



CONFLICT MANAGEMENT STYLES IN PROJECT-BASED ORGANISATIONS: RELATION TO DEMOGRAPHIC FACTORS

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Abstract: During the project realization, disagreements arise and cannot be avoided. Project complexity, various participants, stakeholders' interests, task requirements, and tight project deadlines create an environment for conflict issues. Every individual engaged in the project responds to conflict differently and has a distinct conflict management strategy. Therefore, this research aims to get deeper insights into conflict management styles' differences in specific demographic characteristics. Empirical research was conducted to obtain this study's objective. A total sample of 114 employees from project-based organizations operating in the Republic of Serbia was collected. The findings of the ANOVA test revealed that participants' responses differed in terms of age, work experience, and project type. Findings provide valuable insights by examining differences in conflict management styles and identifying behavioral patterns and variations based on demographic factors.

Keywords: Conflict management styles, projects, ANOVA.

1. INTRODUCTION

Caused of uncertainty, the high degree of people diversity, different goals and motivations, conflicts have been considered an inevitable part of organizational life (İslamoğlu et al., 2008). Conflicts in the organization can be explained as interactive processes between social entities often followed by disagreements and dissonance (Afzalur Rahim, 2002).

In project-based organizations, that operate to satisfy specific customer requirements with high quality, on time, and within the budget, conflicts cannot be omitted (Prieto-Remón et al., 2015). Especially, if the project is realized in undetermined conditions, with low communication and feedback levels, poor contract management, and opposed motivations between project stakeholders, conflicts will arise (Khosravi et al., 2020). Tabassi et al. (2017) stated that conflict is not always considered unfavourable, but incredibly beneficial for problem-solving and generating new ideas.

Examination of conflicts in project management is a common research topic. Although studies emphasized the importance of different conflict management styles in the context of projects, less attention has been paid to the comparison of conflict styles between different roles

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within the project team, such as project managers and team members, as well as the influence of specific project-based organization characteristics on the conflict style.

This points to the need for a deeper understanding of how context and role in a team shape conflict management styles, which is the basis for further research within this paper. In light of increasing interest in management of conflicts in projects, it is important to explore the influence of demographic factors. Therefore the paper objective is to get deeper insights about how conflict management styles differs in relation to demographic specificities.

The paper is organized as follows. Literature Review focuses attention on conflict management theory and conflict management styles. Research Methodology describes methodology used for achieving study objectives. Results and Discussion present the main results and association with previous literature findings. Conclusion deals with summarization, study implications, limitations and future research directions.

2. THEORETICAL BACKGROUND

Performances of project-based organizations often rely on project teams and project managers' expertise, tendency to competitiveness, and intergroup cohesive relations. Nevertheless, managing conflicts is also one of the key skills needed to finish the project successfully.

Many theories offer different theoretical models to define the individual's behavior in conflict and detect his/her conflict-handling approach. One of the most popular is the two-dimensional model proposed by Blake and Mouton in 1964. This model is also known as The Dual Concern Model and includes two dimensions - concern for self (low and high) and concern for others (low and high) (Rahim & Magner, 1995; De Dreu et al., 2001).

The dimension "concern for self" refers to the extent to which an individual tries to satisfy personal needs or beliefs. Similarly, the dimension "concern for others" refers to respecting the needs of others. In combination, these two dimensions indicate five different styles of managing interpersonal conflict (Figure 1).

The Avoiding style, also known as the ignorance style, is related to low concern for self and low concern for others, too. This style can be described by withdrawal behavior, no confrontation with others (Shabani et al., 2022), and a tendency to minimize addressing the conflict, either ignoring it (Montes et al., 2012). Although this style can be seen as the most unsuitable for an organizational environment, sometimes it is a wise choice when conflict by itself is unimportant and can be set aside (Wilmot & Hocker, 2017).

The Dominating style involves high concern for self and low concern for others. This style is also ineffective and inappropriate for social relationships, but it has been found useful for goal-related organizations such as project-based organizations (Gross & Guerrero, 2000). An individual with this dominant style might use authority strategies and social pressure to accomplish a project goal.

Compromising style refers to a moderate concern for self and others. This conflict management approach suggests that both parties should "give something" to "take something" (Shabani et al., 2022). This style tends to an intermediate position and splits the differences between conflict parties (Gross & Guerrero, 2000).

Individuals who use the Obliging style have a greater concern for others than for themselves. They usually appreciate other's needs more than their own interests. Obliging is associated with tendency to please the other side, passively accepting the others beliefs (Rahim & Magner, 1995). In disagreements of two sides, where one is on the higher hierarchy, obliging can be reasonable style for managing the conflict (Wilmot & Hocker, 2017).

