



# Strategic Planning Implementation Practices and School Performance: Evidence from Public Secondary Schools in Tanzania

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## Authors' contributions

*This work was carried out in collaboration among all authors. Author RI was responsible for conceptualisation, writing the original draft, data collection and analysis, reviewing and editing, and approved the final draft for submission. Authors NK and FK worked on conceptualisation, supervised the study, critically revised the manuscript, reviewing and editing, and approved the final version for submission. All authors read and approved the final manuscript.*

## Article Information

DOI: 10.9734/ARJASS/2023/v21i1459

### Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/105747>

**Original Research Article**

**Received: 27/06/2023**

**Accepted: 29/08/2023**

**Published: 01/09/2023**

## ABSTRACT

**Aims:** The study examined the influence of strategic planning implementation practices on school performance in public secondary schools in Tanzania. Specifically, it assessed the influence of strategic implementation practices on school organisational performance; investigated the influence of strategic implementation practices on teacher performance; and evaluated the influence of strategic implementation practices on students' academic performance.

**Study Design:** The study employed a concurrent triangulation design within the framework of a mixed methods approach.

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**Place and Duration of Study:** The study was conducted in two Districts of Mwanza Region namely: Nyamagana and Magu in which data were collected from public secondary schools between August 2022 and January 2023.

**Methodology:** The sample size involved a total of 354 respondents including 266 members of the School Management Teams (SMTs), 76 members of the School Governing Boards (SGBs), 10 Ward Education Officers (WEOs) and 2 District Education Officers (DEOs). Research data were collected through questionnaire, interview and documentary review. The quantitative data were analyzed by using Structural Equation Modelling (SEM) technique, while the qualitative data were analyzed through content analysis.

**Results:** The results of hypotheses tests show that, strategic implementation practices was significantly related to: school organizational performance ( $P < 0.05$ ,  $R^2 = 0.08$ ), teacher performance ( $P < 0.05$ ,  $R^2 = 0.02$ ) and students' academic performance ( $P < 0.05$ ,  $R^2 = 0.24$ ). Therefore, it is generally observed that, strategic implementation practices significantly influence school performance.

**Conclusion:** The study concluded that strategic implementation of school operations and activities is an antecedent to school performance.

*Keywords: Strategic planning; strategic implementation practices; school performance.*

## 1. INTRODUCTION

Strategic planning is widely advocated as an effective managerial tool for enhancing organisational performance both in public and private sector organisations [1,2]. Empirical evidence from previous studies indicates that, strategic planning practices ensure efficient use of an organisation's resources [3,4]. Notably, it aids in the selection of strategies that enable organisations to effectively allocate their resources and exploit their strengths relative to opportunities in their external environment [5]. Like any other business organisation, public secondary schools strive to exploit more of their limited resources to provide quality education to their clients [6]. For this reason, their management systems should adopt strategic planning approaches in order to be effective in achieving the expected levels of performance [5].

In ensuring effective achievement of performance, Nyamboga and George [7] advocate for the adoption of a strategic planning model by Johnson & Scholes (1993) as an effective framework for guiding the strategic planning process in organisations. Accordingly, an effective strategic planning process involves a detailed strategic analysis of the organisation's context; strategic choice of the available alternative options; and strategic implementation of the selected options [8,9]. Nevertheless, strategic implementation is regarded as an essential dimension of strategic planning in which the organisation's chosen strategy is translated into action plans and activities within the framework of its strategic direction [10]. Notably, it involves the design and management

of the organisation systems to achieve the best integration of people, structure, processes and resources [11].

In the context of school management, the term organizational performance is equated to school performance which is defined in terms of the extent to which a school system achieves its intended goals and objectives [11a]. More often, school performance is mainly expressed in terms of students' achievement [11a,12]. Based on this perspective, a school system that contributes more to better students' achievement is considered more effective [13]. Nevertheless, Cheng [14] argues that, school performance is a multi-dimensional construct that should be assessed in terms of three levels of school operations namely: organisational level, teacher level, and students' level. Accordingly, school performance is considered as a composite of school organisational performance, teacher performance and students' academic performance [15].

As an effective managerial tool for enhancing school performance, strategic planning was firstly adopted to be used in schools in the United States of America (USA) in the mid-1980s [16]. It was also introduced in other countries of the world as part of the broader decentralization policies and school-based management reforms of 1980's (ibid.). In England for example, strategic planning was firstly adopted in schools following the introduction of a site-based management reform known as Local Management of Schools (LMS) [17]. In Nigeria and Kenya, strategic planning was declared a ministerial mandatory requirement in which each

school was required to develop and implement a formal strategic plan as a means of enhancing school performance [18,19].

