

RELATIONSHIP OF THE MULTIFACTOR LEADERSHIP MODEL AND CONFLICT MANAGEMENT STRATEGIES IN ALL-DAY PRIMARY SCHOOLS IN CREECE

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Abstract: The main purpose of this study is to highlight the ways in which leaders and/or potential leaders in school practice act and shape their leadership behavior or manage conflict, as well as their interaction on whether they converge or diverge with theoretical and research approaches. The application field of the research was all the teachers in randomly selected Greek all-day primary schools, while the questionnaires of the multifactor leadership model and conflict Management Strategies Scale's, were used as research tools. Following the appropriate analysis methodology, the (N=782) questionnaires were used to draw conclusions based on the research questions. The results show that the dominant style of leadership is transformational, however, some transactional practices are adopted, with a clear distancing from laissez-faire leadership. In addition, a general finding in conflict management is primarily constructive compromising practices, secondarily avoiding practices, while dynamic competing practices are adopted as the last option. The Pearson correlation revealed the existence of a statistically significant positive and/or negative correlation of varying intensity between the three styles of multifactor leadership and the conflict management strategies, except for laissez-faire leadership and compromising. From the multiple regression analysis, it emerged that the compromising strategy positively predicts the variance model of transformational and negatively predicts laissez-faire. Avoiding and competing strategies negatively interpret the variance model of transformational leadership and positively the transactional and laissez-faire leadership.

Keywords: All-day primary school, conflict management, correlation & regression analysis, M.L.Q. 5X-Short & C.M.S. S's questionnaires, multifactor leadership model.

Introduction

In a time of successive scientific, technological, and economic-social changes, the school unit, as a typical organization with a specific mission, is called upon to satisfy the educational needs of young people. In fact, our

country in the last 12 years (2011-2022) went through an economic-social and an epidemic (Covid-19) crisis, which in many cases brought its citizens to an impasse and our educational system faced its own organizational and operational problems. Can this image be reversed for the benefit of society as a whole? The function performed by a teacher is difficult because, he has to perform a quite complex and demanding task, while every day, he is confronted with many questions, problems, and dilemmas, which he is called upon to overcome in order to achieve his pedagogical goals. In addition, the hierarchical structure, bureaucracy, and constant legislative educational changes of our educational system affect the practice of administrative and organizational behavior. Focusing, in particular, on the conflicts that are a widespread phenomenon known to be a reality in the Greek school affecting its orderly and smooth operation. Many researchers argue that in organizations, if there are no such phenomena, there is a stagnation of the organization, without ignoring the fact that conflicts, if they are not within limits, become uncontrollable with negative results for the development of the organization. Therefore, the rational management of conflict phenomena is the key to the balance of their positive-negative effects for the school unit and is of particular interest for those holding administrative positions and for teachers in, how they use the conflict management models developed by administrative science.

Purpose and research questions

The purpose of this study was to investigate the perceptions of teachers as leaders and/or potential leaders regarding, the style of leadership behavior according to the model of full range leadership theory they adopt and the intra-school conflict management strategies they choose in all-day public primary schools in Greece. Does it require a redefinition of their role in the way they act and shape their leadership behavior or manage an intra-school conflict?

Although many studies in the literature focus on investigating models of leadership behavior, conflict management, and their possible correlation, the fact that leadership has a positive or negative relationship with conflict management strategies does not prove the existence of the effect. Therefore, it was useful to test whether conflict management strategies are important or not predictable variables of the multifactor leadership model. The research questions (RQ) posed are described as follows:

RQ1: What is the dominant leadership model (transformational, transactional, laissez-faire) and which intra-school conflict management strategy (compromising, avoiding, competing) is chosen?

RQ2: Is there a correlation between the multifactor leadership model and intra-school conflict management strategies?

RQ3: Which of the strategies (compromising, avoiding, competing) of intra-school conflict management has the best explanatory power in predicting the dependent variables of the multifactor leadership model?

Literature review

Leadership and models of educational leadership

Leadership is most complex and fascinating aspects of organizational behavior and organization. Leadership is also referred to as the process of influencing a group in which a person inspires, guides, and motivates to achieve the desired result (Bush, 2008). Leadership is not a title awarded, a degree, or a certification, but is formed in the working environment over time and requires effective action for the leader to reach the desired goal not alone, but with his team (Athanasoula-Reppa , 2008). Research interest and scientific thinking about leadership have shifted from the genetic approach to behavioral characteristics related to successful leadership. Thus, various theories have been concluded and a number of behavioral patterns that are referred to in the literature are referred to in the term “Leadership style” and is defined as the subjective structure of the needs of the person who activates his behavior in various leadership situations (Fiedler, 1967). Research on leadership since the mid-1980s

continues and criticism of previous approaches continues to new studies, creating a trend called "New Leadership" in the forms of which initially includes the approaches of charismatic, visionary, or transformational leadership "who show common elements in the themes and methodology they adopt against leadership (Bryman, 2017).

Grace, researching the framework of school leadership, separated three different stages of its development. Until the 1940s, school leadership was dominated by the hierarchy. The cultural, patriarchal, and hierarchical characteristics of English society contributed to the rise of the principal as a school leader. From 1940 to the 1970s, the model of school leadership and social democracy prevailed. From 1980 to the 1990s, the model of school leadership, credibility, and the labor market prevailed. This was the period of wider state control, decentralization, and institutional autonomy (Tomlinson, 2004). In modern times, educational organizations have now understood that in order to ensure their success, they have to have executives who not only be capable managers with knowledge and skills but also leaders (Leithwood et al., 2006) . Therefore, the role of the administration is to support teaching and learning (Bryman, 2017).

