

Secondary school teacher retention in Zambia's Copperbelt province: Empirical examination of leadership style, training and rewards

¹Natalia Zulu, ²Gift Masaiti and ³Kasonde Mundende

¹Zambia University College of Technology, ²University of Zambia and ³Kwame Nkrumah University
¹zulunatalia03@gmail.com, ²gift.masaiti@unza.zm and ³kmundende5@gmail.com

Abstract

The article advances how leadership style (at school level), training and rewards impact teacher retention in Zambia. This was done by defining the effect of leadership style, training and rewards on teacher retention and determining a teacher retention model. Herzberg two factor theory and job embeddedness theory informed this paper and a mixed design approach specifically an embedded correlational model was utilized. The research sample comprised 600 participants and 10 informants. Sampling was done using multistage sampling and snowball sampling techniques. To collect quantitative and qualitative data, self-administered questionnaires and semi-structured interview guides were used respectively. Quantitative data was analysed using multiple regression analysis whilst qualitative data were analysed using both a qualitative interpretative approach and Moustakas's Modified Stevick-Colaizzi-Keen (SCK) method. Findings suggested that among the three independent variables, only leadership style had a positive significant relationship with teacher retention. The findings further suggested that school administrators should avoid the use of coercive power, value both production and human resource, and be given foundational training before being ushered in an office. Findings further revealed that teachers' salary should be increased, and their salary scale should be commensurate with their qualifications. And at 95% confidence interval, the three H_0 hypotheses were all rejected. These findings put together gave birth to the Leadership, Training and Rewards (LTR) model of Teacher Retention. Based on the findings the researchers recommend that school managers should avoid the use of coercive power and teachers with higher qualifications than the first degree should have a salary scale commensurate with their qualification.

Keywords: *teacher retention, leadership style, coercive power, training, in-service training, foundational training, reward, promotion, financial rewards, non-financial rewards*

Introduction and background

Employee retention is one of the major concerns for most institutions for it has a great impact on the welfare of institutional operations. Poor retention of employees negatively affects the efficiency, and productivity of many institutions. The problem of employee retention has affected many professions (Ingersoll et al., 2014) and the teaching profession has not been spared. Worldwide, the teaching profession has been badly affected by this problem and it is serious especially among teachers of science, technology, special education, languages, and senior mathematics (Podolsky et al., 2016; Sutchter et al., 2016). This problem is really affecting the education sector negatively more especially that it is common in subjects which are on high demand. To be exact, in England a National Foundation for Educational Research (NFER) report found that 31% of teachers of science would consider leaving the profession, whereas only 17% of teachers of mathematics considering leaving (House of Commons Education Committee, 2017). Additionally,

complementary data from the United States of America based on a representative sample of 50,000 teachers, indicates that over 41% of teachers (primary and secondary education combined) leave the profession within five years of entry, producing an annual attrition rate of 13% (Ingersoll et al., 2014). In Australia, teacher turnover rates range from 8% to 50% (Queensland College of Teachers, 2013, as cited by Mason & Matas, 2015).

And coming to Sub-Saharan Africa, there is a need of a total of about 17 million teachers to achieve universal primary and secondary education by 2030 (Podolsky et al., 2016). At the secondary level, the region must recruit 10.8 million teachers by 2030, including 7.1 million for new teaching positions and 3.7 million to replace those who have left. In Zambia, teacher attrition is also a serious issue in both rural and urban schools. Based on the reviewed literature, a total of 6,578 teachers left the Ministry of Education in 2017 and 7,023 left in 2018. These departures exceeded the yearly teacher recruitment of

approximately 5,000. The Copperbelt province experienced the highest teacher attrition rate (Ministry of Education, 2018; 2020). According to the Ministry of Education (2018–2020), unspecified reasons ranked first among the causes of high teacher turnover, while resignation was the second most significant cause in Zambia. Based on literature reviewed, the cases of low retention rates advanced were: poor working conditions, poor infrastructure, lack of accommodation, distance from town, poor leadership styles, low salaries, lack of opportunities for employee development, lack of job security, and lack of recognition of highly performing teachers (Costen & Salazar, 2011; George, 2015; Ingersoll et al., 2014; Msango & Mulenga, 2010; Podolsky et al., 2016; Wamitu, 2018).

Zambian literature on teacher retention was also reviewed (Kukano, 2020; Masaiti & Naluyele 2011; Msango & Mulenga 2010). The literature reviewed, however, only established the factors contributing to teacher retention, but did not establish which among the contributing factors best foretold teacher retention. This paper therefore, sought to fill this gap by seeking to establish which among the factors identified are more projective than others. From these contributing factors, leadership style, training and rewards are observed to be common variables in many organizations in Zambia. In management, leadership is looked at as the ability to influence others towards the attainment of organizational goals. Leadership has also been described as the ability to impress the will of the leader on those led and induce obedience, respect, loyalty and cooperation (Northouse, 2025). To exercise ‘good’ leadership, one must possess certain leadership characteristics. Reports have shown that for an organization to run effectively it needs a leader who is a visionary, a good planner and one who can inspire others (Robbins & Judge, 2017). An organization also needs a leader who can embrace change, one who is able to understand the importance of teamwork and one who gives all employees equal importance. In other words, leaders need to employ leadership styles that the employees will appreciate.

The issue of leadership style has received a lot of attention in the field of management and has been recognized as one of the variables affecting employees’ feelings about the organization. Simango (2019) contends that effective leaders draw on a collection of different leadership styles, and that the

effectiveness of a particular style is dependent on both the leadership task and the context. Literature has established that leadership style influences staff intention to leave an organization, hence the need to use leadership styles that will promote employee retention (Ronald et al., 2016; Wakabi, 2016). Transformational leadership and transactional leadership were positively related to employee retention and Dwipayana and Suwandana (2021) established that the better the leadership applied by the company, the higher the employee’s desire to remain in the company. Therefore, to build success, ‘good’ leadership in top management is essential. Leadership is important to the survival and continued existence of every organization, and the success of an organization to a great extent depends on leadership style (Thrush, 2012). It is important to note that with appropriate leadership style, the working environment becomes conducive for employees and has a positive impact on job retention levels.

