

## **Implementation of Managerial Grid as a tool of Conflict Resolution in the Workplace: a three sections perception analysis**

Md. Momin Uddin\*, Nazmul Alam Jony, Brishti Rani Dey

Department of Management Studies, Patuakhali Science and Technology University (PSTU), Patuakhali, Bangladesh.

E-mail: mominuddin.521@pstu.ac.bd\*; najony123@gmail.com; brishtiranidey@gmail.com

\*Correspondence: mominuddin.521@pstu.ac.bd

(Received Date: 12<sup>th</sup> April 2024, Accepted Date: 10th February 2024)

**Abstract:** This study intends to determine the relationship between leadership grids and conflict resolution techniques at the levels of teachers, subordinates, and students at several Bangladeshi Universities, as well as any discrepancies between them. The teachers are considered as academic leaders in university perspective. The study's sample size is 200, and data from persons from different universities were gathered using a random sampling technique. Factor analysis and MANOVA are two examples of statistical methods and procedures that were used to analyze, interpret, and draw conclusions on the defined objectives. According to a survey, academic leaders—teachers—don't take a compromise or middle-of-the-road stance. The team method is most commonly used in disagreements between subordinates. It should be the goal of leadership to avoid dispute resolution and compromise by taking the middle road and making compromises. Instructors who are in positions of leadership frequently employ a variety of strategies that are connected to contingency planning at various levels. The report gives policymakers helpful advice on how to employ managerial responsibilities, such as leadership style, to resolve conflicts and use this in the right way going forward.

**Keywords:** Conflict, conflict resolution, leadership, leadership styles, managerial grid, teachers.

### **Introduction**

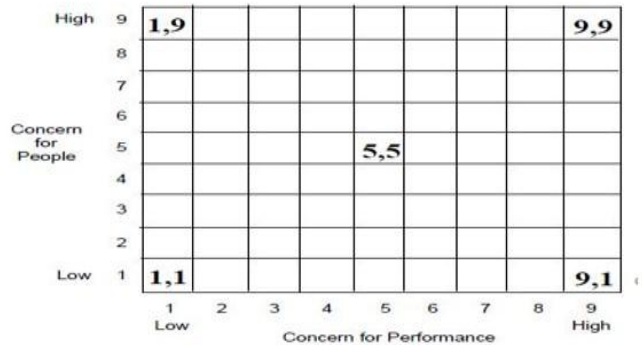
A novel, successful strategy for managing the workplace, resolving conflicts, and the organization as a whole has been actively pursued by the leadership (Guttman, 2004). As per (Jenkins, 1988), a leader provides guidance to their subordinates and ensures that their social support is appropriate for the situation. "Managerial grid" developed by Blake and Mouton is a broadly applicable philosophy of leadership. Based on the idea that "people concerns" and "production issues" are the two dimensions that determine a leader's effectiveness, the "managerial grid" paradigm was developed. As to (R. R. Blake & Mouton, 1981) study, the best course of action for managers is to optimize the behavior that underlies both dimensions. In the study literature, Grid has made a comeback as a crucial conflict resolution style paradigm (Van de Vliert & Kabanoff, 1990). The Leadership Grid model is reinterpreted when used as a conflict resolution model, substituting five distinct conflict resolution techniques for the five leadership philosophies. Poor management of conflict within institutions can have an impact on interpersonal relationships and society as a whole. The purpose of this study is to determine the similarities and differences between conflict management and leadership styles at Bangladesh's universities. This study examined the leadership and conflict resolution approaches employed by university administrators, including instructors who are regarded as leaders at all levels, as

well as by subordinates and students. Leadership is defined as a collection of behaviors that influence a community's objectives and endeavors (Feyerherm & Rice, 2002). It describes the dynamic between the leader and those who follow them. Every time someone wishes to influence someone else, they are obligated to assume leadership responsibilities (Posner, 2004). The normative school of thought states that the best type of leadership would be appropriate in any situation. In actuality, a leader's approach must change depending on the circumstances (Muczyk & Reimann, 1987). Scholars generally concur that there is not a perfect leadership style. According to (Hersey, Blanchard, & Studies, 1982), leaders are most likely to modify their style of leadership in response to particular situations, problems, or circumstances. One leadership style shouldn't limit strong leadership in the workplace or in organizational settings. Leadership and conflict management perspectives showed significant difference among individuals, subordinates and students on team, country club, authority and Middle of the road at leadership side; Collaborating, accommodating, avoiding and compromising at conflict management side (Uddin, Jony, & Dey, 2024). Since there is such a wide range in leadership styles, it is nearly hard to pinpoint a one style. In addition to considering the circumstances, leaders should select a style based on their personal preferences and those of their team members.

**The Leadership grid**

"Grid" was initially created by Jane Mouton and Robert Blake between 1958 and 1960, and it was first released in 1964 (R. Blake & Mouton, 1964). The model was especially influenced by Fleishman's work on beginning structure and contemplation (R. R. Blake & Mouton, 1982). "Consideration" and the "structure of initiation" are two essential components of leadership behavior, according to (Molloy, 1998), It was suggested that high levels of concern were linked to high levels of subordinate satisfaction, and high levels of initiating structure were linked to high levels of productivity as well as high absenteeism and grievance rates. Furthermore, it was thought that when leaders performed well on both dimensions, good efficiency and high satisfaction should follow without complaints or absence.

