



Article Modeling Conflicts at Work: The Case of Elementary School Employees in Croatia

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Abstract: This paper aims to explore conflict as a process that includes antecedents, management strategy, and outcomes while examining the role of affective states in an elementary school working environment. After a theoretical overview and systematization of the conflict elements, a questionnaire was developed that satisfies internal reliability and construct validity. Conflicts at the workplace were modeled with Bayesian SEM, and the results point out the prominent role of affective states in conflicts. Findings confirmed that (1) affective states affect the conflict management strategy choice; (2) different conflict management strategies lead to different conflict consequences; and (3) different affective states lead to differently perceived conflict consequences/outcomes. In addition, we conclude that conflicts with dominantly positive and negative affective states behave structurally differently. The revealed role of affective states facilitates future intervention possibilities in education about conflict management strategies and control of emotions and affective states. Raising awareness about affective states' role in the conflict might increase mutual un-understanding and contribute to a healthy school social environment as a safe space for learning, sharing ideas, and joint actions toward a common goal.

Keywords: conflict process; causes of conflict; conflict management strategies; consequences of conflict; affective states; reliability; validity; bayesian SEM

1. Introduction

Changes in the macro-environment, such as globalization, migration, integration processes, development of ICT, corruption scandals, pandemics, and others, affect all stakeholders' mental and emotional states, including employees. Many organizations are nowadays committed to developing and maintaining harmony in the workplace, looking for ways to have a satisfied employee in the future that is identified with the organization and its goals. This pushing forward topic affects all managerial functions, from organizational design to leadership styles, but conflict, seemingly contradictorily, is also considered a permanent reality of change that can lead to organizational effectiveness and is a sign of organizational health (Mukhtar et al. 2020).

In education management, conflicts may have many origins and arise from relationships with teachers, pupils, parents, and external agencies (Heaney 2001). Inequality, additional workloads, and pressures, along with the ongoing transformation, may induce additional strains, especially if the change is not understood as an improvement of the existing process (Du Plessis 2019).

Performance management goes a long way in preventing the build-up of conflict (CIPD 2020). Before organizations can harness the power of theoretical knowledge, they must build an institutional capability of understanding how conflicts and related emotional economy work in their organization and in the wider marketplace. The importance of estimating conflicts in an organization is shown by the development of calculators for the data measure of the financial cost of conflict (Lazan 2015), which include four quantifiable



Citation: Kostelić, Katarina, Morena Paulišić, and Marli Gonan Božac. 2023. Modeling Conflicts at Work: The Case of Elementary School Employees in Croatia. *Administrative Sciences* 13: 20. https://doi.org/ 10.3390/admsci13010020

Received: 16 November 2022 Revised: 5 January 2023 Accepted: 7 January 2023 Published: 10 January 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). symptoms of conflict such as wasted time, reduced ROI on labor costs, poor decisions resulting from power struggles, and employee attrition.

However, the main goal of educational institutions is determined beyond the economic scope; it relates to accumulating knowledge and creating educated and skilled individuals that may contribute to society and the economy (Miletić 2020). Therefore, their goal must not be subdued to mere financial indicators or employees' productivity. In addition, the education sector does not adhere to simple market laws of supply and demand and, as a public service, it creates externalities that influence individuals, such as enriching their lives, and increasing their autonomy, creativity, etc. (Miletić 2020).

In Croatia, elementary education is a constitutional right of each individual. However, educational institutions are continually facing challenges: decreasing birthrates and emigration, which lead to fewer pupils and an increase in job insecurity; increasing costs, increasing competition and requirements for maintaining an image; increasing requirements for the creation of a stimulating school environment, etc. (Miletić 2020); and school reforms (Alfirević et al. 2016, 2018). Given the educational institutions' purpose combined with challenges and requirements, school principals must manage a variety of conflicting demands. The requirement for the professionalization of school principals was recognized only recently but remains to be conceptualized and applied within the reform of school management (Alfirević et al. 2016, 2018).

A variety of skills is required for school principals, including employee motivation, resource allocation, and their use, increasing inclusion of the student's parents, and building relationships with their users (pupils) and local and regional communities (Miletić 2020). Conflict management is recognized as a necessary skill for managers, and it is equally, if not more, important for school principals.

While managers and school principals are often required to manage conflict (De Dreu and Van Vianen 2001) and create a positive culture and change (Alfirević et al. 2016), the conflict may arise at different levels (Gopinath 2011), involving students, teachers, principals, parents, and the community. Those conflicts may affect the organizational culture and the school's social environment—the same one that envelops the students during their studies—and should transfer the values of trust, democracy, and authenticity (Alfirević et al. 2016).

According to the same authors (Alfirević et al. 2016), the educational process involves immersing students in all social processes within the school environment, which requires a transformation of the students', teachers', and principals' roles. The quality of relationships at school has implications for a range of student outcomes, including engagement, retention, and performance (Smyth et al. 2007). Examination of the conflicts within this framework is important, not only because it influences the organization's climate or may affect performance, but also because their effects can overflow into the pupils' environment and affect the learning and socialization processes.

Research on conflicts often emphasizes one conflict type, its source, or a specific situation. There is an abundance of research investigating work-life conflict and its negative relationship with employees' health, job performance, and job satisfaction, and a negative effect on employees' absenteeism (Vignoli et al. 2016; Atteh et al. 2020; Ademola et al. 2021; Marič et al. 2021). Role conflict is also well-investigated (Xu 2019; Wu et al. 2019; Lu and Guo 2019), often with role ambiguity as a cause and stress and burnout as a consequence (Pervez et al. 2022; Iannucci and Richards 2022).

Cronin and Bezrukova's (2019) proposal addresses the importance of interpersonal conflicts, which can arise from an interpersonal relationship or a task and affects work engagement and work performance (Costa et al. 2015; Maltarich et al. 2018; Yuan et al. 2019). Maltarich et al. (2018) introduced a link between relationship and task conflicts to the choice of a cooperative or competitive approach to solving a conflict, which results in different levels of performance. It can also be noticed that previous research rarely connects conflict sources with strategy choices.

There is also an interest in how conflict management strategies can enhance organizational and employee performance (Castillo 2019; Amie-Ogan and Nma 2021; Ampomah et al. 2022; Shitambasi et al. 2022). The conflict in the school environment also encompasses classroom management (Tsan et al. 2021; Zarar et al. 2021) and mediation in students' conflicts.

Another approach is examining the role of leadership styles and associated conflict management strategies, which can prevent conflict escalation into workplace bullying (Cemaloğlu 2011). This is relevant because a study in Croatia (Bilić 2016) revealed that 74% of teachers (N = 175) suffer violent behavior, mostly verbal violence and raised voices, from their pupils, pupils' parents, or other colleagues, leaving them sad and disappointed. Newer research (Bilić 2021) revealed that 84% of the school principals in Croatia also endure different forms of inappropriate, uncivilized, or violent behavior from colleagues, superiors, students' parents, and students.

While teaching in itself comprises emotional labor, the emotions, feelings, and affective states may also promote teachers' agency (Benesch 2018). Moreover, emotions play an important role in the decision-making process by enhancing people's perception of a situation and strategy choices (Neumann 2017; Gonan Božac and Kostelić 2021). It stands to reason that emotions play an equally important role in the conflict processes. Their importance in the conflict has been recognized (Boateng and Agyei 2013, p. 256) and defined at different levels: within-person, individual, dyadic, group, and organizational (Gopinath 2011). However, the inclusion of emotions and affective states in the empirical investigation of conflicts is still scarce.

While the interest in conflicts in organizational, and specifically school, environments does not cease, conflict as a process that has its origin and consequences is seldom investigated from an integrated approach (Mitrofanova et al. 2020). By that, we mean that there still lacks a comprehensive empirical examination of the conflict as a process that encompasses a variety of conflict sources, aroused emotions, choices of conflict strategy management, and conflict outcomes.

