

## **Moderating Effect of Teachers Support on the Relationship between Conflict Management Strategies and Teachers' Productivity in Secondary Schools in Kenya**

*Virginia Wahu Kariuki<sup>1</sup>, Sammy K. Chumba<sup>2</sup> & Benjamin K. Wambua<sup>3</sup>*

<sup>1,2&3</sup>Department of Educational Management and Policy Studies, Moi University

**Corresponding Author's Email:** [virginiawahu@gmail.com](mailto:virginiawahu@gmail.com)

### **Abstract**

Conflict management in schools is a crucial aspect of creating a positive and productive learning environment for students, teachers, and staff. Effective conflict management helps in preventing and resolving disputes, enhancing communication, and maintaining a harmonious atmosphere. Effective conflict management is vital for creating a positive learning environment where all stakeholders can thrive. Most institutions have employed different strategies in management of conflicts. Among the strategies include negotiation, mediation, collaboration and avoidance. This study examined the extent to which teacher support systems moderates the relationship between the conflict management strategies and teachers' productivity in Uasin Gishu County, Kenya. The study was anchored on conflict theory propounded by Karl Marx and adopted correlational research design with a target of 156 principals and 1783 teachers from 156 public secondary schools. A sample size of 427 respondents comprising of principals and teachers was drawn from the population. The study employed purposive sampling, stratified and simple random sampling approaches. Data was collected using questionnaires and analyzed using Multiple Regression Analysis. The results of regression analysis showed that negotiation, mediation, collaboration and avoidance combined had significant positive relationship with teacher productivity. The four independent variables explained 47.1% of the variance on teacher productivity. The Teachers' support explained only 58% ( $R^2 = 0.580$ ) of the variance on teacher productivity thus contributing an additional  $R^2$  of 0.109 (10.9%) which was significant. The paper concluded that teachers support systems positively improves teacher productivity in public secondary schools and thus it was recommended that to get the best results in the resolution of workplace disputes, the management or administrators of secondary schools should enhance teachers support in school conflict management approaches.

**Key words:** *Teachers Support, Conflict Management Strategy, Teachers' productivity*

### **1.0 Introduction**

Conflicts occur frequently in human life and are prevalent both in businesses and educational institutions (Owan, 2018). Humans have always hated confrontation and developed a variety of methods to settle it, including mediation, negotiation, cooperation, and avoidance. Agreements on points of conflict between opposing governments or people have been reached through negotiation.

Due to the fact that conflicts are universal, they have come to have a variety of meanings, which has left many managers unsure of the best way to handle them. Disputes create an uncomfortable, disruptive, and stressful work environment that lowers employee productivity.

Productivity, according to Arinanye (2019), entails both quality and amount of output, presence at work, a willingness to be accommodating and helpful, as well as timely output. Sorsatakaro and Wako (2018) claim that if productivity is apparent, organizations can apply direct bonuses and rewards based on individual performance. Businesses put a lot of work into pleasing customers, but often pay little attention to pleasing staff. Yet the truth is that until and unless staff are satisfied, customers won't be happy. Consequently, if staff are satisfied, they will do more work therefore ultimately customers will be satisfied (Ahmad, 2017). Motivation truly has an impact on productivity because motivated workers put more effort into their task, which improves performance in the long run (Dukhan *et al.*, 2017).

According to Amoda *et al* (2021), factors that contribute to school-based conflict include a lack of respect for teachers' autonomy, a lack of objectivity, an insufficient flow of information, and a perception of relevant concerns. Given these conflicts, teachers are unable to actively contribute to the teaching-learning process, which is essential to the delivery and achievement of high-quality education and the educational objectives set forth in the Policy on Education. Also, this causes students to linger more, make more noise in the classroom, have their classwork poorly evaluated, and submit their assessment results to the appropriate authority later than they should. These issues that lead to bad teaching practices may be caused by a variety of factors, including ineffective principal conflict resolution techniques. If these disputes are not settled peacefully, the educational system may be disrupted and instructors' performance may suffer. So, it may be safe to assume that, to a large extent, a happy and emotionally content teacher will exhibit a positive attitude that improves learners' academic progress and achievement of educational goals.

In order to improve performance and effectiveness within an organization, conflict management requires putting into place particular methods to lessen the bad parts of conflict while boosting the positive components of conflict. Proper and efficient conflict management techniques in schools decrease absenteeism and discontent among teachers while boosting output, originality, and creativity, all of which increase teachers' effectiveness. Constructive conflict management techniques, according to Johnson and Johnson (2017), provide solutions that are acceptable to all parties in dispute, enhance relationships, and increase their capacity to resolve future problems constructively.