The two attitudes expressed by Blake and Mouton have been called "Concern for People," which refers to the consideration shown to people when leadership is exercised, and "Concern for Performance," which expresses an implicit attitude toward attaining results. As said, these two aspects would result in a high leadership style that was a synergistic blend of high levels on both dimensions (R. R. Blake & Mouton, 1982) [Figure 1]



*Figure 1: Leadership grid model*

*[Source: Grid works by Robert R. Blake, Jane S. Mouton and Walter Barclay, Scientific Methods Inc.1993]*

### Grid as a conflict resolution model

In the academic literature, grid has made a comeback as a crucial dispute resolution model.

Grid's "striking return as a leading study in conflict management literature" is cited by (Van de Vliert & Kabanoff, 1990). The Grid model, which was formerly employed as a conflict resolution model, is reinterpreted as seen in (Figure 2) substituting five distinct conflict resolution tactics for the five basic leadership types. (Van de Vliert & Kabanoff, 1990) remind us that in the Grid model, the different styles represent specific points rather than grid areas, and that the axes are understood as intervals rather than ordinal scales. The styles that their research yielded had geometric locations that were much in line with the original 2x2 arrangement.

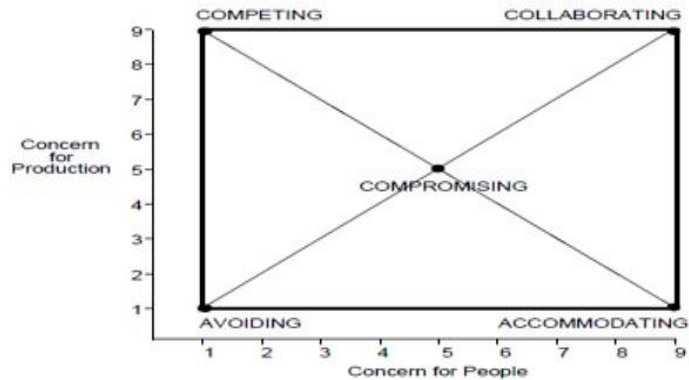


Figure 2: Grid adaptation as conflict management

[Source: A Review of the Leadership grid Model (Molloy, 1998)]

### Theories of conflict management

Conflict in the workplace can lead to frustration and have a negative impact on both individual and group performance. Concerns over conflict resolution techniques have grown as a result of a greater understanding of the negative impacts of conflict. Four factors influence the conflict process: the pre-conflict environment, the emotional and mental states of persons engaged, and the intensity of conflict behaviors (ranging from submissive resistance to overt belligerence). Conflict emerges when an individual or group realizes and acknowledges that another is in pain. The four components of the process he described as conflict are: (a) possible resistance or incompatibility; (b) perception and customization; (c) expectations; (d) actions; and (e) results that improve performance. (Sundstrom, De Meuse, & Futrell, 1990) notes that managers can be extremely effective if they can use conflict as a springboard for personal growth, problem-solving, encouraging self-criticism, and decision-making flexibility.

### Conflict management styles in relation to leadership

In order to investigate the connection between conflict management techniques and the four categories of situational management, (Romero, 1984) gave two conflict inventories and a Lead-Self Instrument to 28 heads of secondary schools. Romero's research shows that Principals do not alter their style of confrontation or leadership when circumstances change (p. 125). Teachers are seen as leaders in the academic community. Academic leadership is resolving disputes, managing, coaching, modelling, counselling, and influencing others in order to

enhance the educational process at all institutional levels. They typically assume the roles of parents, students, teachers, administrators, policy makers, and everyone else who is important to the educational process (Fullan, 2000). These days, teachers act as leaders and do more than just give lectures and handle administrative work. They also play a significant role in resolving conflicts by asking questions about how well they met the expectations of their peers, subordinates, and students, as well as whether there were any discrepancies between faculty and student perceptions. But Due to time constraints, the study was limited to a small number of respondents from various institutions. Additionally, many respondents had little to no knowledge of internal conflict and the managerial framework application used to resolve it. If the researcher had concentrated on additional institutions from other districts of Bangladesh and if all of the respondents had a proper and clear grasp of conflict and the leadership process as a tool, they could have included more samples. Additionally, because of inexperience and a lack of prior research on the subject, statistical data analysis takes longer. Therefore, this study may have more accurately depicted the environment of conflict resolution and the use of various leadership methods in Bangladesh.

### **Objectives of the Study**

The objectives of the study are-

1. To explore how managerial grid tools help the organization to resolute conflict in the workplace.
2. To find out whether leadership styles; have a statistically significant impact on handing conflict at students' level or not.
3. To find out whether leadership styles; have a statistically significant impact on handing conflict at subordinates' level or not.
4. To find out whether leadership styles; have a statistically significant impact on handing conflict at individuals' level?
5. To find out the differences in leadership styles, and the choice of conflict management factors, among individuals, subordinates and students.

### **Materials and Methods**

#### **Research design**

Quantitative survey method has been used as it is called numerical representation to analyze the relationship; It is also used because it provides quantitative response, numerical improvement, and is useful to divide the community into classes, and to check the hypothesis (Cohen & Manion, 1980).

#### **Sampling and sample size**

The sample size for the study is 200 to be collected from individuals (teachers), subordinates and students of various universities such as Patuakhali Science and Technology University, Barishal University, Khulna University and Jagannath University. From each of them 50 respondents were selected randomly of which 30 students, 10 teachers and 10 subordinates. Questionnaire was made separately for three groups (teachers, students and subordinates) through changing structure but key meaning remains same.