This paper aims to explore the conflict antecedents, management strategy, and outcomes while examining the role of affective states in the process and, thus, contribute to closing the research gap. The theoretical background introduces the basis for theoretical model development. The materials and methods section presents the theoretical foundations for the research instrument and data collection process, followed by questionnaire reliability, validity examination, and modeling procedure. The results summarize the final model, followed by a discussion and conclusions.

2. Theoretical Background

Robbins et al. (2016) introduce stages of the conflict. The first stage relates to the circumstances that allow for the emergence of the conflict. The second stage involves the cognitive and affective perception of the conflict. The third stage gives rise to the intention of acting in a certain way, which leads to the fourth stage and intention implementation through the behavior. The fifth stage refers to the consequences. Similarly, Mitrofanova et al. (2020) provide a conceptual framework for social and labor conflict management. While they focus on the strategies chosen by a manager, they examine the conflict through the stages, where the life cycle of a conflict refers to the latent stage, beginning, escalation, and completion of the conflict process. Such a conceptualization enables observation of conflict as a process. While their focus primarily regards the manager's activities throughout the process, this perspective is specific by its holistic approach to the conflicts.

However, both approaches represent a theoretical basis and yet remain to be empirically confirmed. One of the reasons for a delay in the empirical confirmation may be the difficulty of tracking all of the stages. The data collection usually involves a survey, which requires the respondent's recollection of the events. The respondents might have difficulty remembering all of the circumstances that preceded the conflict or whether their intention was the same as their behavior or not. However, the respondents should be able to classify the source of the conflict based on their recollection. While respondents might not remember their intention and execution of that intention, they will likely have activities (within the strategies) that they usually employ. Therefore, we suggest a simplification of the conflict life cycle into three stages (Figure 1): source of the conflict (conflict elicitation), conflict management (choice of activities), and conflict consequences (outcome).

The theory suggests that emotions play an important role in the process and may affect the outcome and strategic choices (Neumann 2017; Gonan Božac and Kostelić 2021), but also impact reflection on the conflict consequences, thereby influencing employees' productivity (Konrad and Mangel 2000; Soleimani and Bolourchi 2021), job satisfaction (Erdamar and Demirel 2016), work efficiency (Rahim 2002) and, consequently, organization climate and performance (Memili et al. 2015; Triguero-Sánchez et al. 2018).

This model also aims to capture the mediating role of affective states in the conflict process. It is assumed that the source of the conflict is a trigger that elicits emotions and affective states. Emotions then influence the choice of conflict management strategies and reflection on the conflict consequences.



Figure 1. Conflict process.

Conflicts can be triggered by a variety of reasons, activities, and circumstances. Some of them are excessive workload, unclear division of tasks, limited resources, unrealistic deadlines, unrealistic expectations, previously unresolved conflicts, differences in personalities and values, lack of trust, misunderstandings, criticism, bad reward systems, or opposing positions or needs for resources (Everard et al. 2004; Mooney et al. 2007; Tao et al. 2018; Robbins and Judge 2013; Canonico 2016).

The following step in conflict management is the choice of strategies. The most often used approach to conflict management strategies involves Rahim and Bonoma's (1979) setting of the strategies in two dimensions—concern for self and concern for others. The operationalization of that approach yielded five main conflict management strategies: cooperation/integrating/problem solving (high concern for others, high concern for self), obliging/yielding (high concern for others, low concern for self), dominating/contending/forcing (low concern for others, high concern for self), avoiding (low concern for others, low concern for self), and compromising (Rahim 2002; Deutsch 1973; De Dreu et al. 2001; Amie-Ogan and Nma 2021). Based on the desired effects, strategies can be observed as efficient (e.g., cooperation and compromise) and inefficient (obliging, dominating, and avoiding) conflict management strategies. The stated strategies may involve different activities: conversation, finding an optimal solution, explaining one's position, giving a second chance to a coworker to explain their position, calming own emotions so that one can understand the other's position, ignoring conflicts, reducing contact with the other person, leaving it to a superior to resolve the conflict, or conflict avoidance (Amie-Ogan and Nma 2021; Edmondson and Roloff 2008; Edwards and Walton 2000; Boroş et al. 2010; Levi 2001; Kuhn and Poole 2000; De Dreu et al. 2001; Van de Vliert 1997; De Dreu and Van Vianen 2001; Bar-Tal et al. 2007). Research in Croatia on a sample of three integrated universities showed that the most dominant conflict management strategy was cooperation, followed by avoidance and yielding, while forcing was the least used. The study confirmed

that compromise should not be considered a separate strategy when investigating conflict management strategies because the line between problem-solving and compromise was blurred. These two strategies were integrated, and this approach was called "collaboration," which can also be specific given the complex academic circumstances (Rupčić et al. 2022).

If the source of the conflict is in a relationship or a task, an employee may choose a cooperative, competitive, or avoidance conflict management approach (Maltarich et al. 2018). Maltarich et al. learn that the outcomes differ regarding the combination of the conflict type and chosen strategy, but they also heavily depend on the initial conflict management strategy choice (as these can change over time). Robbins and Judge (2013); Tao et al. (2018); Rahim (2002); Deutsch (1980) suggest that managers will choose a conflict management strategy depending on the issues they are addressing, also keeping in mind that conflict management depends on individual beliefs about the interdependence of goals. The most important aspect of preparing for conflicts is creating a psychologically safe communication environment that allows for constructive controversy (Edmondson and Roloff 2008).

Hypothesis 1 (H₁). The source of the conflict will affect the choice of conflict management strategy.

Within the affective events theory (AET), it is proposed that work-related events may elicit emotions and emotional states. Affective states are a comprehensive term that comprises emotions, emotional states, moods, sentiments, emotional characteristics, and attitudes. This theory argues that specific events on the job cause different kinds of people to feel different emotions (Fisher 2002; Bauer and Erdogan 2015). Such events may be conflicts, and they may elicit emotions and emotional states, which in turn may even help individuals to recognize that they are in the conflict (Ayoko et al. 2012). In that way, emotions and affective states contribute to the awareness process, warning about the deviation from homeostasis (Čorlukić and Krpan 2020).

Conflicts can inspire bursts of valuable individual action to change situations that are not appropriate. Several emotional sentiments can also become socio–psychological barriers to conflict resolution from an emotional perspective. For example, anger leads to more risky choices and a tendency to blame others for the situation (Angie et al. 2011), which may lead to a dominating or forcing strategy. Fear and anxiety are related to the perception of a threat and may lead to the choice of a yielding, obliging, or avoiding strategy (Lerner and Keltner 2001). On the other hand, happiness is correlated to prosocial behavior (Angie et al. 2011), which can contribute to collaboration and compromise. The growing literature about emotions has made efforts to distinguish between different emotions and identify their exclusive antecedents, appraisals, affects, and responses (Bar-Tal et al. 2007; Neumann 2017).

Affective states may be triggered by events and circumstances and also may serve as information. Once they are aroused, affective states may impact the decision-making process; in this case, the choice of conflict management strategy.

Hypothesis 2 (H₂). *The source of the conflict triggers affective states.*

Hypothesis 3 (H₃). Affective states affect the conflict management strategy choice.

An optimal level of conflict contributes to employee creativity, new ideas, a healthy organizational climate, and sustainable organizational growth. To understand how to get to the optimal level of conflict, we need to understand its root causes, consequences, and tools to help manage it. The goal is to hold conflict levels in the middle range. While it might seem strange to want a particular level of conflict, a medium level of task-related conflict is often viewed as optimal because it represents a situation where a healthy debate of ideas takes place (Robbins and Judge 2013, p. 436).

Freres (2013) provides an extensive literature review on the types of organizational outcomes and costs of workplace conflict. The cost arises from impaired medical and

psychological health, wasted time, counter-productive work behavior, disrupted team behavior, poor customer relationships, unsatisfactory organizational development, and legal and dispute costs. The individual factors decrease motivation, work effort, work quality, performance, and commitment to the organization. Conflict wastes managers' (20–40%), and employees' (approximately 7.5%) time each week, which can be accounted for as a wasted wage. Additionally, Ford et al. (2016) note absenteeism and litigation as outcomes and sources of workplace conflict costs. In the case of employee turnover, businesses tend to spend at least 75% of the employees' salaries on finding replacements (Maximin et al. 2015). In addition, impaired employees' health issues and well-being can result from demanding work conditions, including various types of conflicts (Dicke et al. 2018).