Owan (2018) emphasized that teachers are essential to the teaching and learning processes and need a secure atmosphere to carry out their duties as teachers successfully. According to Ghavifekr and Nair (2019), who support this notion, the efficiency of a school is dependent on the administrative abilities of the school principal, who must be able to deal with disagreements in a way that doesn't negatively impact teachers' ability to do their jobs. Owan (2018) emphasizes that there is not a single conflict management approach that can be used in all conflict circumstances. As a result, it may be claimed that various disputes call for the principals to employ various strategies.

Conflict management strategies are many and include cause identification approach and integration strategy of conflict management. Cause identification approach is a technique for resolving conflict which stresses the identification of the fundamental cause of the conflict. According to Kwamboka and Nassiuma (2017), this tactic is crucial because it enables the discovery of the conflict's root cause, which opens the door for locating a resolution that is agreeable to all sides. On the other hand, an integration strategy is a method for resolving conflict that emphasizes incorporating the viewpoints of opposing parties in order to make it easier for opposing parties to respect one another's interests while the conflict is being resolved. The integration technique appears to be the most effective since it allows warring parties to grasp their current condition and prepares them for active engagement in resolving the dispute (Fareo & Jajua, 2018).

Nyakundi and Orodho (2020) claim that conflicts at secondary schools in Kisii County have had a negative impact on teachers' job performance, with only 5% of instructors in the county doing well on the job. Conflicts therefore serve as a blatant warning sign that something is amiss inside the company and that sound principles are not being used in the resolution of the conflict. In order to boost performance, school principals, who are the top executives, must effectively handle these conflicts. This poses a question about how do teachers' support systems influence the relationship between conflict management strategies and teachers' productivity in secondary schools.

### **1.1 Statement of the Problem**

Despite efforts made in Kenya to resolve conflicts in schools, such as conducting seminars and workshops around the country on the need to use human relationships to minimize conflicts, conflicts in secondary schools in Kenya are still on the increase. Conflicts have a destabilizing effect on school job performance if they are not well managed have resulted in the dismal performance of teachers in the country, as only 5% of the teachers are performing well (Nyakundi & Orodho, 2020).

Studies have evaluated the influence of conflict management strategies on employees' productivity among secondary schools' teachers and ignored the moderating effect of teachers support on conflict management and teacher productivity. This indicated that there was a dearth of empirical literature on the influence of teachers support on conflict management strategies and teachers' productivity in secondary schools in Uasin Gishu County, Kenya.

### **1.2 Objective of the study**

The objective of the study was to examine the extent to which teacher support influence the relationship between conflict management and teachers' productivity in secondary schools in Uasin Gishu County.

## **2.0 Literature Review**

The process of managing conflict includes the explicit interplay of knowledge types, attitudes, and abilities that aims at productivity in organizational operations, as well as encouragement by the management of the organization (Majola, 2017). In an effort to discover answers to the issues

affecting organizations, managing conflicts necessitates conversations between the opposing groups with conflicting viewpoints. The main goal of conflict management approaches is to completely prevent the escalation of negative or destructive linked conflict and to do so at all costs. A social process that includes all stakeholders must articulate competent and effective conflict management systems for this to be carried out successfully (Aja, 2018). According to Anashie and Kulo (2018), post-primary education should be administered without crisis or conflict if education is to be managed productively for long-term peace and economic development in countries. Each and every school administrator needs to use conflict management techniques (Saka, 2020). Techniques or methods that can be utilized to prevent, control, or resolve disputes are referred to as conflict management strategies. Any school should prioritize conflict management techniques since they enable the reduction or management of the negative effects of disputes.

There are numerous methods for resolving disputes in educational settings. Among them are dominance, compromise, synergy, culture of civility, win-lose strategy, lose-lose strategy, and win-win strategy (Anashie & Kulo, 2018); integration, obligation, smoothing, avoidance, and mediation; dialogue, arbitration, conciliation, and diplomacy (Crossfield & Bourne, 2018); negotiation, effective communication, and accommodating (Saka, 2020). Hence, secondary school principals are open to using a variety of dispute resolution techniques in their institutions.

Eze Et al (2019) conducted a study with a sample size of 259 respondents to examine how school administrators in Nigeria adopt and use conflict management tactics. A descriptive survey study design was used, and several conclusions were recorded. Results showed that not all schools fully benefited from the various conflict resolution strategies used by school principals. In addition, there was a lack of use of conflict resolution techniques in schools. Aja (2017) examined the conflict resolution tactics employed by principals in secondary schools in Ebonyi State, Nigeria. Data were collected in this study using questionnaires and a descriptive research methodology, with hypothesis testing serving as a study guide. The target group consisted of 3,285 teachers from 221 public secondary schools and 221 school administrators. According to the findings, school administrators in Ebonyi state primarily used intervention and non-intervention tactics to resolve conflicts that arose in their institutions.

