# Avoid or Engage? Issues of Relationship Conflict in Project Teams - a Review

## Udayan Dasgupta

#### { <u>udayanda@gmail.com</u> }

Symbiosis International University, Pune, 602 Verona, Hiranandani Gardens

**Abstract.** Considering the importance of smooth functioning of teams to project-based organisations, this paper reviews the literature on Relationship Conflict - being the more damaging of the different conflict types. Its causes, impact on team processes and performance, linkage with Task Conflict, and the effectiveness of resolution approaches commonly employed are examined. Implications for teamwork professionals and organisations are discussed, to enhance the understanding and handling of Relationship Conflict as a necessary and integral part of project management practice. The objective is to better understand the behavioural triggers of Relationship Conflict during the execution of projects, and possible approaches to systemically reduce/resolve such conflict, that can lead to better management and improve performance.

Keywords: Relationship Conflict, Conflict Resolution, Project Management, Team Performance

# **1 Introduction:**

Projects are pervasive in the modern context - they are used for products/systems development as well as in services situations - e.g. infrastructure building, R&D, product design, software development, even medical teams, process improvement and change initiatives. As the scopes and values vary, so do the durations - from a few hours to a few years. What distinguishes a project is its transient nature - a temporary grouping of people and resources. It has a definite beginning and end, evolving and changing over time, unlike continuous operations.

Central to all projects is the belief that the best outcome can be achieved by combining the capabilities, and resources commanded, of practitioners from different specialities/functions in a temporary, "matrix" form of organisation. Suitably structured and empowered teams are formed, with members who may not have worked together in the past, selected based on competence. A contract is agreed with defined scopes, time and cost which forms the iron triangle of execution. (The italicised terms may be implemented differently across different types of projects.)

There are the external groups of functional and company management, client organisation, regulatory authorities, host community, government, vendors and subcontractors with whom the project team must interact, and contend with, to deliver the project - besides themselves. This makes for a veritable "cauldron" of participants - with diverse backgrounds, functional/organisational orientation, interpersonal styles, internal and external work environment/culture. The potential for conflict is omnipresent and, if disruptive, the

consequences can be severe. However, some conflict is needed, to generate ideas and solutions to make progress.

This view is also supported in the literature - Elgoibar et al. [1] state that it is natural for people with diverse skills and norms working together in teams, making decisions and endeavouring to meet project goals and objectives, to have conflicts. Phillips [2] states that managing conflict is a natural concomitant of teamwork, arising from the "clash of perceptions, goals and values in an arena where people care about the outcome". Further, task-oriented or cognitive conflict can be constructive - as a means of generating and evaluating ideas. It has to do with project roles and responsibilities, interdependency, limited resources, goals and expectations and is based on issues, ideas, principles and process. However, person-oriented or affective, also called relationship conflict can be destructive - dealing with personalities, values and attitudes and arising from increased interaction.

Organisations endeavour to use Project Management (PM) "best practices" to promote team collaboration by established methods, such as team selection, training in HR skills, joint kick-off and review meetings, team-building events, instant messaging and digital communication, frequent status-sharing and discussion, integrated project planning and monitoring.

"Pulse of the Profession" published annually by the Project Management Institute [3] reveals that globally almost 71% of respondents report embracing Agile project management practices, in one form or other. However, 14% of strategic initiative projects and 28% of other projects were reported failures in that year, abandoned prematurely. Further, over 30% of completed projects exceeded the budget, and about 50% could not be completed on time or experienced scope creep.

An analysis of the failure details reported by PMI in its 2017 survey shows that about 50% can perhaps be ascribed to "human factors" during execution, for both types of projects. "Human Factors" in this context are taken to mean the same as in the project management vocabulary: aspects such as behaviour, communication, culture, knowledge, leadership, learning, trust, conflict, competence - following Pasian et al. [4] (emphasis added to highlight factors of relationship conflict). This analysis is presented below in Tables 1 and 2, for the two types of projects, side-by-side with the PMI data.

Most important factor responsible for failure (as per PMI survey)	PMI data	Human Factors During Project:	Other Factors in Project:
Lack of clearly defined and/or achievable milestones and objectives to measure progress	37%		37%
Poor communication	19%	19%	
Lack of communication by senior management	18%	18%	
Employee resistance	14%	14%	
Insufficient funding	9%		9%
Other	4%		4%
Total:	100%	51%	50%

**Table 1.** Factors for strategic initiative failure (Source: PMI's Pulse of the Profession 9th Global Project Management Survey, 2017 [3])

Top 3 Causes of Project Failure (as per PMI survey)	PMI data (Global Total)	*Human Factors During Project:	*Other Factors in Project
Change in organization's priorities	41%		9%
Inaccurate requirements gathering	39%		9%
Change in project objectives	36%		8%
Inadequate vision or goal for the project	30%	7%	
Inadequate/poor communication	30%	7%	
Poor change management	28%	6%	
Inaccurate cost estimates	28%		6%
Undefined opportunities and risks	27%		6%
Inadequate sponsor support	27%	6%	
Inaccurate task/time estimate	26%		6%
Resource dependency	23%	5%	
Inadequate resource forecasting	23%		5%
Limited/taxed resources	22%	5%	
Inexperienced project manager	20%	5%	
Task dependency	11%	3%	
Team member procrastination	11%	3%	
Other	11%		3%
Total:	433% (for 3)	47%	52%

**Table 2.** Primary Causes of Project Failures - top three (Source: PMI's Pulse of the profession9th Global Project Management Survey, 2017 [3])

### \*normalised percentage = (Global Total) x (100/433)

Pellerin [5] states that engineers and technical experts in complex development projects often have little regard for "touchy-feely-ness". They prefer to "get on with the job" with technical excellence, but the state of human relations in projects is often overlooked or taken for granted. He believes that the interaction of individuals, how people gel within and between teams - the "social context" - underpins the performance of projects far more than the technical skills, especially when problems are encountered. He identifies team "social risk" as a significant impact factor.