A conflict is labeled as functional or dysfunctional depending on the outcome, that is, whether the conflict outcome leads to the desired state or disrupts harmonization (Kreitner and Kinicki 1992). It is assumed that functional conflicts lead to positive consequences for the organization and involved employees. Positive consequences of the conflict can be the encouragement of creativity, increased productivity, increased inspiration for problem-solving, encouragement of development, encouragement of changes, better understanding between coworkers, better decision-making, increased curiosity, or frequent appreciation of others (Robbins and Judge 2013; Levi 2001; Halperin and Tagar 2017; Hussein and Al-Mamary 2019). Negative conflict consequences may refer to decreased productivity, dissatisfaction, disturbed interpersonal relationships, decreased quality of labor, loss of trust between colleagues, poor communication, loss of focus, absence from work, or leaving the organization (Hussein and Al-Mamary 2019; Levi 2001; Lakiša et al. 2021; Janssen and Giebels 2013; Bar-Tal et al. 2007).

Ampomah et al. (2022) found a positive effect of negotiation, mediation, and arbitration (as conflict management strategies) on school performance. Amie-Ogan and Nma (2021) revealed a weak-to-moderate positive relationship between avoidance and compromising conflict management strategies and schoolteachers' performance in public senior secondary schools in the examined region. They also found a moderate positive correlation between collaboration to schoolteachers' performance and a moderate negative correlation between accommodating strategy and teachers' performance.

Hypothesis 4 (H4). *Different conflict management strategies lead to different conflict consequences.*

During the conflict, elementary school employees may experience different affective states (Benesch 2018; Bar-Tal et al. 2007; Bilić 2016). While those states may affect the choices of conflict management strategies, they may also enhance the perception of the outcomes and consequences.

It can be noticed that several conflict consequences may result from a single conflict. The result or output of an event can stem from experienced affective states during the application of chosen strategies (for example, disturbed interpersonal relationships or dissatisfaction), but their perception can also be colored by the affective states (Neumann 2017; Gonan Božac and Kostelić 2021).

Hypothesis 5 (H₅). Different affective states lead to differently perceived conflict consequences/outcomes.

3. Materials and Methods

3.1. Theoretical Basis for Questionnaire Development

The diversity of conflicts, encompassed by different authors' theoretical approaches, encourages researchers to define their factors. We consider it necessary to execute the planned activities in work settings. The systematization of the conflict elements is presented in Table 1.

Conflict Element	Authors	Identified Elements
Frequency of experiencing conflicts in the workplace	Deutsch (1973)	Conflict is an integral part of human action and occurs in private and business environments more or less frequently.
Sources of the conflict	Paresashvili et al. (2021) Tao et al. (2018) Canonico (2016) Robbins and Judge (2013) Mooney et al. (2007) Everard et al. (2004, p. 127) Murray et al. (1998) Kreitner and Kinicki (1992) Greenhaus and Beutell (1985) Goode (1960)	 attitudes towards the content of the specific business activity, for example, resource allocation, provisions of certain acts, etc. dividing scarce resources such as time, territory, money, or equipment as a frequent cause of conflict, unclear division of tasks, and task interdependence uncertainty about task roles, unrealistic deadlines, unrealistic expectations, and members working cross-purposes confusion about people's positions, personality differences, legitimate differences of opinion, hidden agendas, poor norms, competitive or bad reward systems, and poorly managed meetings
Aroused feelings and affective states	Soleimani and Bolourchi (2021) Braem et al. (2017) Halperin and Tagar (2017) Neumann (2017) Erdamar and Demirel (2016) Van Harreveld et al. (2009, p. 184) Desivilya and Yagil (2005) Fredrickson and Joiner (2002) Kirby (2001) Allred et al. (1997)	 sadness discomfort (dis)satisfaction motivation anger fear safety hope engagement disappointment calm frustration
Conflict management strategies and activities	Ford et al. (2016) Maximin et al. (2015) Janssen and Giebels (2013) Montes et al. (2012) Boroş et al. (2010) Edmondson and Roloff (2008) Bar-Tal et al. (2007) Kuhn and Poole (2000) De Dreu and Van Vianen (2001) De Dreu et al. (2001) Levi (2001, p. 129) Edwards and Walton (2000) Munduate et al. (1994) Van de Vliert (1997) Rahim and Bonoma (1979)	 cooperating/integrating/problem solving obliging/yielding dominating/contending/forcing avoiding compromising involving a third party, i.e., an external mediator supporting of superior
Positive conflict consequences	Hussein and Al-Mamary (2019) Halperin and Tagar (2017) Robbins and Judge (2013) Levi (2001)	 increased productivity creativity encourage development a better understanding of others better solutions to workplace problems

 Table 1. Systematization of conflict elements.

Conflict Element	Authors	Identified Elements
Negative conflict consequences	Lakiša et al. (2021) CIPD (2020) Hussein and Al-Mamary (2019) Dicke et al. (2018) Ford et al. (2016) Janssen and Giebels (2013) Freres (2013)	 lack of interest in work work distress wasting time employees leaving the organization personal attacks undermined performance team members' dissatisfaction poor social relations reduced trust, respect, and cohesion in groups encouragement by superiors sickness absence reduced productivity reduced quality of work

Table 1. Cont.

Conflict elements and corresponding authors' previous contributions are used to derive the items in the questionnaire (Table A1).

3.2. Data Collection and Sample Characteristics

While work-related conflicts can happen in any organization, regardless of its size, form, or activities, elementary schools are chosen as an example of work-related conflicts. Burnout and consequent teacher attrition are identified globally (Dicke et al. 2015, 2018; Tsouloupas et al. 2010). A contributing factor to such occurrences can be different conflicts at the workplace, and the consequences can be reflected in productivity, work engagement, and other outcomes. Employees of elementary schools have a unique place in the communication lines with their pupils, pupils' parents, colleagues, and superiors. Given the diversity of relationships, there is potential for an abundance of conflict at different levels. That makes elementary school employees a good choice for studying the relationships between the distinct conflict sources, conflict management strategies, and conflict outcomes, thereby assuming the mediating role of affective states. In addition, the conflicts may affect organizational culture, the school's social environment (Alfirević et al. 2016), and the quality of relationships (Smyth et al. 2007), which can affect students' achievement. The relevance of its potential implicit effect on the students creates additional motivation for the exploration of conflicts among elementary school employees. The response to conflict situations is also culturally specific (Rahim 2002), so it can be expected that the Croatian respondents might differ in their perception of conflict compared to the results from the studies in other countries.

The survey was conducted online from 7 to 14 September 2021 in elementary schools in Croatia. There are 922 elementary schools in Croatia, where 34,636 teachers and professional services work (DZS 2021), but information about all elementary school employees is not available. The questionnaire was sent to all elementary school representatives' official e-mail addresses, requesting a further distribution to their employees; 192 respondents who worked at various positions in elementary schools filled in the questionnaire.

Table 2 offers an overview of the age and gender distribution of the respondents. Most of the respondents were older and female, reflecting the sector demographics.

	18-30	31–40	41–50	51-64	Total
Male	0	3	6	9	18
Female	26	48	50	50	174
Total	26	51	56	59	192

 Table 2. Respondents' age and gender.

Most respondents had a university graduate degree in teaching, advisory, and some administrative positions, while lower levels of education related to housekeeping, cleaning, and some administrative positions (Table 3). The ratios of respondents with high levels of education (and their respective positions) to those with lower levels of education (and their respective job positions) reflects the current ratio in elementary schools.

Table 3. Level of education and age of respondents.

	18–30	31–40	41–50	51–64	Total
Elementary	0	3	0	1	4
High School	3	1	1	0	5
Undergraduate	1	5	2	13	21
Graduate	22	41	50	45	158
Postgraduate	0	1	3	0	4
Total	26	51	56	59	192

Descriptive statistics enable initial insights into responses. Those insights are available in the Supplementary Materials (File S1).