In Tanzania, strategic planning was firstly introduced in the public sector organisations in 1990s as a reform initiative aimed to enhance public sector performance by focusing on the delivery of results [20]. It was also adopted in the management of education system as a means to ensure effective provision of quality education [21]. In its ambition to achieve effective transformation of the education sector, Tanzania adopted the Education Sector Development Programme (ESDP) as a strategic initiative designed to bring about changes within the education sector. As an outcome of the ESDP, the Secondary Education Development Plan (SEDP) was introduced in order to implement the reform initiatives for education development within the secondary education sub-sector [22].

The focus of SEDP was to improve performance of secondary schools through devolution of operational functions to the school level [22]. According to URT [21], a school is the initial planning unit in the education system. Therefore, in order to improve performance of secondary schools, each school is required to develop and implement its own school development plan [22]. According to Chukwumah [19], school development planning is the first systematic attempt to establish strategic planning in schools. Hence, in line with the reform process, Mestry [23] calls for the school management teams to embark on strategic planning process as an effective means of enhancing school performance.

The influence of strategic planning practices on organisational performance has widely been investigated. Evidence from previous studies reveal a positive influence of strategic planning on organisational performance, see for example, [24,25,3]. Similarly, Kwaslema and Onyango [26] argue that, if well implemented in the school management system, strategic planning can positively influence school performance. Notably, it can lead to successful implementation of strategic decisions which are critical for school performance (Elbanna, Thanos & Colak, 2014) [5]. In Nigeria for example, strategic planning was observed to be an effective tool for successful management of secondary school system [27].

In Tanzania, while much has been written regarding the influence of strategic planning practices on organisational performance, still there remained much to be investigated, particularly on its influence on education organisations. A myriad of the previous studies such as Mori, Kazungu & Mchopa [28], Salum [29] and Matare and Sreedhara [30] mainly focused on investigating the influence of strategic planning on the business sector organisations. Hence, it is not clearly known whether strategic planning can as well work effectively in education sector organisations and particularly in public secondary schools. In response to this gap, an empirical investigation on the influence of strategic implementation practices on school performance was deemed necessary as its findings will provide insights to inform essential policy options among the education stakeholders regarding the best practice of strategic planning in the management of public secondary schools.

## 1.1 Problem Statement

Although much literature is available on the influence of strategic planning on organisational performance, only a few studies focused their attention on education sector organisations and public secondary schools in particular. Besides, the available studies such as Meigaru et al. [20] and Kwaslema and Onyango [26] assessed the variable school performance in a narrow definition based only on students' achievement indicators. Hence, little evidence is available on the relationship between strategic planning practices and school performance as a multi-level variable assessed at a school organisational level, teacher level and students' achievement level. This creates a knowledge gap which hinders successful efforts for enhancing school performance. Therefore, the current study was set out to fill this gap by providing empirical evidence related to the influence of strategic implementation practices on school performance in terms of school organisational performance, teacher performance and students' academic performance indicators.

## 1.2 Specific Objectives of the Study

This study was guided by three specific objectives namely:

- i) Assessing the influence of strategic implementation practices on school organisational performance in public secondary schools.

- ii) Investigating the influence of strategic implementation practices on teacher performance in public secondary schools.
- iii) Evaluating the influence of strategic implementation practices on students' academic performance in public secondary schools.

### 1.3 Research Hypotheses

In order to achieve the intended specific objectives, the study tested the following alternative hypotheses:

- Ho1: Strategic implementation practices significantly influence school organisational performance.
- Ho2: Strategic planning implementation practices significantly influence teacher performance
- Ho3: Strategic planning implementation practices significantly influence students' academic performance.

## 2. LITERATURE REVIEW

### 2.1 Strategic Planning Implantation

Strategic implementation is defined as an effective process of implementing the organisation's chosen strategy to create better performance [31]. Bryson [8] argues that, having a good strategic choice is half a battle won, the other half is worn through effective strategy implementation. In this study, strategic implementation is defined as the process through which the school's chosen strategy is translated into action plans and activities within the framework of its strategic direction. It includes taking actions consistent with the selected strategies of the school; allocating roles and responsibilities through the design of organisational structure; allocating resources; setting short-term objectives; and designing the organisation's control and reward systems [32]. For effective articulation of school objectives, the school management should develop, utilize and integrate organisational structure, control systems and culture to implement strategies that lead to a competitive advantage and better performance [33].