Cheung [6] sees behaviour as having an underlying, though not always noticed, effect on project delivery. Traditionally, key roles are defined in a project but not behaviours - this provides flexibility to the individual to adopt behaviours. Not doing something - ineffective, or lack of, action also comprises behaviour. Few people deliberately sabotage a project through behaviour, but unhelpful or undesired behaviour can adversely impact a project. "Choice Theory" by Glasser [7] would also seem to support this view, stating that "all we do is behave" and that "almost all behaviour is chosen", 80% being the result of conscious thought and action.

Relationship conflict among team members executing a project can have severe effects on its performance, as the above discussion shows. This aspect of teamwork appears not to have been sufficiently addressed, from the behavioural standpoint. The Project Management Institute's "A Guide to the Project Management Body of Knowledge" or PMBOK Guide, 5th ed. [8] - the "bible" for aspiring project professionals - has just 1 page in 616 explicitly devoted to interpersonal Conflict Management! Katz & Flynn [9] state that within most project organisations there is still a lack of detailed understanding of conflict issues, the absence of

integrated conflict management systems, and dissatisfaction with older grievance-type systems used.

# **2** Objective

The purpose of this review is to define the basis and synthesise prior research underlying our central question "How can we better understand relationship conflict behaviour in project teams? (As a means to facilitating improved conflict resolution/management)". The study aims to investigate the occurrence and subsidence of relationship conflict and its related impact on performance, across a variety of work/projects and groups/teams. It will attempt to synthesise knowledge regarding what may be appropriate from different relationship conflict situations. The choice of what is "appropriate" will be guided by its importance for project teams. It is believed that analysis of the results obtained will lead to a better understanding of conflict behaviour and its implications for project teams, yielding recommendations for better execution by such teams.

# **3 Definitions and Framework**

Team conflict is categorised into three types in the literature, namely task conflict, relationship conflict and process conflict:

- i. task-oriented, also termed cognitive, conflict: from role ambiguity, task interdependence or scarcity of resources
- ii. person-oriented or relationship, affective or emotional, conflict: from attitudes, behaviours, communication style, values or beliefs
- iii. process conflict: about task strategy or who should do what

Most published studies of behaviour in the context of specially-constituted or temporary project teams deal with what could be said to be the opposite of conflict - greater cooperation and collaboration, including the intention to so behave, and group maintenance behaviours. The paucity of studies on relationship conflict per se in project teams is striking; perhaps it reflects the difficulty of carrying out formal research in a dynamic real-life setting. The preliminary search carried out suggested that related studies in other fields could prima-facie be useful for application in our project team conflict context. These are drawn from the journals of psychology, small group research, team performance management, human relations, organisational behaviour, social psychology, cross-cultural management and conflict management.

# 4 Methodology

Both database and manual searches were employed. The former primarily used the Scopus database of indexed journals available through the Symbiosis Central Library. An alternative using Harzing's Publish-or-Perish desktop software (which repeatedly queries the Google Scholar database to overcome its 20-result limitation) was used when Scopus was unavailable. The search query was enlarged to include other similar words: (project OR work AND team OR group) AND (relationship OR emotional OR personal OR affective AND conflict OR dispute OR disagreement OR fight) with variations thereof, omitting or changing one or more search terms, to increase the result count.

Manual search via Google was used to locate other cited articles and relevant grey literature/websites on the subject. Irrelevant journals/titles were weeded out, and the bibliographic data of relevant titles including abstracts were then transferred to a database on the desktop for further study and refinement. Mendeley reference manager was used throughout to maintain API citation capability and to use its helpful feature of comparing and merging bibliographies of multiple copies of articles. The process of elimination is depicted in a PRISMA template in Figure 1.

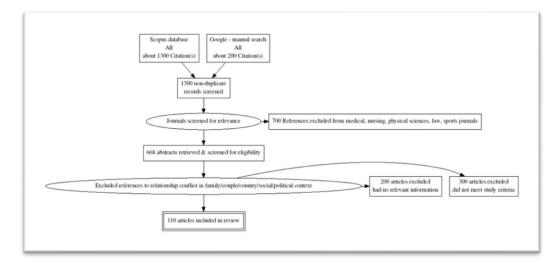


Fig. 1. Flow diagram of the search process

An early-stage bibliometric analysis carried out of about 300 search results (not the final references presented here), using Google Scholar in conjunction with Harzing's Publish-or-Perish software, indicated a search validity as depicted in Figure 2.

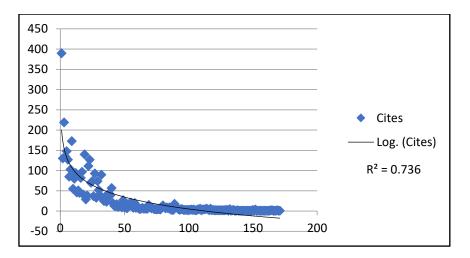


Fig. 2. No.of cites vs Google page rank

The graph in Figure 2 shows that the number of citations, listed from highest to lowest, is inversely correlated to the Google page rank, as can be expected. This is a check to ensure that the correct keywords are being used so that Google does not include high Page Rank articles in the results merely because of superfluous keywords.

It was separately observed that about half the articles are without any citation, which has been excluded from this analysis. There was also an outlier giving very high page rank, which dealt with R&D rather than design-build projects.

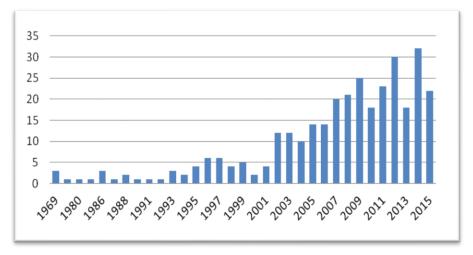


Fig. 3. Publications by Year

The total number of articles published in a particular year is plotted in the above graph. This indicates that though there were some studies conducted before 2000 in this field, the attention

given to this subject has escalated rapidly since the early 2000s and continues at a high level, having achieved a peak of 32 articles in 2014.