### **Questionnaire design**

Five – point Likert scale was used in designing questions; this scale is used because it will be easy to interpret the collected data because of the numbering assigned to each option, according to Simply Psychology (Likert, 1967). Also, as observations can range from "one" to "five" or "low" to "high"; in addition, it gives more scope than a simple Yes / No questions. The questionnaire form has been made by benefitting from the studies of (R. Blake & Mouton, 1964), (Molloy, 1998), and (MA, 2004). Mainly adapt Blake and Mouton SAMS (Self-Assessment of Managerial Style) form and ROCI-II form.

### **Statistical tools used**

The following descriptive statistics, factor analysis, Pearson correlation analysis, MANOVA statistical tools were applied in order to analyze the data, interpret and draw conclusions with respect to the objectives set. This study involved a Pearson correlation as well as a MANOVA. The MANOVA has a strictest sample size requirement; therefore, the minimum total sample size is determined.

### **Hypotheses description**

Based on the findings of relevant literature (R. Blake & Mouton, 1964), the following hypothesis are formulated:

H1: There is moderate positive relationship between leadership styles and conflict management styles at students' level.

H2: “There is positive moderate relationship between leadership styles and conflict management styles at subordinates' level”.

H3: “There is positive moderate relationship between leadership styles and conflict management styles at individual level”.

H4a: There are statistically significant differences between choice of leadership styles and level (individuals, subordinates and students), as measured by the MANOVA.

H4b: There are statistically significant differences between choice of conflict management styles and level (individuals, subordinates and students), as measured by the MANOVA.

### **Data collection procedures**

The questionnaire remained open for a period of 3–4 weeks. Participants were notified of the voluntary nature of their participation and no follow-up was made after completion of the questionnaire.

## **Result Analysis**

### **Demographic description**

In order to understand the characteristics of respondents the researcher was dealing with the basic information of the respondents.

**Table 1.** Respondents' demographic profile

Teachers' Demographic		
Age	Frequency	Percent
25-30	5	12.5
30-35	14	35.0
35-40	7	17.5
40-45	7	17.5
45-50	4	7.5
Above 50	3	10.0
Designation		
Lecturer	5	12.5
Assistant	13	32.5
Associate	9	22.5
Professor	13	32.5
Year of Experience		
Below 5	8	20.0
(5-10)	13	32.5
(10-15)	13	32.5
Above 15	6	15.0
Gender		
Male	37	92.5
Female	3	7.5
Subordinates Demographic		
Age	6	15.0
30-35	10	25.0
35-40	15	37.5
40-45	5	12.5
45-50	4	10.0
Above 50	6	15.0
Education		
Below SSC	16	40.0
SSC	6	15.0
HSC	7	17.5
Honors	6	15.0
Masters	5	12.5
Year of Experience		
Below 5	2	5.0
(5-10)	12	30.0

(10-15)	13	32.5
(15-20)	8	20.0
Above 20	5	12.5
<b>Gender</b>		
Male	28	70.0
Female	12	30.0
<b>Students Demographic</b>		
<b>Age</b>		
20-22	59	49.2
23-25	40	33.3
Above 25	21	17.5
<b>Education</b>		
Under graduate	94	78.3
graduate	26	21.7
<b>Gender</b>		
Male	73	60.8
Female	47	39.2

It has shown the all respondents demographic characteristics including teachers, subordinates and students were among the three sections most of the respondents are the students (N= 120). It is also shows that, the teachers have more experience than the subordinates (32.5%). The respondent's age, educational background, gender and other things are also be mentioned in the table. [Table 1]

### **Factor analysis**

Kaiser-Meyer-Olkin test was used for checking the sampling adequacy and found that the sample size is adequate for factor analysis with a KMO score of 0.732. Exploratory and confirmatory factor analyses were used in this study.

**Table 2.** Kaiser-Meyer-Olkin (KMO) and Bartlett's Test.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.732
Bartlett's Test of Sphericity	Approx. Chi-Square	954.641
	df	153
	Sig.	.000

This result measures indicates the research's sample is sufficient to carry out factor analysis. (Kaiser and Rice 1974) recommends accepting values greater than 0.5 as acceptable. Values between 0.7-0.8 are good, values between 0.8-0.9 are great and values above 0.9 are superb seen (Hutcheson and Sofroniou 1999), pp.224-225 for more detail. Bartlett's test is another indication of the strength of the relationship among variables. It tests the null hypothesis that the correlation

matrix is an identity matrix. From the above table, it is observed its associated probability is less than 0.05. In fact, it is actually 0.000 i.e. the significance level is small enough to reject the null hypothesis. This means that correlation matrix is not an identity matrix.

**Leadership styles perspective:**

Principal component analysis with Varimax rotation was used for the analysis. 18 questions related to leadership styles perspective, which identical to four factors which were denoted as Team, Country club, Authority and Improvised with Cronbach's alpha value of is 0.743, 0.725, 0.682 and 0.627. Team approach of leadership style indicates that leaders place high value on sound (.769), creative decisions, in authority approach, leaders' "emphasizing on accomplishing goal or task more than anything else" (.791) whereas improvised approach focus more on "avoid taking sides by not revealing opinion, attitude, and idea" (.687). But Middle of the road show insignificant factor loading and Cronbach's alpha (.137) represent that so.