After analyzing a representative sample of 121 scientific articles from 1988 to 1998 in four of the most famous English-speaking journals related to the administration of education, the most widespread classification of leadership types in school education were: Administrative or managerial, collaborative, transformational, ethical, adaptive, and pedagogical or didactic (Leithwood et al., 1999). In addition to this typology, transactional, interpersonal, transformation, and post-modern leadership can also be added (Bush & Glover, 2003; Shields, 2004; Bush, 2011), while a contemporary idea of school leadership describes the model of distributed leadership (Harris et al., 2007) and the last of the teachers' leadership (Wenner & Campbell, 2017).

Multifactor leadership model

Burns (1978) considered the concepts of transactional and transformational leadership as opposite ends of the same dimension, the leader as either transactional or transformational. On the contrary, Bass (1985) and his associates considered the two forms of leadership as complementary to each other, and the leader as having the capacity to display elements and behaviors of both forms of leadership (Bass, 1998). The multifactor leadership model refers to the full range of the full range leadership theory (F.R.L.T.), which is a development of two theories of trading and transformative leadership. It also encompasses passive or indifferent leadership. It is considered the most modern model of new leadership because it can explain the multidimensional nature of leadership and record the predictive factors of the outcome of leadership (Antonakis et al., 2003). With reference to its dimensions: The transformational Leadership is characterized by the interaction of leaders with their subordinates who enhance their creativity and motivation in the organization (Burns, 1978). A transformational leader deals with his subordinates, emphasizes their internal motivation and needs, and seeks not to maintain the "status quo", but provides an incentive for change and innovation to the organization for the benefit of the organization (Bass & Avolio, 1994; Menon-Eliphottou, 2011).

Transactional leadership is based on a trading relationship between the leader and his existing ones. Burns (1978) designated trading leaders or politicians who promoted members of the organization by offering rewards (Bass, 1990; Passiardi, 2004). Transactional leaders bore the needs of their subordinates and try to satisfy them by redeeming their energy in return for service (Bass & Avolio, 1994).

Laissez-faire leadership is the third style of leadership of the full range of leadership. A leader who practices passive leadership avoids making decisions, is usually absent when needed, delaying decisions, and uses his power little while giving complete freedom of action to subordinates to determine their goals and achieve them.

This style of leadership can lead to the non-fulfillment of organizational goals, ineffectiveness, and chaos (Avolio & Bass, 2004; Antonakis et al., 2003).

Conflict management

The issue of conflicts in educational organizations and their consequent settlement is one of the most important issues in organizational science, particularly in the field of education administration. This controversy sometimes manifests as a disagreement, some as a clash, and some as a conflict. In the literature, there is a wealth of conceptual determinations and definitions of the "conflict" from both sociological and psychological, anthropological, and communicative sides, as it is an inevitable place in organizational life (Rahim, 2017). Conflicts could not be absent from the school units where they co-exist, meet, and interact with people of different cultural-social strata, sex, and age with different goals and interests and may concern members of the same or different group in the educational organization, or even between the organization and corresponding organizations (Fasoulis, 2006). Focusing on teaching staff, teachers have a role in the management of conflict because their decisions have a direct impact on school climate and learning (Saiti & Saitis, 2012).

Conflict management strategies

Management as a concept is a set of actions that are perfectly harmonized, designed, and executed to promote the desired results for the effective functioning of the organization (Tekos & Iordanides, 2011). Leaders should be able to predict conflict and, determine the type of conflict, whether at an individual or group level, to settle or resolve it properly. Many researchers prefer the term "management", which includes the design of effective strategies aimed at reducing dysfunctions and enhancing the positive effects of conflict, as opposed to the term "resolution" of conflicts, which aims to minimize or end conflict within the existing system (Rahim, 2002).

Various models have been developed, and depending on the sources, the type and level of the conflict are selected each time according to the most appropriate style of management by leaders. However, whichever style is chosen, the goals are to reduce the negative consequences of conflict and increase its positive consequences. To date, several theoretical models have been proposed that analyze how to approach conflicts, the first being Follet in 1924 who distinguished three basic ways in which managers manage a conflict: dominance, compromise, and cooperation (Daves & Holland, 1989). However, the most appropriate conflict management style is considered to be the one that combines and achieves the best results for subordinates and productivity (Montana & Charnov, 2006). Later, Thomas (1976) presented a two-dimensional grid similar to that of Blake and Mouton based on cooperation and positivity or enforcement, resulting in the five modes of conflict management: Collaborating, smoothing, competing, avoiding, and compromising. Rahim in (1983) proposed a conflict management model based on dimensions of self-interest and concern for others, the combination of which results in five modes of management: integration, compulsory obedience, competing, avoiding, and compromising (Rahim & Magner, 1995). A recent study (Chen & Tjosvold, 2002) focused on three dominant strategies (compromising, avoiding and competing) of conflict management. Newer studies on conflict management are based on the personality dimension of the person who determines their personal and professional actions (Gupta & Sasidhar, 2010). By analyzing different conflict management models, researchers converge on five types of conflict behavior:

Compromising strategy is a type of strategy in which the warring parties maintain their differences, move middle, trying to split the difference and make mutual concessions. The resolution is superficial without seeking to find the deeper wants and needs of the two groups to avoid prolonged conflict (Rahim, 2002; Montana & Charnov, 2006). It is considered an effective method for dealing with conflicts at school, as long as they do not involve complex problems.

Avoiding strategy includes the element of ignoring, and the person who chooses to use this type of conflict resolution is indifferent to the conflict, remains neutral, tries to downgrade the difference, or feels powerless to resolve the conflict (Saitis, 2002; Chen & Tjosvold, 2002; Chan et al., 2006). It is indicated for matters of low importance and when the cost of dealing with them is greater than the benefits of resolving the conflict.