Focusing on training, Armstrong (1999) defines training as a well-planned alteration of behaviour through learning which occurs as a result of education, instruction, development and planned experience. Training is considered as a continuous improvement process that should be up to date to face the dynamic changes in the working environment and has a direct impact on employee retention. Damei (2020), Oraby and Elsafty (2022), all found a significant positive relationship between training and job retention. Training also impacts positively on employee performance (Al-Mzary et al., 2015) and at the same time helping to establish close cooperation and a fully-fledged and fruitful process of exchanging experiences. Research has also established that some aspects of the education and preparation that novice teachers received were significantly related to their turnover rates (Ingersoll et al., 2014).

Additionally, training also helps staff to get along well with those in authority and that is a long - term achievement (Umesh, 2014). However, to make this a success, the training provided should match the employee needs (Al-Mzary et al., 2015). To reap the benefits of training many institutions are spending large amounts of money on employee training and career development programmes (Jehanzeb & Beshir, 2013). Therefore, if we are to reap the good out of training programmes provided to employees, training must be valid and consistent. Furthermore, a reward also as one

of the variables under investigation in this study is defined as benefits given to someone for doing something good. Rewards play a major role in teacher job satisfaction (Farrington et al., 2014) which can later impact on teacher retention positively. Among these rewards, recognition strategy and promotion strategy impact on retention positively and at the same time they are less costly, affordable and at the disposal of all school managers. Therefore, school administrators should consider improving both financial and non-financial rewards to attract and retain teachers (Fullard, 2021).

Other than helping to reduce teacher turnover, rewards play a significant role in other areas of teacher wellbeing. Rewards reduce absenteeism and increase employee commitment. Reward systems also influence people's attitudes, behaviour and performance and also affect teachers' performance as well as achievement motivation (Santos & Gomez-Mejia, 2015). Additionally, rewards such as financial incentives, promotion opportunities and organizational prestige have a strong effect on employees' psychological empowerment (Gkorezis & Petridou, 2012). Rewards also help to manage behaviour (Santos & Gomez-Mejia, 2015; Trivedi, 2014). And focusing on monetary rewards, research has shown that, a teacher can easily be motivated with a high compensation in terms of salary (Nawaz & Yasin, 2015). In another study, Fullard (2021) asserts that higher salaries do improve labour productivity in different ways and increase the level of attention to steps that were related to compensation. This clearly shows that among employees, money is considered a primary motivator that can lead to high performance and retention rates. To support this statement, Wang et al. (2017) contend that monetary and social rewards are generally connected to human motivation and behaviour. Contrary, Aguinis et al. (2013) contend that money is not everything and it cannot always lead to the desired goals. This is so because it is not always that people will do what you asked them to do but rather do what they are paid for. Therefore, to make monetary reward effective, it has to be given on time and should match the work being done.

However, existing rewards systems in some institutions have proven to be ineffective (Siwale et al., 2020), hence human resource managers should also try not only to decide on type of rewards to give to workers, but to design a reward system that will benefit and

motivate employees. Therefore, based on what has been discussed so far, it is clear that rewards are, at least, a partial solution to improve retention rates in learning institutions and other organizations. Hence, the effect of rewards especially on job retention cannot be underestimated.

Theoretical framework

This article was informed by Job Embeddedness Theory and Herzberg Two Factor Theory. These two theories provided ways for understanding the causes and prevention of job attrition (Herzberg, 1966). The Job Embeddedness theory asserts that employees who feel linked to the social and professional space are less likely to leave the organization. Hence, to retain competent and committed employees in an institution, managers should take care of factors affecting job satisfaction (Gorde, 2019). On the other hand, Herzberg two factor theory contends that there are two factors that employees want: 'Motivators' and 'hygiene' factors (Herzberg, 1966). The motivators lead to job satisfaction and the hygiene factors prevent job dissatisfaction among employees. It is therefore important that administrators give importance to both motivators and hygiene factors as they work on retention strategies.

Consecutively, to simplify the relationship between the key variables in the current paper, the Employee Retention Connections (ERC) model was used. This model helped to give accuracy to the research process because of its nature and focus. The model stipulates that employee retention has direct relationship with career development, good leadership style, recognition and rewards (Nazia & Begum, 2013)

Research problem

Zambia, like any other country in the sub-Saharan Africa region, has not been spared by the problem of retaining qualified teachers (Ministry of Education, 2016). This is especially common among teachers of mathematics, science, technology, special education and those with skills and qualifications most needed in the labour market (Podolsky et al., 2016). Despite many recommended solutions, the problem of high teacher attrition in Zambia has escalated (Kukano, 2020). For instance, 7,915 teachers left the teaching profession for different reasons and resignation being the second major cause (Ministry of Education, 2020). The

following are the other reasons: poor working conditions, poor infrastructure, lack of accommodation, distance from town, poor leadership styles, low salaries, lack of opportunities for employee development, lack of job security, lack of recognition of highly performing teachers and many more others (Podolsky et al., 2016; Ministry of Education, 2018; Ministry of Education, 2020; Wamitu, 2018). In addressing the research problem, the current paper sought to answer the following questions;

1. How do leadership style, training and rewards affect retention among teachers in the Copperbelt province of Zambia?
2. What is an appropriate model for teacher retention of teachers in the Copperbelt province of Zambia?

This paper also tested the following hypotheses, which emerged from the literature review:

H₀: Leadership style negatively impact on teacher retention in the Copperbelt province of Zambia.

H₁: Leadership style has a positive impact on teacher retention in the Copperbelt province of Zambia

H₀: Training negatively impacts on teacher retention in the Copperbelt province of Zambia.

H₁: Training has a positive impact on teacher retention in the Copperbelt province of Zambia.

H₀: Rewards have a negative effect on teacher retention in the Copperbelt province of Zambia.

H₁: Rewards have a positive effect on teacher retention in the Copperbelt province of Zambia.