**Table 3.** Factor analysis on Leadership Styles measurement statements

Statements	Factor Loading	Factor	Cronbach's alpha
Participate in decision making and place high value on sound, creative decisions.	0.769	Team	<b>0.743</b>
Counseling to improve their performance or behavior.	0.597		
Closely monitor the activities to ensure a task will be completed in time.	0.552		
Expect vigorous effort to perform a task.	0.755	Country Club	<b>0.725</b>
Support decisions which promote good relation	0.750		
Encourage to be creative about their job.	0.752		
Consider that people may have boundaries	0.491		
Nothing is more important than building a great team or keeping people together.	0.584	Authority	<b>0.682</b>
Emphasizing on accomplishing a goal or task more than anything	0.791		
Expect that people will accept my decision.	0.602		
Use authoritative power to make a decision in favor of a task.	0.635		
Prefer to carry out several tasks at the same time.	0.456		
Avoid taking sides by not revealing opinions, attitudes, and ideas	0.687	Improvised	<b>0.627</b>
No time burden for the completion of work.	0.475		
Drive others and myself to away from the problems.	0.468	Middle of the road	<b>0.137</b>
In competitive situation should remain neutral.	0.633		
Find solutions that accommodate others.	0.309		
Search for just workable decisions to maintain steady pace.	0.151		

**Conflict management Styles perspective**

Within 18 statements only 8 statements with a factor loading greater than or equal to 0.5 get focused on this study.

**Table 4.** Factor analysis on Conflict management Styles perspective

Statements	Factor Loading	Factor	Cronbach's alpha
Integrate ideas with to come up with a decision jointly.	0.754	Collaborating	0.619
Try to work with my fellows or subordinates to find solution to a problem that satisfies our expectations.	0.725		
I try to investigate issues with my fellows or subordinates to find a solution acceptable to us.	0.208		
I exchange accurate information with my fellows to solve a problem together.	0.042	Accommodating	0.558
Satisfy the needs of my fellows, subordinates or students.	0.604		
Usually accommodate the wishes of fellows, subordinates or students.	0.721		
Prefer to support rather than initiate action.	0.039		
Try to satisfy the expectations of my fellows or subordinates.	0.037	Competing	0.724
Influence to get my ideas accepted	0.835		
Use authoritative power to make a decision in favor.	0.412		
Firm in pursuing my side of the issue.	0.774		
I use my expertise to make a decision in my favor	0.075		
Try to find a middle course to resolve an impasse.	0.510	Avoiding	0.595
Try to stay away from disagreement with my fellows or subordinates.	0.259		
Avoid an encounter with my fellows or subordinates.	0.566		
Try to keep my disagreement with my fellows or subordinates to myself in order to avoid hard feelings.	0.046	Compromising	0.435
Usually propose a middle ground for breaking deadlocks.	0.483		
Try to please everyone and seeking quick solution	0.205		

These four factors were named as competitive style, collaborating style, avoiding style and accommodating, which had a Cronbach's alpha value of 0.724, 0.619, 595 and 0.558 respectively.

**Compare mean across level:**

Chart of the compared mean showed that there is a consistency between the choices of leadership styles and conflict management styles. Subordinates are high on Team (M=3.79), country club (M=3.89), and middle of the road (M=3.72) among leadership styles. At the same time subordinates also high on collaborating (M=3.78), accommodating (M=3.89) and compromising (M=3.8). But overall consistency didn't achieve because subordinates' authority mean showed middle mean whereas competing showed low mean.

In term of authority and Improvised individuals are high on it and predicatively also high on competing and avoiding as well as they showed inconsistency in term of team and collaboration. Students comparatively high on middle of the road (M=3.72) on leadership side and avoiding

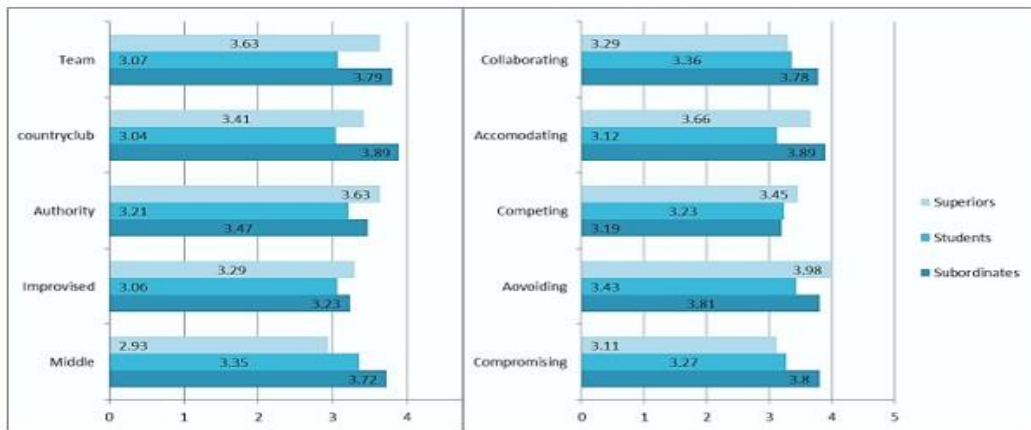


Figure 3: Mean comparison

(M=3.43) on conflict side. So, it indicates that overall consistency was not achieve across level but on specific styles across level showed consistency.

**Relationship between leadership styles and conflict management styles at students' level.**

Results of correlations between the five leadership styles as independent variables and conflict management at the students' level as dependent variable are shown in [Table- 5].