# **5** Results of the Review

The literature collated has captured the existing studies along the lines of the following themes, as part of the study domain:

- Impact of relationship conflict, compared to task conflict
- Interdependence of task and relationship conflict
- Antecedents of relationship conflict
- The role of leadership in relationship conflict
- Effect of conflict management style in relationship conflict
- Processes of team conflict resolution
- The all-pervading role of trust
- Models of team conflict resolution
- Discussion and conclusions

We now proceed to elaborate the review results in the sections and sub-sections below. Each section is followed by a summary table which is a simplification of the findings and essential factors. All discussion of the review results has been kept in the final section.

## 5.1 Impact of Relationship Conflict, compared to Task Conflict

There is no standard definition of project success since its understanding is affected by the different perceptions of the organisation management, the project team and other stakeholders as confirmed by Davis [10] including, most importantly, customers. A search reveals that project performance is measured both by "output" factors like cost/profit, schedule, safety, operability, quality/reliability, productivity, efficiency/effectiveness, innovation, as well as internal "process" parameters like job satisfaction, trust, cohesion, creativity, learning & employee turnover.

Porter & Lilly [11] found that conflict, in general, had a stronger negative correlation with performance in complex (decision making/project) tasks where conflict and task processes were directly related to team performance, than in more straightforward (production) tasks.

## 5.1.1 Effects of Task Conflict

De Dreu & Weingart [12] observed that task conflict was less negatively correlated with team performance than relationship conflict. He [13] found that while task conflict interferes with performance and increases over time, eventually cognitive capability which develops as team members work together on the project helps restrain and convert task conflict to beneficial and constructive actions.

Hoffart et al. [14] observed that teams that were the most effective engaged in task-related debates, i.e. high task conflict, while being unhindered by interpersonal tensions and logistic disagreements, i.e. low relationship conflict and process conflict. Jehn & Mannix [15] found that teams performing well had low but increasing levels of process conflict, low relationship conflict with more near the project end, and moderate task conflict in the middle.

Choi & Sai [16] found that task conflict increases the group organisational citizenship behaviour (OCB) whereas relationship conflict decreases it. Rispens et al. [17] also found that relationship conflict was also associated with counterproductive work behaviour, moderated by group relational closeness. Both relational and task conflict were found to increase avoidance, decrease compromise and confidence but relational conflict also decreased self-devotion, organisational relations and cooperation/collaboration, whereas task conflict acted to increase them, as per Qasemi et al. [18].

Meng et al. [19] saw that relationship conflict between team members negatively affects information-seeking behaviour, but not so task conflict, the former being duly moderated by emotion management. Task conflict was found by Yong et al. [20] to have a positive relationship with creativity whereas relationship conflict had a negative relationship.

#### 5.1.2 Consequences of Relationship Conflict

Many studies show the negative impact of relationship conflict on team performance, either directly or via intermediate processes such as team learning, consensus, cohesion, anger. Vaux & Kirk [21] found that as a result of relationship conflict, the primary detrimental outcomes were schedule delays and budget increases, while factors that mitigated relationship conflict were superior communication and trust. When workload sharing was low, high relationship conflict was especially harmful to team performance, as observed by Alipour et al. [22].

Relationship conflict was involved in the team size-performance relation, via a decrease in team cohesion, which sets off a downward spiral, as per Espedalen [23]. Quigley et al. [24] found a 3-way interaction between cohesion, its method of assessment (member averages or consensus), and relationship conflict on perceived team performance.

Relationship conflict was found by Manata [25] to have an indirect negative impact on both task-based aspects of group performance (i.e., decision accuracy) and social-based aspects of group performance (i.e., social cohesion). Zouher Al-Sibaie et al. [26] found a significant relationship between project performance and two factors of conflict: internal and social, which contributed to about 27% of the variance in project performance.

van Woerkom & van Engen [27] found that relationship conflict negatively impacted team learning. Team learning was a significant predictor of performance and partially mediated the relation between relationship conflict and performance. Tien [28] observed that relationship conflict has a more prominent effect on team learning than process conflict. Guinot et al. [29] proposed relationship conflict as a mediating variable that explains how altruism improves organisational learning.

Meier et al. [30] found that relationship conflict influenced angry mood and somatic complaints that lasted until the next day if task conflict was low. Hurt [31] observed that attributions determine the relationship between conflict and anger within executive teams: intentionality and

controllability. Such perceptions about the actions or comments of an individual can fuel subsequent conflict.

	1	
<b>Contributory Factors</b>	Impact on Team Process	Impact on Team
		Output
Task Conflict:		
Time: conflict increases at first, eventually reduces Desirable: moderate task conflict at middle, low but increasing process conflict, and	<ul> <li>- avoidance</li> <li>- compromise &amp; confidence</li> <li>+ task-related debates</li> <li>+ cognitive capability</li> <li>+ group OCB</li> <li>+ self-devotion</li> <li>+ organisation relations</li> </ul>	-interferes with performance + beneficial & constructive actions + effectiveness + performance
low relationship conflict, more at end <i>Relationship Conflict:</i>	+ co-operation/collaboration + creativity	
Low group relational closeness Low emotion management Lack of communication & trust Low workload sharing Large team size	<ul> <li>group OCB</li> <li>counterproductive work</li> <li>behaviour</li> <li>avoidance</li> <li>compromise &amp; confidence</li> <li>self-devotion</li> <li>organisation relations</li> <li>co-operation/collaboration</li> <li>information seeking behaviour</li> <li>creativity</li> <li>social cohesion</li> <li>team learning</li> <li>mood &amp; sleep</li> </ul>	<ul> <li>schedule delays</li> <li>budget increases</li> <li>27% variance in performance</li> <li>decision (in)accuracy</li> </ul>

Table 3. Summary of impacts of task & relationship conflict

#### 5.2 Interdependence of Task and Relationship Conflict:

Simons & Peterson [32] found that the two conflict types are correlated in existing groups; however, trust moderates this relationship by influencing conflict interpretation processes. Huang [33] observed that the type of team goal orientation and conflict management approach moderated the relationship between task conflict and relationship conflict. This relationship was weaker under conditions of higher team learning and lowered team performance orientation. The relationship between task and relationship conflict was also weaker among teams that engaged in cooperative conflict management.