Competing strategy is the technique where the person tries to impose his or her interests. Any cost, ignoring the needs of the other. In any case, the use of power escalates the competitive moods of the two parties, while the probability of its repetition is increased (Chen & Tjosvold, 2002). It is indicated for matters of minor importance for making quick decisions (Rahim, 2001) and is followed by people who show high levels of performance, occupying managerial positions (Thomas et al., 2008).

The collaborative style is a technique where all possible alternatives are sought, which are acceptable to all opposing members. It has a similar philosophy to compromising, is followed in cases of complex issues, and is time-consuming (Thomas, et al., 2008).

Smoothing strategy is characterized by one party making concessions to the other's demands in the hope of gaining something in the future (Rahim, 1986). This approach is similar to that of avoiding in terms of the time shift of the conflict, but differs in that, after collaboration, one side agrees to satisfy the other's desires.

Therefore, it is logical to ask the reasonable question of which is the most effective type of conflict management. Every conflict situation is different, and educational research has shown that the choice of the most appropriate type varies.

Methodology

Population sampling and participant profiles

The sample of the research was nationwide and as representative as possible, with particular emphasis on its geographical stratification at the Region-Prefecture level and is part of a wider survey during the period 2019-2021. The population of the research was the teachers of general education and all teachers' specialties in the randomly selected all-day public primary schools. Data distribution and collection was performed through the Google forms online application, while the final sample to be processed included (N = 782) correctly answered questionnaires.

The participation rate of the research sample was 40.2% (314) men and 59.8% (468) women. In terms of age, 11.51% (16) are from 25 to 34 years old, 48.92% (68) are from 35 to 44 years old, 29.% (231) are up to 35 years old, 38.8% (241) are 36 to 45 years old, 28.4% (222) are 45 to 55 years old, and 11.3% (88) are up to 56 years old, while in terms of years of service, the majority of teachers (74.4%) have from 1 to 20 years of service. In relation to the position in the school unit, 18.3% (143) are principals, 12.9% (101) are deputy principals, and 68.8% (538) teachers. of which 62.8% (491) are general education teachers and 37.2% (391) are special education teachers. Regarding the level of education, 29.4% (230) have a university basic degree, 16.8% (131) a second degree, 10.1% (79) teacher training, 41.8% (327) had a master's degree, and 1.9% (15) had a doctorate. Regarding knowledge of a foreign language and of ICT, 75.3% (589) and 89.1% (697) respectively, have certified training, while 24.7% (193) and 10.9% (85) respectively, no. In relation to the type of primary school in which the teachers serve, 47.4% (371) serve in small rural schools and 52.6% (411) in urban schools. Finally, depending on the geographical location of the school, a percentage of 30.2% (236) serve in urban areas, 36.3% (284) serve in semi-urban areas, and 33.5% (262) serve in rural areas.

Research instruments and procedures

For the collection of data, a single questionnaire was chosen in which, in addition to the demographic characteristics, the respondents were invited to declare the degree of agreement or disagreement using a 5-point scale. The Multifactor Leadership Questionnaire (MLQ-5X-Short) developed by Avolio and Bass (2004) was used to assess leadership behavior, which investigates the style of leadership and the outcome of leadership. The questionnaire includes (45) questions that identify and evaluate (36) the leadership components of the three styles of the "multifactor leadership model" and (9) questions that examine the "outcome of leadership". The using scale is scored as 0=not at all, 1=once in a while, 2=sometimes, 3=fairly often, 4=frequently, if not always. Finally, the MLQ-5x-Short Scoring key allows us, by matching the questions with the components of leadership, to extract the mean for each of the three leadership styles and more specifically (20 questions) for transformational, (12 questions) for transactional, and (4 questions) for laissez-faire leadership.

To assess the conflict management style, the questionnaire "Conflict Management Strategies Scale's" (C.M.S. S's) by Holton & Holton (1992), modified by Baley (2006) and based on the model of Chen and Tjosvold (2002) was used, which recognizes and evaluates the three dominant strategies/scales of the conflict management style, compromising, avoiding, and competing. Compromising Strategy is related to the "loss-loss" technique where the two warring parties converge on a middle path of the conflict and tentative solutions of the type "give and take", with the aim of reaching a mutual agreement. It is structured by (13) questions (Rahim, 2001; Saitis, 2002). Avoiding strategy, where the conflict is avoided, is in line with the "loss-loss" technique and is structured by (9) questions, which try to detect the extent to which the person tries to ignore or postpone the resolution of disputes of the conflict (Rahim, 2001; Saitis, 2002). Competing strategy is structured by (10) questions, where the "win-loss" orientation predominates and detects the degree to which the individual tries to resolve conflicts at the expense of others (Saiti & Saitis, 2012). The scale is scored as follows: 1=never agree, 2=disagree, 3=neutral, 4=agree, 5=always agree.

Data analysis

The data analysis was performed using the following tools of the S.P.S.S. (version 24) (Marakis, 2005; Anastasiadou, 2013).

- i. Cronbach's alpha indicators and normality tests.
- ii. Descriptive analysis methods were used to obtain frequency (N), percentage (%), mean (M), standard deviation (Sd), Xmin and Xmax.
- iii. Pearson's correlation coefficient (r) and its significance. The weighted index (r) was evaluated according to the following categorization:

If $|r| \leq 0.1$ there is no linear correlation. Almost zero correlations

$|r| \leq 0.4$ there is a weak positive or negative correlation.

$|r| \leq 0.7$ there is moderate positive or negative correlation.

$|r| \leq 1.0$ there is a strong positive or negative correlation.

- iv. The coefficient of determination R^2 , a measure of the interpretative capacity of multiple regression analysis, is used to determine the percentage of the total variability of the dependent variables that is affected by the independent variables.

The reliability check of "M.L.Q. 5x-short" and "C.M.S.S's." questionnaires showed Cronbach's alpha = 0.855 and alpha = 0.753, respectively, which confirm their reliability, as index values greater than 0.7 are considered satisfactory (Field, 2005). The survey sample was analyzed with the Kolmogorov-Smirnov test and found that data were normally distributed, therefore, parametric tests could be used.