**Table 5.** Relationship between Leadership Style and Conflict Management Styles at students' level

		Team	country club	Authority	Improvised	Middle
Team	Pearson Correlation					
	Sig. (2-tailed)					
country club	Pearson Correlation	0.443**				
	Sig. (2-tailed)	0.000				
Authority	Pearson Correlation	0.455**	0.517**			
	Sig. (2-tailed)	0.000	0.000			
Improvised	Pearson Correlation	0.427**	0.493**	0.543**		
	Sig. (2-tailed)	0.000	0.000	0.000		
Middle	Pearson Correlation	0.114	-0.104	-0.131	-0.116	
	Sig. (2-tailed)	0.217	0.259	0.153	0.206	
Students	Pearson Correlation	<b>0.531**</b>	<b>0.514**</b>	<b>0.484**</b>	<b>0.468**</b>	0.179
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.050
	N	120	120	120	120	120

\*\* . Correlation is significant at the 0.01 level (2-tailed).

In this correlation, moderate correlation is considered. Therefore. Low and negligible relation is not considered. According to the findings of the correlations as stated in table-5, there is a moderate relationship except middle of the road and also indicate, after team individuals prefer country club approach for handling conflict at student's level. Individuals use authoritative approach in term of handling student's level conflict significantly. The correlation between Improvised and handling conflict at student's level is considered as positive moderate relationship. Middle of the road and handling conflict at student's level is found positive but low correlation. Overall consideration is defined as; because of the negligible correlation between middle of the road and handling conflict at student's level H2: There is moderate positive relationship between leadership styles and conflict management styles at students' level ", is rejected.

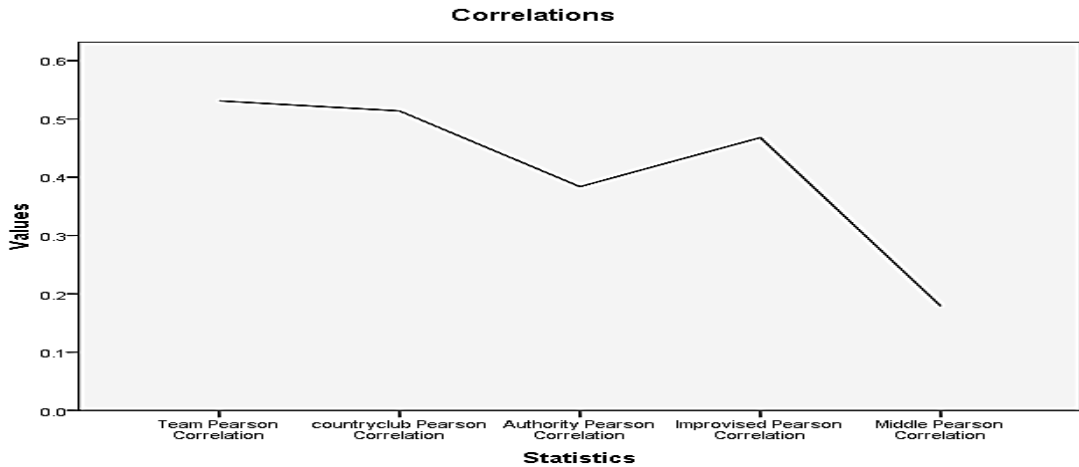


Figure 3. Relationship between Leadership Styles and Conflict management styles at Students Level

**Relationship between leadership styles and conflict management styles at subordinates' level:**

Results of correlations between the five leadership styles as independent variables and conflict management at the subordinates' level as dependent variable are shown in Table- 6.

**Table 6.** Relationship between Leadership Style and Conflict Management Styles at subordinates' level.

		Team	country club	Authority	Improvised	Middle
Team	Pearson Correlation					
country club	Pearson Correlation	0.467**				
Authority	Pearson Correlation	0.457**	0.212			
Improvised	Pearson Correlation	0.484**	0.406**	0.016		
Middle	Pearson Correlation	0.400*	0.166	0.084	0.607**	
Subordinate	Pearson Correlation	<b>0.766**</b>	<b>0.425**</b>	<b>0.504**</b>	0.309	<b>0.400*</b>

The relationship between Team style and subordinates' level conflict is considered moderately high positive [Table- 6]. In term of subordinates' conflict individuals prefer country club approach after Team. Authority showed a positive moderate correlation. Middle of the road also showed positive moderate relationship. Based on the result improvised style and handling conflict at subordinates showed positive but not moderate relationship. So, considering overall relationships H3 that “There is positive moderate relationship between leadership styles and conflict management styles at subordinates' level” is rejected. Because of improvised style.

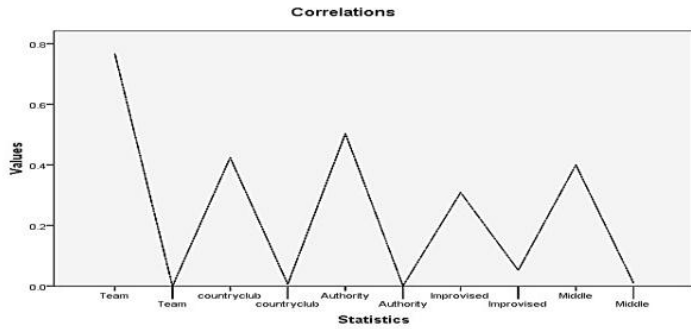


Figure 5: Line chart on leadership Styles and handling conflict management at Subordinates' Level

**Relationship between leadership styles and conflict management styles at individuals' level:**

Results of correlations between the five leadership styles as independent variables and conflict management at the subordinates' level as dependent variable are shown in [Table- 7].