#### **5.2.1** Task → Relationship Conflict Transformation

Choi & Cho [34] observed that task conflict predicted a subsequent relationship conflict under a specific context, that is, groups that had lower levels of trust among members. Curseu et al. [35] found that task conflict has high chance to evolve into relationship conflict when groups (both short and long-term) have less efficient emotion regulation processes. Task and relationship conflict are decoupled in long-term groups scoring high on emotion regulation.

Holahan et al. [36] hypothesised that geographically dispersed teams are likely to trigger affective conflict from task conflict. The rationale for this was the higher reliance on technology-mediated communication. Such communication provides less social and contextual information which leads to a higher incidence of adverse attributions, more uninhibited behaviour and harsher language than face-to-face communication.

Liu & Zhao [37] put forward several measures to prevent task conflict from transforming into relationship conflict, such as strengthening the mutual trust among team members, resolving conflicts by proper cooperation, making a learning goal-oriented team. Kim et al. [38] proposed that another way of management that can undermine the process of transference of task conflict to relation conflict is team identification, which is a social identity of an individual. It is a positive, affective or cognitive bonding of such individual toward the team and can be an efficient way of managing conflict.

## 5.2.2 Relationship $\rightarrow$ Task Conflict Correlation

Choi & Cho [34] found that relationship conflict led to increased task conflict through adverse group affective behaviour. Parayitam et al. [39] observed that task conflict in top management teams is positively related to relationship conflict and negatively related to agreement-seeking behaviour. Intra-group trust moderates the relationship between agreement-seeking behaviour and collaborating responses such that high-trust groups will have higher collaboration than low-trusting teams. O'Neill et al. [40] state that relations of task conflict with relationship conflict involve critical teamwork variables: team potency, cooperative behaviours, competitive behaviours, and avoidance behaviours.

Influence	Moderator/curative factor	Causative factor/context
Task $\rightarrow$ Relationship	Strengthening mutual trust	Lower trust levels
Conflict	Resolving conflicts by co-	Less efficient emotion
(transform,	operation	regulation
subsequently)	Learning-goal oriented team	Geographically dispersed
	Individual-team identification	team
Task 🗲 Relationship	Agreement-seeking behaviour	Adverse group affective
Conflict	Intra-group trust	behaviour
	Cooperative behaviour	Competitive and avoidant
		behaviours
Task $\leftarrow \rightarrow$ Relationship	Trust (thro' conflict	
Conflict	interpretation processes)	
	Influence weaker if team goal	
	orientation high-learning &	
	low-performance, and there is	
	cooperative conflict	
	management	

Table 4. Summary of the interdependence of task & relationship conflict

## 5.3 Antecedents of Relationship Conflict

There are several studies of the antecedent factors of relationship conflict, which predispose teams to relationship conflict or lack of it, either directly or as a mediator:

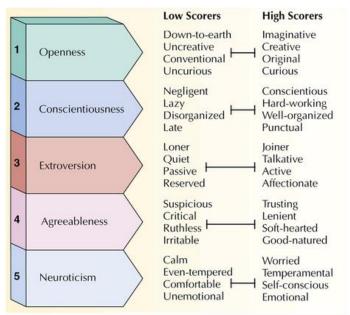
### 5.3.1 Diversity

Huo et al. [41] state that intrapersonal team diversity, uncertain tasks, cultural diversity, and inappropriate behaviour are known to increase relationship conflict. Rispens et al. [17] state that relationship conflicts are harmful in relationally distant work groups in which members are not very familiar with each other personally and do not feel close to each other. Lount et al. [42] state that there is a perception of higher relationship conflict when teams are described as "racially diverse" and not "homogeneous", even though the team discussion was of the same content. Cognitive diversity, i.e. team-member perceptions also increase relationship conflict and decrease agreement-seeking behaviour as observed by Parayitam et al. [43]. Liang et al. [44] found that knowledge diversity increased task conflict which had a positive effect on team performance, but values diversity increased relationship conflict which negatively affected performance.

Mohammed & Agnell [45] found that the diversity–conflict link appears to be moderated by team orientation and team process. Team orientation was found to minimise the adverse effects of "surface-level" (gender) diversity on relationship conflict. Team processes similarly reduced the damaging effects of "deep-level" diversity (time urgency) on relationship conflict. Alipour et al. [22] found that the presence of high power-values diversity helped to reduce relationship conflict.

#### 5.3.2 Members' Personality

Figure 4: The Big 5 Factors (Costa & McCrae, [46]) frequently cited in personality studies



Bono et al. [47] found that the most active effects of personality on relationship conflict were in dyads where pair levels of extraversion and conscientiousness, of the "big five" personality parameters, enumerated above, were high. Tekleab & Quigley [48] observed that homogeneity in agreeableness, conscientiousness, and emotional stability weakens relationship conflict and team member affective relations, while heterogeneity in extraversion and preference for teamwork also weakens these relationships.

## 5.3.3 Team Psychological Safety

Psychological safety has emerged as an essential determinant of team performance, with relationship conflict playing a mediating role. Alipour [49] found that higher participative safety climate tended to decrease relationship conflict. Martins et al. [50] observed that in situations of low psychological safety, expertise diversity was more negatively related to team performance. Chi et al. [51] found that members' differences in the need for closure mitigated the negative relationship between perceptions of team safety climate and relational conflict.

Chen et al. [52] observed that team members' states of psychological motivation and affective commitment are influenced by teams' level of empowering leadership and relationship conflict. These motivational states mediate the relationships between members' stimuli and innovative and teamwork behaviours, as well as turnover intentions.