The Integrating style is related to high concern for self and high concern for others. It is one of the most appropriate styles that focus on problem-solving collaboratively by searching for new and creative solutions to satisfy the needs of all parties (Gross & Guerrero, 2000). Nevertheless, it is a high-energy style and sometimes can be seen as manipulative (Wilmot & Hocker, 2017).

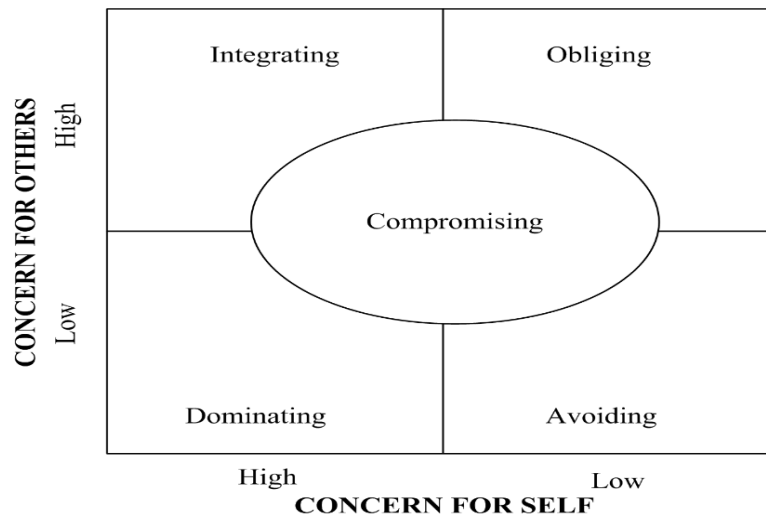


Figure 1. The Dual Concern Model (Rahim & Magner, 1995)

The study conducted by Mohammed et al. (2008) identified significant connections between Hofstede's cultural dimensions and the tendency of project managers to adopt a certain style of conflict management. For instance, the study showed that avoidance of uncertainty is correlated with a project manager's tendency to use an Avoiding style. On the other hand, Prieto-Remón et al. (2015) research study showed that project managers adopt Dominating and Compromising styles in most cases. Kowszyk et al. (2023) explored five conflict management styles within the mining sector by conducting interviews with managers from four mines in Latin America and examining differences between preferred styles.

Wang & Liu (2021) assessed cooperative conflict management styles as a mediator among political skills and relationship quality. The research confirmed a significant and positively associated relationship with the domination of integrating and compromising styles as the most frequently applied styles in construction projects.

Zhang et al. (2015) investigated the relationship between emotional intelligence, conflict management styles, and innovation performance in the construction industry. Integrating style is the most preferred one, followed by compromising and dominating styles. Tabassi et al. (2019) evaluated the impact of team leaders' conflict management styles on team performance, with the mediating role of team coordination in the construction industry. This study highlighted that team leaders most frequently choose avoidance and cooperative approaches to manage conflicts.

Wu et al. (2018) analyzed the relationship between contractual flexibility and project success of megaprojects and found that contractual flexibility was positively associated with project success. When adding conflict types as a mediator, the relationship was significantly weakened.

As above mentioned studies have demonstrated that Rahim and Magner's (1995) concept can be applied from psychology to project management, this study aims to examine different conflict management styles in project.

3. RESEARCH METHODOLOGY

This study employed sampling and survey techniques. To identify the conflict management styles among project managers and members of project teams, an anonymous survey was completed in 2023. Participant were informed that their answers would be used for preparing scientific research. Paper questionnaires were distributed directly to organizations, while an online version was sent through the LinkedIn network. In both cases, the survey employed a five-point Likert scale to assess respondents' agreement with the statements provided in the questionnaire, where 1 represents the least agreement and 5 indicates the greatest agreement.

Participants in the face-to-face survey were asked to indicate the extent of their agreement with various statements by circling a number on a five-point Likert scale. For the online survey, a questionnaire was created using Google Forms.

The questionnaire items are adapted from existing literature on conflict management styles (Rahim & Magner, 1995; Wilmot & Hocker, 2017), and consists of two parts. The first part includes demographic questions such as gender, age, project position, educational level, years of work experience, company size, and type of project. The second part of the questionnaire comprises 25 questions, corresponding to the five conflict management styles.