Methodology

This paper was underpinned by pragmatic research philosophy and used a mixed design approach specifically an embedded correlational model, in which qualitative data was embedded within a quantitative design. The research was done on the Copperbelt Province of Zambia with the population of 17, 885 which included the teaching staff in government secondary, combined primary and basic schools. From the population, the sample of 600 participants was calculated using

Yamane formula. Sampling was done using multistage sampling and snowball sampling techniques. To collect quantitative and qualitative data, self-administered questionnaires and semi-structured interview guides were used respectively. The questionnaires were given to serving teachers and administrators. Out of the 600 questionnaires distributed a total of 503 questionnaires were collected. This gave a response rate of 84%, an acceptable percentage to make the study generalizable. The interview schedule was then used to interview 10 former teachers who had joined other organizations. Note that letters of the alphabet identified these teachers. Quantitative data were analysed using inferential statistics, specifically Analysis of Variance and Multiple Regression. The relationship between the variables was established using the following multiple regression models:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \alpha$$

Where:

Y is the dependent variable (Teachers Retention), β_0 is the regression coefficient/constant/Y-intercept, β_1 , β_2 , β_3 are the slopes of the regression equation,

X₁ Leadership Style, X₂ Training and X₃ Rewards

Where;

Y is the dependent variable, β_0 is the intercept, α is the error term and X₁, X₂, X₃, represented the three independent variables of this research.

Qualitative data on the other hand was analysed using both a qualitative interpretative approach and Moustakas's Modified Stevick-Colaizzi-Keen (SCK) method. To achieve reliability and validity, extensive literature reviews were done to extract the related items as a way of establishing content validity. Experts in the topic under investigation were also consulted on their own judgement of the items in the survey instrument. However, it was not easy to present the instrument to many experts due to scarcity of experts in this field. This caused a limitation to conduct validity tests on the research instrument (Choudrie & Dwivedi, 2005). Cronbach's statistical analysis for the questionnaire items was also done and a value of α ranging from 0.7 - 1 was obtained, an indication that the internal consistency of the questionnaire was good. It is important to

note that for a questionnaire with good internal consistency, Cronbach's α should exceed 0.70 for a developing questionnaire or 0.80 for an accepted questionnaire (Bowling, 1997; Bryman & Cramer, 1997). Additionally, validity was also achieved through critical self-reflection and the instrument design and development were backed by a logical, systematic and structured approach. The questionnaire was also checked for completion after collecting them from the participants. Quantitative data was then coded and cleaned with the aid of Statistical Package for Social Sciences (SPSS) version 26. And to attain trustworthiness in this research, environmental and methodological triangulation was used. Ethical considerations, such as obtaining informed consent from participants and securing permission from authorities, were adhered to.

Results

This paper aimed to ascertain the effect of leadership style, training and rewards on teacher retention and to establish an appropriate model for teacher retention. The findings are presented starting with regression results, ANOVA results on individual items on each independent variable and the hypotheses testing results.

Regression results

From the model summary the R^2 showed 32.3%, a variance in the dependent variable (teacher retention) that can be explained by independent variables (leadership style, training and rewards) collectively. However, Srinivasan (2020) describes the R^2 of the value between 0.3 and 0.5 to be moderate. Hence, the R^2 value of 0.323 meant a moderate effect of the independent variables on the dependent variable an indication that a model was a good fit though not very perfect. Further, the regression coefficient results indicated that taking all key variables into account (the leadership style, training, and rewards), constant at zero, teacher retention rate would

be at 1.342%. The findings further indicate that taking all other independent variables constant, a unit increase in leadership style resulted in an increase in teacher retention rate of 1.67% and significant ($0.000 < 0.05$). The study further demonstrated that a unit increase in Training led to a fall in teacher retention rate by 0.026% and a p-value of 0.676 an indication that the relationship was insignificant between training and teacher retention when tested at 0.05 significance level. Additionally, the study found that rewards influenced teacher's retention, and the results showed that a unit increase in rewards resulted in a fall of retention rate by 0.068%, and p-value associated with variable was 0.610 a clear indication that the relationship was also insignificant when tested at 0.05 (employee retention rate in this study was presented in percentages). As per the regression results it can be stated that leadership style was the only independent variable which exhibited a significant positive relationship with teacher retention.

Quantitative results

Research question one: *How does leadership style impact on teacher retention on the Copperbelt province of Zambia?*

To address the impact of leadership style on teacher retention (research question one), an analysis of variance (ANOVA) was conducted on individual items. The ANOVA results (F -value = 3.825, p -value = .002) indicated a statistically significant relationship between leadership style and teacher retention. Further analysis revealed that many school managers used coercive power (F -value = 6.948, p -value < .001) and prioritized production over human resources (F -value = 6.455, p -value < .001). These findings suggest that training for school managers is warranted. Furthermore, the researchers tested the first hypothesis (H_0 : Leadership style has a negative impact on teacher retention in the Copperbelt province). The findings are presented in Table 1.

Table 1: The impact of leadership style on teacher retention

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	59.108	5	11.822	3.796	.028 ^a
	Residual	455.611	497	.917		
	Total	514.720	503			
<i>a. Predictors: (Constant), Leadership style</i>						
<i>b. Dependent Variable: Teachers Retention</i>						

The ANOVA results presented in Table 1 indicate a statistically significant effect (F-value 3.796 and p-value = .028, which is less than the conventional alpha of .05). Therefore, were rejected the null hypothesis.

Qualitative results on the impact of leadership on teacher retention

Qualitative findings revealed that administrators prioritized end-of-year examination results over teacher well-being. Eight of the ten of the former teachers who were interviewed strongly indicated that teachers worked in an environment where administrators used threats to compel them to complete tasks. Eight participants also reported that the leadership style employed by many school managers negatively impacted teacher retention rates. Furthermore, nine former teachers suggested that school managers should be required to complete managerial training prior to assuming their roles. To support these findings, Teacher B had this to say “leaders need to be exposed to short courses on leadership as a way of helping them to improve in the way they treat and relate with their subordinates.” Additionally, Teacher J pointed out that “leaders need to stop using threats in order to control the teachers. Every time a teacher makes a mistake they are threatened to be transferred to rural schools and those in secondary schools are threatened to be transferred to basic schools. To me this was unacceptable.” Teacher G added by saying that “school administrators should not just find pride in the results the teachers produce at the end of the year, but they should also learn to value and appreciate the teachers producing those results. And personally, I left the Ministry of Education because I never felt

appreciated despite the effort; I was putting in my work.”