## 5.3.4 Team Behavioural Integration

Desivilya et al. [53] found that relationship conflict was negatively correlated with a team's integrating pattern (constructive-cooperative conflict management). Camelo-Ordaz et al. [54] observed that the effects of team tenure, intragroup trust and value consensus on relationship conflict in top management teams are mediated by behavioural integration.

Vodosek [55] observed that divergent mental models of appropriate social interaction patterns affect relationship, process, and task conflict in groups. Marques Santos & Margarida Passos [56] found that teams with similar Mental Models (TMM's) have less relationship conflict which improves effectiveness.

Elements of context	Impact on relationship conflict	Moderator, if any
Intrapersonal team diversity:		
-culture -relational distance -racial -cognitive/perception -values -gender -time urgency -knowledge -power value <u>Members' personality:</u> -high extraversion and conscientiousness dyads -homogeneity in agreeableness, conscientiousness and emotional	Negative " " " " Positive " Negative Positive Positive	Team orientation and team process
stability -heterogeneity in extraversion and preference for teamwork <i>Team Psychological Safety:</i>		
-higher participative safety climate, psychological safety -affective commitment -innovative and teamwork behaviours <i>Team Behavioural Integration:</i>	Positive Positive Positive	Expertise diversity, related to team performance Empowering leadership
<ul> <li>- constructive-cooperative conflict management</li> <li>- team tenure, intragroup trust and value consensus</li> <li>- similar Team Mental Models (TMM's)</li> </ul>	Positive Positive Positive	

Table 5. Summary of Antecedent Factors' influence on relationship conflict.

## 5.4 Role of Leadership in Relationship Conflict

Ziaaddini et al. [57] found no direct impact of leadership quality on interpersonal conflict, save through the mediating effect of organisational citizenship behaviour.

Fodor & Riordan [58] found that leaders high in power needs were rated significantly lower in group conflict situations, on cooperative behaviour and analytical task-oriented problem solving, producing lower self-affect among group members. Zhou & Shi [59] state that leadership may be blamed for higher Relationship Conflict - LMX (leader-member exchange) differentiation was positively related to team relationship conflict, though ethical leadership weakened this relationship. Liu et al. [60] observed that members' need for affiliation (NAFF)

influences relationship conflict, and LMX differentiation has a moderating effect on the relationship of NAFF and group relationship conflict.

Aw & Ayoko [61] found that transformational leadership had more motivation to incite constructive debate, than transactional or external leadership styles, but ignited affective conflict among groups. Leaders' transformational behaviours improved the followers' problem-solving conflict behaviours and quality of team member exchange.

Kessler et al. [62] observed that certain proactive leadership behaviours, rather than passive/avoidant models, led to negative emotions and counterproductive work behaviour. Yang & Li [63] found that leaders' conflict-avoidance behaviour was perceived as positive by followers in specific contexts, regarding justice, trust and emotional wellbeing.

Kotlyar et al. [64, 65] observed that pragmatic, rather than charismatic, leader behaviours were effective in ensuring higher team member commitment, by restraining dysfunctional conflicts.

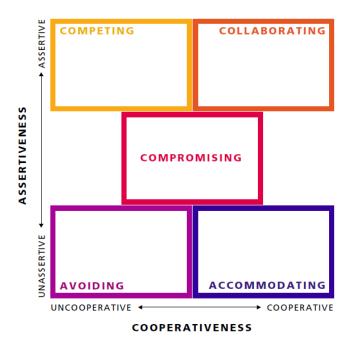
Leadership aspect	Impact on relationship conflict	Moderator, if any
-leadership quality	None directly	Organisational citizenship behaviour (OCB)
-high power needs	Negative	Leader-member exchange (LMX), ethical leadership, Members' need for affiliation
-transformational -proactive	Negative (ignited affective conflict) Negative (led to	(NAFF)
-avoidant	counterproductive behaviour) Positive (in the context of	
-pragmatic, rather than charismatic	justice, trust & emotional wellbeing)	
	Effective (ensures higher commitment, restrains conflicts)	

Table 6. Summary of Leadership's effect on Relationship Conflict

#### 5.5 Effect of Conflict Management Style in Relationship Conflict

Five modes of individuals' innate long-term/strategic preferences in handling conflict, also known as styles, were originally proposed by Thomas & Kilmann [66] as depicted below:

Figure 5: The Five Conflict Management Styles (Source: Thomas & Kilmann, [66])



Benitez et al. [67] found that avoiding and integrating/collaborating conflict management styles reduced the collective emotional exhaustion of work teams while a compromising style increased it.

Quite contrarily, De Dreu & Van Vianen [68] showed that collaborating and contending (competing?) responses to relationship conflict in teams performing complex, non-routine tasks, negatively impact team functioning (i.e., voice, compliance, helping behaviour) and overall team effectiveness. In such situations avoiding responses gave rise to higher team functioning and effectiveness. It was suggested that collaborating and contending responses to relationship conflict distract team members from tasks while avoiding responses appear more functional and allow members to pursue task performance.

Tjosvold et al. [69] state that "Cooperative conflict" builds confidence in relationships that, in turn, results in team effectiveness. Dodoiu [70] states that perceived norms and high volitional control in cooperative conflict management relate to members' intentions to engage in such activities, the role of norms not mediating with behaviour. At the team level, a high level of perceived norms relates to the higher adoption of cooperative resolution style. However high diversity in attitudes regarding the value of this style negatively impacts its occurrence.

Gabrielidis et al. [71] found that students in a collectivistic culture (Mexico) preferred conflict resolution styles that emphasised concern for the outcomes of others (accommodation and collaboration) to a higher degree than did students from an individualistic culture (United States).

#### 5.6 Models of Coping Behaviour in studies of work groups or teams

Balawajder [72] identified alternative conflict coping behaviours, i.e. attack, amicable settlement, defence and yielding, tested them for reliability and validity, and used them to compile a conflict behaviour questionnaire. Volkema & Bergmann's [73] earlier work on analysing a possible list of 21 conflict responses indicated some distinct clusters, including an emotive category.