Adeyemi and Ademilua's (2012) study focused on the methods used to settle disputes at school and how effective they were in Nigerian universities. Using 62 Nigerian public universities as the target population, this study used a descriptive research design. The results showed that current conflict management techniques were woefully unsuitable for handling recurrent disagreements. Gyan and Offin (2018) aimed to comprehend the methods for handling disputes in secondary schools in Ghana's Ashanti Region. 43 students that were chosen from Senior High School made up the targeted group for the descriptive study design. According to the study's findings, there is a good chance that a disagreement will be resolved when the appropriate conflict management tactics are developed and put into practice.

The assessment of conflict management tactics employed by Ghanaian school administrators was the focus of Afful-Broni's (2018) study. The research strategy was a descriptive case study in which the researcher collected observations, conducted interviews, and distributed questionnaires

to get information from respondents about the best methods for handling disputes at the Winneba Senior High School. According to the findings, the school heads avoided arguing and criticizing staff and children when issues emerged, developed consensus, and met with the appropriate parties when conflict started to emerge. They also sought advice from counselors and the Ghana Education Service's help.

In order to evaluate the methods used by school administrators to resolve conflicts in public secondary schools located in rural Tanzania, Angela (2018) conducted a research study. Both qualitative and quantitative methods were applied in this investigation. The different conflict management techniques employed by the school heads were ineffective for addressing the kinds of disagreements that frequently occurred in schools. Kipyego (2017) looked into the typical conflict-resolution techniques used by secondary school principals in the Nandi Central District. There were 456 tutors and 36 schools in the target population. The results showed that mediation and negotiation were standard conflict resolution methods.

According to Obizue and Ahukanna (2017), conflict is a condition of disagreement, perplexity, animosity, or opposition. A state of dispute, controversy, or opposition is what is meant by conflict in its most basic sense. It could imply the presence of a protracted conflict, struggle, or fight. when people act in a way that is contrary to social norms and expectations. Ineffective agreements and other types of relationship breaches can also cause conflicts. According to Nwaike (2017), conflict arises as a result of the unique characteristics of the human race. He continued by saying that due to individual, cultural, religious, and societal variances, no two people behave the same way under the same circumstances.

From the perspective of an employee, productivity is simply the outcome of a number of activities. The many jobs completed each day add up to overall productivity (Hrakhouskaya & van Schuppen, 2017). General work behavior, written and oral communication task proficiency, demonstrating effort: level of commitment to core tasks, maintaining personal discipline, promoting peer and team performance, supervision or leadership; and management or administration. Job-specific task proficiency: behavior related to core tasks of the job. Non-job-specific task proficiency: general work behavior. On the other hand, outcomes are the most important factors in a supervisor's assessment of productivity. Results are ultimately more significant to an employer than the activities that led to those results, so (Hrakhouskaya & Van Schuppen, 2017). Some researchers contend that the definition of performance is not as important as how it is constructed and assessed (Yahaya et al., 2017). Some academics even contend that personality plays a more particular impact in how well a person performs at work. Ndungu (2017) asserts that the measurement of performance is the issue with job performance.

One of the most crucial concepts in management study is productivity (Zulkiffli, 2018). Any organization's goal is continuous performance because this is the only way for them to advance and flourish. Also, understanding the factors that affect productivity is crucial, particularly in light of the current economic crisis, as it permits the identification of those elements that require specific attention in order to improve performance. The parameters under which initiatives, investments, and acquisitions are producing the desired results are estimated by performance measurement

(Belvedere & Gallmann, 2018). Most performance measurements, according to Gavrea *et al.*, (2017), can be divided into six broad categories: productivity, efficiency, cost, quality, timeliness, innovation, and productiveness. The methods a school principal employs to resolve disputes with teachers can have a significant impact on how the teachers feel about their jobs and how they interact with the principals (Badubi, 2017). Teachers will be more satisfied with supervision if they receive more guidance and supervision. In their investigations, Barasa (2015) and Iravo (2011) found that teacher employee productivity is negatively impacted when the school principal uses domineering and avoidance strategies to manage conflicts.

Several academics have studied a variety of conflict management strategies for use in organizations. In order to prevent disputes from impeding production, lowering morale, causing more conflicts, and resulting in improper actions, Bar-Tal (2013) argues that schools must have processes, knowledge, and strategies for handling conflicts. The major ways to managing conflicts are clearly illustrated in (Ghaffar, 2019), with structural and confrontational approaches supposing that conflicts are already present and need to be managed. However, they diverge in that confrontational approaches seek to surface conflict by bringing the parties together, whereas structural approaches strive to minimize direct expression of conflict by isolating the parties. In applying these approaches, support systems for teachers during conflicts not only help them navigate challenging situations more effectively but also contribute to a positive school culture where teachers feel valued, empowered, and well-equipped to fulfill their roles. The study examined on how do teachers' support systems influence the relationship between conflict management strategies and teachers' productivity in secondary schools in Uasin Gishu County, Kenya.

