 5, pp. 393-411.

Carmines, E.G., & Zeller, R. A. (1979). Reliability and validity assessment. Newbury Park, CA: Sage.

Coser, L. A. (1956). The functions of social conflict. Glencoe, IL: The Free Press.

Davis, P. S., and Stern, D. (1980), Adaptation, survival, and growth of the family business: An integrated systems perspective, Human Relations, Vo. 34, pp. 207-224.

Deutsch, M. (1973). The resolution of conflict: Conservative and destructive processes. New Haven, CN: Yale University Press.
Deutsch, M. (1990). Sixty years of conflict, International Journal of Conflict Management, Vol. 1(3), pp. 237-263.

Deutsch, M., and Krauss, R. M. (1962). Studies in interpersonal bargaining, Journal of Conflict Resolution, Vol. 6, pp. 52-76.

Donnelly, R. (1964). The family business, Harvard Business Review, Vol. 42, pp. 93-105.

Dunn, B. (1995). Success themes in Scottish family businesses: Philosophies and practices through the generations, Family Business Review, Vol. 8, pp. 17-28.

Dyer, W. G., Jr. (1986). Cultural change in family firms: Anticipating and managing business and family transitions. San Francisco: Jossey-Bass.

Dyer, W. G., Jr. (1994). Potential contributions of organizational behavior to the study of family-owned businesses, Family Business Review, Vol. 7, pp. 109-113.

Eschelman, D. (1982). The relationship between innovation and the syles of handling interpersonal conflict. Unpublished master's thesis, Youngstown State Univeristy, Youngstown, OH.

Gersick, K. E., Davis, J. A., Hampton, M. M., and Lansberg, I. (1997). Generation to generation: Life cycles of the family business. Boston, MA: Harvard Business School Press.

Guetzkow, H., and Gyr, J. (1954). An analysis of conflict in decision-making groups, Human Relations, Vol. 7, pp. 367-381.

Hall, J. (1969). Conflict management survey: A survey on one's characteristic reactions to and handling of conflict between himself and others. Conroe, TX: Teleometrics International.

Harvey, M., and Evans, R. (1995), Forgotten sources of capital for the family-owned business, Family Business Review, Vol. 9, pp. 159-176.

Hodges, J. E. (1987). Tolerance for conflict and communication competence as predictors of conflict styles in organizational members. Unpublished master's thesis, University of Georgia, Athens.

Hoy, F., and Verser, G. (1994). Emerging business, emerging field: Entrepreneurship and the family firm, Entrepreneurship Theory & Practice, Vol. 19(1), pp. 9-23.

Janis, I. L. (1972). Victims of groupthink. Boston: Houghton Miffin.

Kaye, K. (1991). Penetrating the cycle of sustained conflict, Family Business Review, Vol.4, pp. 21-44.

Kets de Vries, M. F. (1993). The dynamics of family controlled firms: The good and the bad news, Organizational Dynamics, Vol. 21, pp. 59-71.

Kilmann R.H., and Thomas K. W. (1974). Four perspectives on conflict management: an attributional framework for organizing descriptive and normative theory, paper presented at the 34th annual meeting of the Academy of management, August 18-21, in Seattle.

Kilmann, R. H., and Thomas, K. W. (1977). Developing a forced-choice measure of conflict-handling behavior: The "MODE" instrument, Educational and psychological Measurement, Vol. 37, pp. 309-325.

King, W. C., & Miles, E. W. (1990). What we know - and don't know – about measuring conflict: An examination of the ROCI-II and the OCCI conflict instruments, Management Communication Quarterly, Vol. 4, pp.222-243.

Konovsky M. A., and McDonald M. A. (1989). Using parametric statistics to explore the construct validity of the Thomas-Kilmann conflict mode survey, Management Communications Quarterly, Vol. 3, pp. 268-290.

Lansberg, I. (1983). Managing human resources in family firms: The problem of institutional overlap, Organizational Dynamics, Vol. 12(1), pp. 39-46.

Lansberg, I. (1999). Succeeding generations: Realizing the dream of families in business. Boston, MA: Harvard Business School Press.

Lansberg, I., and Astrachan, J. H. (1994). Influence of family relationships on succession planning and training: The importance of mediating factors, Family Business Review, Vol. 7, pp. 39-59.

Lee, M. S., & Rogoff, E. G. (1996). Research note: Comparison of small businesses with family participation versus small businesses without family participation: An investigation of differences in goals, attitudes, and family/business conflict,

Family Business Review, Vol. 9(4), pp. 423-437.

