

MANAGING CONFLICTS WITHIN A TEAM: CONFLICT RESOLUTION STRATEGIES AND EFFECTIVE COOPERATION

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Abstract: Managing conflicts and developing their resolution strategies are among the leading topics in modern management. The studies aimed at improving and understanding the connection between management styles and conflicts, strategies for coordinating cooperation, and increasing team productivity are becoming relevant. This research aims to determine the effectiveness of training professionals in conflict management and resolution strategies within a team, enhancing productivity through cooperation and project effectiveness. Also, the authors present a study of how team effectiveness depends on the ability to manage conflict by mediating the level of team coordination. The study employs various methods. The experiment method is the main one in this paper. The study results were evaluated using a survey and observation conducted by stages. The research hypothesis asserts that studying conflict resolution principles and employing various conflict avoidance strategies are positive components of contemporary management practices. The research results indicate that conducting a conflict management training course based on cooperation positively impacts project team productivity and managerial preparedness. There are prospects for continuing experimental research on considering and analyzing conflict management styles as they develop and determine the connection between team performance and conflict management skills.

Keywords: Motivation, Conflict resolution, Conflict, Conflict management, Cooperation strategy, Effectiveness.

1 Introduction

The need for developments in conflict studies that consider modern society's needs and its activities has been highly relevant for many centuries.

A conflict, in a range of studies, has been defined as a process where one party perceives the actions of others as negatively impacting cooperation and its own interests (Chen et al., 2016). A conflict is a process involving multiple individuals or groups in which neither side wants to accept the actions and decisions of the other side, as they believe such actions contradict their interests (Wall, Callister, 1995; Levytska et al., 2020).

Several researchers argue that conflict is a characteristic feature of team activities and inherent in daily human interactions (Müller et al., 2016; Jia et al., 2011). It has been established that team effectiveness also depends on how the team manages conflicts (Liu, Cross, 2016; Prieto-Remón et al., 2015). There is also a hypothesis that a conflict not only brings harm but also benefits teamwork, as it can be constructive for project activities. Team members' perceptions of the rightness and harmfulness of approaches influence the nature of interaction and the final outcome in cooperation and conflict management (Li et al., 2009).

One distinct aspect of creating conflict situations is the presence of cultural differences between the conflicting parties. Moreover, different cultures employ different methods for resolving conflict situations and have their own styles of cooperation (Mitkus et al., 2014).

Examining conflict management and cooperation, specifically how a team can effectively manage conflict, indicates the effectiveness of such a group (Tjosvold, 2008). The methods of team coordination can influence cooperation and conflict management strategies within a team.

In the study, it is noted that most recent studies conduct research in a Western context (Popovych et al., 2020). It has been identified that the level of coordination and cooperation in the context of the overall project performance affects work performance (Tabassi et al., 2019).

The research aims to determine the influence of the choice of management and conflict resolution strategies within a team on the quality of collaboration and the effectiveness of group work on a project, namely:

- To establish the main hypothetical models of conflict prevention and cooperation to be considered within the scope of the new educational course "Philosophy of Conflictology: Project Activities."
- To evaluate the acquisition of conflict resolution knowledge and readiness for productive collaboration on the project.
- To determine participants' assessment of the introduction of the new educational course regarding the investigation of the leader's role in choosing conflict resolution strategies and facilitating effective group cooperation.

2 Methods

Descriptive methods, analysis, and synthesis were employed to study the theoretical and methodological aspects of the research problem. The experiment also involved the application of empirical methods, such as questionnaires, observations, and conducting pedagogical experiments. Statistical methods were used to evaluate the experiment's results.

The experiment was conducted at several institutions of postgraduate education: the Postgraduate Institute of Kyiv University, named after B. Hrinchenko (Ukraine), and the Municipal Institution "Institute of Postgraduate Pedagogical Education" of the Zhytomyr Regional Council (Ukraine).

The study lasted during the 1st semester of the 2022-2023 academic year in groups studying the basics of management, project activities, and conflict resolution. The participants were divided into two groups: Group 1 (28 individuals) and Group 2 (30 individuals), totaling 58 students who studied the new discipline "Philosophy of Conflictology: Project Activities" within the framework of professional development courses in the field of management.