The reliability of the measuring instrument was determined by evaluating the internal consistency coefficients of the questionnaire through the Cronbach alpha test. According to the results, for all five groups of questions, regarding five conflict management styles, Cronbach's alpha coefficients exceed the minimum recommended value of 0.70 (Nunnally & Bernstein, 1994).

Furthermore, to explore the influence of demographic factors on preferred conflict management styles, an Analysis of variance (ANOVA) test was utilized. ANOVA was performed in the IBM SPSS v. 25 software package.

4. RESULTS AND DISCUSSION

Out of a total of 128 respondents in the research, 69 preferred a Compromise style, 45 preferred an Integrative style, and the rest 14 chose an Avoidance, Dominating, or Obliging style. Due to the pronounced unevenness in the distribution of preferred styles of conflict management among respondents, which can affect the validity of statistical processing and group comparisons, the analysis was restricted to styles with a sufficient number of cases, namely Compromising and Integrating which is 114.

The study involved more females than males, the most of them are 26-45 year old. Also, study involved more team members than project managers. The most of the respondents have high school degree and previous work experience of 6-10 years, work in small and medium project-based organizations mostly related to industrial projects. For more details, see Table 1.

Table 1. Demographic characteristics of the research sample (N = 114)

Variables	Category	N	Percentage %
Gender	Male	45	39,5
	Female	69	60,5
Age	Less than 25 years	7	6,1
	26 – 35 years	43	37,7
	36 – 45 years	19	34,2
	46 – 55 years	18	15,8
	Above 56 years	7	6,1
Project position	Project manager	27	23,7
	Team member	87	76,3

Table 1. (continued)

Variables	Category	N	Percentage %
Education	Elementary school	5	4,4
	High school	65	57,0
	Higher education	14	12,3
	University	30	26,3
Work experience	Less than 5 years	26	22,8
	6 – 10 years	41	36,0
	11 – 20 years	25	21,9
	21 – 30 years	17	14,9
	Above 31 years	5	4,4
Company size	Less than 10 employees	1	0,9
	11 – 50 employees	16	14,0
	51 – 250 employees	92	80,7
	Above 251 employees	5	4,4
Project type	Construction projects	14	12,3
	Industrial projects	87	76,3
	IT projects	6	5,3
	Event organizing projects	7	6,1

Table 2 presents the mean values of participant responses on compromising and integrating questions regarding demographic variables and its categories.

Table 2. Compromising and Integrating styles mean values

Variables	Category	Compromising (mean value)	Integrating (mean value)
Gender	Male	4.07	3.80
	Female	4.22	4.08
Age	Less than 25 years	4.26	4.09
	26 – 35 years	4.39	4.09
	36 – 45 years	4.05	3.99
	46 – 55 years	3.77	3.69
	Above 56 years	4.31	3.63
Project position	Manager	4.10	4.14
	Team member	4.18	3.91
Education	Elementary school	3.88	3.92
	High school	4.11	3.89
	Higher education	4.36	4.03
	University	4.22	4.12
Work experience	Less than 5 years	4.54	4.35
	6 – 10 years	4.18	3.83
	11 – 20 years	4.04	4.08
	21 – 30 years	3.91	3.76
	Above 31 years	3.52	3.24
Company size	Less than 10 employees	3.80	4.60
	11 – 50 employees	4.09	4.01
	51 – 250 employees	4.17	3.91
	Above 251 employees	4.32	4.68
Project type	Construction projects	3.54	3.03
	Industrial projects	4.29	4.08
	IT projects	4.25	4.75
	Event organizing projects	3.66	3.86

ANOVA testing was conducted to examine how demographic factors influence preferred conflict management styles. The results are presented in Table 3.

Table 3. ANOVA test results

Demographic characteristics	Conflict management style	Significance		Remark
		F	p	
Gender	Compromising	1.055	0.307	n.s.
	Integrating	2.996	0.086	n.s.
Age	Compromising	2.609	0.039	**
	Integrating	1.074	0.373	n.s.
Project position	Compromising	0.203	0.653	n.s.
	Integrating	1.535	0.218	n.s.
Education	Compromising	0.680	0.566	n.s.
	Integrating	0.559	0.643	n.s.
Work experience	Compromising	3.422	0.011	**
	Integrating	3.132	0.018	**
Company size	Compromising	0.199	0.897	n.s.
	Integrating	1.564	0.202	n.s.
Project type	Compromising	4.345	0.003	*
	Integrating	7.087	0.000	*

Notes: n.s. non-significance; * statistically significant at 0.01 level; ** statistically significant at 0.05 level.