3.3. Questionnaire Reliability

Reliability can be observed through equivalence, stability, and internal consistency of the questionnaire (Patel and Joseph 2016), but only internal consistency will be examined. Internal consistency is considered a minimum or required reliability check and denotes the instruments' consistency over all their parts (Patel and Joseph 2016; Taherdoost 2016). Many suggest the Cronbach Alpha coefficient for this purpose (Patel and Joseph 2016; Taherdoost 2016; Chan and Idris 2017; Kline 2011). For this questionnaire, Cronbach's alfa coefficient of 0.915 was calculated, which shows high reliability according to the usual criteria (Hunt et al. 1982; Kline 2011).

3.4. Questionnaire Validity

The questionnaire validity examination aims to check whether the questionnaire measures what it was intended to measure. Several aspects of validity may be explored, content validity, construct validity, and criterion validity (Taherdoost 2016; Messick 1989). In this paper, the minimal criterion for the continuation of the analysis will be explored; construct validity, as it justifies the subject of measures (Taherdoost 2016; Campbell and Fiske 1959). Construct validity has two aspects, convergent and divergent construct validity. The first one is usually performed using principal component analysis (PCA), and the latter with factor analysis (FA) (Taherdoost 2016; Mittag 1993), in this case using maximum likelihood as a method of extraction. Due to the data characteristics, the analysis requires a nonparametric approach. One of the possible nonparametric alternatives for PCA and FA is based on Spearman's correlation coefficient matrix instead of Pearson's. The replacement is facilitated with the ranking, as the two coefficients take the same value when replacing variable values with their ranks (De Winter et al. 2016; Conover and Iman 1981; Garcia-Granero 2002). For the remainder of the analysis, both principal component and factor analysis used matrix algebra for deriving the component matrix, followed by a choice of a number of components for Eigenvalues greater or equal to one and the choice of the standard threshold of 0.4 for factor loadings. This analysis was performed using SPSS (IBM, New York, NY, USA) based on the Spearman correlation coefficient matrix (with a principal

component for the PCA and maximum likelihood extraction with varimax rotation for FA) while loosely following Garcia-Granero's (2002) approach.

Kaiser–Meyer–Olkin's measure of sampling adequacy was 0.859, and Bartlett's test of sphericity indicated that the data was suitable for further analysis ($\chi^2 = 6688.89$, p < 0.001). The conducted PCA resulted in a scree-plot (Figure A1) that indicated 11 components. An additional examination of the 11 components (Table A2) showed that the questionnaire satisfied convergent validity. FA for this questionnaire also resulted in 11 factors (Figure A2) but discriminated questions Q13, Q23, Q44, and Q52, which did not exhibit a relevant enough factor loading (smaller than 0.4, Table A3), meaning that they were not relevant for explication of the concepts captured in the latent variables, i.e., factors.

The resulting factors' explanation and description are presented in Table 4, and the factors' descriptive statistics are in Table A4. The goodness of fit test ($\chi^2 = 1037.51$, p < 0.01) indicated that 11 factors were adequate to explain the covariances among the variables. Further factor analysis (such as confirmatory factor analysis) was omitted due to redundancy in the modeling as the analysis proceeded to Bayesian structural equation modeling.

Several interesting observations could be singled out regarding the questions with too-low loadings to meet the criteria for inclusion in the factors. These were fear, a bad rewards system, seeking third-party advice, and conflicts' influence on personal life. A possible explanation was that the examined sector (elementary schools) provided relatively more stable working conditions than the private sector, leading to such conflict elements' perception, resulting in derived factors. In addition, the factors regarding conflict management strategies partially aligned with the previous findings (Rahim 2002; Deutsch 1973; De Dreu et al. 2001). A part of the difference could arise from using a different questionnaire, and the other part could stem from cultural differences and sector-specific circumstances. The identified factors also indicated content validity, as they conferred to the theoretical basis, with an additional split by the perception of sources.

Factor	Description	Questions	Description of Questions
		Q14	Encouragement of creativity
		Q15	Increased productivity
		Q16	Increased inspiration for problem-solving
	Positivo conflicto'	Q17	Encouragement of development
I1		Q18	Encouragement of changes
	consequences	Q19	Better understanding between coworkers
		Q20	Better decision-making
		Q21	Increased curiosity
		Q22	Frequent appreciation of others
		Q32	Decreased productivity
		Q33	Dissatisfaction
 I2	Nogative conflicts'	Q34	Disturbed interpersonal relationships
	Regative conflicts	Q35	Decreased quality of the labor
	consequences	Q36	Loss of trust between colleagues
		Q37	Poor communication
		Q38	Loss of focus
		Q5	Excessive workload
	Sources of the conflict	Q6	Unclear division of tasks
I3	related to the cognitive	Q7	Limited resources
	conflict type	Q8	Unrealistic deadlines
		Q9	Unrealistic expectations

Table 4. Factor description.

Factor	Description	Questions	Description of Questions
		Q41	Conversation
	Efficient conflict	Q42	Finding optimal solution
I4		Q49	Explaining own position
	management strategy	Q50	Giving a second chance to a coworker to explain his/her position
		Q51	Calming your emotions so you can understand the other position
		Q24	Anger
	No setime offertions	Q25	Discomfort
15	Negative affective	Q26	Sadness
	states	Q27	Frustration
		Q28	Disappointment
		Q10	Previously unresolved conflict
	Sources of the conflict	Q11	Differences in personalities and values
IC	related to the affective	Q12	Lack of trust
16	conflict type	Q2	Misunderstanding
	connict type	Q3	Criticism
		Q4	Opposed positions or needs
		Q43	Ignoring conflicts
17	Inefficient conflict	Q45	Reducing contact with the other person
17	management strategy	Q46	Leaving it to a superior to resolve the conflict
		Q47	Conflict avoidance
		Q29	Calm
I8	Positive affective states	Q30	Safety
		Q31	Motivation
ю	Extreme conflict	Q39	Absence from work
19	management strategy	Q40	Leaving the organization
I10	Adaptive conflict management strategy	Q48	Adapting to the other person to maintain peace
I11	Frequency of conflicts	Q1	Frequency of conflicts

Table 4. Cont.

The synergy of internal reliability and construct validity (Weathington et al. 2010; Kane 2013) should suffice for the data's further examination. However, the results refer only to the questionnaire in the Croatian language, whereas the questionnaire in other languages should be rechecked (Patel and Joseph 2016).

3.5. Modeling Conflicts at Work Using Bayesian SEM

Many social and economic phenomena exhibit properties of complex systems and are multivariant in nature, which calls for developing and using sophisticated modeling methods. Structural equation modeling is one of the most frequently applied methods in such cases, even for modeling conflicts in organizations (for example, Baillien et al. 2014). However, such an approach requires adherence to method assumptions. In cases where these presumptions are not met or, more importantly, the distribution of coefficients wants to be identified, Bayesian regression modeling may be applied or, more precisely, Bayesian structural equation modeling (BSEM). In addition, BSEM comes with its own set of advantages: it better reflects substantive theory, leads to a better model fit and less overestimates the correlations (De Bondt and Van Petegem 2015). The method has been successfully applied in situations involving conflicts and affective states (Oogishi et al. 2017; Boulter et al. 2021). In modeling conflicts at work, derived items (Table 4) are considered variables. R program language version 4.1.2., was used for this analysis, with packages brms (Bürkner 2017, 2018), blavaan (Rosseel 2012; Merkle and Rosseel 2018), rstan, and mcmcplots. The analysis was governed by the WAMBS checklist (Depaoli and Van de Schoot 2017) and loosely adhering to Smeets and Van de Schoot's (2019a, 2019b) coding.