Throughout the experiment, opportunities for learning and project activities were provided to the participants in the experimental groups under the guidance of their supervising educators. The main focus was on improving group work skills, conflict management, and conflict resolution methods.

The experiment was designed to be implemented in three stages. The preparatory (Stage 1) and final (Stage 3) stages involved:

- Surveying the respondents.
- Shaping and correcting the content of the educational course.
- Organizing learning activities.
- Extracurricular and independent work of the participants.

The second stage involved active work with the educational course and testing to assess the participants' knowledge of conflict resolution and readiness for productive cooperation on the project.

The control tests were organized at the beginning and end of the project. The questions and practical tasks were presented in 2 blocks, consisting of 25 questions in the first block and the implementation of project work opportunities in the second block. The results determined levels of knowledge acquisition and self-assessment of cooperation and conflict management skills. Also, the effectiveness

of the methodology implemented during the experiment was analyzed.

Further calculations indicated the participants' success level and their evaluation of working with the new educational course, "Philosophy of Conflictology: Project Activities."

The research involved students and teachers who voluntarily agreed to participate in the experiment. The research team prepared all the questionnaire materials and adhered to respect, dignity, and privacy principles. The educational and methodological complex did not use any measures that would affect the honesty and accuracy of the results and assessments of the participants.

3 Literature Review

Correlative relationships existing between conflict management skills and group productivity also determine the opportunities to enhance cooperation effectiveness.

Modern conflict research has examined the implementation of conflict management strategies at a group and individual levels and the means of mediated moderation (Zhang et al., 2011). It primarily includes the model of differentiated conflict impact on task orientation and creative ability within the group. The researchers have found that emotional exhaustion due to a conflict significantly reduces individuals' creativity within the group.

Examining the influence of conflicts and functional confusion within a team reveals decreased productivity and job dissatisfaction. Internal conflict and negative individual emotions within the team can be reduced through supportive leadership. High leadership support mitigates conflict within the team and minimizes its negative impact on performance and job satisfaction (Greenwood, Haar, 2018). Moderation is essential in conflict model development, where conflict management is represented through the mediation function (Li et al., 2019). Additionally, conflicts in production industries, particularly in complex, sometimes multicultural projects, are individually studied. These include inter-organizational disputes and their management models and approaches to their resolution (Hu et al., 2017; Wu et al., 2017). Destructive and constructive leadership styles are examined within the context of project performance evaluation, the nature of conflict, group members' perception of conflict prevention actions, and other factors that significantly influence cooperation within large project teams (Wu et al., 2017; Iatsyshyn et al., 2020).

Several studies are dedicated to managerial conflict resolution styles, primarily examining the peculiarities of business and interpersonal relationships (Wang, 2017), ways to enhance conflict resilience within the group (Wu et al., 2017), and the search for effective methods to cultivate a sense of importance and productivity among team members while minimizing conflict occurrence, which is a prerequisite for sustainable financial growth (Chiocchio et al., 2011).

The examination of the positive impact of conflict and conflict management styles also touches upon the issue of competitive conflict research. Independence among team members and a competitive style lead to the implementation of confrontational approaches, where one wins while others capitulate (Yang et al., 2013). Such tactics as constant disagreement, maintaining one's own position, and attempts to control communication within the group and others are considered.

The development of effective and contemporary conflict management models should be based on extensive educational work and support for conflict research projects. It will allow project team leaders and employees to navigate conflict models and choose the correct management and cooperation style.

4 Results

An awareness of the crucial interaction between management, conflict prevention, and team productivity in a project depends on the leadership management style, the types of conflicts that

arise during a project, and the coordination and productivity of team members.

During the initial stage of the project, the focus was on refining the examined and tested strategies for conflict avoidance and collaboration. The research group conducted a preliminary survey of teachers and students planning to work on the project. The permission was obtained from the management of postgraduate education centers, and an agreement on maintaining respondent anonymity and confidentiality of personal information beyond the scope of the study was signed.