Hachaturova [74] classified personality types, from the coping behaviours due to conflict, and categorised them as dependent, steady, unsteady and diffuse. Earlier, Kilmann & Thomas [75] had related interpersonal conflict-handling behaviour to Jungian personality dimensions.

## 5.7 Processes of Team Conflict Resolution

Prieto-Remon et al. [76] found that project managers adopt confronting and compromising styles in most cases as first options, under the influence (guise?) of responsibility which affects how issues are dealt with in a project team. On the other hand, Jordan & Troth [77] observed that individuals with high emotional intelligence consistently preferred to seek collaborative solutions when confronted with conflict.

Mediators are neutral third parties which means that, although the mediator may have his or her views and beliefs, he/she is not taking sides or trying to find who is wrong or right on the contentious issue/s. Ohlendorf [78] states that project managers may also act as mediators, who aim to assist the parties to find a solution that honours both their interests or at least does not violate their needs. Project managers can help team members find a solution to their dispute and one that is in alignment with the project's scope and needs.

Thiel et al. [79, 80] found that teams with high initial relationship conflict have worse interpersonal functioning and coordinate less, demonstrating low levels of these processes over the project lifespan. However, teams gradually "rebound" from these lower levels if members tend towards objectively reappraising past affective events. Over time the teams that were more likely to reappraise adverse events overcame negative patterns caused by relationship conflict. Further, changes in perceived threat arising from early-stage Relationship Conflict drives these effects.

Sherf & Shapiro [81] observed that a contingency model distinguishes between "surfacing" and "discussing" relationship conflict, noting that their effects depend on many other contextual variables. Key among these variables was whether surfacing relationship conflict had yielded relationship repair. The repair was likely to happen if discussions of relationship conflict, including responses to its being surfaced, occurred in style similar to "accommodation" (refraining from contentious exchanges/communication, despite receiving real or perceived threats).

Von Glinow et al. [82] found that language challenges in multicultural teams can increase the likelihood of emotional conflict and highlight the difficulty of "finding words" in emotional

situations because of the individual circumstances. As a result, it is questionable whether team members embroiled in emotional conflict ought to be advised to talk (discuss their feelings to repair frayed relationships), since members from culturally different backgrounds may not share the same meaning of talk.

Behfar et al. [83] found that groups that continuously improve or maintain high-performance share three conflict resolution characteristics:

- a) focusing on the content of personal interactions rather than delivery style,
- b) explicitly discussing reasons behind any decisions in accepting and distributing work, and
- c) assigning work to members who have relevant expertise rather than by other means such as volunteering, default, or convenience.

Roschuni et al. [84] found that high performing teams with low-conflict use high levels of feeling communications (based on a study of messages sent by teams). High-conflict teams also use enhanced levels of feeling communications but suppress its use when given feedback.

DeChurch et al. [85] found that for similar conflict state (i.e., task or relationship conflict), conflict processes impact 13% of the variance in both team performance and team satisfaction. Thus, conflict processes - how teams interact regarding their differences, are equally crucial as conflict types - the source and intensity of their conflict.

Negative conflict	Positive conflict behaviours	Context elements if any
behaviours		
-compromising style	-integrating/collaborating conflict management styles	
-collaborating and contending	-avoiding responses	Teams performing complex, non-routine tasks
(competing?) responses	- accommodation and collaboration	Collectivist rather than individualistic culture
-assertiveness more than cooperativeness	- high concern for others rather than no concern	
-an aggressive, confrontational or domineering tactic	<ul> <li>high emotional intelligence</li> <li>and pro-social behaviour</li> <li>neutral third-party mediation</li> </ul>	Project manager behaviours
-confronting and	1 5	Project manager behaviours
compromising styles	<ul> <li>objectively reappraising past affective events</li> <li>"surfacing" and "discussing"</li> </ul>	Changes in perceived threat of early relationship conflict Style similar to
- the difficulty of	relationship conflict	"accommodation."
"finding words"		Members embroiled in emotional conflict High-performance groups

 Table 7. Summary of conflict styles, team processes and behaviour, both + (positive) and - (negative)

- focusing on the content of	High performing low-
0	01
personal interactions rather than	conflict teams
style	
- high levels of feeling	Perceived norms and high
communications in messages	volitional control
- cooperative conflict	Conflict processes impact
management	13% of the variance in team
-negotiation and interest-based	performance & satisfaction
conflict resolution	

### 5.8 The All-Pervading Role of Trust

The literature is unanimous that conflict in the presence of trust can be beneficial for teams, and that conflict in the absence of trust is almost always deleterious. (The word "trust" occurs about 25 times in this paper, in different contexts). This reality gives rise to the question of how teams can increase trust, since it is a psychological state that cannot be either imposed or assumed to exist, apriori. Peterson & Ferguson [86] suggest there are ways, during certain junctures in the life of a project, when trust and constructive conflict can be encouraged. Trust is difficult to build among team members, but there may be trust in the resolution process.

#### 5.9 Models of Team Conflict Resolution

#### 5.9.1 The Project Management Institute

PMI's "A Guide to the Project Management Body of Knowledge" or PMBOK Guide, 5th ed. [8] states the following on page 283 (copied in full because of its importance):

There are five general techniques for resolving conflict. As each one has its place and use, these are not given in any particular order:

- Withdraw/Avoid. Retreating from an actual or potential conflict situation; postponing the issue to be better prepared or to be resolved by others.
- Smooth/Accommodate. Emphasizing areas of agreement rather than areas of difference; conceding one's position to the needs of others to maintain harmony and relationships.
- **Compromise/Reconcile.** Searching for solutions that bring some degree of satisfaction to all parties in order to temporarily or partially resolve the conflict.
- Force/Direct. Pushing one's viewpoint at the expense of others; offering only win-lose solutions, usually
  enforced through a power position to resolve an emergency.
- **Collaborate/Problem Solve.** Incorporating multiple viewpoints and insights from differing perspectives; requires a cooperative attitude and open dialogue that typically leads to consensus and commitment.