During the initial modeling attempts to get insights into relationships, it soon became apparent that, while the source of the conflict—particularly a source related to the cognitive conflict type (I6) in connection with negative affective arousal (I5)—holds explicative value; it diminishes posterior predictivity of models. Besides variable I3, variables I9, I10, and I11 were revealed as irrelevant for modeling and prediction. The frequency of conflicts (I11) seemed not to be relevant for the consequences' prediction. The consequences may be both positive and negative, regardless of the conflicts' frequency (although it was expected to reveal a relationship between the negative affective states, negative consequences, and conflict frequency). The preliminary model where I6 acted as a trigger and governed affective states (I5 and I8), and strategy choices (I4 and I7), whereby I4 and I8 led to the positive consequences and I5 and I7 led to the negative consequences, was discarded due to autocorrelation issues (which we attributed to model specification), CIs containing zero and low PPP value.

The choice was made to report models of the conflict stage and consequences, without the conflicts' sources, in the form of two separate models of positive and negative consequences. In such a structure, affective states mediate the strategy choice and reflection on the consequences. The consequences of the conflicts are governed by the affective states and chosen conflict management strategies, revealing structural relationships and the mediating role of affective states.

The choice of priors may lead to deviation in estimated parameters, so due consideration has been given to its examination. The comparison of default (Supplementary Materials (File S2), Tables S1, S2, S17, and S18), non-informative (Tables S3, S4, S19, and S20), weakly informative (Tables S5, S6, S21, and S22), and informative priors (Tables S7, S8, S23, and S24) for positive and negative models, respectively, were examined and relative deviations due to different priors calculated (Tables S9 and S25). Informative priors were based on the expectations of small estimated parameters and small expected effects (as not only affective states influence strategy choices and not only affective states and strategy choices determine the consequences, but also keeping in mind that the variables' values spread in the interval from 1 to 5). Calculated biases that stem from different priors' choices revealed small relative deviations (<5%). Nevertheless, models were based on weakly informative priors for further analysis to avoid directing the estimates toward the expectations.

Convergence was examined due to differences in priors and the number of iterations (Figures S1–S14, Tables S10 and S11, Figures S18–S31, Tables S26 and S27). The convergence was achieved in each case, and a very small bias occurred in the case of a doubled number of iterations.

Posterior distribution information was examined with histograms (Figures S15 and S32) and density plots (Figures S16 and S33). Histograms of the parameter's posterior distributions indicated sufficient information was obtained. The parameters' posterior distribution density plots were somewhat symmetric and seemed to explain the parameters well.

The parameter estimation process is inherently prone to autocorrelation due to underlying Markov chain processes and may lead to divergence in chains and invalid results (Depaoli and Van de Schoot 2017). The examination of autocorrelation revealed that autocorrelation parameters very soon diminished toward zero, indicating the absence of autocorrelation (Figures S17 and S34).

Additional checks of the influence of changes in the hyperparameters of priors, both for variance and "off" prior distributions (Tables S12, S13, S28, and S29), showed minor sensitivity (<5%) to changes. An additional models check was conducted with leave-one-out-cross-validation (LOO) estimates (Tables S14 and S30).

The models' robustness was checked by comparison with truncated models, where the relationship between the affective states and conflicts' consequences was removed. The model comparison (Tables S15 and S31) showed a higher weight for the full models than for truncated ones.

4. Results

The result of the modeling process is presented in Figure 2. The final model comprises two models composed of positive conflict consequences (I1), efficient conflict management strategy (I5), dominantly positive affective states (I8), negative conflict consequences (I2), inefficient conflict management strategy (I5), and dominantly negative affective states (I7).

p_LOO measures can be interpreted as the effective number of parameters (Figure 2, Table 5). In the case of the positive conflict consequences model, it took the value of 6.5 (SE = 0.7), which was smaller than the number of parameters in the model (7) and indicates good model predictive capability. However, in the case of the negative conflict consequences model, p_LOO took the value of 8.1 (SE = 1.5). While the number of model parameters lies within the standard error, such a value indicates potentially lower model predictive capability. However, in each case, Pareto k estimates were smaller than 0.5, pointing to the usefulness of calculated estimates. As p_LOO may understate model prediction accuracy (Vehtari et al. 2017), the posterior predictive *p*-value (PPP) was calculated for the model (using blavaan and bsem). PPP enabled evaluation of the model fit. PPP for the model of positive conflicts' consequences took the value of 0.509, and for the model of negative conflicts' consequences, the value of 0.498. Both measures were close to 0.5, indicating that the models fit the observed data. As weakly informative priors were used, it was not expected that posterior predictive *p*-values might misbehave (Hoijtink and van de Schoot 2018) and can be considered instructive in this case.



Figure 2. Structural models of conflicts at work. Notes: model parameters calculated using R, package brms (4 chains, each with iter = 4000; warmup = 2000; total post-warmup draws = 8000), additional model fit parameters calculated with package bsem (estimator: Bayes; optimization method: NLMINB; Warmup = 500; Iter = 1000). Variables' abbreviations and their meaning: I1—positive conflicts' consequences, I2—negative conflicts' consequences, I3—sources of the conflict related to the cognitive conflict type, I4—efficient conflict management strategy, I5—negative affective states, I6—sources of the conflict related to the affective conflict type, I7—inefficient conflict management strategy, I8—positive affective states.

The values of R2 shown in Figure 2 and Table 5 are its means calculated with the loo_r2 function, which uses LOO residuals and Bayesian bootstrap for uncertainties (Vehtari et al.

2019). It is worth mentioning that the values were lower for lower quantiles and higher for higher quantiles (at quantile 97.5, reaching values of 0.35, 0.06, 0.43, and 0.17 for I1, I4, I2, and I7, respectively).

The final model (Figure 2, Table 5) comprises models of positive and negative conflict consequences at work. The model of positive conflict consequences shows that the estimate for the effect of positive affective states on positive conflict consequences is 0.41 with a credibility interval [0.26, 0.55]. The estimate for the effect of positive affective states on conflict management strategy choices is 0.16 [0.02, 0.3], and the estimate for the effect of conflict management strategy choices is 0.39 [0.23, 0.54].

Final Model	Coefficients	95% CI	R2	MLL	Elpd_LOO	p_LOO (SE)	PPP
Functional conflict mo			-760.17	-484.6	6.5 (0.7)	0.509	
I4 intercept	3.72	[3.45, 4]					
I8->I4	0.14	[0.02, 0.3]	0.01				
I1 intercept	0.7	[0.06, 1.34]					
I8—>I1	0.41	[0.26, 0.39]					
I4->I1	0.39	[0.23, 0.54]	0.25				
Family-specific param	eters:						
Sigma I1	0.87	[0.79, 0.96]					
Sigma I4	0.83	[0.75, 0.92]					
Dysfunctional conflict	model			-854.92	-466.7	8.1 (1.5)	0.498
I7 intercept	1.61	[1.06, 2.15]					
I5->I7	0.32	[0.18, 0.45]	0.08				
I2 intercept	0.96	[0.39, 1.53]					
I5->I2	0.53	[0.39, 0.67]					
I7->I2	0.19	[0.06, 0.33]	0.3				
Family-specific param	eters:						
Sigma I2	0.79	[0.71, 0.88]					
Sigma I7	0.83	[0.75, 0.92]					

Table 5. Summary of results.

Notes: model parameters calculated using R, package brms (4 chains, each with iter = 4000; warmup = 2000; total post-warmup draws = 8000), additional model fit parameters calculated with package bsem (estimator: Bayes; optimization method: NLMINB; Warmup = 500; Iter = 1000); MLL and PPP were calculated using package bsem. The results are summarized from Tables S6 and S22. variables' abbreviations and their meaning: I1—positive conflicts' consequences, I2—negative conflicts' consequences, I4—efficient conflict management strategy, I5—negative affective states, I7—inefficient conflict management strategy, I8—positive affective states.

The model of negative conflict consequences shows that the estimate for the effect of negative affective states on negative consequences was 0.53 [0.39, 0.67], and 0.19 [0.06, 0.33] is the estimate for the effect of conflict management strategy choices on negative consequences. The negative affective states' estimate for the effect on choice strategy is 0.32 [0.18, 0.45]. The hypotheses for parameters (in full models) indicate their relevance to the models (Tables S16 and S32). In addition, predictive error histograms (Figures S17 and S35) show almost normally distributed predictive errors around the mean of zero.