For qualitative findings presented above, three themes emerged, and these were: **short leadership training, supervision by threats, and value of results over human resource.** These themes are in agreement with the quantitative findings which established that there was need to train the school administrators before ushering them into office. It was also revealed that most school managers used coercive power and valued production more than human resource.

Research question two: How training leads to higher retention rates among teachers on the Copperbelt province of Zambia?

To investigate the relationship between training and teacher retention (research question one), an analysis of variance (ANOVA) was conducted on survey items related to training. The findings were as follows: School managers who had completed foundational training demonstrated stronger management skills (*f-value* = 8.685, *p-value* < .001); in-service training should be an ongoing practice, particularly in rural schools (*f-value* = 7.937, *p-value* < .001); foundational training contributed to technical competence, which can foster intrinsic motivation (*f-value* = 2.784, *p-value* = .026); and in-service training motivated teachers to remain in their positions for longer periods (*f-value* = 3.742, *p-value* = .005). The researchers also tested the second hypothesis (thus, H₁: Training has a positive impact on teacher retention on the Copperbelt province; H₀: Training negatively impacts on teacher retention on the Copperbelt province) as shown in Table 2 below.

Table 2: The impact of training on teacher retention

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	33.963	7	5.138	6.529	.000 ^b
	Residual	388.700	494	.787		
	Total	424.663	503			
a. Predictor: (Constant), training						
b. Dependent Variable: Teachers Retention						

The ANOVA results presented in Table 2 demonstrate a statistically significant effect of training on teacher retention (*f-value* = 6.529, *p-value* < .001). Given the *p-value* is less than the predetermined alpha level of .05, the null hypothesis was rejected. Qualitative findings

further support these results and are presented below.

Qualitative results on the impact of training on teacher retention

Qualitative findings indicated that preparatory

training should be provided to aspiring school administrators before they assume administrative positions, such as head teacher, deputy head teacher, or heads of departments, to equip them with the knowledge and skills necessary to perform their duties effectively. This training should not be limited to administrators but should also be extended to classroom teachers, particularly those in disadvantaged locations. Opportunities for professional development contributed to higher retention rates. This may be because training provides teachers with specialized skills, potentially creating a sense of obligation to the institution. To support this assertion Teacher C had this to say “workers become indebted to the institution whenever the institution takes them for further studies, and since they will benefit from the training they will be forced to stay. And at times they will be bonded to the institution for a particular agreed number of years after graduation. This helps in retaining the teachers.” Teacher G added that “to increase retention rates among the teachers with very high qualifications, it is imperative that both newly recruited teachers and school administrators undergo preparatory training as they join the Ministry and as they take up the new office respectively. This will help them prepare for future challenges and it will also help them to understand what they should expect from the teaching profession.” Teacher E also added by saying that “training provides us with knowledge on how to handle even the most difficult situations. Therefore, training opportunities should be accorded to every teacher and should be a continuous exercise.

This will even be more beneficial to those teachers who are in places where there is no internet or public libraries. In so doing teachers will not feel left out or cut off from what is trending out there and this will result into increased motivation which can later impact positively on teacher retention.” From these findings, three themes emerged, these being: preparatory training, bonding, and continuous training. These themes were in agreement with the findings from the quantitative data.

Research question three: *What is the effect of reward systems on teacher retention in the Copperbelt Province of Zambia?*

An analysis of variance (ANOVA) conducted on survey items related to reward systems (research question one) revealed several significant findings. A good salary package was identified as a potential factor in teacher retention (f -value = 5.212, p -value < .001). Monetary rewards were found to be more motivating than non-financial rewards (f -value = 3.490, p -value = .009). Reward systems were shown to influence occupational choices (f -value = 18.970, p -value < .001). Rewards in the form of promotions may also contribute to increased teacher retention rates (f -value = 2.737, p -value = .028). Finally, it was found that teachers who perform well should be consistently recognized and rewarded (f -value = 3.211, p -value = .013). The researchers also tested the third hypothesis (H_0 : Rewards have a negative impact on teacher retention in the Copperbelt province), as shown in Table 3 below:

Table 3: The effects of reward systems on teacher retention

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	150.813	8	18.852	11.548	.000 ^b .
	Residual	806.415	494	1.632		
	Total	957.229	503			
<i>a. Predictors: (Constant), Rewards (financial / non-financial)</i>						
<i>b. Dependent Variable: Teachers Retention</i>						

The ANOVA results (f -value = 11.548, p -value < .001) indicated a statistically significant effect of training on teacher retention. Because the p -value is less than the conventional significance level of .05, the null hypothesis was rejected.

Qualitative results on the impact of reward systems on teachers’ retention

Qualitative findings indicated that the lack of both financial and non-financial rewards contributed to low retention among experienced and highly qualified staff within the Ministry of Education (research question 1). Specifically, low salaries and a lack of promotion opportunities, particularly for

teachers with advanced qualifications, proved demotivating and prompted many teachers to seek employment elsewhere. In support of this statement, Teacher H had this to say *"I can only continue to work for Ministry of Education if the salary matches my qualifications. What I mean here is that I have a master's degree but I still get a salary of a bachelor's degree holder. And it will also be motivating if only there could be an automatic upgrade immediately one attains a higher qualification. Salaries should also be cost reflective."* Additionally, Teacher F had the following to say *"it's not just a low salary that stresses teachers, but they also get demotivated and stressed out because of lack of promotion opportunities. In fact, promotion in the Ministry of Education should be based on merit. Many teachers with Master's degree are still class teachers whilst those with bachelor's degrees and diplomas are holding administrative positions. This is what made me to leave the Ministry of Education"*. Teacher A also went to say that *"though one has security when working in government, teachers would rather work for other organizations where they can benefit from other financial incentives other than a salary. Although at times teachers are rewarded for doing a good job, the rewards given have not much impact on teachers and create no difference on our social standard. Personally, I would say my social status has even changed in a positive way since I joined another organization"*.

Furthermore, a number of themes emerged from the qualitative findings, thus low salaries, lack of promotion opportunities, and financial benefits in other organizations. It is, however, important to say that both quantitative and qualitative results pointed in one direction, hence we concluded that a good salary package aligned with the qualifications, and promotion based on merit have a positive effect on teachers on the Copperbelt province.