Levinson, H. (1971). Conflicts that plague the family business, Harvard Business Review, (49), pp. 90-98.

March, James G., and Herbert Simon. (1958). Organizations. New York: Wiley.

Musser, S. J. (1982). A model for predicting the choice of conflict management strategies by subordinates in high-stakes conflict, Organizational Behavior and Human Performance, Vol. 29, pp. 257-269.

Neubauer, F., and Lank, A. (1998). The family business: Its governance for sustainability. New York: MacMillan Press Ltd.

Nunnally, J. M. (1978). Psychometric Theory (2nd ed.). New York: McGraw-Hill.

Osgood, C. E. (1961). An analysis of the cold war mentality, Journal of Social Issues, Vol.17, pp.12-19.

Patrick, S. (1987). Equity sensitivity and its relationship to reactions to inequality and to conflict management styles. Unpublished doctoral dissertation, University of Georgia, Athens.

Pondy, L. R. (1967). Organizational conflict: concepts and models, Administrative Science Quarterly, Vol.12, pp. 296-320.

Pruitt, D. G., and Rubin, J. Z. (1986). Social Conflict: Escalation, stalemate, and settlement, Random House, New York.

Putnam, L. L., and Poole, M. S. (1987). Conflict and Negotiation, Handbook of organizational communication: An interdisciplinary perspective, F. M. Jablin, L. L.

Putnam, K. H. Roberts, and L. W. Porter (eds.), Sage, Newbury Park, CA, pp. 549-599.

Putnam, L. L., and Wilson, C. E. (1982). Communicative strategies in organizational conflicts: Reliability and validity of a measurement scale. In M. Burgoon (Ed.), Communication yearbook 6, pp. 629-652. Newbury Park, CA: Sage.

Rahim, M. A. (1983a). Rahim organizational conflict inventories: Professional manual. Palo Alto, CA: Consulting Psychologists Press.

Rahim, M. A. (1983b). A measure of styles of handling interpersonal conflict, Academy of Management Journal, Vol. 26, pp. 368-376.

Rahim, M. A. (1985). A strategy for managing conflict in complex organizations, Human Relations, Vol. 38(1), pp. 81-89

Rahim, M. A. (1986b). Referent role and styles of handling interpersonal conflict. Journal of Social Psychology, Vol.

126, pp. 79-86.

Rahim, M. A., and Bonoma, T. V. (1979). Managing organizational conflict: A model for diagnosis and intervention. Psychological Reports, Vol. 44, pp. 1323-1344.

Rahim, M. A. and Psenicka, C. (1984). Comparison of reliability and validity of unweighted and factor scales, Psychological Reports, Vol. 55, pp. 439-445.

Richardson, D. R., & Hammock, G. S. (1987, June). Interpersonal conflict management in close relationships: Motivation versus skills. Paper presented at the First international conference of the conflict management group, Fairfax, Virginia.

Roark A. E. and Wilkinson L. (1979). Approaches to conflict management, Group Organization Management, Vol. 4, pp. 440-452.

Robbins, S. P. (1978). "Conflict management" and "conflict resolution" are not synonymous terms, California Management Review, Vol. 21(3), pp. 67-75.

Schelling T. C. (1961). The strategy of conflict. Cambridge, Mass: Harvard University.

Schmidt, Stuart M., and Thomas A. Kochan. (1972). Conflict: towards conceptual clarity, Administrative Science Quarterly, Vol. 17, pp. 359-370.

Seymour, K. C. (1993). Intergenerational relationships in the family firm: The effect of leadership on succession, Family Business Review, Vol. 6, pp. 263-281.

Shockley-Zalabak, P. (1984). Current conflict management training: An examination of practices in ten large American organizations, Group and Organizational Studies, Vol. 9, pp. 491-507.

Sonnenfeld, J. A. and Spence, P. L. (1989). The parting patriarch of a family firm, Family Business Review, Vol. 2, pp. 355-375.

Sorenson R. L. (1999). Conflict management strategies and family and business outcomes in family businesses, unpublished paper, Texas Tech University, http://sbaer.uca.edu/research/usasbe/1999/44.pdf

Tagiuri, R., and Davis, J. (1996). Bivalent attributes of the family firms, Family Business Review, Vol. 9(2), pp. 199-208.

Thomas, K. W. (1976). Conflict and conflict management, in M. D. Dunnette (Ed.),   Handbook of industrial and organizational psychology, pp. 889-935, Chicago: Rand McNally.

Thomas, K. W. (1992). Conflict and conflict management, Handbook of industrial and organizational psychology, M. D. Dunnette (ed.), Consulting Psychologists Press, Palo Alto, CA, pp. 889-935.