It can be noticed that the effects of elementary school employees' affective states surpass the effects of chosen strategies for appraisal of conflict consequences, which is more expressed in the model of negative conflict consequences. Moreover, these effects are more denotative for the model of negative conflicts' consequences.

Considering credible intervals, it can be concluded that none of the 95% posterior credible intervals contains zero for effects' size. That means that examined effects are different from zero. The models present a plausible representation of the structural relationships between the chosen strategies, affective states, and conflicts' consequences for conflicts at work. Moreover, posterior densities for response variables compared to observed data (Figure 3) show a very good fit for I1, I2, and I7, while I4 showed some deviation.





Figure 3. Posterior predictive check by densities overlay.

Bayesian structural equation modeling involves multiple models' comparison and recursive steps in models' evaluation and estimation. Model development and evaluation with complete reports are available in the Supplementary Materials (File S2), while this chapter summarizes the results. Concerning the conducted evaluations and estimations, the model is reported in the form of two separate models—positive and negative consequences. The model depicts a conflict structure whereby affective states affect the strategy choice and reflection on the consequences. More precisely, the perceptions of the conflicts' consequences are governed by the affective states and chosen conflict management strategies, revealing structural relationships and mediating the role of affective states. The effects of the affective states exceeded the effects of the chosen strategies for conflict consequences appraisal, which is more explicit in the model of negative conflict consequences.

While the initial set of theoretical hypotheses suggested a possibility of the affective states' mediation effect between the conflict sources and conflict management strategy, the final model does not contain the link between the source of the conflict and affective states. Thus, mediation analysis with affective states as mediators could not be performed. Only a mediation of conflict management strategy could be considered. The results in Table 6 show that the conflict management strategy mediated 12.66% and 9.96% effect on the conflict consequences in the positive and negative consequences models, respectively. The mediation effects are small, however, they still show how conflict management strategies mediate aroused affective states towards more expressed consequences.

Effects	Functional Treat Med Resp	Conflict Model ment—I8 iator—I4 onse—I1	Dysfunctional Conflict Model Treatment—I5 Mediator—I7 Response—I2		
	Estimate	95% ETI	Estimate	95%ETI	
Direct effect (ADE)	0.409	[0.261, 0.554]	0.528	[0.387, 0.667]	
Indirect effect (ACME)	0.060	[0.009, 0.125]	0.059	[0.016, 0.120]	
Mediator effect	0.385	[0.239, 0.535]	0.193	[0.057, 0.333]	
Total effect	0.470	[0.239, 0.535]	0.589	[0.455, 0.723]	
Proportion mediated	12.66%	[0.77%, 24.55%]	9.96%	[1.00%, 18.92%]	

Table 6. Mediation analysis.

Notes: ETI stands for equal-tailed interval of posterior distributions computed using the quantiles method; ADE stands for average direct effect; ACME stands for average causal mediation effects. Variable abbreviations and their meaning: I1—positive conflicts' consequences, I2—negative conflicts' consequences, I4—efficient conflict management strategy, I5—negative affective states, I7—inefficient conflict management strategy, I8—positive affective states.

The identified sources of the conflict can be various: excessive workload, unclear division of tasks, limited resources, unrealistic deadlines, unrealistic expectations, previously unresolved conflicts, differences in personalities and values, lack of trust, misunderstanding, criticism, and opposed positions (attitudes) or needs. The sources of a conflict grouped by cognitive (I3) and affective (I6) type did not affect the choice of conflict management strategy, nor did they trigger affective states.

It is an interesting and somewhat unexpected finding that the source of the conflict showed no predictive value for the choice of strategy (Figures 2 and 4). As many theories (Robbins and Judge 2013; Tao et al. 2018; Rahim 2002) rely on the relationship between the conflict source, its type, and its consequences, these results contradict such approaches. However, the results did not reveal relationships between the source of the conflict and affective states and conflict management strategies, so we conclude that H₁ and H₂ are not supported. Nevertheless, it is possible that measures of conflict sources different from the applied ones may reveal the relationship in future research.

If the conflicts incite dominantly negative affective states (anger, sadness, frustration, disappointment, discomfort), it can be expected that elementary school employees will cope by choosing an inefficient conflict management strategy. Such a strategy involves ignoring conflicts, reducing contact with the other person, leaving it to the superior to resolve conflict, and conflict avoidance. Such an approach can result in positive consequences only by mere chance, and it predictably leads to negative consequences of conflict (Deutsch 1949), as these empirical findings confirm. However, the revealed links from positive and negative affective states to conflict management strategies and outcomes, and the relationships between conflict management strategies and outcomes, support H_{3} , H_{4} , and H_{5} (Table 7).

While the model can be perceived as differing between functional and dysfunctional conflict (Kreitner and Kinicki 1992), it is interesting to observe the role that affective states play in the strategy choices and perception of conflict consequences. If elementary school employees' aroused affective states are dominantly positive (calm, safety, motivation), they will guide them toward an efficient conflict management strategy. An efficient conflict management strategy comprises conversation, finding an optimal solution, explaining own position, giving a second chance to coworkers to explain their position, and calming own emotions to understand the other's position. Such a conflict is desirable, as it leads to positive conflict consequences: it encourages creativity, curiosity, and inspiration for problem-solving, increases productivity, and enables development and change, allowing for better understanding and decision-making. All of the stated are desirable from the school's perspective, but also support employee well-being. The revealed relationships are in line with previous findings (Boroş et al. 2010; Kuhn and Poole 2000; Castillo 2019; Amie-Ogan and Nma 2021; Ampomah et al. 2022; Shitambasi et al. 2022).

Theoretical Hypotheses	Relationship	Hypothesis Supported
Hypothesis 1	I3–>I4 I6–>I7	No
Hypothesis 2	I3->I8 I6->I5	No
Hypothesis 3	I8—>I4 I5—>I7	Yes
Hypothesis 4	I4->I1 I7->I2	Yes
Hypothesis 5	I8->I1 I5->I2	Yes





Figure 4. Visual representation of relationships revealed by the model. Note: black color denotes hypothesized relationships supported by the data; gray color denotes hypothesized relationships not supported by the data.

Given that the affective states show the highest coefficient values, their essential, if not dominant, role in models can be surmised. Moreover, the comparison to the proposed model (Figure 1) reveals the lack of relationships between the variables in the final model (Figures 2 and 4), leading to the conclusion that conflicts with dominantly positive and negative affective states behave structurally differently. Once set off, affective states predictably affect the rest of the conflict.

5. Discussion

Regardless of the conflict source, the results suggest that it can be expected that it will result in elementary school employees' aroused affective states, which is in line with previous research (Robbins and Judge 2013; Boateng and Agyei 2013; Tao et al. 2018; Halperin and Tagar 2017; Benesch 2018; Boulter and Boddy 2020). This means that it is more important to maintain calm affective states for all included parties and choose conflict strategies prudently. Otherwise, aroused negative affective states will lead to the choice of

inefficient strategy, and the conflict will lead to undesired consequences—or at least, the involved elementary school employees will perceive them that way.

New demands are placed on organizations because they must build an institutional capability of understanding how conflicts and related emotional economy work in their organization. For example, consider a conflict situation that arises from the lack of financial resources for training. The present study suggests that in such a case, if the employee experiences dominantly positive affective states (feeling calm, safe, or motivated) at higher levels, they will more likely choose an efficient management strategy to resolve the situation (conversation, explanation of their position, calming own emotions for better understanding the other position, etc.). In this case, that combination predictably leads to positive conflict consequences (such as encouragement of creativity and increased inspiration for problem-solving). It is very pragmatic for employees to know and recognize the affective states and how they affect the conflict. Therefore, there lies a possibility for intervention. Educating elementary school employees about emotion control and providing emotional support and guidance during the conflict could lead the employees toward an efficient conflict strategy.