### 3.0 Methodology

The study employed quantitative approach encompassing the use of correlational research design. Quantitative research as a structured, objective, systematic process for defining and testing relationships and for analyzing interactions between variables. Correlational research design was chosen owing to its effectiveness in determining the relationships that exist between variables. It was employed in the definition, estimation, forecasting, and analysis of synergistic associations (Zangirolami-Raimundo et al 2018). This study was undertaken in Uasin Gishu County targeting principals and teachers from 156 public secondary schools. According to County Director of Education (2022), there were 1783 teachers and 156 principals. The sample size for this study was based on Krejcie and Morgan (1970) sample size determination formula where 316 respondents was used as the sample size.

The schools and individual participants were sampled using a combination of stratified random sampling technique, simple random sampling technique and purposive sampling technique. Teachers from selected schools were selected through simple random sampling technique while principals if each selected school were purposively sampled to participate in the study. Questionnaires were used to collect data in this study.

The Content Validity Index (CVI) for the questionnaires was obtained in order to confirm the validity of the study's tools while reliability was determined through pilot study and calculation of Cronbach Alpha. Frequencies and percentages were utilized to examine data trends in the

descriptive statistics. Multiple regression analysis was used to determine the strength and direction of association between conflict management strategies and teachers' productivity.

#### 4.0 Results and Discussion

The aim of this paper was to establish how teachers' support systems influence the relationship between conflict management strategies and teachers' productivity in secondary schools in Uasin Gishu County. To achieve this objective, the study participants were requested to indicate their level of agreement/disagreement on statements which covered teachers' support systems and the influence of conflict management strategies on teachers' productivity.

#### 4.1 Influence of Teacher Support on the Relationship between Conflict Management Strategies and Teachers' Productivity

In this study, the intervening variable was teacher support and thus the study participants were thus requested to rate their level of agreement on a five point-likert scale items in the questionnaire on teacher support. Their responses were tabulated and the results are presented in Table 1

**Table 1: Responses on Teacher Support in Schools**

Statement	SD		D		UD		A		SA		Mean	Std Dev.
	F	%	F	%	F	%	F	%	F	%		
Welfare package for teachers aid in conflict management hence teachers' productivity	40	11.0	68	18.7	46	12.7	104	28.7	105	28.9	3.56	1.024
Schools have conducive work environment that help in conflict management which lead to teachers' productivity	24	6.6	53	14.6	44	12.1	99	27.3	143	39.4	4.03	.632
Due to continuous professional development in schools, there is minimal conflicts which has led to improved teachers' productivity	26	7.2	49	13.5	61	16.8	150	41.3	77	21.2	3.81	.774
Due to teacher supervision, conflicts have been managed well in schools which has resulted to high teachers' productivity	31	8.5	45	12.4	65	17.9	100	27.5	122	33.6	3.79	.895
There is teacher reward in most schools therefore conflicts are well management hence teachers' productivity	20	5.5	101	27.8	24	6.6	134	36.9	84	23.1	3.78	.997

Source: Field Data, 2022

Table 1 shows that 105(28.9%) respondents strongly agreed with the statement that welfare package for teachers aid in conflict management hence teachers' productivity, 104(28.7%) study participants agreed with the statement, 68(18.7%) respondents disagreed and 46(12.7%) respondents were undecided while 40(11.0%) were strongly in disagreement with statement. the study found a mean of 3.56 with a standard deviation of 1.024 on the responses showing that a majority (57.6%) of the secondary school teachers and principals in Uasin-Gishu County believed that welfare package for teachers aid in conflict management hence teachers' productivity. According to Amadi and Okpara (2022) offering welfare packages like bus service, canteen services, participation in the school's housing program, and other types of non-cash incentives like promotion which involves elevating teachers to higher ranks and providing opportunities for professional growth through attendance at seminars, conferences, and workshops where the teachers must increase their knowledge and proficiency in areas crucial to performing their duties. These training sessions help teachers improve their abilities so that kids learn more.

Similarly, 143(39.4%) respondents strongly agreed with the statement that schools have conducive work environment that help in conflict management which lead to teachers' productivity, 99(27.3%) respondents agreed with the statement, 53(14.6%) respondents disagreed with the statement and 44(12.1%) were undecided while 24(6.6%) respondents strongly disagreed with the sentiments. A mean of 4.03 with a standard deviation of .632 was obtained on the statement showing that a majority (66.7%) of the study participants acknowledged that schools had conducive work environment that help in conflict management which lead to teachers' productivity. The effectiveness of the office environment affects both employee motivation and performance (Ajala, 2012). Razig and Maulabakhsh (2015) pointed out that organizations must meet the demands of their workers by creating comfortable working environments, which will in turn boost workers' effectiveness, productivity, efficiency, and commitment to their jobs. This is consistent with Tio's (2014) finding that the workplace has a major impact on job satisfaction and productivity.