**Table 7.** Relationship between Leadership Style and Conflict Management Styles at individuals' level.

Team	Pearson Correlation					
	Sig. (2-tailed)					
country club	Pearson Correlation	0.386*				
	Sig. (2-tailed)	0.014				
Authority	Pearson Correlation	0.620**	0.491**			
	Sig. (2-tailed)	0.000	0.001			
Improvised	Pearson Correlation	0.400*	0.491**	0.557**		
	Sig. (2-tailed)	0.011	0.001	0.000		
Middle	Pearson Correlation	-0.171	0.235	-0.512**	-0.157	
	Sig. (2-tailed)	0.293	0.144	0.001	0.332	
Individuals'	Pearson Correlation	0.246	0.388*	0.234	<b>0.571**</b>	0.025
	Sig. (2-tailed)	0.127	0.013	0.146	0.000	0.879
	N	40	40	40	40	40

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

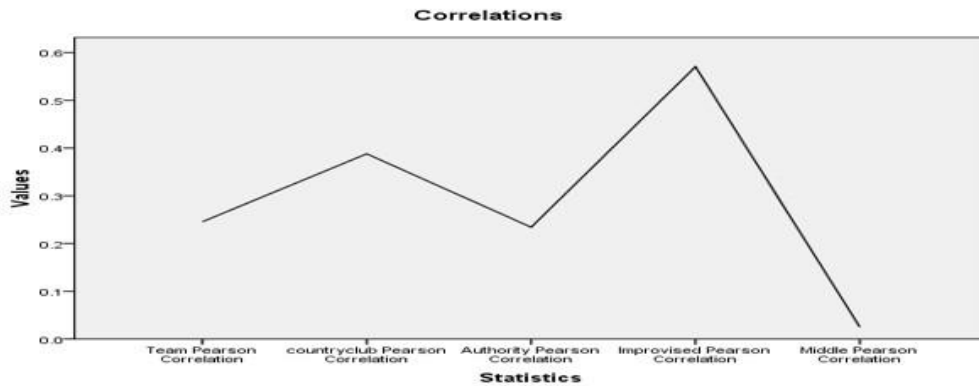


Figure 6: Line chart on leadership Styles and handling conflict management at Individuals' Level

The results indicated that there is no significant relationship between team and handling conflict at individuals' level [Table- 7]; Country club and handling conflict at individuals' level relationship is positive as; but not moderate relationship. No significant relationship between Authority and handling conflict at individuals' level, so that it is an insignificant relationship. The results indicated positive moderate correlation between Improvised and handling conflict at individual level. The correlation between Middle of the road showed highly insignificant value so there is no relationship between Middle of the road and handling conflict at individual level.

**MANOVA analysis:**

To address Research Question 4, MANOVA used to determine if there is significant differences existed in choice of leadership styles practiced among individuals, subordinates and student's level. A MANOVA is an appropriate statistical tool when determining if simultaneous mean differences exist on multiple continuous dependent variables between independent grouping variables (Tabachnick 2012). The dependent variables in the analysis corresponded to Team, Country club, Authoritative, Improvised and middle of the road Leadership. The independent variables in the analysis corresponded to level (individuals, subordinates and students). Prior to analysis, the assumptions of normality, homogeneity of variance, and homogeneity of covariance are assessed.

**Homogeneity of variance assumption:** The homogeneity of variance assumption with a series of Levene's tests. Leven's test defines the quality of error variances. In Leven's test (leadership styles) in Table 8 just like the covariance matrices assumption we want these values to greater than 0.05 for Leven's test. The assumption of equal variance was not met for those variables ( $p < .05$ ) those points are not greater than 0.05 except country club and middle of the road So, It provides some evidence that equal variance is satisfied on the univariate level except two variable improvised, country club. The assumption of equal variances was met for team, authority, and Middle of the road.

**Table 8.** Levene's Test of Equality of Error Variances (leadership styles)<sup>a</sup>

	F	df1	df2	Sig.
Team	.683	2	197	0.506
Country club	3.627	2	197	0.028
Authority	2.256	2	197	0.107
Improvised	20.321	2	197	0.000
Middle	1.353	2	197	0.261

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

In Leven’s test, Levene's Test of Conflict management styles there are five dependent variables within which only two variables indicate significance Avoiding and Compromising but assumption of equal variance was not meet for those variables.

**Table 9.** Levene's Test of Equality of Error Variances (conflict style)<sup>a</sup>

	F	df1	df2	Sig.
Collaborating	0.315	2	197	0.730
Accommodating	2.694	2	197	0.070
Competing	0.769	2	197	0.465
Avoiding	4.280	2	197	0.015
Compromising	4.629	2	197	0.011

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

The assumption of equal variance was meeting by Collaborating, Accommodating and competing because those variables are greater than p value 0.05.[Table- 9]

**Homogeneity of covariance assumption:** Box M test to evaluate covariance assumption homogeneity. The test results at  $\alpha = .001$  were statistically significant for both Leadership and Conflict management style, so the assumption was not fulfilled (Pallant and Manual 2010)). Because of this assumption not being met, I exercised caution when interpreting the results of the MANOVA.

**Leadership style’s MANOVA:**

The results of the MANOVA indicated overall significant differences between leadership styles and level (individuals, subordinates and students), wilk’s  $\Lambda = .576$ ,  $F(10,386) = 12.27$ ,  $p = .000$ ,  $\eta^2 = .241$ . ANOVA was evaluated at an alpha level of 0.025. There was a significant difference among individuals, subordinates and students on team, country club, authority and Middle of the road styles. Team, country club and middle of the road scoring higher with subordinates. Authority scored higher with individuals. There was not a significant difference among individuals, subordinates and students on improvised styles,  $F(2,197) = 2.50$ ,  $p = .085$ , partial  $\eta^2 = .03$ , with individuals ( $M = 3.29$ ), subordinates ( $M = 3.23$ ) and students ( $M = 3.06$ ). So,

according to the overall significance null hypothesis H05a rejected and alternative hypothesis H4a: “There are statistically significant differences between choice of leadership styles (team, country club, authority, improvised and middle of the road) and level (individuals, subordinates and students), as measured by the MANOVA” is accepted.