Research question four: *What is an appropriate model for teacher retention of teachers in the Copperbelt province of Zambia?*

Firstly, the quantitative findings from the first research questions established that there was need to train the school administrators before ushering them into office. It was also revealed that most school managers used coercive power and valued production more than human resource. Conclusively, both quantitative and qualitative results showed evidence that

leadership style had an impact on teacher retention.

Secondly, both qualitative and quantitative findings on the impact of training on teacher retention as per question one, established that there was need for school managers to undergo foundational training if they were to be good managers. Foundational training was also identified to be one of the trainings that helped to bring about technical competence which could later led to intrinsic motivation. The findings also revealed that in-service training should be an ongoing exercise especially in rural schools for it motivates teachers to stay in one place for a long time.

Thirdly, in answering the research question on how reward systems impact on teacher retention as per question number one, findings from both quantitative and qualitative data, showed that a good salary package aligned with teachers' qualifications, and promotion based on merit had a positive effect on teachers' retention on the Copperbelt province. The results also showed that monetary rewards have a more motivating effect on teachers and that rewards given contributed much to occupational choices.

Therefore, based on the above findings, we conclude that, for experienced and qualified teachers in the Copperbelt province to be retained in the Ministry of Education, they need to be supervised by leaders who employ good leadership styles. Thus, leaders who value both production and personnel, leaders who do not use coercive power and who have been trained to handle that office. However, though the relationship between training and reward systems and teacher's retention was insignificant as per regression results, the ANOVA findings on specific items relating to rewards and training came out to be significant. Therefore, we can still consider the results which contends that for teachers to be retained they needed to be exposed to trainings such as foundational training (especially the newly recruited teachers and those due for promotion), and in-service training should be an ongoing exercise. In addition, for teachers in the Copperbelt province to be retained, they also needed a good salary package which was cost reflective and tallied with their qualifications. In the same vein, the findings also revealed that to teachers in the Copperbelt province, monetary rewards were more motivating. Opportunities for promotion were also something they craved for. This, therefore, put together gave birth to the Leadership style,

Training and Rewards (LTR) model for teacher retention on the Copperbelt province as presented in Figure 1.

Further, the LTR Model for teacher retention is important for it does not only contribute to the understanding of teacher behaviour and preferences but also contributes

to understanding which among the independent variables tested mattered the most when it came to teacher retention. This model also provided a framework through which important questions regarding teacher retention could be examined.

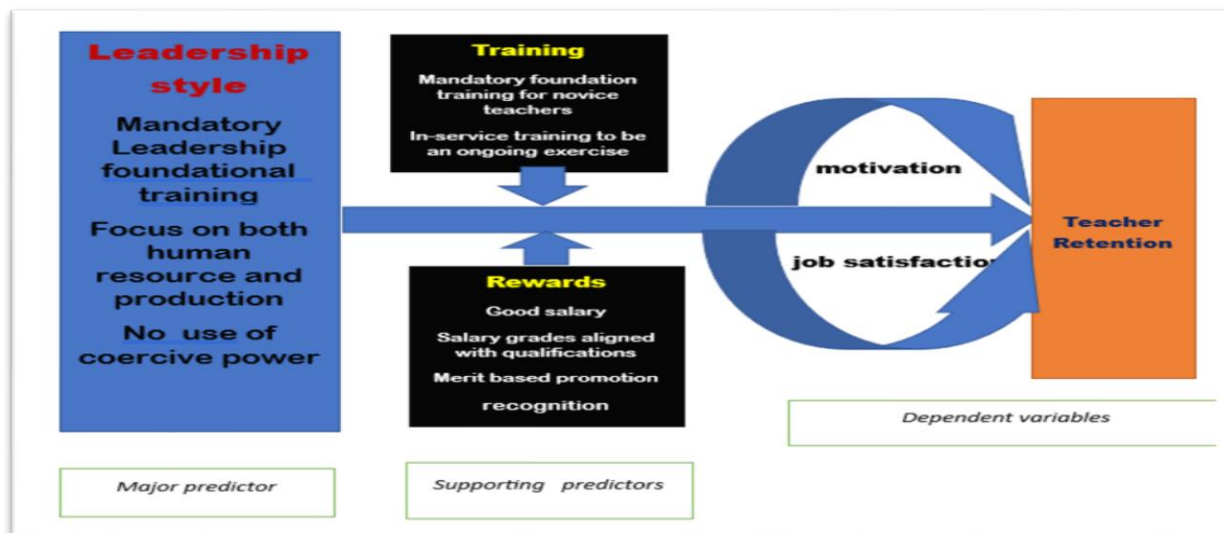


Figure 1: The Leadership, Training and Rewards (LTR) Model for teacher retention (Research data 2022)

Discussions

Regarding the impact of leadership on teacher retention (research question one), ANOVA results provided strong evidence that leadership style positively influences retention. These findings are consistent with those reported by Wakabi (2016). Several themes emerged from the data analysis and are discussed in the following subsections.

Foundational training of school managers

The results revealed that school managers needed to be trained before being given an office. This is important because every organization needs capable human resource to run smoothly. This agrees with the skills leadership theory which asserts that learnt knowledge and acquired skills and abilities are significant factors in the practice of effective leadership (Allen, 2018). When we look at how Zambian school administrators are appointed, only a qualification in the teaching subject and recommendation letters are considered (Sutcher et al., 2016). The demands of the offices they occupy call for effective leadership style. This can be made possible by leadership training made compulsory to everyone being appointed as an administrator before being ushered into office.

Herzberg's two-factor theory (Herzberg, 1966) contends that providing employees with opportunities for career advancement and personal growth is highly motivating. Therefore, training given to new school administrators will be satisfying and that might also lead to higher motivation and good performance by school administrators. This in turn will positively impact on the teachers they are leading, hence leading to job satisfaction that in turn improves teacher retention. Further, the literature has clearly shown a significant relationship between workers' training and workers' performance (Aroge, 2012). The job embeddedness theory also contends that there are a number of factors that might influence employees to stay when they felt connected to the social and professional space within an institution (Mitchell et al., 2001). Thus, other than helping the administrators improve their leadership style, opportunities in employee development also influence employees to remain in an institution.