Further, 150(41.3%) respondents agreed with the assertion that due to continuous professional development in schools, there were minimal conflicts which had led to improved teachers' productivity, 77(21.2%) respondents strongly agreed with the assertion, 61(16.8%) respondents were neutral on the statement and 49(13.5%) respondents disagreed with the statement while 26(7.2%) respondents strongly disagreed with the statement. from the responses, a mean of 3.81 with a standard deviation of .774 was obtained on the statement implying that due to continuous professional development of teachers in schools, there is minimal conflicts which has led to improved teachers' productivity. Thus, teacher productivity can be enhanced through professional development.

In addition, 134(36.9%) respondents agreed with the statement that there were teacher rewards in most schools therefore conflicts were well management leading to improved teachers' productivity, 101(27.8%) respondents disagreed with the statement, 84(23.1%) respondents strongly agreed with the assertion and 24(6.6%) respondents were neutral while 20(5.5%) strongly disagreed with the statement. From the responses, a mean of 3.78 with a standard deviation of .997 was obtained on the statement implying that there were teacher rewards in most schools therefore



conflicts were well management leading to improved teachers' productivity. According to Luthans (2011), rewards at the workplace may be monetary, non-monetary, intrinsic, or extrinsic and may be used to improve employees' performance. According to Ursachi et al (2015) study, an organization's failure to reward employees will result in lower employee performance, which can demotivate workers and cause low performance, internal conflicts, absenteeism, high turnover, a lack of commitment, and tardiness. In contrast, an effective reward system can serve as a good motivator to increase productivity. Therefore, institutions including schools must establish effective incentive programs that raise employee productivity and help them reach their objectives.

#### 4.2 Relationship between Conflict Management Strategies and Teachers' Productivity

Regression analysis was employed to test the relationships that existed between conflict management strategies and teachers' productivity in secondary schools in Uasin-Gishu County. The regression method was used to determine the effects of negotiation, mediation, collaboration and avoidance as the independent variables and teachers' productivity as the dependent variable.

Regression analysis combined selected independent variables (negotiation, mediation, collaboration and avoidance) with teachers' productivity being the dependent variable. This was to determine any significance for the assumed relationships based on the magnitude and direction of the relationship. The independent variables were standardized to reduce multicollinearity that is produced by higher-order terms. The  $R^2$  characterized the degree of teachers' productivity that is accounted for by the predictors which in this case are the independent variables including negotiation, mediation, collaboration and avoidance. From the model, ( $R^2 = .471$ ) shows that all the predictors accounted for 47.1% variation in teachers' productivity in public secondary schools in Uasin-Gishu County. The adjusted  $R^2$  gave the idea of how well the model simplifies and ideally, its value would be the same or very close to  $R^2$ . In this case the value of adjusted  $R^2$  is .465, showing that if the data was derived from the population rather than the sample it accounts for approximately 46.5% variance in teachers' productivity in public secondary schools in Uasin-Gishu County. The change statistics were used to test whether the change in  $R^2$  is significant using the F ratio as indicated in Table 2.

Table 2: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.686 <sup>a</sup>	.471	.465	.56834	.471	79.680	4	358	.000	1.854

a. Predictors: (Constant), avoidance, Negotiation, Collaboration, Mediation

b. Dependent Variable: Productivity

Analysis of variance (ANOVA) was used to examine if the regression model significantly fitted in forecasting the results over the usage of the mean as shown in Table 3

Table 3: ANOVA for Combined effect of negotiation, mediation, collaboration and avoidance on Teachers' Productivity

Model	Sum of Squares	df	Mean Square	F	Sig.
-------	----------------	----	-------------	---	------

1	Regression	102.949	4	25.737	79.680	.000 <sup>b</sup>
	Residual	115.636	358	.323		
	Total	218.585	362			

a. Dependent Variable: Productivity

b. Predictors: (Constant), avoidance, Negotiation, Collaboration, Mediation

The F- ratio represents the ratio of improvement in prediction that results from fitting the regression model, relative to the inaccuracy that exists in the model. The F- ratio was 79.680 which are likely to happen by chance and was significant ( $P < .05$ ). The model significantly improved the ability to predict the effect of conflict management strategies on teachers' productivity in public secondary schools in Uasin-Gishu County.

### 4.3 Coefficients of Teachers' Productivity

Table 4 expresses the estimations of  $\beta$  values and provides contribution of each predictor to the regression model. The  $\beta$  value gives the existing association between teachers' productivity with each predictor. Positive  $\beta$  values indicate a positive association between the predictors and the outcome whereas a negative coefficient represents a negative association. The  $\beta$  value for all predictors were positive indicating a positive relationship. The negative and positive  $\beta$  values indicate the direction of relationship between predictors and outcome.