The significance level of statistical tests was set at $p < 0.05$.

Results

Teachers' Perceptions of Leadership Style and Conflict Management

From the analysis of the research data, we conclude that the respondents adopt the transformational model as the dominant style of leadership behavior ($M=2.97$), and to a lesser extent the transactional model ($M=2.25$), while they distance themselves quite a bit from the style of laissez-faire leadership ($M=1.39$). Examining the respondents' opinions on their choice of conflict management strategies in all-day primary schools, the compromising average ($M=3.83$), for the avoiding ($M=3.29$) and for the competing ($M=3.00$) (Table 1).

Table 1. Descriptive Analysis of the Multifactor Leadership Model and Conflict Management Strategies

	Mean	Sd	Xmin	Xmax
Multifactor leadership model				
Transformational	2.97	0.56	1.0	4.0
Transactional	2.25	0.62	0.0	4.0
Laissez-faire	1.39	0.99	0.0	3.8
Conflict management strategies				
Compromising	3.83	0.35	2.7	4.9
Avoiding	3.29	0.46	1.7	4.9
Competing	3.00	0.57	1.6	4.6

Correlation between the multifactor leadership model and conflict management strategies

According to (Table 2) the Pearson correlation coefficient (r) of transformational leadership with the compromising strategy is statistically significant with a weak positive correlation ($r=0.310$, $p < 0.01$), while with the avoiding and competing strategy is statistically significant with a weak negative correlation ($r=-0.210$, $p < 0.01$ and $r=-0.364$, $p < 0.01$, respectively).

The Pearson (r) of transactional leadership with the compromising strategy is statistically significant with an almost zero negative correlation ($r=-0.022$, $p < 0.01$), while with the avoiding and competing strategy, it is statistically significant with weak positive correlation ($r=0.372$, $p < 0.01$) and moderately positive correlation ($r=0.558$, $p < 0.01$), respectively.

The Pearson (r) of laissez-faire leadership with the avoiding strategy is statistically significant with a moderate positive correlation ($r=0.417$, $p < 0.01$), with the competing strategy it is statistically significant with a moderate negative correlation ($r=-0.556$, $p < 0.01$), while with the compromising strategy it is not statistically significant ($r=-0.054$, $p > 0.05$).

Table 2. Pearson (r) correlation and significance of the multifactor leadership model and conflict management strategies

Multifactor leadership model	Conflict management strategies	Pearson (r) Sig. (2-tailed)	
Transformational leadership	Compromising	0.310	0.000*
	Avoiding	-0.210	0.000*
	Competing	-0.364	0.000*
Transactional leadership	Compromising	-0.022	0.000*
	Avoiding	0.372	0.000*

	Competing	0.558	0.000*
Laissez-faire leadership	Compromising	-0.054	0.134
	Avoiding	0.417	0.000*
	Competing	-0.556	0.000*

* Correlation is significant at the 0.01 level.

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The Pearson (r) of laissez-faire leadership with the avoiding strategy is statistically significant with a moderate positive correlation ($r=0.417$, $p<0.01$), with the competing strategy it is statistically significant with a moderate negative correlation ($r=-0.556$, $p<0.01$), while with the compromising strategy it is not statistically significant ($r=-0.054$, $p>0.05$).

Results of the multiple regression analysis

To investigate the research question (RQ3), multiple regression analysis was performed using the enter technique.

Table 3. Multiple regression results in prediction of the transformational leadership variable

Model I		Model Summary					
	R	R square	Adjusted R square	Std. error of the estimate	N		
	0.480	0.230	0.227	0.367	782		
ANOVA							
		Sum of Squares	df	Mean of squares	F	Sig. s	
	Regression	31.393	3	10.464	77.619	0.000	
	Residual	104.889	778	0.135			
	Total	136.282	781				
Coefficients							
	Beta	Std. error	t	Sig.	Lower Bound	Apper Bound	
	Constant	2.442	0.162	15.093	0.000	2.124	2.759
	Compromising	0.386	0.039	9.953	0.000	0.310	0.462
	Avoiding	-0.110	0.037	-2.961	0.003	0.182	0.037

Competing	-0.210	0.029	-7.361	0.000	0.266	0.154
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According to (Table 3) it appears, that 22.7% (Adjusted R^2) of the variance of the dependent variable transformational leadership is explained by the variance of the model, which presents a good fit with the slope of the regression line being statistically significant different from zero with ($df=3$, $F=77.619$, $p<0.05$). Also, the model proves as statistically significant the estimator of the coefficient of the constant ($B=2.442$, $p<0.05$), as statistically significant the positive impact of the compromising strategy ($Beta=0.386$, $p<0.05$), as significant the negative impact of avoiding ($Beta=-0.110$, $p<0.05$) and as significant the negative impact of competing ($Beta=-0.210$, $p<0.05$).

According to (Table 4) it appears, that 31.3% (Adjusted R^2) of the variance of the dependent variable transactional leadership is explained by the variance of the model, which presents a good fit with the slope of the regression line being statistically significant different from zero with ($df=3$, $F=119.595$, $p<0.05$). Also, the model proves as statistically significant the estimator of the coefficient of the constant ($B=1.114$, $p<0.05$), as statistically significant the positive effect of the

Table 4. Multiple regression results in prediction of transactional leadership variable

D Model Summary						
Model I						
R	R square	Adjusted R square	Std. error of the estimate	N		
0.562	0.316	0.313	0.335	782		
ANOVA						
	Sum of Squares	df	Mean of squares	F	Sig. s	
Regression	40.255	3	13.418	119.595	0.000	
Residual	87.290	778	0.122			
Total	127.546	781				
Coefficients						
	Beta	Std. error	t	Sig.	Lower Bound	Upper Bound
Constant	1.114	0.148	7.551	0.000	0.825	1.404
Compromising	-0.039	0.035	-1.098	0.273	-0.108	0.031
Avoiding	0.079	0.034	2.331	0.020	0.012	0.145
Competing	0.356	0.026	13.684	0.000	0.305	0.408

($Beta=0.356$, $p<0.05$), while rejecting as not statistically significant the negative effect of compromising ($Beta=-0.039$, $p>0.05$).