### 2.2 The Johnson & Scholes Model of Strategic Planning

The Johnson & Scholes model of strategic planning was designed and developed by

Johnson and Scholes in 1993 to be used as a sound framework that facilitates strategic planning process in organisations [34]. The model suggests that, the strategic planning process comprises of three main interlinked elements: strategic analysis, strategic choice and strategic implementation [35]. Furthermore, the model suggests that, each of the key strategic planning elements comprises of three main variables. The Johnson & Scholes model is based on the assumption that, although each of the key elements might appear to operate in a sequence, in reality each is likely to interact with others (ibid.). The model also assumes that, the three elements: strategic analysis, strategic choice and strategic implementation are interdependent and may be occurring simultaneously [34].

According to the model, strategic analysis involves an examination of environmental factors to determine the strategic position of the organisation; analysis of the resource capability; and analysis of the organisational culture and stakeholders' expectations [36]. The strategic choice involves generating and evaluating strategic options available to the organisation, and selecting the appropriate strategy for the future needs of the organisation. On the other hand, strategic implementation involves planning and allocating resources, designing an effective organisational structure and managing strategic change (ibid). At this stage, the organisation's chosen strategy is translated into action plans and activities within the framework of its strategic direction [37]. According to Azhar, Ikram, Rashid and Saqib [10], strategic implementation is an essentials dimension of the strategic planning model which has significant influence on organisation performance.

### 2.3 School Performance

The term "school performance" is conceptualized differently by many authors. Nevertheless, many authors view it in terms of organisational performance which is defined as the effectiveness and efficiency with which an organisation's goals and objectives are achieved [38,39]. Based on this perspective, Caldwell & Spinks [40] define school performance as the effectiveness and efficiency of the schooling process. Similarly, Zajda, [41] equates school performance with the fulfilment of objectives by the school: that is, if the school is able to attain its objectives, then it is said to be effective. In line with this view, the term effectiveness refers to the accomplishment of the school's objectives while

efficiency indicates whether the school objectives were accomplished in a timely and costly manner.

In practice, the variables and indicators used to measure organisational performance vary with respect to the context in which the organisation operates and the strategic objectives pursued (Auka, 2016). In education context, school performance is mainly measured in terms of students' academic achievement. However, recent studies stress that, school performance is a complex and multidimensional construct that comprises more variables than students' achievement. Auka (2016) for instance, describes school performance in terms of student academic achievement, staff team work and co-curriculum. Moreover, Kariuki et al. (2017) argue that, the measurement of school performance should include academic excellence, infrastructure development, stakeholder satisfaction, financial stability and excellence in non-academic activities.

While student academic achievement has traditionally been used to measure school performance, in recent years, an increasing attention has been drawn to consider school organisation and teacher performance as essential variables in the measuring school performance [14,42]. This study takes a broader view of school performance as perceived by Cheng [42] which comprises three levels of school operations namely: organisational level, teacher level and student level. Accordingly, school performance is viewed as a multi-dimensional construct which comprises of school organisational performance, teacher performance and students' academic performance (ibid.). In particular, academic performance includes not only student academic achievement but also student retention, student pathways and transition as well as staff and parent satisfaction [43,44].

As a component of school performance, organisational performance refers to the extent how better a school performs as an organisation [14]. The organisational level performance indicators include degree of teacher involvement, school culture, school-community relations and resource management [14,42,45]. Teacher performance refers to the extent how teachers respond to their assigned duties in order to enable a school achieves its objectives. At this level, performance indicators include timely preparation of scheme of works and lesson plans, involvement in co-curricular activities,

involvement in discipline management and involvement in counselling and guidance [45] (Auka, 2016; Kariuki et al., 2017) [42]. On the other hand, student academic performance refers to students' academic achievements as measured by test scores, attitude toward learning, life skills, morals and ethics [46].

### 3. METHODOLOGY

The study was conducted within the framework of a mixed methodology in which a concurrent triangulation design was employed to guide the process of data collection and analysis. The study targeted a population of 2417 teachers including Heads of Schools from all 51 public secondary schools in Nyamagana and Magu Districts. Thus, by using a Yamane's formula, a sample size of 342 respondents was determined. It comprised of 266 School Management Team (SMTs) members and 76 teacher representative members of the School Governing Boards (SGBs). In addition, the study sample also included 10 WEOs and 2 DEOs as the key informants. Since each school provided 9 respondents to the study sample (7 SMT and 2 SGB members), the sample subjects were derived from 38 secondary schools (342/9). To ensure effective representation, the sample size of 38 schools was shared between the two districts at a proportion of 0.745 (38/51) based on their sampling frames.

The research data were collected by using survey questionnaire, interview and documentary review. The use of multiple methods was adopted in order to overcome the limitations of one method by the strengths of the other (Creswell, 2014). Notably, triangulation process in the data collection ensured validity and enabled the researcher to get the reality of what was investigated (Cohen, Manion & Marrison 2001). Quantitative data were analysed by descriptive statistics and inferential analysis through Structural Equation Modeling (SEM) while the qualitative data were analysed through content analysis. As a multivariate statistical technique, SEM enabled the researcher to test complex relationships between and among the observable and latent variables of the study (Byrne, 2016).