Use of coercive power

The results established that most school administrators used coercive power when dealing with employees. In learning institutions where the leaders use such type of

power to get things done, Hofmann et al. (2017) assert, there is always an antagonistic climate and enforced compliance in the working environment and this is what is happening in many Zambian schools. This has in turn led to a number of experienced and qualified teachers leaving the profession. Herzberg's two factor theory argues that people will always be motivated to work hard under favourable conditions. They will not be motivated to work hard if they felt threatened.

Importance of valuing both production and human resource

The research findings found that most school managers gave more importance to production than to human resource. It is essential that school managers realize that the success of any institution lies in the hands of its human resource. Human resource needs to be kept safe, happy, healthy and satisfied. This can only be possible if employee demands are satisfied. Every normal human being cares about fair treatment (Hamid et al., 2016). But in most schools in Zambia, production is valued more than the ones producing it. This is very demotivating on the part of the employee. Therefore, those who cannot tolerate such treatment tend to leave for other organizations where working conditions might be much more satisfying. This is supported by the job embeddedness theory that stipulates that people tend to be attracted to certain things for them to remain at an organization. The Employee Retention Connection (ERC) model contends that institutions should also learn to recognize and reward a job that is done other than just looking at what has been produced (Nazia & Begum, 2013). Administrators should know that just a word of praise or an email recognizing one's contribution to the organization may be a sufficient reward to increase job satisfaction and job retention. Lastly, school managers should be aware that best leadership style involves both human resource and production being valued, as indicated in the managerial grid (*refer to appendix*).

Focusing on the second hypothesis, testing this hypothesis also yielded significant positive results that validated the findings of Oraby and Elsafty (2022). To assess the impact of training on retention, individual items in line with training were also analysed and the following issues emerged.

In-service training

The research produced credible results that showed that in-service training motivated teachers to stay at one place of work for a long time on the Copperbelt of Zambia. These results agreed with those by Aroge (2012), Damei (2020). The findings showed that in-service training also impacted positively job satisfaction and motivation, and productivity. Further, refresher training was beneficial especially to those teachers who have been in the service for more than a year. For more-experienced teachers to acclimatize to change, they also needed to be given opportunities to learn through in-service training. However, the findings showed that teachers in the 50–65-year age group were relatively few. Could it be that many were going on early retirement because of the 21st century technological demands on their jobs?

The findings further revealed that in-service training should be an ongoing exercise especially in rural schools. To maintain and improve educational standards in the nation, rural schools, as urban ones, must be run at levels of efficiency. The job embeddedness theory predicts that if teachers are accorded opportunities in career advancement, even those in remote areas will tend to stay because the opportunities will act as a force to attract them to remain in those schools. Further, Herzberg's theory describes an opportunity for career advancement as a motivator regardless of whether the opportunity is in a rural school or not.

Foundational training

The results on whether or not school managers who had gone through foundational training were better managers indicated a calculated F value of 8.685 and p-value of 0.000. These results provide strong evidence that managers who had undergone foundational training were indeed better managers. Because many school managers have not been given the right foundation training, they failed to carry out certain responsibilities. The lack of foundational training is a common deficiency in Zambian schools that negatively affects the performance of school administrators. Foundational training is essential for school administrators to become effective managers. Focusing on the third hypothesis, testing this hypothesis also yielded significant positive results that validated the findings of Makhuzeni and Barkhuizen (2015). A number of issues emerged amongst the individual items

that were analysed as discussed below.

Good salaries

The study revealed that a good salary could help to retain teachers with good qualifications. A good salary in this context is a salary that would allow teachers to meet their daily basic needs and live a life of their dreams. Seven of the former teachers who were interviewed also came out strongly that they had left because the salary they were getting did not commensurate with their qualifications. To be precise some teachers with a master's degree got the same salary as those with bachelor's degrees. Also, despite a number of teachers having had their first degrees, they were still in the salary scale for diploma holders. Other than the salary not matching with their qualifications, it was also reported that the salaries they got were not cost reflective such that they could not manage to provide for their basic necessities, and they could barely survive throughout the whole month. This was impacting negatively on teachers' wellbeing especially that most of those with good qualifications had paid their tuition fees through loans with the hope that their lives would improve after graduating. Mundende and Namafe (2019), on providing equal opportunity to learners where no one should be left behind indicated that without commensurate salaries or allowances; it was difficult for teachers to effectively offer equal opportunity to each learner especially when teaching large classes.

However, it is important to know that monetary rewards such as salaries are generally connected to human motivation (Wang et al., 2017), though Herzberg's two factor theory classifies a salary as a hygiene factor. Though a salary is not a motivator as Herzberg two factor theory explains, to Zambian teachers, money is actually the main motivator. This agrees with Nawaz and Yasin (2015) who argue that teachers can easily get motivated with a high compensation in terms of salary. Fullard (2021) also contends that higher salaries do improve labour productivity in different ways. The informants who were interviewed also intimated that they could only return to the Ministry of Education if the government was ready to offer them at least the same salary they were being paid by the new companies they worked for. From this discussion, we can conclude that teachers were not really happy with the salaries they were getting and that this affected their motivational

levels, hence we cannot expect quality performance from them. It is also important to know that the higher the levels of motivation and satisfaction, the greater the levels of performance and productivity. And it is due to lack of monetary motivation that many qualified and experienced teachers decided to leave for better paying jobs.

Monetary rewards and occupational choices

The study also established that monetary rewards were more motivating than non-financial rewards. Contrary to this, Aguinis et al. (2013) assert that although money is looked at as a primary motivator, money is not everything and it cannot always lead to the desired goals. Therefore, school administrators should give importance to both monetary and non-monetary rewards. The study findings also seem to suggest that rewards systems contribute to occupational choices. Many people take teaching as a steppingstone and many leave for other jobs immediately they attain certain qualifications. As a result, many leave for other jobs which pay better. It is therefore prudent for the Ministry of Education to try and find a lasting solution to this problem. Related to this, the embeddedness theory argues that employees can choose to stay in one place if there are enough forces to attract them to remain. This may include rewards which are attractive and equitable, opportunities in career advancement, recognition and prestige.