According to (Table 5) it appears, that 32.7% (Adjusted R^2) of the variance of the dependent variable laissez-faire leadership is explained by the variance of the model, which presents a good fit with the slope of the regression line being statistically significant different of zero with ($df=3$, $F=127.218$, $p<0.05$). Also, the model proves as non-statistically significant the estimator of the coefficient of the constant ($B=0.239$, $p>0.05$) whose interpretation does not have any particular

Table 5. Multiple regression results for predicting the laissez-faire leadership variable

Model I		D Model Summary				
R	R square	Adjusted R square	Std. error of the estimate		N	
0.574	0.329	0.327	0.506		782	
ANOVA						
	Sum of Squares	df	Mean of squares	F	Sig	
Regression	97.605	3	32.532	127.219	0.000	
Residual	198.968	778	0.256			
Total	296.573	781				
Coefficients						
	Beta	Std. error	t	Sig.	Lower Bound	Apper Bound
Constant	0.239	0.223	1.710	0.285	-0.199	0.674
Compromising	-0.145	0.053	-2.713	0.007	0.250	0.040
Avoiding	0.237	0.051	4.650	0.000	0.137	0.337
Competing	0.487	0.039	12.389	0.000	0.410	0.564

meaning in the multiple regression, as statistically significant the negative effect of the compromising strategy (Beta=-0.145, $p<0.05$), as statistically significant the positive effect of avoiding (Beta=0.237, $p<0.05$) and of competing ($b= 0.487$, $p<0.05$).

Discussion

As a reference to the research question (RQ1), the respondents highlighted and favored transformational leadership as the dominant leadership style, which is the most effective form of leadership (Bass & Avolio, 1994; Day & Antonakis, 2011; Menon-Eliphoutou, 2011). The transactional style is adopted to a lower degree, while the laissez-faire leadership style did not seem to be particularly appreciated. These results are confirmed by previous research promoting the application of transformational practices to education (Antoniou et al., 2018; Giatra, 2019; Dimakopoulou, 2020; Maral & Hamedoglu, 2022).

The prevailing perception of the transformational leadership style can be attributed to the fact that transformational leaders are more likely to emerge in times of economic-social crisis, change, and unstable situations (Bass, 1990, 1998). On the contrary, the adoption of some transactional leadership practices can be attributed to the intense bureaucratic and centralized model system (Antonakis, 2001) applied in Greek education that is classified in the formal administration standards, according to Bush's (2011) typology and is matched with transactional leadership, despite the announcements of decentralization and autonomy of the Greek education system (Saiti & Saitis, 2012). Finally, distancing from the style of laissez-faire leadership is particularly encouraging and is probably due to the process of selecting education executives in recent years, which are judged on the basis of additional qualifications rather than antiquity, although its application is often as important as exercising any form of leadership of F.R.L.T (Judge & Piccolo, 2004).

Compromise strategy as the first choice indicates the search for an average solution in terms of concern for personal goals and for the goals of others (Chan et al., 2006). Although considered an effective practice, conflict management is superficial because the search for the deeper desires of both groups is bypassed (Rahim, 2001; Montana & Charnov, 2006). The choice of avoiding depicts a reduced interest from the conflicting parties in personal goals and the goals of others; the person is indifferent or feels powerless to resolve the conflict (Chen & Tjosvold, 2002; Chan et al., 2006).

The adoption of competing reveals that the respondents do not use their potential power and do not exert pressure to settle the conflict (Chen & Tjosvold, 2002).

The results are in agreement with previous research, where the teachers use first choice compromise methods of conflict management (Balay, 2006; Paraskevopoulos, 2008; Tekos & Iordanidis, 2011; Antoniou, 2018; Maliara, 2018) and ways of collaboration and compromise (Vassilopanagou, 2016; Dimakopoulou, 2020; Maral & Hamedoglu, 2022), while in some cases, they differ in the second and third selection (Mitsara & Iordanidis, 2015; Antoniou, 2018; Maliara, 2018).

Regarding the research question (RQ2) using the linear correlation coefficient (r), almost all variables showed statistically significant correlations, either positive or negative. These results greatly confirm and enhance the findings of previous research (Maliara, 2018; Chandolia & Anastasiou, 2020; Dimakopoulou 2020).

Transformational leadership was positively related to compromising and negatively related to avoiding and competing strategies. Transformational leaders are characterized by the acceptance of a common vision and confidence between team members, so it is reasonable that they try to satisfy those involved and deal with conflict as effectively as possible through compromise rather than avoidance (Bass, 1985; Avolio & Bass, 2004). In addition, transformational leadership is characterized by the leader's tendency to develop a spirit of teamwork, collaboration, and collegiality, even motivating teachers involved in conflict situations in constructive and collaborative solutions, which is not in line with the competing strategy because it is contrary to its philosophy (Bass & Riggio, 2006).

The linear analysis for transactional leadership revealed an almost zero negative correlations with compromising and a positive correlation with strategies of avoiding and competing. The first two findings seem not to be fully in line with the characteristics of transactional leaders, as they exchange support for their work with promises as well as rewards, reach mutually acceptable agreements, and exchange help with effort. In this light, it is a constructive transaction, which reinforces their commitment to compromise solutions in the case of disputes and not avoid them (Avolio & Bass, 2004; Bass & Bass, 2008). On the contrary, the moderate positive correlation of transactional leadership with the competing strategy can be attributed to the dimensions "management by exception-active and passive" that shape its characteristics, where the leader monitors the performance of his subordinates and intervenes correctively when it deviates from expected expectations, before the problem becomes serious or even after its development (Judge & Piccolo, 2004; Bass & Bass, 2008).