#### 3.1 Operationalization of the Study Variables

In this study, strategic planning implementation practices was the independent variable which

was assessed in terms of six observable variables/indicators. On the other hand, school performance was the dependent variable which was assessed in terms of three latent variables (constructs) namely: school organisational performance, teacher performance and students' performance. Each of the latent variables was further assessed by using various observable indicators as shown in Table 1.

### 3.2 Analytical Model of the Study

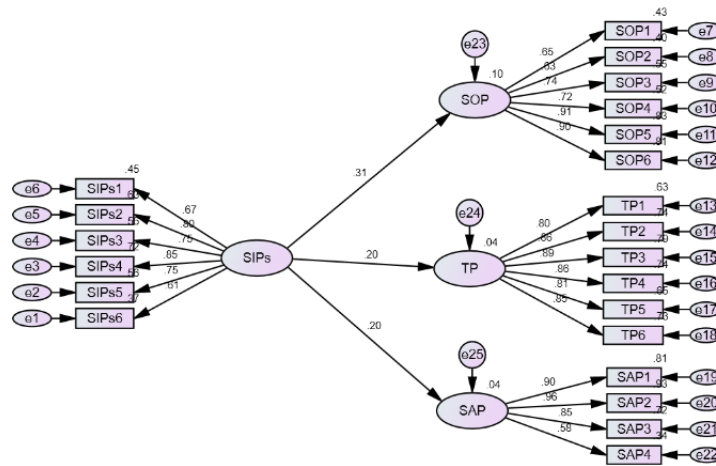
The specified structural model for the influence of strategic implementation practices on school performance was developed and presented diagrammatically through path analysis (Fig. 1) and mathematically through multiple regression model.

The model presented in Fig. 1 shows a direct relationship between the independent variable (SIPs) and the dependent variables (SOP, TP and SAP). Moreover, from the general specified model, three specific models were specified based on the study hypotheses as follows:

- a) Model 1: Strategic implementation practices and school organisational performance;
- b) Model 2: Strategic implementation practices and teacher performance; and
- c) Model 3: Strategic implementation practices and students' academic performance.

**Table 1. Operationalization of the study variables**

| Variable Name                      | Variable type        | Indicators/Measurements                                     | Variable level | Sources  |
|------------------------------------|----------------------|---|----------------|--|
| Strategic implementation practices | Independent Variable | ▪ Determination of resource acquisition                     | SIPs1          | Wheelen, Hunger, Hoffman, & Bamfor [31], Hill, Jones & Schilling [32], Hill, Schilling & Jones (2017), Davies & Ellison (2003) and Harris (2002) |
|                                    |                      | ▪ Determination of school finance allocation                | SIPs2          |  |
|                                    |                      | ▪ Determine employee's allocation                           | SIPs3          |  |
|                                    |                      | ▪ Setting short-term objectives                             | SIPs4          |  |
|                                    |                      | ▪ Design control and reward systems                         | SIPs5          |  |
|                                    |                      | ▪ Communicate key change aspects                            | SIPs6          |  |
| School organisational performance  | Dependent Variable   | ▪ Attitude towards school improvement                       | SOP1           | Cheng [14], Beth [42] and Salvador [45]  |
|                                    |                      | ▪ Degree of teacher involvement                             | SOP2           |  |
|                                    |                      | ▪ Motivation toward hard work                               | SOP3           |  |
|                                    |                      | ▪ Team work spirit  | SOP4           |  |
|                                    |                      | ▪ School-community relations                                | SOP5           |  |
|                                    |                      | ▪ Resource management                                       | SOP6           |  |
| Teacher performance                | Dependent Variable   | ▪ Teachers' preparation of schemes of work and lesson plans | TP1            | Cheng [14], Salvador [45], Auka (2016) Kariuki et al. (2017) and Beth [42]   |
|                                    |                      | ▪ Teachers' use of teaching and learning aids               | TP2            |  |
|                                    |                      | ▪ Support for students                                      | TP3            |  |
|                                    |                      | ▪ Monitoring students' progress                             | TP4            |  |
|                                    |                      | ▪ Feedback on students' progress                            | TP5            |  |
|                                    |                      | ▪ Excellence in co-curricular activities                    | TP6            |  |
| Students' academic performance     | Dependent Variable   | ▪ Students' attitude toward learning                        | SAP1           | Deeboonmee & Aritatana [46].   |
|                                    |                      | ▪ Students' life skills                                     | SAP2           |  |
|                                    |                      | ▪ Morals and ethics   | SAP3           |  |
|                                    |                      | ▪ General performance average (GPA) in CSEE results         | SAP4           |  |