**Table 4: Coefficients of Teachers' Productivity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.111	.208		.533	.595		
Negotiation	.204	.043	.220	4.702	.000	.675	1.481
1 Mediation	.390	.064	.341	6.111	.000	.473	2.112
Collaboration	.164	.064	.137	2.577	.010	.522	1.914
Avoidance	.156	.058	.136	2.684	.008	.574	1.742

a. Dependent Variable: Productivity

The coefficients for each of the variables indicates the amount of change one could expect in teachers' productivity in secondary schools in Uasin-Gishu County given a one-unit change in the value of that variable. Given that all other variables in the regression model are held constant, the constant is .111, and this is the predicted value when all the independent variables equal zero. The standardized regression coefficient for negotiation is 0.220, meaning that for a one-unit increase in negotiation conflict management strategy, we would expect a unit increase in teachers' productivity while on the other hand, a one-unit increase in mediation as a conflict management strategy would yield a positive change of .341 units in teachers' productivity. The standardized regression coefficients were used to compare the relative strength of the various predictors within the regression model. Because the beta coefficients were all evaluated using standard deviations, instead of the units of the variables, they were linked to one another.

From the results in Table 4, this study model can then be specified as:-

$$\text{Teachers' Productivity} = .111 + .220X_1 + .341 X_2 + .137 X_3 + .136X_4 + e$$

#### 4.4 Multiple Hierarchical Regression Analyses

To test the moderating effect of support on the relationship between conflict management strategies and teacher productivity, a Multiple Hierarchical regression analysis was applied. The interaction variables were created by multiplying each independent variable together with the moderator. In a six-step hierarchical regression, step 1, multiple regressions were carried out on the three independent variables were entered. In step 2, the moderator variable support was introduced. Step 3, 4, 5 and 6 interactions of support and the four variables of conflict management strategies were introduced.

#### 4.5 Model Summary on Interactions

Hierarchical regression model summary results on support interaction with conflict management strategies and teacher productivity indicated that the four independent variables explained 47.1% ( $R^2 = 0.471$ ) of the variance on teacher productivity and they were statistically significant as shown in model 1 in table 5. The results of regression analysis showed that negotiation, mediation, collaboration and avoidance combined had significant positive relationship with teacher productivity as shown in Table 5. The four independent variables explained 47.1% of the variance on teacher productivity. The moderator support explained only 58% ( $R^2 = 0.580$ ) of the variance on support thus contributing an additional  $R^2$  of 0.109 (10.9%) which was significant as shown in model 2 in Table 5. The independent variables and moderator explained 58% of the variance on teacher productivity.

**Table 5: Interaction Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.686 <sup>a</sup>	.471	.465	.56834	.471	79.680	4	358	.000
2	.762 <sup>b</sup>	.580	.574	.50690	.109	93.035	1	357	.000
3	.765 <sup>c</sup>	.585	.578	.50456	.005	4.320	1	356	.038
4	.771 <sup>d</sup>	.594	.586	.50004	.009	7.468	1	355	.007
5	.775 <sup>e</sup>	.600	.591	.49689	.006	5.517	1	354	.019
6	.776 <sup>f</sup>	.602	.591	.49673	.001	1.219	1	353	.027

a. Predictors: (Constant), Avoidance, Negotiation, Collaboration, Mediation

b. Predictors: (Constant), Avoidance, Negotiation, Collaboration, Mediation, Support

c. Predictors: (Constant), Avoidance, Negotiation, Collaboration, Mediation, Support, NegSup

d. Predictors: (Constant), Avoidance, Negotiation, Collaboration, Mediation, Support, NegSup, MedSup

e. Predictors: (Constant), Avoidance, Negotiation, Collaboration, Mediation, Support, NegSup, MedSup, ColSup

f. Predictors: (Constant), Avoidance, Negotiation, Collaboration, Mediation, Support, NegSup, MedSup, ColSup, AvoSup

Model summary interaction results shows that model 3 interaction of negotiation strategy and support (NegSup) explained 58.5% ( $R^2 = 0.585$ ) of the variance on teacher productivity which resulted in  $R^2$  change of 0.005 (0.5%) which was significant as shown in model 3. In addition, interaction of mediation strategy and support (MedSup) explained 59.4% ( $R^2 = 0.594$ ) of the variance in teacher productivity. This contributed additional  $R^2$  of 0.009 (0.9%) which was significant as shown in model 4.

The interaction of collaboration strategy and support (ColSup) explained 60% ( $R^2 = 0.600$ ) of the variance in teacher productivity. This contributed additional  $R^2$  of 0.006 (0.6%) which was significant as shown in model 5. The interaction of avoidance strategy and support (AvoSup) explained 60.2% ( $R^2 = 0.602$ ) of the variance in teacher productivity. This contributed additional  $R^2$  of 0.001 (0.1%) which was not significant as shown in model 6.