Finally, laissez-faire leadership was significantly positively related to avoiding and, negatively to competing, while for compromising, the almost zero negative correlation was not statistically significant. These results indicate that those who follow passive leadership tend to choose intra-school conflict management strategies beyond compromising and competing, ignoring and/or downgrading their causes (Chen & Tjosvold, 2002; Chan et al., 2006).

Indeed, passive leaders are characterized by their indifference and/or inability to create a friendly collaborative school climate, to make management decisions concerning basic issues-problems of organization and

administration, and to provide minimal guidance to their subordinates who rightly undertake the exercise of power and freedom in decision-making (Avolio & Bass, 2004; Yukl, 2010).

Interpreting the results of the research question (RQ3) of the multiple regression model, we find that the strategies of avoiding and competing significantly predict all variables of the multifactor leadership model, while the strategy of compromising predicts the style of transformational and laissez-faire leadership. The competing strategy has a negative effect on the transformational leadership styles, a finding that is consistent with previous research (Saeed et al., 2014; Maral & Hamedoglu, 2022), while the positive effect of competing on the transactional and laissez-faire leadership styles agrees with the study (Maral & Hamedoglu, 2022) and contradicts another research, where competing predicted transactional leadership significantly in a negative way (Saeed et al., 2014).

The negative effect of the avoidance strategy on the transformational leadership style agrees with previous surveys (Chandolia & Anastasiou, 2020; Maral & Hamedoglu, 2022), which show that leaders who demonstrate a transformational philosophy stay away from competing strategies and pursue resolving conflict through compromise rather than avoidance (Avolio & Bass, 2004; Bass & Riggio, 2006).

The positive effect of the avoiding strategy on transactional leadership style contradicts previous research reporting that compromising strategy significantly predicts transactional leadership (Saeed et al. 2014). Transactional leaders reward according to work and performance, intervene immediately when problems arise, and attach particular importance to maintaining the "status quo" for the organization (Hoy & Miskel, 2005). Therefore, it is possible for those who demonstrate transactional leadership to exercise the strategy of competing, when necessary, as an element of pressure to prevent conflict, while maintaining the "status quo" of the organization (Bass & Avolio, 1994).

Focusing on the bibliography, we should not ignore the weighty importance in the management of school units that have their size and the area in which they are located because they can form a variety of dynamic relationships, leadership characteristics, levels of school collaborative culture, and different human resource management techniques (Stoll et al., 2006; Saiti 2015; Schroeder et al., 2016; Tsipas et al., 2023).

In small-sized schools, teachers have, on the one hand, fewer internal communication difficulties, more opportunities for personal interactions, developing collaborative relationships, and follow different ways of managing a conflict, (Stoll et al., 2006). On the other hand, they have to perform multidimensional work usually without significant experience, professionalism, clear goals, and means, while they have the need for appropriate incentives and rewards (Galton et al., 1998) and to treat them as separate individuals with different needs, elements that promote transformational leadership. On the contrary, in large school units, members of different perceptions coexist, and it is more difficult and time-consuming to develop relationships of mutual trust, collegiality, and strong identification (Stoll et al., 2006), without excluding the adoption of the transformational leadership style (Leithwood & Jantzi, 2006), while the compromising strategy that requires time and good relations between the parties involved is not suitable for settling a conflict (Rahim, 2001).

In addition, the area in which a school is located is important in the sense that it affects the extent to which its staff can access key people who can contribute to its evolution, and the wider society in which the school is integrated has a positive attitude toward education (Stoll et al., 2006). In addition, some environments are more supportive, and the formation and maintenance of professional learning communities for each school is influenced by the support of its external environment. On the contrary, even if a school manages to develop internally, it will not be able to maintain the improvements it has made without the support of the external environment (Fullan, 2007).

Conclusion

The descriptive analysis revealed that the formation of the transformational leadership style is constantly gaining ground among the teaching staff, despite the rigidity of the Greek educational system. However, the respondents adopted some transactional practices, while their distancing from laissez-faire leadership was evident.

In addition, the perceptions of the respondents are primarily intertwined with constructive consultant practices, choosing in second degree avoiding practices, recognizing that the temporary avoidance of dealing with the conflict helps to defuse the situation, while as a last choice they adopt dynamic practices of competing, which although ineffective, is a strategy that would otherwise cause elevated levels of tension.

The correlation analysis proved that the adopted multifactor leadership model is significantly associated with the conflict management style by confirming and largely enhancing the existing conclusions.

In general, the correlations of the multiple regression models, although weaker in intensity and presence than expected, provide clear evidence that conflict management strategies are a strong influencing factor in the applied models of multifactor leadership.

Ethics statements and Conflict of interest

The study was conducted in accordance with the research license granted by the Greek Ministry of Education, Research and Religious Affairs. In any case, the scientific ethics for research participants as provided by the Greek Institute of Educational Policy were strictly followed.

The authors declare no conflict of interest in publishing this article.

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References

- Anastasiadou, S. (2013). Statistics and research methodology in the social sciences. Athens: Kritiki Publications S.A. (in Greek).
- Athanasoula-Reppa, A. (2008). Educational administration and organizational behavior. Athens: Greek editions (in Greek).
- Athanasoula-Reppa, A. (2012). *Conflicts - Leadership and Effectiveness in Schools in Contemporary Educational Policy Issues* (curated by Karakatsani D., Papadiamantaki G.), Epicenter Publications, Athens pp. 183-200 (in Greek).
- Antonakis, J., Avolio, B., & Sivasubramaniam, N. (2003). Context and leadership: an examination of the nine factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, 14(3), 261-295.
- [https://doi.org/10.1016/S1048-9843\(03\)00030-4](https://doi.org/10.1016/S1048-9843(03)00030-4)
- Antoniou, F. (2018). *Conflict Management in Secondary Education*. Master's research thesis. University of Piraeus (in Greek).