**Fig. 1. The general structural model for the influence of strategic implementation practices on school performance**

The specified general model (Fig. 1) was also presented in a form of multiple regression as shown in equation 1

$$SP_i = \beta_1 (SIPs1) + \beta_2 (SIPs2) + \beta_3 (SIPs3) + \beta_4 (SIPs4) + \beta_5 (SIPs5) + \beta_6 (SIPs6)$$

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon \quad (1)$$

Where:

- Y=SP=School Performance
- $\beta_0$  = The intercept of the variable Y
- $\beta_i$  = The slope of the regression line
- $X_i$  = Observable indicators of Strategic Implementation Practices (SIPs)
- $Y_i$  = Latent variables/constructs of School Performance (SOP, TP and SAP)
- $\varepsilon$  = The error term.

#### 4. RESULTS AND DISCUSSION

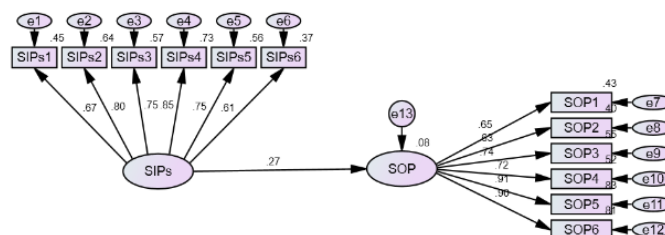
As an initial stage in the use of SEM, Confirmatory Factor Analysis (CFA) was performed to assess the factor structure of the

measurement model. Thus, the CFA was used to test for the reliability and validity of the study variables as well as to evaluate the adequacy of the model fit. In addition, a diagnostic test for the multivariate assumptions was performed in which the basic assumptions of SEM were checked through normality, linearity, multiple measurements and multicollinearity test.

#### 4.1 The Influence of Strategic Implementation Practices on School Organisational Performance

SEM was used to examine the relationship between strategic implementation practices and school organisational performance in which the specified structural model (Fig. 2) was assessed to determine its model fit and parameter estimates.

The final specified model (Fig. 2) was thus over-identified with 78 number of observations and 25 number of parameters to be estimated. Table 2 shows the fit statistics of the fitted structural model.



**Fig. 2. the estimated structural model for the influence of strategic implementation practices on school organisational performance**

**Table 2. Fit statistics of the final structural model for the influence of strategic implementation practices on school organisational performance**

| Fit Statistic | Acceptable Level | Obtained |
|---------------|------------------|----------|
| $\chi^2$      | -                | 173.886  |
| df            | -                | 53       |
| $\chi^2/df$   | <5               | 3.281    |
| GFI           | >0.90            | 0.907    |
| NFI           | >0.90            | 0.909    |
| IFI           | >0.90            | 0.935    |
| TLI           | >0.90            | 0.919    |
| CFI           | >0.90            | 0.935    |
| RMSEA         | <0.08            | 0.041    |

The fit statistics in Table 2 show that, the ratio of the chi-square to the degree of freedom ( $\chi^2/df$ ) was 3.281 which was less than the recommended cut off point of 5.0. Besides, the obtained values of GFI (0.907), NFI (0.909), IFI (0.935), TLI (0.919), and CFI (0.935) indices were greater than the recommended value of 0.9. Likewise, the value of RMSEA (0.041) was less than the acceptable cut off point of 0.08. Therefore, it was concluded that the final specified structural model (Fig. 2) fitted the observed data. Moreover, Table 3 shows the parameter estimates and the associated p-values of the estimated structural model for the influence of strategic implementation practices on school organisational performance.

The inferential results presented in Table 3 revealed that strategic implementation practices is positively and significantly related to school organisational performance ( $\beta = 0.285$ ) and ( $P < 0.001$ ). It was also estimated that, strategic implementation practices account for about 8% of the variability of school organisational performance as indicated by ( $R^2=0.08$ ). This implies that, strategic implementation practices is an antecedent to school organisational performance. Hence, public secondary schools should adopt strategic implementation practices in their school planning process in order to enhance school organisational performance. Based on the inferential results, it was confirmed that, strategic implementation practices has significant positive influence on school organisational performance. Hence, the study hypothesis (H1) was accepted.

The observed finding was consistent with the theoretical and empirical evidence from various

literatures [47,45] (Elbanna, Thanos & Colak, 2014). It also coincides with the Johnson and Scholes model which argues that, strategic implementation practices ensure effective planning and allocation of organisational resources [47]. Moreover, it was established that, the success of any organisation depends largely on its ability to translate its chosen strategy into action plans and activities within the framework of its strategic direction. In supporting this finding, Salvador [45] observed that, institutions that manifest good practices in terms of strategy implementation are likely to have higher organisational performance outcomes.