It is, therefore, necessary to reconsider the role of emotions in the conflict process and their influence on the outcome and strategic choices (Neumann 2017; Gonan Božac and Kostelić 2021), a reflection on the consequences of the conflict (Konrad and Mangel 2000; Soleimani and Bolourchi 2021), as well as their possible implicit effects on job satisfaction (Erdamar and Demirel 2016), work efficiency (Rahim 2002) and, consequently, organizational climate and performance (Memili et al. 2015; Triguero-Sánchez et al. 2018).

Moreover, the optimal conflict level, especially if arising from functional conflicts, is desirable for an organization to be healthy and good in performance, leading to progress and growth (Kreitner and Kinicki 1992; Mullins 1999; Robbins and Judge 2013; Memili et al. 2015; Triguero-Sánchez et al. 2018). Furthermore, conflict management strategies can enhance organizational and employee performance (Castillo 2019; Amie-Ogan and Nma 2021; Ampomah et al. 2022; Shitambasi et al. 2022). If the organization is faced with the avoidance of any form of conflict, it will disturb organizational health and result in lower levels of productivity and efficacy. One possible tool for maintaining the optimal conflict level might be the development of leadership skills to govern the employees' affective states through the conflict.

In a changeable environment, schools face new challenges (Miletić 2020): decreasing birthrates and emigration, which lead to fewer pupils and an increase in job insecurity; increasing costs, increasing competition and requirements for maintaining an image, increasing requirements for the creation of a stimulating school environment, etc.; and expected school reforms, as well as the ongoing initiative of school principals' professionalization, creates even more pressure on the need for employee empowerment (Alfirević et al. 2016, 2018). Conflict management in the organization, emotion control, and providing emotional support are considered indispensable in empowering employees to face new challenges. The results of this research suggest that school principals and other school employees need these skills to successfully overcome conflicts.

Teachers learn about classroom management during their education and their knowledge is regularly extended through workshops, professional meetings, or lifelong learning. Those may be the means to develop teachers' required skills of conflict management (beyond classroom conflicts) and emotional control. In a similar way, the respective professional meetings for employees in professional service (such as librarians, pedagogues, psychologists, defectologists, etc.) could serve for the transfer and development of additional skills in conflict management. However, administrative and technical staff may also be involved in the conflicts, which must not be disregarded. A possible solution lies in in-house workshops. However, with the development of a positive organizational climate, regular staff and teachers' meetings may promote civilized and fruitful discussion on the conflicting issues between the employees, thus contributing to a healthy school social environment, as a safe space for learning, sharing ideas, and joint actions toward a common goal. All the above-stated will have a direct impact on students because, as stated by Alfirević et al. (2016), those conflicts may affect the organizational culture and school's social environment, the same one that envelops the students during their studies, and should transfer the values of trust, democracy, and authenticity.

Limitations arise because the research did not cover the impact of employee stress, performance, job satisfaction, and other factors in a school environment, which could prove to be relevant, as the existing data indicate that in Croatia (Bilić 2016, 2021) 74% of teachers suffer violent behavior, from their pupils, pupils' parents, or other colleagues, leaving them sad and disappointed. Also, 84% of the school principals also endure different forms of inappropriate, uncivilized, or violent behavior from colleagues, superiors, students' parents, and students.

An additional interesting finding is the lack of a relationship between the negative affective states and conflict frequency, which was expected but not revealed by this data. While the conflict consequences may be a source for the next conflict, the relationship should be expressed much more to produce predictivity. The fact that a person experiences negative affective states during the conflict does not mean that they will predictively engage in the next conflict, meaning that experiencing emotions in a conflict should not be characterized as an undesirable trait but as a normal response, which does not necessarily lead to repetitive conflicts. However, different findings may occur due to cultural settings (Ross 2000), and further cross-cultural confirmation is required for the findings' generalization. Whatever the causes of the conflict, its perceived consequences primarily depend on the chosen conflict management strategies and affective states experienced due to the conflict.

6. Conclusions

Conflicts can and should be observed as complex systems, multivariant in nature, and such phenomenon modeling calls for sophisticated methods such as Bayesian structural equation modeling. The analysis shows that conflicts are complex, and their outcome depends on the interaction of multiple factors. As Bayesian structural equation modeling still represents an unusual modeling choice, this may also serve as an example of the possibilities for more profound insights into complex issues.

The model is based on the factors derived from the nonparametric factor analysis applied to the questionnaire. The questionnaire satisfied both internal reliability and construct validity requirements. The developed questionnaire measures different aspects of the employees' conflict perception and its elements and is a viable option for further research. The developed questionnaire enables further examination of conflicts in different socio-economic contexts. Moreover, it would be interesting to examine whether the results differ over different sectors and cultural settings.

The conflict sources appeared irrelevant for this model, contrary to the approaches that rely on the relationship between the conflict source, its type, and its consequences. The model points out the prominent role of affective states in conflicts. Positive affective states facilitate the choice of efficient conflict management strategy, and when combined, lead to positive consequences. On the contrary, negative affective states exhibit their role in choices of inefficient conflict management strategy and negative consequences. That reveals a possibility for intervention. Educating elementary school employees about emotional control and providing emotional support and guidance during the conflict could lead the employees toward an efficient conflict strategy. In addition, the schools' organizational climate would benefit if school principals possessed skills in conflict management, emotion control, and providing emotional support. That provides an additional argument for the efforts to achieve school principals' professionalization. Besides focusing on only one country, the data and findings only regard employees in elementary schools; this represents a further limitation of the findings and a call for future research covering several sectors. An additional limitation may be the manner of distributing the questionnaire, which was sent to the schools' representatives, who further shared the questionnaire with their employees. Such a hierarchical approach might have discouraged employees from engaging, resulting in a smaller sample. The conflicts are examined from the respondents' perspective, despite being aware that the respondent's position in the organization and relationships also affect the perception of conflict.

In further research, more attention can be devoted to external factors. Specifically, the conflict can be observed in the education sector from a leadership position, team dynamics, or a classroom situation; therefore, future efforts should be focused on long-term research on the process of conflicts in the education sector. This research and the following ones will fill in a puzzle to put new insights into conflicts in Croatia as an opportunity. Hopefully, it can serve as an inspiration for other researchers.

In addition, conflicts should continue to be examined as a multivariate phenomenon, with the complexity arising from the variables' interaction that synergically influences the outcomes. Given the revealed effects, the role of the affective states in conflict resolution requires further examination from the conflict management perspective, along with its possible mediation effect. The findings also call for a re-examination of the role of affective states regarding their importance and portrayal in dominant management theories.

This research shows that affective states play an essential role in models of conflicts at work. The revealed role of affective states facilitates future intervention possibilities. While much attention is devoted to the managers' education about conflict management strategies, it seems that more emphasis should be placed on the role of affective states. Affective states influence both conflict management strategy and the perception of the conflict consequences. Additional education about emotion and affective state control, as well as raising awareness about their role in the conflict, might increase mutual understanding and save substantial costs that derive from time and lost productivity on behalf of the conflicts.

Supplementary Materials: The following supporting information can be downloaded at: https://osf.io/75ya6/?view_only=12782e075ddc4063a19831b3eb18a2d6 (created on 4 June 2022, last updated on: 13 December 2022).

Author Contributions: Conceptualization, M.G.B., M.P. and K.K.; methodology, M.G.B., M.P. and K.K.; validation, K.K.; formal analysis, K.K.; investigation, M.P.; writing—original draft preparation, M.G.B., M.P. and K.K.; writing—review and editing, M.G.B. and K.K.; visualization, K.K.; project administration, M.G.B.; funding acquisition, M.G.B., M.P. and K.K. All authors have read and agreed to the published version of the manuscript.

Funding: This paper is a result of the internal scientific project "The role of emotions in strategic decision-making" supported by the Faculty of Economics and Tourism "Dr. Mijo Mirković", Juraj Dobrila University of Pula. Any opinions, findings, and conclusions or recommendations expressed in this paper are those of the authors and do not necessarily reflect the views of the Faculty of Economics and Tourism "Dr. Mijo Mirković" Pula.

Institutional Review Board Statement: The Research Ethics Assessment Committee at Juraj Dobrila University of Pula has given its positive opinion on the research design in our manuscript Modeling Conflicts at Work: The Case of Elementary School Employees in Croatia with the decision from 19 January 2022.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Anonymized and aggregated data for items are available in the Supplementary file.