During the preparatory stage (Stage 1), the mechanisms of coordination in conflict management and the mediating role of such mechanisms were examined.

A conceptual approach to studying conflict prevention models is presented as a diagram in Figure 1. The modeling of strategies is focused on three central interrelationships:

- the link between leadership approaches and conflict management, the coordination of actions within the team;
- the link between collaboration skills and team productivity;
- the link between conflict management approaches and group performance under the coordination of "leader-team."

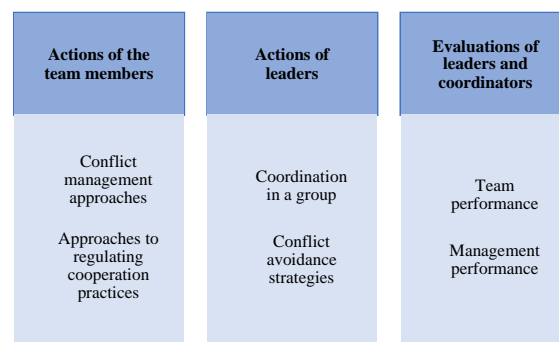


Figure 1. Hypothetical models of conflict prevention and cooperation

The presence of a correlation between conflict management approaches, team interaction level, and team productivity depends on the coordination of actions and resolution of conflict situations within the group. Such a model indicates the presence of two behavior models within the group, where cooperation and coordination of actions positively influence project implementation productivity. Collaboration within the team correlates with the approaches to conflict avoidance in the team and the team's performance in project activities.

The researchers grouped the students into two experimental groups, which were taught using an updated course program called "Conflictology Philosophy: Project Activities," dedicated to project activities, cooperation, and conflict management. The respondents analyze their activities. Based on this analysis, they develop models of their own behavior regarding conflict management within the team and fostering positive cooperation within the group for the project.

The experimental groups had an equal number of learning hours. Also, both groups had subjects introduced, such as "Conflict Resolution: Theory and Practice" and "Conflictology Philosophy: Project Activities." Two curators were selected for each group, responsible for coordinating practical work and organizing a series of events related to project management.

At all stages of the experiment, surveys were conducted in the groups (at the beginning, middle, and end), which included assessing knowledge and acquired skills and readiness to apply the obtained management, organization, and group management knowledge in projects.

In the 2nd stage of the experiment, students were tested to determine their level of cooperation skills and ability to prevent conflicts during the project. The first part of the knowledge and skills assessment included theoretical questions from the course, while the project block assessed their ability to work with the project group. The results are presented in percentages.

Table 1. Overall evaluation of knowledge in conflictology and readiness for effective cooperation on the project

Control block number		Assessment of acquired knowledge and skills			Number of students per group	
		High	Average	Low	EG1	EG2
Question block 1	EG1	26	59	15	28	30
	EG2	23	59	18		
Project block 2	EG1	25	52	17	28	30
	EG2	24	58	17		
Total per block	EG1	51	111	32	56	60
	EG2	47	117	35		

Source: author's elaboration.

A group of researchers identified the content, methodology, and approaches to modeling conflict prevention strategies, developing skills in planning and collaborating in the context of studying a new conflictology course. Measurements of the formation and readiness of managers to coordinate project cooperation and team performance improvement were the main indicators evaluated during the experiment and the main factor in verifying the course's efficiency.

In the 3rd (final) stage, the survey results of students' survey were analyzed, and an evaluation of the respondents and the teachers involved in the experiment was determined regarding the feasibility of implementing the new course "Philosophy of Conflictology: Project Activities." The students and educators were asked to assess their increase in proficiency in conflict management and increased productivity in the group work on the project, if applicable, on a 10-point scale.

Table 2. Indicators for evaluating the feasibility of introducing the course "Philosophy of Conflictology: Project Activities"

Evaluation results	Experiment stage	Group 1	Group 2
Minimum score (from 1 to 6)	Initial	6	9
	Final	4	5
Average score (from 6,1 to 8)	Initial	17	13
	Final	8	11
Maximum score (from 8,1 to 10)	Initial	5	8
	Final	16	12

Source: author's elaboration.