On the other hand, the findings from quantitative data were also supported by qualitative findings from interview in which it was observed that, strategic implementation practices are significant determinant of school organisational performance. Through interviews, the respondents were requested to respond on the question related to how strategic implementation practices influence school performance. In response to the question, it was revealed that, strategic implementation practices influence school organisational performance in various ways including effective allocation of roles and responsibilities among the school employees and setting relevant short-term action plans based on strategic position of the school. When responding to the question at hand during an interview, one respondent was quoted saying that:

*"...the implementation of school development plans needs to be strategic in order to ensure successful achievement of school objectives...it happens that, if roles are well and equitably allocated among the teachers, they tend to be motivated and work hard in achieving school objectives..."*  
(DEO: January, 2023)

Based on the critical analysis of the above comment, it was established that, effective allocation of roles and responsibilities among the teachers has an impact on school organisational performance in terms of motivation towards hard work and team work spirit. In supporting the views given in the above comment, another respondent was quoted saying that:

*"...in schools where teachers are actively engaged in setting relevant short term action plans, you can see a big difference in terms of their motivational level and team work spirit..."* (WEO: January 2023).



**Table 3. Estimated parameters of the final structural model for the influence of strategic implementation practices on school organisational performance**

| Endogenous | Exogenous  | Estimate ( $\beta$ ) | P-Value | Status      |
|------------|------------|----------------------|---------|-------------|
| SOP        | <--- SIPs  | 0.285                | <0.001  | Significant |
| SOP        | <--- SIPs1 | 1.000                |         |             |
| SOP        | <--- SIPs2 | 1.254                | <0.001  | Significant |
| SOP        | <--- SIPs3 | 1.117                | <0.001  | Significant |
| SOP        | <--- SIPs4 | 1.225                | <0.001  | Significant |
| SOP        | <--- SIPs5 | 1.104                | <0.001  | Significant |
| SOP        | <--- SIPs6 | 1.851                | <0.001  | Significant |

Source: Survey Data (2023)

A detailed analysis of the above comment revealed an evidence of strategic implementation practices in public secondary schools in terms of setting relevant short-term action plans based on the identified strategic position of the school. It was also established that, such practices influence school organisational performance in terms of increased motivation and team spirit.

Generally, a detailed analysis of both quantitative and qualitative results revealed that public secondary schools are actively engaged in strategic implementation practices in various ways. Essentially, the practices are reflected in terms of how the chosen school strategy is translated into action plans and activities within the framework of the school strategic direction. Moreover, the quantitative results revealed that, all the observable variables used to measure the strategic implementation construct were positively and significantly related to school organisational performance. Based on the study findings and evidence from both theoretical and empirical literature, it was generally concluded that, strategic implementation practices significantly influence school organisational performance.

#### 4.2 The Influence of Strategic Implementation Practices on Teacher Performance

The study used SEM to examine the relationship between strategic implementation practices and teacher performance in which the specified structural model (Fig. 3) was assessed to determine its model fit and inferential parameter estimates.

The final structural model (Fig. 3) was proved to be over-identified with 90 number of observations and 37 number of parameters. Table 4 shows the fit statistics of the fitted structural model for the influence of strategic implementation practices on teacher performance.

**Table 4. Fit statistics of the final structural model for the influence of strategic implementation practices on teacher performance**

| Fit Statistic | Acceptable Level | Obtained |
|---------------|------------------|----------|
| $\chi^2$      | -                | 220.335  |
| df            | -                | 53       |
| $\chi^2/df$   | <5               | 4.158    |
| NFI           | >0.90            | 0.906    |
| IFI           | >0.90            | 0.927    |
| TLI           | >0.90            | 0.909    |
| CFI           | >0.90            | 0.927    |
| RMSEA         | <0.05            | 0.044    |

Source: Survey Data (2023)

The fit statistics presented in Table 4 show that, the ratio of the chi-square to the degree of freedom ( $\chi^2/df$ ) was 4.158 which was less than the recommended cut off point of 5.0. Besides, the obtained values of NFI (0.906), IFI (0.927), TLI (0.909), and CFI (0.927) indices were greater than the recommended value of 0.9. Likewise, the value of RMSEA (0.044) was less than the acceptable cut off point of 0.08. Therefore, it was concluded that the estimated structural model for the influence of strategic implementation practices on teacher performance (Fig. 3) fitted well the observed data. Moreover, Table 5 shows the parameter estimates and the associated p-value of the fitted structural model for the influence of strategic implementation practices on teacher performance.