Acknowledgments: We are grateful to the student Antea Xhemajli for the questionnaire distribution.

Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

Appendix A

Table A1. Instrument: Questionnaire.

Code	Questions]	Possib	le Res	ponse	s
Q1	Do you experience conflicts int the workplace? (1-never, 5-very frequent)	1	2	3	4	5
	According to your opinion, how do the following factors relate to the conflict at work? (1–	-not at a	all <i>,</i> 5—	-strong	gly)	
Q2	Misunderstanding	1	2	3	4	5
Q3	Criticism	1	2	3	4	5
Q4	Opposed positions (attitudes) or needs	1	2	3	4	5
Q5	Excessive workload	1	2	3	4	5
Õ6	Unclear division of tasks	1	2	3	4	5
Õ7	Limited resources	1	2	3	4	5
Õ8	Unrealistic deadlines	1	2	3	4	5
Õ9	Unrealistic expectations	1	2	3	4	5
010	Previously unresolved conflict	1	2	3	4	5
Õ11	Differences in personalities and values	1	2	3	4	5
012	Lack of trust	1	2	3	4	5
013*	Bad reward system	1	2	3	4	5
	ou experience the following positive conflict consequences at work (1—completely disagree	- 	omple	telv ac	ree)	-
014	Encouragement of creativity	1	2 2	يە ردىن 2	4	5
015	Increased productivity	1	2	3	4	5
O_{16}^{10}	Increased inspiration for problem-solving	1	2	3	4	5
Q^{10} Q^{17}	Encouragement of development	1	2	3		5
018	Encouragement of development	1	2	3	т 1	5
Q10 Q10	Better understanding between cowerkers	1	2	2	-±	5
O^{19}	Better degision making	1	2	2	-±	5
Q20 Q21		1	2	2	4	5
Q_{21} Q_{22}	Frequent appreciation of others	1	2	3	4	5
~	Conflicts at work elicit the following feelings (1- completely disagree, 5-comple	etelv ag	ree)			
023*	Fear	1	2	3	4	5
024	Anger	1	2	3	4	5
025	Discomfort	1	2	3	4	5
\overline{O}_{26}^{26}	Sadness	1	2	3	4	5
O27	Frustration	1	2	3	4	5
O_{28}	Disappointment	1	2	3	4	5
O_{29}	Calm	1	2	3	4	5
O_{30}	Safety	1	2	3	4	5
Q31	Motivation	1	2	3	4	5
<u> </u>	ou experience the following negative conflict consequences at work (1—completely disagree	ee, 5—c	omple	telv as	ree)	
O32	Decreased productivity	1	2	3	4	5
Õ33	Dissatisfaction	1	2	3	4	5
Q34	Disturbed interpersonal relationships	1	2	3	4	5
Õ35	Decreased quality of the labor	1	2	3	4	5
Õ36	Loss of trust between colleagues	1	2	3	4	5
Q37	Poor communication	1	2	3	4	5
Q38	Loss of focus	1	2	3	4	5
Q39	Absence from work	1	2	3	4	5
Q40	Leaving the organization	1	2	3	4	5
× 10		-	-	5		5

Code	Questions	Possible Response					
	I solve the conflicts by (1—completely disagree, 5—completely agree)						
Q41	Conversation	1	2	3	4	5	
Q42	Finding optimal solution	1	2	3	4	5	
Q43	Ignoring conflicts	1	2	3	4	5	
Q44 *	Seeking third-party advice	1	2	3	4	5	
Q45	Reducing contact with the other person	1	2	3	4	5	
Q46	Leaving it to the superior to resolve the conflict	1	2	3	4	5	
Q47	Conflict avoidance	1	2	3	4	5	
Q48	Adapting to the other person to maintain peace	1	2	3	4	5	
Q49	Explaining own position	1	2	3	4	5	
Q50	Giving second chance to a colleagues to explain his/her position	1	2	3	4	5	
Q51	Calming your emotions so you can understand the other's position	1	2	3	4	5	
Q52 *	Do you think that conflicts at work influence your personal life? (1-always, 5-never)	1	2	3	4	5	

Table A1. Cont.

Note: * denotes items not included in the model.





Table A2. Rotated component matrix (PCA).

	Component										
	1	2	3	4	5	6	7	8	9	10	11
Q16	0.910										
Q17	0.894										
Q20	0.867										
Q15	0.858										
Q14	0.857										
Q19	0.853										
Q22	0.821										

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	Component										
	1	2	3	4	5	6	7	8	9	10	11
Q21	0.795										
Q18	0.779										
Q35		0.814									
Q37		0.795									
Q38		0.769									
Q34		0.765									
Õ33		0.762									
Õ36		0.760									
032		0.644									
08		0.011	0.814								
$\overline{O7}$			0.790								
\tilde{Q}'			0.75								
05			0.703								
Q5 06			0.723								
Q_0			0.655								
Q13			0.401	0.004							
Q50				0.824							
Q41				0.794							
Q49				0.712							
Q42				0.707							
Q51				0.700							
Q12					0.759						
Q10					0.747						
Q3					0.641						
Q11					0.593						
Q4			0.415		0.582						
Q2					0.532						
Q27						0.744					
Q28						0.729					
Q26						0.708					
Q25						0.666					
Q24						0.645					
Q30							0.859				
Õ29							0.833				
Õ31	0.404						0.623				
Õ45								0.727			
Q46								0.649			
O_{43}								0.640			
O_{44}								0.0486			
Q17								0.444			
Q4/								0.444	0.855		
Q37 Q40									0.000		
Q40									0.782	0 720	
Q48										0.729	
Q23										0.500	0 50
Q1											0.726
Q52											0.656

 Table A2. Cont.



Figure A2. Scree plot (FA).

Table A	A3.	Factors.
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						Factor					
	1	2	3	4	5	6	7	8	9	10	11
Q16	0.913										
Q17	0.886										
Q15	0.856										
Q14	0.851										
Q20	0.840										
Q19	0.829										
Q22	0.806										
Q21	0.777										
Q18	0.743										
Q35		0.818									
Q37		0.767									
Q36		0.731									
Q38		0.728									
Q34		0.721									
Q33		0.710									
Q32		0.608									
Q52 *											
Q12			0.739								
Q10			0.681								
Q3			0.566								
Q4			0.558								
Q11			0.552								
Q2			0.450								
Q13 *											
Q50				0.858							
Q49				0.732							
Q41				0.692							
Q51				0.642							
Q42				0.601							
Q8					0.830						
Q9					0.801						

						Factor					
	1	2	3	4	5	6	7	8	9	10	11
Q7					0.677						
Q5					0.625						
Q6					0.549						
Q28						0.729					
Q27						0.713					
Q26						0.643					
Q25						0.633					
Q24						0.566					
Q23 *											
Q43							0.676				
Q45							0.611				
Q47							0.520				
Q46							0.502				
Q44 *											
Q30								0.953			
Q29								0.726			
Q31								0.535			
Q39									0.940		
Q40									0.607		
Q1										0.490	
Q48											0.433

Table A3. Cont.

Note: * denotes items not included in the model.

Table A4. Descriptive statistics of facto	ors.
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Factors	Minimum	Maximum	Mean	Standard Deviation	Skewness
I1	1.000	5.000	2.990	1.002	-0.130
I2	1.000	5.000	3.569	0.946	-0.582
I3	1.000	5.000	3.427	0.912	-0.387
I4	1.400	5.000	4.014	0.836	-0.931
I5	1.200	5.000	3.901	0.867	-0.702
I6	1.167	5.000	3.655	0.818	-0.764
I7	1.000	5.000	2.846	0.868	0.101
I8	1.000	5.000	1.821	0.865	1.177
I9	1.000	5.000	2.005	0.921	0.706
I10	1.000	5.000	2.469	1.082	0.231
I11	1.000	5.000	3.021	0.965	0.170

Note: Factors are expressed as the averages of related Qs according to Table 3.

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