Thomas, K. W. (1992a). Conflict and conflict management: Reflections and update, Journal of Organizational Behavior, Vol. 13, pp. 265-274.

Thomas, K. W., & Kilmann, R. H. (1974). Thomas-Kilmann conflict MODE instrument, Tuxedo, NY: Xicom.

Thomas, K. W., & Schmidt, W. H. (1976). A survey of managerial interests with respect to conflict, Academy of Management Journal, Vol. 19, pp. 315-318.

Thompson, L. (1990). Negotiation behavior and outcomes: Empirical evidence and theoretical issues, Psychological Bulletin, Vol. 108, pp. 515-532.

Tjosvold, D. (1991). The conflict-positive organization: Stimulate diversity and create unity, Reading, MA: Addison-Wesley.

Wall, J. A. Jr., and Callister, R. R. (1995). Conflict and its management, Journal of Management, Vol. 21(3), pp. 515-558.

Ward, J. L. (1987). Keeping the family business healthy. San Francisco: Jossey-Bass.

Weider-Hatfiled, D. (1988). Assessing the Rahim Organizational Conflict inventory-II (ROCI-II), Management Communication Quarterly, Vol. 1, pp. 350-366.

Womack, D. F. (1988). A review of conflict instruments in organizational settings, Management Communication Quarterly, Vol. 1, pp. 437-445.

Wortman, M. S., Jr. (1994). Theoretical foundations for family0owned business, a conceptual and research based paradigm, Family Business Review, 7(1), pp. 3-27.

Young, C. M. (1985). The relationship between rhetorical sensitivity and conflict management style. Unpublished master's thesis, University of Georgia, Athens.

Figures and Tables

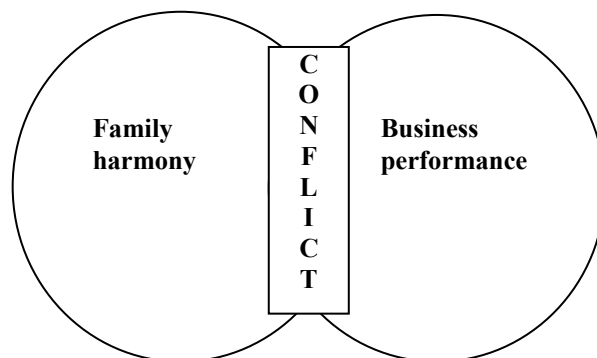Figure 1   The family Business Dilemma

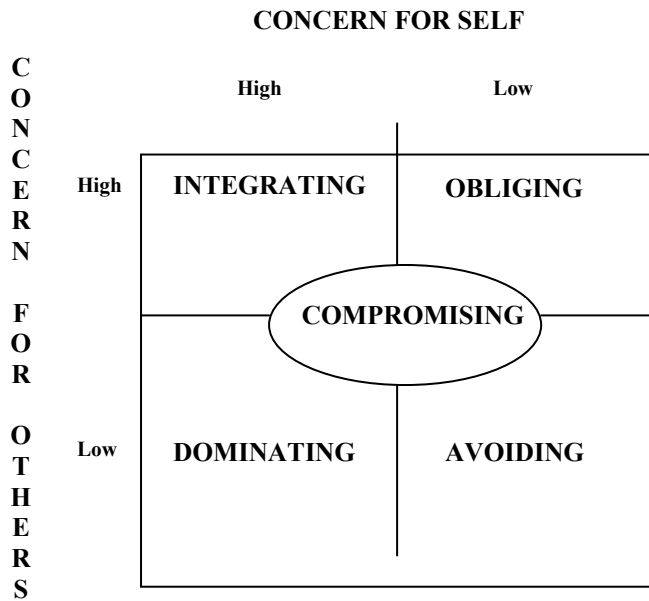Figure 2   Two-Dimensional Model of Styles of Handling Interpersonal Conflicts

CONCERN FOR SELF

	High	Low
High	INTEGRATING	OBLIGING
	COMPROMISING	
Low	DOMINATING	AVOIDING

(Left vertical label: CONCERN FOR OTHERS)

Table 1   Factor Structure Matrix for Varimax Rotated Factor Solution, ROCI-II

(N=1,219)