The inferential analysis results presented in Table 5 revealed that, strategic implementation practices is positively and significantly related to teacher ( $\beta = 0.318$ ) and ( $p = 0.022$ ). It was also estimated that, strategic implementation practices account for about 2% of the variability of teacher performance ( $R^2=0.02$ ). This implies that, strategic implementation practices is an antecedent to teacher performance. Hence, public secondary schools should adopt strategic

implementation practices in their development planning process in order to enhance teacher performance. Based on the inferential results presented in Table 5, it was confirmed that, strategic implementation practices has significant positive influence on teacher performance. Hence, the study hypothesis (H2) was accepted.

The observed finding was in line with empirical evidence from various authors, [48,49]. It was generally established that, strategic implementation practices are essential in improving the quality of teachers. In their study titled "strategic planning in developing the quality of educators and education personnel", Al Kadri and Widiawati [48] found that, strategic implementation of school development plans is important for improving the quality of educators and educational personnel in schools. Moreover, the inferential findings were also supported by other findings derived from qualitative analysis results. Concerning this, it was generally established that, strategic implementation practices significantly influence teacher performance. During an interview session, one of the respondents was quoted saying that:

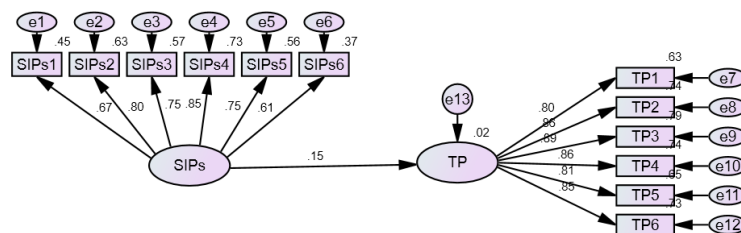
*"...in schools where the school leadership is strategic, teachers are actively involved in decisions related to the allocation and distribution of their tusks...when teachers*

*know their roles, they become motivated to perform"* (WEO: January, 2023)

He went on revealing more by adding that:

*"..... it also happens that, the strategic school leadership is always adaptive to changes...accommodating changes in schools is useful in moderating the pressures of external environment...this in turn leads to creation of harmony and job commitment among the teachers...."* (WEO: January, 2023)

Based on the critical analysis of the above comments, it was established that, the school development plans are strategically implemented. Among others, the school management teams are concerned with involving their teachers in the decisions related to the allocation of their roles and tusks. Moreover, they are also concerned with accommodating changes through various change management processes in which teachers are involved. It was further established that, adoption of strategic implementation practices in terms of teachers' roles allocation and change management processes has significant influence on teacher performance. The improved teachers' performance is reflected through enhanced self-motivation and job commitment.



**Fig. 3. The estimated structural model for the influence of strategic implementation practices on teacher performance**

**Table 5. The estimated parameters of the final structural model for the influence of strategic implementation practices on teacher performance**

| Endogenous | Exogenous | Estimate ( $\beta$ ) | P-Value | Status |             |
|------------|-----------|----------------------|---------|--------|-------------|
| TP         | <---      | SIPs                 | 0.318   | 0.022  | Significant |
| TP         | <---      | SIPs1                | 1.000   |        |             |
| TP         | <---      | SIPs2                | 1.249   | <0.001 | Significant |
| TP         | <---      | SIPs3                | 1.115   | <0.001 | Significant |
| TP         | <---      | SIPs4                | 1.223   | <0.001 | Significant |
| TP         | <---      | SIPs5                | 1.104   | <0.001 | Significant |
| TP         | <---      | SIPs6                | 0.848   | <0.001 | Significant |

Source: Survey Data (2023)

The qualitative findings presented above were also supported by Al Kadri and Widiawati [48] and Sadik, Marouf and Khaleel [50]. In their study related to strategic planning and quality of educators, Al Kadri and Widiawati [48] insisted that, when teachers identify their roles, they would be more motivated to participate and perform their functions. Concerning this, it is implied that, public secondary schools should be sensitive on involving their teachers in the allocation and distribution of their roles as a strategic initiative towards enhancing their performance. On the other hand, Sadik et al. [50] suggested that, organizations should adapt to environmental changes through strategic implementation practices to sustain their competitive edge. This observation implies that, the school management teams should uphold the role of change management process as one of the essential strategic options for enhancing teacher performance.