According to the results (Table 3), participants' responses were found not to be different regarding gender. Previous literature (Havenga, 2006) states that it was found that women are more integrated than men. However, results presented in Table 2 indicate that mean values of integrating style are higher for women (4.08) than men (3.80), but this difference is not statistically significant.

Participants' responses were found different regarding age in the case of compromising style. The integrating style means value somehow declines with age, but this is not the case with compromising style. To detect the main difference in compromising style regarding age, an additional ANOVA post-hoc test was performed. Results showed that between 26-35 and 46-55-year-old participants exists a statistically significant difference (mean difference = 0.619; Sig. = 0.028).

Furthermore, participants' responses were found not to be different regarding project position. However, previous findings concerning the relationship between conflict styles and hierarchical levels show that employees on higher levels prefer dominating and compromising styles the most, while employees on lower levels usually prefer avoiding styles (Brewer et al., 2002). Additionally, Slabbert (2004) examined traditional organizations and found that managers utilize low cooperation styles, while on the other hand, their subordinates prefer high cooperation styles. However, this study examines employees of project-based organizations that are particularly different from traditional hierarchy and rigid organizational structure (Mitrev et al., 2017).

The difference in education levels was not found to be statistically significant based on the ANOVA test. Mean values for both considered conflict styles increase with the respondents' level of education. This finding aligns with the research conducted by İslamoğlu et al. (2008), which indicates that employees with higher education levels (BSc degree and above) tend to use an integrating style more than high school graduates.

Additionally, the results of this study indicate that the mean values for both conflict styles decline as employees gain more work experience. These results are contrary to the findings of Drory and Ritov (1997) which emphasized that integrating and compromising styles are chosen more often by experienced employees than by inexperienced ones. Differences observed in this study are statistically significant for both styles. Post-hoc test results revealed significant differences between participants with less than 5 years of work experience and those

with 21-30 years of experience (mean difference = -0.633; Sig. = 0.048), as well as between participants with less than 5 years of experience and those with over 31 years (mean difference = -1.018; Sig. = 0.039). This can be explained by the statement that integrating style involves a high level of cooperation, the search for win-win solutions, which can seem idealistic, requires a lot of energy, and by the fact that experienced employees are more likely to take a position of authority.

The participant's responses were found not to be different regarding company size. These findings can be supported by statements that conflict management styles, including Integrating and Compromising, depend more on personal skills, values, and attitudes than on organizational factors (Rahim & Magner, 1995). Additionally, participants' responses were found to be different regarding project type and this difference is statistically significant for both styles. When analyzing the Compromising style, post-hoc test results indicated significant differences between participants engaged in construction projects and those in industrial projects (mean difference = - 0.745; Sig. = 0.004).

Furthermore, when analyzing Integrating style, post-hoc test results show significant differences between participants engaged in construction projects and those in industrial projects (mean difference = - 1.051; Sig. = 0.000), and between participants engaged in construction projects and those in IT projects (mean difference = -1.721; Sig. = 0.001).

Construction projects typically require a more authoritarian hierarchy and careful monitoring of deadlines and budgets, leaving little space for compromise (Lawani et al., 2024). In contrast, industrial projects can be managed more collaboratively, with greater interdependence among sectors such as production, engineering, and logistics. On the other hand, since IT projects utilize the agile concept (Crawford et al., 2014), employees involved in these projects have a greater need for integrative solutions and flexibility.

5. CONCLUSION

It is important to have comprehensive knowledge about conflict styles to manage and solve interpersonal conflicts. Furthermore, it is valuable to recognize their main relation to demographic factors. Therefore, this study employed an ANOVA test to analyze the influence of demographic characteristics on conflict styles.

The study results provide certain implications. Although no statistically significant difference was found in conflict style preferences according to gender, position in the project, education, and company size, certain tendencies were observed. For instance, females are more inclined to an Integrating style, while a higher level of education means a more pronounced use of both Integrative and Compromising styles.

On the other hand, factors like age, work experience, and project type showed a statistically significant impact. As younger and less experienced employees prefer cooperative styles, this may indicate changes in attitudes and energy needed to resolve conflicts as employees gain experience and assume more responsible positions. Additionally, employees on construction projects prefer less cooperative styles, while integrative and compromising styles are more often applied in IT and industrial projects. These findings indicate that the project context and organizational structure may shape conflict resolution.

Besides theoretical and practical implications, this study has some limitations. The observed sample size is not sufficient and reliable for generalizing the results. In this study, the influence of demographic characteristics is analyzed for only two of five conflict management styles. To overcome this limitation, future research should be directed to a comprehensive analysis of all conflict management styles based on a larger sample.

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