Mundende (2015) referring to the demotivated teachers who handled Geography Fieldwork Project, advanced that some teachers did not apply themselves fully to the executing of this practical component of geography discipline because they were not rewarded handsomely after preparing learners at Senior Secondary School level. However, since most employees want to be paid the monetary equivalent of their skills and qualifications, capable employees will always look for more rewarding organizations to work for or other occupations with better rewards. Therefore, to curb attrition of Zambian teachers, policy makers should try to compare the working conditions at Ministry of Education with those of other organizations and try to harmonize them to suit individual aspirations.

Promotion opportunities and recognition

The findings, further revealed that rewards in form of promotion could increase teacher

retention. These findings agree with Bibi et al. (2016). Holtom and Mitchell, (2004), also argue that individuals who do not have any responsibilities are considered to have low job embeddedness, for such employees may have few connections that may not matter much to them if they decide to leave the organization. Hence, promotion can be used as a tool of making people feel connected to the organization. On the other hand, Herzberg's two factor theory of motivation identifies promotion as a hygiene factor which contributes to reducing job dissatisfaction that later leads to higher retention rates. Therefore, school administrators should consider promoting employees with good qualifications to positions where they feel responsible and to contribute the knowledge they have to the wellbeing of the institution. In so doing, that may increase job embeddedness among the employees (Schultz, 2015).

It was also found that teachers who did a good job were always rewarded and if that was the case, why were some teachers with good qualifications leaving teaching? The answer could only be that, though rewards are given, they might not be equitable and attractive and that could affect retention negatively as well (Kukano, 2020). This also tallies with the job embeddedness theory which contends that employees may be attracted to stay in one place if there are forces attracting them to do so. Hence, school administrators should consider improving the rewards systems being used in schools.

Implications of the study

The practical implications of this research are of great concern to education policy makers, to teachers as well as to all stakeholders in the Zambian education system. Education plays a vital role in the development of the economy and a teacher is the main player in it. Therefore, there must be effective strategies that would allow teachers to stay in the Ministry of Education. Generally, leadership style plays a vital role in the retention of teachers (Rodriguez, 2019) as well as rewards and training. Leaders should, therefore, learn to use leadership styles that will impact positively on teacher retention. In addition, policy makers should also consider providing the teachers with rewards that are equitable and attractive.

Conclusion

The main aim of this article was to examine

the impact of leadership style, training and rewards on teacher retention in the Copperbelt province of Zambia. The focus of the paper was to understand the degree to which each of the independent variables impacted on teacher retention and to establish an appropriate teacher retention model. The paper involved former teachers working with other organizations, serving teachers and educational administrators. This paper used a mixed method approach which was primarily quantitative. The findings showed that the three independent variables – leadership style, training and rewards – each had an impact on teacher retention though leadership style was the greatest predictor of teacher retention as compared to other two independent variables.

Firstly, the findings showed that school administrators need to improve in the way they lead the teachers and be required to undergo foundational training before being ushered into office. They also needed to value the human resource and not just the product. Also, they need to avoid the use of coercive power. Secondly, the paper found that foundational trainings should be given to both administrators and teachers. In-service training should be an on-going exercise especially in rural schools. Teacher retention can be enhanced by the use of appropriate leadership style and the provision of training opportunities in government schools in the Copperbelt province of Zambia. Lastly, the study established that a good salary package might help to retain the teachers, and monetary rewards were more motivating than non-financial rewards. It was also established that teachers needed a cost reflective salary and a salary that matched their qualifications.

References

- Al-Mzary, M. M. M., Al-rifai, A. D., & Al-Momany, M. O. E. (2015). Training and its impact on the performance of employees at Jordanian Universities from the perspective of employees: The case of Yarmouk University. *Journal of Education and Practice*, 6(32), 128-140.
- Allen, W. E. (2018). Leadership theory: A different conceptual approach. *Journal of Leadership Education*, 17(2), 149-161.
- Aguinis, H., Joo, H., & Gottfredson, K. R. (2103). What monetary rewards can and cannot do: How to show employees money. *Business Horizons*, 56, 241-249.
- Armstrong, M. (1999). *A handbook of human resource management*. London: Kogan.

- Aroge, S. T. (2012). Employee's training and development for optimum productivity: The role of Industrial Training Fund (ITF), Nigeria. *Developing Country Studies*, 2(4), 50-58.
- Bibi, P., Ahmad, A., & Majid, A. H. A. (2016). The moderating role of work environment on the relationship between compensation, job security, and employees' retention. *International Journal of Economic Perspectives*, 10(4), 726-738.
- Bowling, (1997). *Research methods in health*. Open University Press.
- Bryman, A., & Cramer, D. (1997) *Quantitative data analysis with SPSS for windows: A guide for social scientists*. London: Routledge.
- Choudrie, J., & Dwivedi, Y. K. (2005). Investigating broadband diffusion in the household: Towards content validity and pre-test of the survey instrument. In *Proceedings of the European Conference on Information Systems (ECIS)*, 38.
- Costen, W. M., & Salazar, J. (2011). The impact of training and development on employee job satisfaction, loyalty, and intent to stay in the lodging industry. *Journal of Human Resources in Hospitality & Tourism*, 10(3), 273-84.
- Dwipayana, K. I. G. B., & Suwandana, I. G. M. (2021). The effect of leadership style on employee retention at Ayodya Resort Bali with non-physical work environment as moderating variable. *European Journal of Business and Management Research*, 6(6), 223-226.
- Damei, J. M. (2020). The effect of job training on employee retention in Somalia. *Journal of Research in Business and Management*, 8(1), 9-17.
- Farrington, S. M., Venter, E., & Sharp, G. D. (2014). Extrinsic rewards in family businesses: Perspectives of non-family employees. *South African Journal of Business Management*, 45(3), 67-79.
- Fullard, J. (2021). *Does money motivate teachers?* University of Essex.
- George, C. (2015). Retaining professional workers: What makes them say? *Employee Relations*, 37(1), 102-121.
- Gkorezis, P., & Petridou, E. (2012). The effect of extrinsic rewards on public and private sector employees' psychological empowerment: A comparative approach. *The International Journal of Human Resource Management*, 23(17), 3596-3612.
- Gorde, S. U. (2019). A study of employee retention. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 6(6), 331-338.
- Hamid, N. B., Hashin, R., Shonubi, O., & Abudullah, N. (2016). The psychological impact of recognition and appreciation on job satisfaction and job performance among IT employees: Review. *Medwell Journals*, 11(21), 5222-5227.
- Herzberg, F. (1966). *Work and the nature of man*. Cleveland: World Publishing Company.
- Holtom, B. C., & Mitchell, T. R. (2004). *Turnover in organizations: Causes, consequences, and cures*. Sage Publications.
- Hofmann, E., Hartl, B., Gangl, K., Hartner-Tiefenthaler, M., & Kirchler, E. (2017). Authorities' coercive and legitimate power: The impact on cognitions underlying cooperation. *Frontiers in Psychology*, 8(5), 1-15.
- House of Commons Education Committee. (2017). *Recruitment and retention of teachers: Fifth report of session 2016-2017*. Retrieved August 13, 2023, from www.parliament.uk/education-committee
- Ingersoll, R., Merrill, L., & Stuckey, D. (2014). *Seven trends: The transformation of the teaching force (CPRE Report No. RR-80)*. Consortium for Policy Research in Education: University of Pennsylvania.
- Jehanzeb, K., & Beshir, N. A. (2013) Training and development program and its benefits to employee organization: A conceptual study. *European Journal of Business and Management*, 5, 243-252.
- Kukano, C. (2020). *Teacher attrition in Zambian schools: An educational management analysis*. Pretoria: University of South Africa.
- Makhuzeni, B., & Barkhuizen, E. N. (2015). The effect of a total rewards Strategy on school teachers' retention. *Journal of Human Resource Management*, 13(1), 1-10.
- Masaiti, G., & Naluyele, P. (2011). *Strategies to retain and motivate employees in Africa: Examining the case of the Ministry of Education in Zambia*. Wuhan city: Huazhong University of Science and Technology.
- Mason, S., & Matas, C. P. (2015). Teacher attrition and retention research in Australia: Towards a new theoretical