Figure 6: Conflict resolution techniques in PMI's PMBOK Guide, 5th ed. [8]

## 5.9.2 Alternative Dispute Resolution

McAleer [87] proposed an ADR model of project conflict resolution, including techniques of facilitation, negotiation, mediation and role of an ombudsman, linked to the level of conflict intensity expressed in 5 stages as below:

Level	Definition	Type of Conflict	Conflict Technique
1	Differences	Goal/Priorities, Personality, Communication, Procedural, Resource Allocation, and Scheduling	Facilitation
2	Misunderstanding	Goal/Priorities, Personality, Communication, Procedural, Resource Allocation, and Scheduling	Facilitation
3	Disagreements	Goal/Priorities, Personality, Communication, Politics, Procedural, Resource Allocation, and Scheduling	Negotiation Mediation
4	Discord	Goal/Priorities, Personality, Communication, Politics, Procedural, Resource Allocation, and Scheduling	Negotiation Mediation Ombudsman
5	Polarization	Goal/Priorities, Personality, Communication, Politics, Procedural, Resource Allocation, and Scheduling	Mediation Ombudsman

Figure 7: ADR model for project conflict resolution

## 5.9.3 Appropriate/Inappropriate Styles

Building on previous work of similar nature, Spaho [88] proposed the following table, as an elaboration of situations in which particular conflict management styles may be suitable:

Conflict	Situations where	Situations where
management style	appropriate	inappropriate
Cooperation	<ol> <li>Issues are complex</li> <li>Synthesis of ideas is needed to come up with better solutions</li> <li>Commitment is needed from other parties for successful implementation</li> <li>Time is available for problem solving</li> <li>One party alone cannot solve the problem</li> <li>Resources possessed by different parties are needed to solve their common problems</li> </ol>	<ol> <li>Task or problem is simple</li> <li>Immediate decision is required</li> <li>Other parties are unconcerned about the outcome</li> <li>Other parties do not have the problem-solving skills</li> </ol>
Accommodating	<ol> <li>You believe you may be wrong</li> <li>Issue is more important to the other party</li> <li>You are willing to give up something in exchange for something from the other party in the future</li> <li>You are dealing from a position of weakness</li> <li>Preserving relationship is important</li> </ol>	<ol> <li>Issue is important to you</li> <li>You believe you are right</li> <li>The other party is wrong or unethical</li> </ol>
Forcing	1.Issue is trivial     2.Speedy decision is needed     3.Unpopular course of action is implemented     4.Necessary to overcome assertive subordinates     5.Unfavorable decision by the other party may be costly to you     6.Subordinates lack expertise to make technical decisions     7.Issue is important to you	<ol> <li>Issue is complex</li> <li>Issue is not important to you</li> <li>Both parties are equally powerful</li> <li>Decision does not have to be made quickly</li> <li>Subordinates possess high degree of competence</li> </ol>
Avoiding	1.1ssue is trivial 2.Potential dysfunctional effect of confronting the other party outweighs benefits of resolution 3.Cooling off period is needed	<ol> <li>Issue is important to you</li> <li>It is your responsibility to make decision</li> <li>Parties are unwilling to defer, issue must be resolved</li> <li>Prompt attention is needed</li> </ol>
Compromising	1.Goals of parties are mutually exclusive     2.Parties are equally powerful     3.Consensus cannot be reached     4.Integrating or dominating style is not successful     5.Temporary solution to a complex problem is needed	1.One party is more powerful 2.Problem is complex enough needing a problem-solving approach

Figure 8: Spaho, K. (2013). Organizational communication and conflict management. Management Journal. 18(1). 103-118 [88]

## 5.9.4 The Harvard Approach

Cloke & Goldsmith [89] state that interest-based resolution of conflict is highly effective in preventing, managing, and resolving the full range of issues that arise when employees work in partnerships to improve quality and participation. The processes most successful in bringing disputes to resolution include:

- 1. informal problem solving,
- 2. peer mediation and coaching,
- 3. peer coaching and advocacy,
- 4. peer review board,
- 5. organisational learning,
- 6. professional mediation and arbitration, and
- 7. coordination and training

## 5.9.5 Team Mediation System

Katz & McNulty [90] believe that conflict resolution is a communication process for managing conflict and negotiating solutions. Managing conflicts involves defusing any strong emotions and "enabling the disputing parties to understand their differences and similarities". Negotiation, which is intrinsic to the process, involves enabling the parties in the conflict to achieve agreement concerning their interests, not positions.

Littlejohn & Domenici [91] report that a systemic "team mediation system" is used by companies such as Advanced Micro Devices using a communication process of confront-listen-acknowledge-respond-commit, based on five characteristics of constructive conflict management - collaboration, power/process/face management and safe environment.

#### 5.9.6 Integrated Conflict Management System

In the USA context, where conflict-related costs of employment litigation and damages are high, an ICMS has been proposed and adopted by some companies, including few in the engineering & construction space, according to Lipsky & Seeber [92]. ICMS has the following elements:

- ensuring conflicts are resolved at the earliest stage and the lowest organisational level
- emphasise conflict management and dispute prevention, through interest-based negotiation and problem-solving, rather than power or rights
- a robust ADR program to creatively & efficiently resolve disputes that are not prevented
- clear organisational statement of expected behaviour engendering mutual respect and trust
- systematic training & rewards ensuring employees have necessary communication & negotiation skills
- conflict competence as a critical element of the expected leadership skill set leaders set the tone

#### 5.9.7 Conflict Dynamics Profile

Another approach is which focuses specifically on conflict behaviours, rather than styles, developed by the Center for Conflict Dynamics at Eckerd College in Florida, USA [93]. It tests both individuals and teams for constructive and destructive responses and determines hot buttons to control, helping individuals and teams understand how they respond to conflict, what triggers can escalate the conflict, and how to manage conflict more effectively. People can become aware of their conflict causing behaviours, and the system provides tools to grow their conflict resolution behaviours and skills, rather than rely on identification of personality factors which do not change appreciably.