**Table 10:** Tests of Between-Subjects Effects (leadership)

Source	Dependent Variable	Type III Sum of Squares	Mean Square	F	Sig.	Partial Eta Squared
Level	Team	20.187	10.094	33.455	0.000	0.254
	Country club	22.276	11.138	29.810	0.000	0.232
	Authority	6.269	3.134	7.274	0.001	0.069
	Improvised	1.995	.997	2.496	0.085	0.025
	Middle	13.220	6.610	10.248	0.000	0.094

**Conflict management style’s MANOVA:**

The results of the MANOVA indicated overall significant differences between choice of conflict management styles and level (individuals, subordinates and students), wilk’s  $\Lambda = .653$ ,  $F(10,386) = 9.17$ ,  $p = .000$ ,  $\eta^2 = .192$ . There was a significant difference among individuals, subordinates and students on Collaborating, accommodating, avoiding and compromising.

Collaborating, accommodating and compromising with subordinates scoring higher than students and individuals. Avoiding scored high at individuals. There was not a significant difference among individuals, subordinates and students on Competing style,  $F(2,197) = 1.85$ ,  $p = .161$ , partial  $\eta^2 = .01$ . So, according to the overall significance null hypothesis H05b rejected and alternative hypothesis H4b: “There are statistically significant differences between choice of conflict management styles (collaborating, accommodating, competing, avoiding and compromising) and level (individuals, subordinates and students), as measured by the MANOVA” is accepted.

**Table 11.** Tests of Between-Subjects Effects (conflict)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Level	Collaborating	6.188	2	3.094	7.703	0.001	0.073
	Accommodating	21.553	2	10.777	25.950	0.000	0.209
	Competing	1.726	2	0.863	1.845	0.161	0.018
	Avoiding	10.883	2	5.442	12.153	0.000	0.110
	Compromising	11.178	2	5.589	11.166	0.000	0.102

There’s really no standard effect size for partial ETA squared ( $\eta^2$ ) for MANOVA but as always bigger the partial ETA squared the stronger the effect on the dependent variables. Among five leadership variable Team has higher Partial  $\eta^2 = .25$  while accommodating ( $\eta^2 = .21$ ) remain higher among conflict management variables. Based on the result of overall leadership and

conflict styles of MANOVA both shows significant result  $P < .025$  that indicate there are significant differences [Table-11].

### **Discussion**

Researchers have studied leadership qualities and grid how they affect the choice of conflict management strategies at large. Leadership styles in university affect student outcomes and enhance the learning process as it is associated with the ability to resolve conflict (Uddin et al., 2024). Mainly, conflict management ability is a specific characteristic of a leader. In this study, outlined leadership styles that demonstrate effect on conflict strategy in different context. The study involved a quantitative correlational approach to compare each style of leadership and conflict to determine the relationship and compare mean across level to examine the consistency. The survey method allowed for the collection and analysis of research data from the population. Through use of a multiple linear correlation and a MANOVA, researcher was able to answer the research questions. The main statistical tool to analyze responses was SPSS. The results from the study provided information regarding the relationship between leadership and conflict resolution styles. Researcher used a KMO and Bartlett's Test via a Factor Analysis to determine the adequacy of the sample size. KMO and Bartlett's Test calculated the adequacy of sample size to assure empirical validity. Based on the analysis calculations, a sample of 200 participants were deemed sufficient for the study (Baxter & Bartlett, 2001).

#### **Interpretation of findings:**

Eighteen questions related to leadership styles perspective, which identical to four factors which were denoted as Team, Country club, Authority and Improvised but Middle of the road show insignificant factor loading [Table- 3]. Only 8 statements of conflict perspective with a factor loading greater than or equal to 0.5 are get focused on this study. These four factors were competitive style, collaborating style; avoiding style and accommodating. In response to conflicting situation leaders have great influence in get ideas accepted. Compromising style should ideally be the least preferred style of conflict resolution [Table- 4]. According to the result of the correlation at the student level, leadership styles have statistically significant impact on the choice of conflict management styles at the students' level except middle of the road [Table- 7]. It indicates that after team individuals prefer country club and individuals' use authoritative approach in term of handling student's level conflict significantly. Middle of the road and handling conflict at student's level is found positive but low correlation. In this correlation, moderate correlation is considered. Therefore. Low and negligible relation is not considered. It is also noted in the previous research that the conflict may occur at the student level and resolute this by enhancing their leadership capabilities (Posner, 2004). Overall Hypothesis was" H1: There is moderate positive relationship between leadership styles and conflict management styles at students' level ", is rejected because of negligible correlation. In Term of subordinates' conflict individuals prefer team over other styles after that Authority comes. Middle of the road and Country club also showed positive moderate relationship. Only improvised style showed positive but not moderate relationship. Overall hypothesis H2 was that "There is positive moderate relationship between leadership styles and conflict management styles at subordinates' level", is rejected due to lack of moderate correlation of improvised style [Table- 8].