- Antoniou, A., Goumouki, M., & Babalis, T. (2018). Educational leadership and school culture: A comparative study between mainstream and special primary schools. *Education Sciences*, 3, 117-139 (in Greek). <https://doi.org/10.26248/v2018i3.302>
- Avolio, B. J., & Bass, B.M. (1991). *The full range leadership development program: Basic and advanced manuals*. Binghamton, NY: Bass, Avolio, & Associates.
- Avolio, B.J., & Bass, B.M. (2004). *Multifactor Leadership Questionnaire. Sampler Set. Manual, Forms and Scoring key*. New York: Mind Garden.
- Bass, B.M. (1985). *Leadership and performance beyond expectations*. Free Press
- Bass, B.M. (1990). From transactional to transformational leadership: learning to share the vision. *Organizational Dynamics*, 18(3), 19-32. [https://doi.org/10.1016/0090-2616\(90\)90061-S](https://doi.org/10.1016/0090-2616(90)90061-S)
- Bass, B. M. (1998). *Transformational leadership: industry, military and educational impact*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bass, B.M., & Avolio, B.J. (1994). *Improving organizational effectiveness through transformational leadership*. New York: Sage Publications.
- Bass, B., & Riggio, R. (2006). *Transformational Leadership*. Mahmah, New Jersey: Lawrence Erlbaum Associates (LEA).
- Bass, B.M., & Bass, R. (2008). *The Bass handbook of leadership, theory, research and managerial applications* (4th Ed.). New York: Free Press.
- Bryman, A. (2017). *Social research methods*. (P. Sakellariou, translation). Athens: Gutenberg Publications (in Greek).
- Baley, R. (2006). Conflict management strategies of administrations and teachers. *Asian Journal of Management Cases*, 3(1), 5-24. <https://doi.org/10.1177/097282010500300103>
- Burns, J., M. (1978). *Leadership*. New York: Harper & Row
- Bush, T. (2008) From management to leadership: semantic or meaningful change? *Educational Management Administration & Leadership*, 36(2), 271-288. <https://doi.org/10.1177/1741143207087777>
- Bush, T. (2011). *Theories of educational leadership and management* (4th Edition). London: Sage Publications.
- Bush, T.E., & Glover, D. (2003). *School leadership: Concepts and evidence*. Nottingham: National College for School Leadership.

- Chan, C.C.A., Monroe, G., Ng, J., & Tan, R. (2006). Conflict Management styles of male and female Junior accountants. *International Journal of Management*, 23(2), 289-295. <http://www.internationaljournalofmanagement.co.uk/index.html>
- Chandolia, E., & Anastasiou, S. (2020). Leadership and conflict management style are associated with the effectiveness of school conflict management in the region of epirus, NW Greece. *European Journal of Investigation in Health, Psychology and Education*, 10 (1), 455-468. <https://doi.org/10.3390/ejihpe10010034>
- Chen, G., & Tjosvold, D. (2002). Conflict management and team effectiveness in China: The mediating role of justice. *Asia Pacific Journal of Management*, 19, 557-572. DOI: [10.1023/A:1020573710461](https://doi.org/10.1023/A:1020573710461)
- Daves, W.F., & Holland, C.L. (1989). The structure of conflict behavior of managers assessed with self- and subordinate ratings. *Human Relations*, 42, 741-756. <https://doi.org/10.1177/001872678904200805>
- Day, D.V., & Antonakis, J. (2011). *The nature of leadership*. Thousand Oaks, CA, Sage Publications, Inc..
- Dimakopoulou, F. (2020). *Educational Leadership Models and Conflict Management: researching the correlation among secondary schools in Achaia prefecture* Master thesis. University of Thessaly (in Greek).
- Eurydice, (2013). *Key numbers for teachers and principals*. V. 2013, Eurydice Exhibition. European Union Publications Office. Luxembourg.
- Fassoulis, K. (2006). The creative communication as a tool of conflict management in a school environment. In: *Proceedings of the 3rd Greek Conference of the EMIEKEK on ‘‘Critical and creative thought in education: Theory and Practice’’*, 14-16 May. Athens, Greece, ISSN: 1790-8574: pp.520–525 (in Greek).
- Field, A. (2005). *Discovering Statistics Using SPSS* (2nd edn). London: SAGE.
- Fiedler, F.E. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill.
- Fullan, M, (2007). *The new meaning of educational change*, 4th edn. New York: Teachers College Press.
- Galton, M., Hargreaves, L., & Comber, C., (1998). Classroom Practice and the National curriculum in small rural primary schools. *British Educational Research Journal*., 24(1), 43-61. <http://www.jstor.org/stable/1501755>
- Gupta, J.M., & Sadidhar, B. (2010). Managing conflicts in organizations. A comunicative approach. *AIMS International Journal of Management*, 4(3), 177-190. <https://www.aims-international.org/AIMSijm/abstracts/4-3-3-a.pdf>