Table 3. A general assessment of conflict resolution knowledge formation and readiness for effective cooperation during the project

Control unit number		Assessment of acquired knowledge and skills			Number of students per group	
		High	Average	Low	EG1	EG2
Question block 1	EG1	32	58	10	28	30
	EG2	31	60	10		
Project block 2	EG1	28	55	11	28	29
	EG2	30	60	9		
Total per block	EG1	60	113	21	56	59
	EG2	61	120	19		

Source: author's elaboration.

At the final stage, the students were given a final test, with blocks of questions and project activities representing the levels of respondents' success in terms of acquired knowledge and skills in conflict resolution and management.

According to the experiment results on introducing the new course, it was found that managers and administration representatives in educational activities learn to collaborate on a group project and manage a conflict after completing the new training course. The high level of academic performance in the experimental groups increased by 7%. The average level increased by 3%, while the low level of performance decreased by 15%.

5 Discussion

The effective models of conflict prevention, conflict management, and cooperation are considered a part of effective management policies, crucial for successful business operations, institutional work, etc. The issue of finding effective cooperation algorithms within a group requires scientific attention. The research on matters of social responsibility, the formation of functioning skills within civil society, and the basics of cooperation have been addressed in a series of studies (Popovych et al., 2020; Wang, 2017). It has been established that an active civic position and cooperation in international projects motivate dynamic professional growth, effective group work search, and increased productivity (Fernández-Manjón et al., 2007; Akimova et al., 2022).

In our research, the respondents also positively assessed the proposed program for qualification enhancement in conflictology and group work within the project. The positive evaluation of conflict prevention skills by participants increased on average by 37% during the final stage of the project, while project success improved by 7%.

In the theoretical dimension of conflictology, the interrelation between team conflict, group work productivity, and conflict management models has been examined (Luo Ying, Lu Lei, 2020; Bakhov, 2021). Primarily, this involves the examination of mediating factors and moderation. Conflict formation and transformation are studied from the standpoint of conflict management theory. However, researchers have proposed considering conflicts from a linear causality aspect and as dynamic systems with a complex set of variables. The course's practical components were considering a conflict as a dynamic system and the ability to work in groups on a project.

A study of team coordination and conflict management models in a multicultural group (Tabassi et al., 2019) was conducted to identify the ways to improve team effectiveness by increasing its coordination. A total of 126 managers and supervisors and 378 members of construction industry groups working on multicultural projects were surveyed. The obtained results indicated that the choice of conflict avoidance strategy positively influences the productivity of multicultural groups within the project.

The results obtained during our research confirm a similar thesis. Regulating conflicts and collaborating on a project enhances the leader's success and self-confidence. High success rates during training and practical work on the project increased by 7%, and the average level of proficiency increased by 3%. Overall, the majority of respondents (47 out of 59) positively evaluated the introduction of the course, which aims to provide theoretical and practical training in conflict settlement strategies and effective cooperation in project activities.

6 Conclusion

The results obtained during the project implementation have shown that improving management effectiveness in the project is associated with managing conflict, enhancing team productivity, and making the right choices regarding collaboration and project management models.

The introduction of educational programs that include the study of conflict prevention and practical cases of project work is a vital component of a manager's modern and effective management and is positively accepted by the project participants.

Therefore, project activities involve the presence of clear goals for team members and project goals that should be achieved through mutually beneficial results based on fairness and normative communication. The ability to find the right balance within the project group, manage conflict effectively, and work productively on the project is a valuable skill for a leader. It allows not only for conflict resolution but also for prevention. This is a positive outcome for individuals within the working group and the project in general.

The impact of team interaction, the ability to avoid or effectively neutralize conflicts, and attention to team conflict are crucial components of the project's financial success. The rapid development of the global economy, science, and technological advancements present increasing challenges for modern managers.

Hence, it is essential to continuously research conflict management styles within the dynamics of their development and explore the correlation between team productivity and the ability to manage conflicts and make the right choices in management styles.

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Primary Paper Section: A

Secondary Paper Section: AE, BC