- framework. *Australian Journal of Teacher Education*, 40(11), 45-66.
- Ministry of Education. (2016). *Educational Statistical Bulletin*. Lusaka: Government Printers.
- Ministry of Education. (2018). *Educational Statistical Bulletin*. Lusaka: Government Printers.
- Ministry of Education. (2020). *Educational Statistical Bulletin*. Lusaka: Government Printers.
- Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablinski, C. J. & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal*, 44, 1102-1121.
- Msango, H., & Mulenga, R. (2010). *Retention of lecturers at the University of Zambia from 1990 to 2010*. Lusaka: University of Zambia.
- Mundende, K., & Namafe, C. M. (2019). Exploring the concept of equal opportunity in teaching and learning geography in selected secondary schools of Kabwe district, Zambia. *International Journal of Research in Geography (IJRG)*, 5(4), 23-33.
- Mundende, K. (2015). Implementation of geography field project in Zambian high schools: A survey of Livingstone and Monze towns of Southern province. *International Journal of Research in Geography*, 1, 38-52.
- Nazia, S., & Begum, B. (2013). Employee retention practices in Indian corporate: A study of select MNCs. *International Journal for Engineering and Management Sciences*, 4(3), 361-368.
- Northouse, P. G. (2025). *Leadership: Theory and practice* (7th Ed.). Sage Publications.
- Nawaz, N., & Yasin, H. M. (2015). Determinants of motivation in teachers: A study of private secondary schools chain networks in Bahawalpur. *Journal of Education and Practice*, 6(1), 55-59.
- Oraby, M., & Elsayfy, A. (2022). The impact of training on employee retention. An empirical research on the private sector in Egypt. *Internal Journal of business and management*. .
- Podolsky, T. K., Bishop, J., & Darling-Hammond, L. (2016). *Solving the teacher shortage: How to attract and retain excellent educators*. Learning Policy Institute.
- Robbins, S. P., & Judge, T. A. (2017). *Organizational behavior* (17th Ed.). Pearson Education.
- Rodriguez, A. C. (2019). *Please don't go: An examination of teacher retention in high needs school*. California State University: Long beach.
- Ronald, M. O., Aisha, L. N., & Babu. M. (2016). Analysis of the effects of leadership styles on staff retention in selected private hospitals in Kampala district, Uganda. *European Journal of Business and Management*, 8(9), 141-150.
- Siwale, J., Hapompwe, C. C., Kukano, C., & Silavwe, D. C. (2020). Impact of reward system on organizational performance: A case study of Brentwood Suppliers Limited in Lusaka, Zambia. *International Journal of Scientific and Research Publications*, 10(7), 167-179.
- Santos, M., & Gomez, (2015). Rewards systems. *Wiley Encyclopedia of Management*, 1-6.
- Simango, B. (2019). *The significance of appropriate leadership styles in Dual Mode Colleges of Education in Zambia*. International Multidisciplinary Conference: Lusaka, Zambia.
- Srinivasan, P. (2020). Interpreting p-value and r squared score on real-time data: Statistical data exploration. *Published in Analytics Vidhya*.
- Schultz, W. (2015). Neuronal reward and decision signals: From theories to data. *Physiological Reviews*, 95(3), 853-951.
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Palo Alto, CA: LearningPolicy Institute.
- Thrush, A., (2012). Leadership in higher education. *International Journal of Human Humanities and Social Sciences*, 2(13), 1-12.
- Trivedi A, (2014). *Classroom management on the use of rewards and sanctions*. Oxford: Oxford University.
- Umesh, U. (2014). A study of the importance of training and development of personnel of Cochin Port Trust, Kerala, India. *Electronic Journal of Integrative Business and Economic Research*, 4(1), 245-252.
- Wakabi, B. M. (2016). Leadership style and staff retention in organisations. *International Journal of Science and Research (IJSR)*, 5(1), 10-15.
- Wamitu, S. N. (2018). Motivational strategies for teacher attraction and retention in

Nyeri county, Kenya. *The International Journal of Business Management and Technology*, 2(5), 1-10.
Wang, D., Liu, T., & Shi, J. (2017).

Development of monetary and social reward processes. *Scientific Reports*, 7, 1-10.

Appendix: Managerial Grid