## **6** Discussion and Conclusions

Fear of conflict and inaction has been termed as a classic team dysfunction.

The devastating negative consequences of relationship conflict on a host of team processes and team output are evident from Table 3, making it an essential factor for improving project performance (up to 27%). Contributory reasons identified are low or lack of group relational closeness, emotion management, communication, trust and workload sharing, besides large team size. In contrast, task conflict is shown to have a beneficial effect on team processes overall and eventually on output. A moderate level of task conflict is optimum, accompanied by low levels of relationship and process conflict.

The interdependence of task and relationship conflict summarised in Table 4 shows how one form of conflict can lead to the other. There is an obvious necessity of isolating the two if we are to minimise the negative impacts of relationship conflict while preserving the benefits of task conflict. Favourable conditions for this to occur are identified as mutual trust, cooperation rather than competition or avoidance, team learning orientation rather than performance orientation, agreement-seeking behaviour rather than a display of emotion, and geographical closeness or co-location rather than dispersion.

Table 5 indicates that members' given diversity and personality composition predispose teams to relationship conflict, also suggesting that team orientation and team process can help overcome this. The age-old paradigm of "behaviour is a function of personality & environment" is often changed in modern times to "context trumps personality" according to Pellerin [5]. Thus the same person may behave differently in different situations and the second set of contextual factors studied - psychological safety and behavioural integration have a positive influence, reducing relationship conflict. A researcher needs to be aware of, and control for, such antecedent factors while studying the behaviour and process of relationship conflict during the execution of projects.

Appropriate leadership is often regarded as a panacea for various organisational ills. However, as indicated in Table 6, the sensitive nature of relationship conflict renders transformational or proactive leadership to be perceived as negative, and avoidant or pragmatic leadership to be seen as positive or effective in restraining conflict - by appearing to do justice, restore trust or wellbeing and ensuring higher commitment. This has an interesting parallel with the latest Prince2 and Agile approaches to Project Management which highlight people management and "servant leadership" as key project competencies - a shift away from "command and control"

to people and behaviour, including visioning, autonomy, motivation, influencing, culture and people awareness.

Table 7 summarises the results from the previous sections on conflict styles and conflict resolution processes, in order to identify both negative and positive behaviours, which either exacerbate or reduce conflict. Compromising and competing styles generally are seen to have a negative influence on conflict, as have assertive, aggressive, confrontational and domineering tactics, besides difficulties in communication (finding appropriate words). On the other hand, collaborating and accommodating styles are found to reduce conflict, as are behaviours reflecting high concern for others, pro-social emotional intelligence, besides processes such as reappraising/surfacing/discussing past conflicts, recourse to negotiation or third-party mediation. This comparison list can be helpful to develop behaviour-based survey instruments to assess competency in conflict-related matters during empirical studies.

In reviewing and comparing the alternative team conflict resolution models proposed by different authorities, it appears that the one contained in the PMBOK Guide [8] falls short of requirements. Firstly, it assumes that project managers and team members have the behavioural flexibility to adopt the different styles, which are characteristic of different personality types as initially proposed by Thomas & Kilmann [66]. Even if this were feasible, the consequence of altering members' conflict styles from time to time within the same team and project is likely to cause perceptual confusion and inaction in the team. It is doubtful if the mix of power, rights and interest-based resolutions proposed can be an effective and lasting conflict resolution strategy.

Similar comments apply to the appropriate/inappropriate styles model proposed by Spaho [88] which is an elaboration of the PMBOK Conflict Resolution model. The style recommendations are from the viewpoint of individuals, to maximise their gain in a given situation, and cannot be said to benefit the team performance, except collaborative style.

The model proposed by Littlejohn & Domenici [91] emphasises the importance of communication in resolving team conflict and institutes a process embracing collaboration, power management and other features. It has the advantage of being tested and applied by industry.

The model proposed by McAleer [87] takes the previous model a step further by proposing fullscale ADR for team conflicts - including the use of an ombudsman. It proposes that the conflict technique - whether Facilitation, Negotiation, Mediation or Ombudsman be linked to the intensity of conflict in 5 levels termed as Differences, Misunderstanding, Disagreements, Discord or Polarisation. This is entirely different from other current approaches which recommend that team conflict be "nipped in the bud" as close to inception as possible. There is also no record of applications in industry.

The 5th model discussed - ICMS [92] or integrated conflict management system, as followed by the dispute resolution community in the USA in recent years, must be regarded as the "Gold Standard" since it incorporates all three elements necessary to make a success of such initiatives:

- Management support and leadership
- Detailed system and process to be followed
- Personnel training and incentives for performance

The final model using CDP or conflict dynamics profile [93] makes a significant contribution by addressing resolution activities where the conflict begins - individual behaviour, which is much more controllable and changeable than conflict styles or personality, by using powerful tools.

As can be seen, successful team conflict resolution and the models and methods used to teach the skills involved, rely on several pedagogical insights, as stated by Coleman & Prywes [94]. These need to be learnt and practised by project professionals and organisations, as with Agile methods. As with all applied content, the problem often is that learning and applying a new skill is regarded as less important than delivering the finished product or project as stated by Steghofer et al. [95].

This area can be regarded as equally important and rewarding as another project management focus - claims management or external dispute resolution, where there is an acceptance by most project-based organisations that the 3-step implementation stated above is indeed helpful. Finally, the answer to the rhetorical question "Avoid or Engage?" concerning relationship conflict must be that avoidance cannot be a solution since we are not sure that the conflict will subside on its own. When to engage and in what manner should be addressed, as reviewed here.

The sensitive nature of relationship conflict is such that project leaders may find it difficult to mediate by being neutral and not imposing their views, given their allegiance to project goals. Successful team conflict resolution takes a collaborative approach, relying on negotiation based on interests, rather than using power or rights to "adjudicate" between the parties. The new skills and systems as described, if learnt and practised by project professionals and organisations, can yield rich dividends for greater project success.

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