Results indicated by model 1, 2, 3, 4, 5 and 6 showed good model fit as illustrated by overall test of significance with p value 0.000 ( $< 0.05$  level of significance) as summarized in Table 5. In other words, the independent variables, moderator and the four interactions were statistically highly significant predictors of teacher productivity (Table 5). Thus, models 1 to 6 were valid and fit to predict teacher productivity using interaction of the four independent variables with support as suggested by Ghaffar (2019)

## 5.0 Conclusion and recommendation

The study concluded that the independent variables, moderator and the four interactions were statistically highly significant predictors of teacher productivity. Thus indicating that teachers support has a significant positive effect on the conflict management strategies and teachers' productivity in secondary schools in Uasin-Gishu County. The study recommends that to get the best results in the resolution of workplace disputes, the management or administrators of secondary schools should enhance teachers support in school conflict management approaches. This is done with an understanding that a single conflict management method could not result in the best resolution of the current organizational disputes.

## References

- Abdul, G. A., & Sehar, S. (2015). Conflict management and organizational performance: A case study of Askari Bank Ltd. *Research Journal of Finance and Accounting*, 6(11), 201.
- Adeyemi, T. & Ademilua, S. (2012). Conflict management strategies and administrative effectiveness on Nigerian Universities. *Journal of Trends in Educational Research and Policy*, 3(3):368-375.
- Agbo, P. O., Okoye, K. E., Uwaegbute, K., & Agbo, C. O. (2021). From Nigeria/Biafra War to increasing Ethnic Conflict: The Imperative of Nehemiah's Administrative Strategy?. *African Renaissance (1744-2532)*, 18(1).
- Aja S. N. (2014). Conflict management approaches that principals adopt for effective administration in Ebonyi State, Nigeria. *International Journal of Science and Research* 92: 2319-2321.

- Amoda, M. B., Awe, S. S., Ogunade, O. A., & Yakubu, A. O. (2021). Teachers' job effectiveness in ogun east senatorial district of Ogun State, Nigeria. *Sapientia global journal of arts, humanities and development studies*, 4(4).
- Anashie, A. B. & Kulo, V. (2014). Conflict resolution strategies of Nigerian secondary schools' administrators for peace and economic development. *African Education Indices*, 7(1), 1 – 12.
- Angela I. (2014). Assessment of Heads of Schools' Strategies in Managing Conflicts. *Journal of Management Issues* 3: 23-25.
- Arinanye, R. T., & Basheka, B. C. (2016). Organizational communication, culture and commitment and employee performance in University Faculties: implications from Makerere University College of Computing and Information Sciences. *International Journal of Technology and Management*, 1(1), 11-11.
- Badubi, R. M. (2017). Theories of motivation and their application in organizations: A risk analysis. *International Journal of Innovation and Economic Development*, 3(3), 44-51.
- Barasa, C. N. (2015). Protracted conflicts and children's social well-being: a case of west pokot county 1990.
- Bar-Tal, D. (2013). *Intractable conflicts: Socio-psychological foundations and dynamics*. Cambridge University Press.
- Benoliel, P. (2020). Principals' boundary activities and school violence: The mediating role of school management teams. *Educational Management Administration & Leadership*, 48(2), 286-304.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.
- Crossfield, D., & Bourne, P. A. (2018). Management of interpersonal conflict between principals and teachers in selected secondary schools in Bermuda. *Insights Anthropol*, 2(1), 90-104.
- Dampson, D. G., & Afful-Broni, A. (2018). Teacher participation in school decision-making in ghanaian basic schools: looking back and moving forward, what stakeholders say?. *International Journal of Educational Studies*, 5(2), 91-102.
- Dukhan, N. (2018). Splintered Warfare II. *The Enough Project*.
- Fareo, D. O., & Jajua, M. A. (2018). Conflict Management Strategies in Ondo State Tertiary Institutions. *European Scientific Journal*. 14 (4), 315, 327.
- Ghaffar. A. (2017). Conflict in schools: Its causes and management strategies, PhD Scholar (Education), Qurtuba University of Science and Information Technology, Peshawar Campus, Pakistan. *Journal of Managerial Sciences*, 3(2), 212-227.
- Ghavifekr, S., Nair, A., & Ibrahim, M. S. (2019). Practising Conflict Management Strategies in Primary Schools: A Malaysian Scenario. *Global Business & Management Research*, 11(1).
- Gregory, B. S. (2017). *Rebel in the ranks: Martin Luther, the Reformation, and the conflicts that continue to shape our world*. HarperOne.
- Ibarrola-García, S., & Iriarte, C. (2014). Desarrollo de las competencias emocional y sociomoral a través de la mediación escolar entre iguales en educación secundaria. *Revista Currículum*, 27, 9-27.