According to the result of the correlation at the individuals' level, leadership styles do not have statistically significant impact on handling conflict at individuals' level. Only Improvised has

moderate significant relationship at individuals' level. Overall hypothesis H3 was that "There is positive moderate relationship between leadership styles and handling conflict at individuals' level", is rejected due to insignificant relationship [Table- 9]. The assumption of equal variances was met for team, authority and Middle of the road (see the table 10); at conflict perspective Collaborating, Accommodating and Competing was met because those variables are greater than p value 0.05 [Table- 11]. Based on the result of both leadership and conflict styles' MANOVA showed significant result  $P < .025$  that indicates, there are significant differences. Null hypothesis H04a and H04b are rejected, therefore alternative hypothesis H4a and H4b are accepted. Overall consistency didn't achieve because subordinates' authority mean showed middle mean whereas competing showed lower. In term of authority and Improvised individuals are high on it and predictably also high on competing and avoiding as well as they showed inconsistency in term of team and collaboration. But students hold middle position across all variables of leadership and conflict (Uddin et al., 2024). Students are comparatively high on middle of the road on leadership side and avoiding on conflict side. See the chart 1. So, it indicates that overall consistency was not achieved across level but on specific styles across level showed consistency.

### **Conclusion**

The study found that there is a positive, although weak, correlation between leadership and conflict management styles, with the exception of team and cooperation types. From a leadership standpoint, the team approach is the most popular, along with the collaborative method of resolving conflicts among university students and subordinates at all levels. The degree of compromise in this healthy partnership varies, with a high degree of collaboration. The middle ground when it comes to leadership and dispute resolution from a student-level perspective is not preferred by university leaders, or professors. At the student level, almost all styles have a positive, moderate correlation with one another—there is no compromise or middle ground. This means that academic leaders at universities frequently take a cooperative, forceful, and avoidant attitude. They occasionally concentrate just on the needs of the students, but they never take a middle-of-the-road or compromise strategy. They simply stay away from everyday situations. At the subordinate level, team approach is given more weight in confrontations than improvisation or avoidance approaches, which are either ignored entirely or used sparingly. However, only the improvised method receives greater attention at the individual level; the other variables are positive but not to a sufficient degree. Thus, it is evident that leaders frequently employ a variety of strategies for different levels. Although there isn't a set specification, they largely adhered to the leadership and conflict resolution methods. This indicates that they employ situation-specific styles, which are connected to contingency approaches. Perspectives on leadership and conflict management revealed notable differences between people, subordinates, and students regarding team, country club, authority, and middle of the road; on the conflict management side, these differences included collaboration, accommodation, avoidance, and compromise. However, there were little variations in competing and improvised styles across all levels. In an ideal world, middle-of-the-road and compromise approaches to leadership and dispute resolution would be the least favored. Preferred styles were not consistently used at all levels. Generally, there is a correlation between conflict resolution techniques and the leadership grid; however, this association is not strong enough. Thus, the researcher suggested more investigation.

## **Declaration**

### **Data Availability**

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

### **Funding**

This study did not receive any funding from external sources.

### **Declaration of Interests**

The authors declare that there are no conflicts of interest.

### **Ethical Approval**

Not required

### **Consent to participate**

Not required

## **References**

- Baxter, J., & Bartlett, P. L. J. o. a. i. r. (2001). Infinite-horizon policy-gradient estimation. 15, 319-350.
- Blake, R., & Mouton, J. J. H. G. P. C. (1964). The managerial grid: The key to leadership excellence. 350.
- Blake, R. R., & Mouton, J. J. P. (1981). Increasing productivity through behavioral-science. 58(3), 59-67.
- Blake, R. R., & Mouton, J. S. J. T. J. o. A. B. S. (1982). Theory and research for developing a science of leadership. 18(3), 275-291.
- Cohen, L., & Manion, L. J. H. O. L. P. L. (1980). Research Methods in Education. London: Croom Helm Ltd.
- Fullan, M. J. P. D. K. (2000). The three stories of education reform. 81(8), 581-584.
- Guttman, H. M. J. L. t. L. (2004). The leader's role in managing conflict. 2004(31), 48-53.
- Hersey, P., Blanchard, K. H. J. G., & Studies, O. (1982). Grid® principles and situationalism: Both! A response to Blake and Mouton. 7(2), 207-210.
- Jenkins, K. (1988). Metaphor and mindset for educational leadership. Paper presented at the The educational forum.
- MA, R. (2004). Rahim Organizational conflict inventories: Professional manual. PaloAlto. In: CA: Consulting Psychologists Press.
- Molloy, P. L. J. A. C. (1998). A review of the managerial grid model of leadership and its role as a model of leadership culture. 31, 2-31.
- Muczyk, J. P., & Reimann, B. C. J. A. o. M. P. (1987). The case for directive leadership. 1(4), 301-311.
- Posner, B. Z. J. J. o. c. s. d. (2004). A leadership development instrument for students: Updated. 45(4), 443-456.
- Romero, M. G. (1984). The relationship of conflict management style to the leadership style of secondary school principals in their role as middle managers.
- Sundstrom, E., De Meuse, K. P., & Futrell, D. J. A. p. (1990). Work teams: Applications and effectiveness. 45(2), 120.
- Uddin, M. M., Jony, N. A., & Dey, B. R. J. A. J. o. M. (2024). Application of Managerial Grid as a Tool of Conflict Resolution: A Study on Bangladesh Perspective. 15(2), 132-136.
- Van de Vliert, E., & Kabanoff, B. J. A. o. M. J. (1990). Toward theory-based measures of conflict management. 33(1), 199-209.