Item No.	Items	IN	AV	DO	OB	CO
Q1	I try to investigate an issue with my --- [b] to find a solution acceptable to us	.53				
Q2	I generally try to satisfy the needs of my ---				.48	
Q3	I attempt to avoid being "put on the spot" and try to keep my conflict with my --- to myself		.60			
Q4	I try to integrate my ideas with those of my --- to come up with a decision jointly	.55				
Q5	I try to work with my --- to find solution to a problem that satisfies our expectations	.56				
Q6	I usually avoid open discussion of my differences with my ---		.58			
Q7	I try to find a middle course to resolve an impasse					.59
Q8	I use my influence to get my ideas accepted			.64		
Q9	I use my authority to make a decision in my favor			.69		
Q10	I usually accommodate the wishes of my ---				.68	
Q11	I give in to the wishes of my ---				.59	
Q12	I exchange accurate information with my peers to solve a problem together	.61				
Q13	I usually allow concessions to my ---				.42	
Q14	I usually propose a middle ground for breaking deadlocks					.82
Q15	I negotiate with my --- so that a compromise can be reached	.61				.49
Q16	I try to stay away from disagreement with my ---		.53			
Q17	I avoid an encounter with my ---		.48			
Q18	I use my expertise to make a decision in my favor			.54		
Q19	I often go along with the suggestions of my ---				.42	
Q20	I use "give and take" so that a compromise can be made					.50
Q21	I am generally firm in pursuing my side of the issue			.44		
Q22	I try to bring all our concerns out in the open so that the issues can be resolved in the best possible way.	.58				
Q23	I collaborate with my --- to come up with decisions acceptable to us	.49				
Q24	I try to satisfy the expectations of my ---				.57	
Q25	I sometimes use my power to win a competitive situation			.64		
Q26	I try to keep my disagreement with my --- to myself in order to avoid hard feelings		.61			
Q27	I try to avoid unpleasant exchanges with my ---		.42			
Q28	I try to work with my --- for a proper understanding of a problem	.60				

Table 2   Factor structure Matrix for Varimax Rotated Factor Solution, ROCI-II FB

N=124)

Item No.	1	2	3	4	5	6	7	8	9
Q26	.736								
Q27	.727								
Q17	.715								
Q16	.563								
Q6	.488						-.418		
Q7		.804							
Q14		.784							
Q15		.707							
Q9			.803						
Q8			.731						
Q25			.691						
Q18			.626						
Q5				.774					
Q4				.742					
Q23				.536		.519			
Q13				.496					
Q11					.759				
Q10					.754				
Q19					.524			.488	
Q24						.700			
Q2						.659			
Q28						.651			
Q22							.785		
Q21							-.720		
Q3	.431							.448	
Q12									-.655
Q20		.490							.502

Table 3:   Comparison of variables representing factors in ROCI-II and ROCI-II FB

Factors	Conflict Management Styles	ROCI-II Items	ROCI-II FB (Primary Data) Items	Common Items	Non-matching Items
Factor 1	IN	Q1, Q4, Q5, Q12, Q22, Q23, Q28	Q5, Q4, Q23, Q13	Q4, Q5, Q23	Q13, Q1, Q12, Q22, Q28
Factor 2	OB	Q2, Q10, Q11, Q13, Q19, Q24	Q11, Q10, Q19	Q11,Q10,Q19	Q2, Q13, Q24
Factor 3	DO	Q8, Q9, Q18, Q21, Q25	Q9, Q8, Q25, Q18	Q9,Q8,Q25,Q18	Q21
Factor 4	AV	Q3, Q6, Q16, Q17, Q26, Q27	Q26, Q27, Q17, Q16, Q6	Q26,Q27,Q17,Q16, Q6	Q3
Factor 5	CO	Q7, Q14, Q15, Q20	Q7, Q14, Q15	Q7, Q14, Q15	Q20

Table 4   Factors Comparison

Factors	Conflict Management Styles	ROCI – II	Matching with ROCI-II FB
Factor 1	Integrating Style	7	3
Factor 2	Obliging Style	6	3
Factor 3	Dominating Style	5	4
Factor 4	Avoiding Style	6	5
Factor 5	Compromising Style	4	3

Table 5   Wilcoxon Rank Statistics

Factor	ROCI-II	Matching with ROCI-II FB	Difference	Rank
1	7	3	4	5
2	6	3	3	4
3	5	4	1	2
4	6	5	1	2
5	4	3	1	2
		Sum of Signed Ranks		15

Dr. Sajal Kabiraj
Department of Business Management
Skyline University College
University City of Sharjah, Sharjah, UAE

Dr. J Shanmugan
Department of Business Management
Skyline University College
University City of Sharjah, Sharjah, UAE

Dr. Mohammad Faiz
Department of Business Management
Skyline University College
University City of Sharjah, Sharjah, UAE