- Iravo, A. (2011). "Effects of conflict management on performance in public secondary schools in Machakos County, Kenya". Jomo Kenyatta University of Agriculture and Technology. Unpublished.
- Johnson, D. W., & Johnson, F. P. (2017). *Joining together: Group theory and group skills*. NY, NY: Pearson.
- Kanyip, B. P., Ezech, R. S., & Chioma, S. (2023). Principals' and Teachers' Perception of the Impact of Conflict Management Strategies on Effective Teaching in Secondary Schools in Enugu State, Nigeria. *International journal of multidisciplinary research and analysis*, 6(1), 121-131.
- Kipyego, L. B. (2013). Conflict Management Methods Used By Secondary Schools Head Teachers: A Case of Nandi Central District, Nandi County, Kenya. *Unpublished Master of Education (Administration) Thesis*
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Kwamboka, N. E., & Nassiuma, B. K. (2017). Employee downsizing strategies and firm performance: Evidence from the Kenyan context. *Journal of Human Resource and Leadership*, 2(7), 58-68.
- Lazarus, U. K. (2014). Conflict management strategies and employees productivity in a Nigerian State Civil Service. *Journal of Business and management sciences*, 2(4), 90-93.
- Majola V. J. (2013). *The role of the school governing body (SGB) in conflict management: a case study*. Unpublished Master of Education. The University of South Africa.
- Moral, A. & Pérez, M. D. (2010). La evaluación del "Programa de prevención de la violencia estructural en la familia y en los centros escolares". *Revista Española de Orientación y Psicopedagogía (REOP)*, 21 (1), 25-36.
- Muhatia G.S (2022). *Principals' Conflict Management Strategies and Teachers' Job Performance in Public Secondary Schools In Kisii County, Kenya*. Unpublished thesis, Catholic University of Eastern Africa.
- Mwikali, F. (2016). *Procurement Governance and Procurement Performance of Small Medium-sized Enterprises in Nairobi Central Business District* (Doctoral dissertation, University of Nairobi).
- Ndungu, D. N. (2017). The Effects of Rewards and Recognition on Employee Performance in Public Educational Institutions: A Case of Kenyatta University, Kenya. *Global Journal of Management and Business Research*, 17(A1), 43-68.
- Nyakundi, G. M., & Orodho, J. A. (2020). *Influence of Competence on Performance of Teachers in Public Secondary Schools in Kisii County-Kenya*.
- Obizue, M. N., & Ahukanna, R. (2017). Gender and conflict resolution: New perspectives in gender studies in Nigeria.(Ed.) Nze. *UM, Kanno TN*.
- Olang, B. A. (2017). *The influence of conflict management on organizational performance: a case of Stima Sacco Society limited* (Doctoral dissertation, United States International University-Africa).
- Owan, V. J. (2018). *Conflict management strategies and secondary school teachers' job effectiveness in Obubra Local Government Area Of Cross River State, Nigeria*. A research project submitted to the Department of Educational Administration and Planning, Faculty of Education, University of Calabar, Nigeria in partial fulfillment of the requirements for the award of bachelor of education degree (b.ed.) in educational Administration and Planning.
- Saka, S. J. (2020). *Conflict Management Strategies on Administrative Effectiveness in Selected Federal Universities in the North Central Nigeria* (Doctoral dissertation, Kwara State University, Nigeria).

Ursachi, G., Horodnic, I. A., & Zait, A. (2015). How reliable are measurement scales? External factors with indirect influence on reliability estimators. *Procedia Economics and Finance*, 20, 679-686.

Villanueva, L., Usó & Adrián, J.E. (2013). Los programas de mediación entre iguales: una herramienta eficaz para la convivencia escolar. *Apuntes de Psicología*, 31 (2), 165-171.

Zangirolami-Raimundo, J., Echeimberg, J. D. O., & Leone, C. (2018). Research methodology topics: Cross-sectional studies. *Journal of Human Growth and Development*, 28(3), 356-360

### About the Authors

*Virginia Wahu Kariuki* a doctoral student at Moi University for Educational Management and Policy. She holds Masters degree in Education in Emergencies from the University of Nairobi and Bachelor of Education (Arts) from Moi University. She is a language educator specialized in English and Literature. Her Research interest is in Education management.

*Sammy K. Chumba* is an Associate Professor of Educational Management and Policy and Chairman of School Graduate Faculty Committee. He holds PhD in Educational Administration (Moi University), Masters in Education Administration and Planning (University of Eastern Africa-Baraton), Bachelor of Education (Science) Egerton University, Certificate in Doctoral Supervision (Stellenbosch University) and National Senior Management Course in Education Management at Kenya Education Management Institute. Currently teaches Advanced Educational Statistics and educational management courses.

*Benjamin Kyalo Wambua* is an Associate Professor of Educational Research and Evaluation; Chairman of Graduate Department Committee. He holds PhD in Educational Research and Evaluation (The Catholic University of Eastern Africa), Masters of Education in Economics (Moi University), Bachelor of Education (Arts) Kenyatta University, and Certificates in Blended Learning Practice and Introduction to Technology Enabled Learning-Offered Jointly by the Commonwealth of Learning and Athabasca University- Canada. Currently teaches Economics of Education, Educational and Planning, Research and Evaluation courses.