- Harris, A., Leithwood, K., Day, C., Sammons, P., & Hopkins, D. (2007). Distributed leadership and organizational change: Reviewing the evidence. *Journal of Educational Change*, 8, 337-347. <https://doi.org/10.1007/s10833-007-9048-4>
- Holton, B. & Holton, C. (1992). *The manager's short course: A complete course in leadership skills for the first-time manager*. John Wiley & Sons, Inc.
- Hoy, W.K., & Miskel, C.G. (2008). *Educational Administration. Theory, Research, and Practice*. New York: McCraw-Hill.
- Judge, A.T., Piccolo, F.R., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in Leadership research. *Journal of Applied Psychology*, 89(1), 36-51. <https://doi.org/10.1037/0021-9010.89.1.36>
- Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement*, 17(2), 201-227. <https://doi.org/10.1080/09243450600565829>
- Leithwood, K., Jantzi, D., & Steinbach, R. (1999). *Changing leadership for changing times*. Buckingham, Philadelphia: Open University Press.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2006). *Seven strong claims about successful school leadership*. Nottingham: National College of School Leadership.
- Mitsara, S. & Iordanidis, G. (2015). Investigation of conflict management techniques in primary schools in Greece. *Research in Education*, 3, 57-96 (in Greek). DOI: [10.12681/hjre.8848](https://doi.org/10.12681/hjre.8848)
- Makrakis, B. (2005). *Using SPSS. From Theory to Practice*. Athens, Gutenberg Publications (in Greek).
- Maral, M., & Hamedoglu, A.M., (2022) Does leadership style of school administrators affect conflict management? *Revista de Investigación Apuntes Universitarios*, 12(1), 268-287. <https://doi.org/10.17162/au.v11i5.933>
- Menon-Eliphoutou, M. (2011). Leadership theory and educational outcomes: The case of distributed and transformational leadership. *Proceedings of the 24th International Congress for School Effectiveness and Improvement*, Cyprus. www.icsei.net/icsei2011/Full%20Papers/0125.pdf
- Maliara, D. (2018). *Leadership style and conflict management style at school: Perceptions of primary school teachers in Volos*. Master thesis. University of Thessaly (in Greek).
- Montana, J.P., & Charnov, H.B. (2006). *Management*. Keydarithms Publications (in Greek).
- Paraskevopoulos, T.A. (2008). *Conflicts among Teachers at School*. Athens: Grigoriou Publications (in Greek).

- Passiardis, P. (2004). *Educational leadership-From the period of benign indifference to the modern times*. Athens: Metaichmio Publications.
- Rahim, M.A. (1986). Referent role and styles of handling interpersonal conflict. *Journal of Social Psychology*, 126(1), 79-86. <https://doi.org/10.1080/00224545.1986.9713573>
- Rahim, A. (2001). *Managing conflict in organizations*. London: Quorum Books.
- Rahim, M.A. (2002). Toward a theory of managing organizational conflict. *The International Journal of Conflict Management*, 13(3), 206-235. <https://doi.org/10.1108/eb022874>
- Rahim, M.A., & Magner, N.R. (1995). Convergent and discriminant validity of the Rahim Organizational Conflict Inventory II. *Psychologists reports*, 74, 35-38.
- DOI: [10.2466/pms.1995.81.3f.1075](https://doi.org/10.2466/pms.1995.81.3f.1075)
- Rahim, M. A. (2017). *Social intelligence, power, and conflict: Volume 17: Current topics in management*. Londres: Routledge.
- Saeed, T., Almas, S., Anis-ul-Haq, M., & Niazi, G. (2014). Leadership styles: Relationship with conflict management styles. *International Journal of Conflict Management*, 25(3), 214-225. <https://doi.org/10.1108/IJCMA-12-2012-0091>
- Shields, C.M. (2004). Dialogic leadership for social justice: Overcoming pathologies of silence. *Educational Administration Quarterly*, 40(1), 109-132. <https://doi.org/10.1177/0013161X03258963>
- Saiti, A., & Saitis, X. (2012). *The Principal in the Modern School*. Athens: Self-publishing (in Greek).
- Saiti, A. (2015). Conflicts in schools, conflict management styles and the role of the school leader: A study of Greek primary school educators. *Educational Management Administration and Leadership*, 43(4), 582-609. <https://doi.org/10.1177/1741143214523007>
- Saitis, X. (2002). *The Principal in the Modern School* (2nd Ed.). Athens: Self-publishing (in Greek).
- Schroeder, J., Caruso, E., M., & Epley, N. (2016). Many hands make overlooked work: Over-claiming of responsibility increases with group size. *Journal of experimental psychology applied*, 22(2), 238-246. <https://doi.org/10.1037/xap0000080>
- Tekos, G., & Iordanides, G., (2011). School unit management and conflict management from the teachers' point of view. *Pedagogical Review*, 51, 199-217.
- <https://ojs.lib.uom.gr/index.php/paidagogiki/article/view/7043>
- Thomas, K.W. (1976). *Conflict and Conflict Management*. In M.D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology*, pp. 889-935. Chicago: Rand McNally.

- Thomas, W.K.; Fann-Thomas, G.; & Schaubhut, N. (2008). Conflict styles of men and women at six organization levels. *International Journal of Conflict Management*, 19, 148-166.
<https://doi.org/10.1108/10444060810856085>
- Tomlinson, H. (2004). *Educational Leadership: Personal growth for professional development*. London: SAGE Publications.
- Tsipas, N., Zagkotas, V., & Tsipa, S. (2023) An empirical study of collaborative culture as a model of organizational behavior in Greek primary schools. *European Journal of Education Studies*, 10(6), 85-108.
<http://dx.doi.org/10.46827/ejes.v10i6.4835>
- Vassilopanagou, A. (2016). *Ways of managing interpersonal conflicts in Secondary Education: Perceptions of teachers and administrators*. Master thesis. Harokopio University (in Greek).
- Wenner, J., & Campbell, T. (2017). The theoretical and empirical basis of teacher leadership. *Review of Educational Research*, 87(1): 134-171.
<https://doi.org/10.3102/0034654316653478>
- Yukl, G.A. (2010). *Leadership in Organizations* (7th Ed.) Upper Saddle River, NJ: Prentice-Hall.