Generally, a detailed analysis of both quantitative and qualitative results revealed that strategic implementation practices are significant determinants of teacher performance. These findings provide a wide implication to the school management teams within the public secondary schools in Tanzania. Specifically, it is implied that, public secondary schools need to implement their plans strategically such that their long-term objectives are successfully achieved. In the process of translating the chosen strategies, the school management teams should ensure that, among others, they set short-term plans and activities related to the improvement of quality of teachers. In addition, they should also ensure that, the school personnel are actively engaged in setting the short-term plans and activities. Based on the data analysis results and evidence from both empirical and theoretical literature review, the study concluded that, strategic implementation practices significantly influence teacher performance.

### 4.3 The Influence of Strategic Implementation Practices on Students' Academic Performance

Through the use of SEM, the study examined the relationship between strategic implementation practices and students' academic performance in which the specified structural model (Fig. 4) was assessed to determine its goodness of model fit and estimation of inferential parameters.

The final estimated structural model (Fig. 4) was over-identified with 65 number of observations

and 32 number of parameters. Table 6 shows the fit statistics of the final fitted model for the influence of strategic implementation practices on students' academic performance.

**Table 6. Fit statistics of the final structural model for the influence of strategic implementation practices on students' academic performance**

| Fit statistic | Acceptable level | Obtained |
|---------------|------------------|----------|
| $\chi^2$      | -                | 148.434  |
| df            | -                | 33       |
| $\chi^2/df$   | <5               | 4.498    |
| NFI           | >0.90            | 0.903    |
| IFI           | >0.90            | 0.918    |
| TLI           | >0.90            | 0.901    |
| CFI           | >0.90            | 0.918    |
| RMSEA         | <0.05            | 0.049    |

Source: Survey Data (2023)

The fit statistics presented in Table 6 indicate that, the ratio of the chi-square to the degree of freedom ( $\chi^2/df$ ) was 4.498 which is less than the recommended cut off point of 5.0. Besides, the obtained values of NFI (0.903), IFI (0.918), TLI (0.901), and CFI (0.918) indices were greater than the recommended value of 0.9. Likewise, the value of RMSEA (0.049) was less than the acceptable cut off point of 0.08. Hence, it was confirmed that, the estimated model for the influence of strategic implementation practices on students' academic performance (Fig. 4) fitted the observed data. Moreover, Table 7 shows the parameter estimates and the associated p-value of the fitted structural model for the influence of strategic implementation practices on students' academic performance.

The inferential results presented in Table 7 revealed that strategic implementation practices is positively and significantly related to students' academic performance ( $\beta = 0.543$ ) and ( $p < 0.001$ ). Moreover, the results show that, strategic implementation practices account for about 24% of the variability of students' academic performance as reflected by ( $R^2=0.24$ ). This implies that, strategic implementation of planned school activities is an antecedent to students' academic performance. It is therefore for the public secondary schools to adopt strategic implementation practices in their development planning process in order to enhance students' academic performance. Based on the inferential analysis results, it was confirmed that, strategic implementation practices significantly influence students'

academic performance. Hence, the study hypothesis (H3) was accepted.

The observed findings support the findings by Kwaslema and Onyango [26] who observed a positive contribution of strategic implementation practices towards improved academic performance among public secondary school students in Babati district. Moreover, Meigaru et al. [20] established that, strategic planning implementation practices has a positive influence on students' academic performance. It is therefore essential for the public secondary schools to ensure that teachers are actively engaged in strategic implementation practices so as to ensure sustained higher levels of students' academic performance. This can be affected through active involvement of teachers in determination of short-term school plans and operational activities, determination of roles allocation, designing relevant school structures and deciding on the relevant ways to accommodate changes within the school environment.

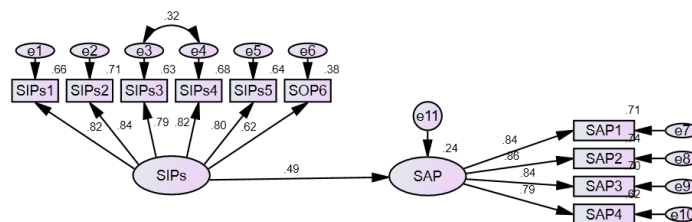
The findings from inferential analysis results were in line with the qualitative findings derived from interviews with the key informants as well as data gleaned from documentary review analysis. Concerning the interview data, it was generally observed that, majority of the interviewed respondents were consistently in line with the general perception that, strategic implementation practices significantly influence students' performance. In supporting this observation, the following comment was quoted from one of the respondents during an interview session:

*"...in schools where the school leadership is strategic, teachers are actively involved in decisions related to setting short-term plans and activities as well as in allocation and distribution of their tusks...when teachers know their roles, they become motivated to perform which in turn leads to improved*

*students' performance..."*(WEO: January, 2023).

A critical analysis of the above comment revealed that, adoption of strategic implementation practices in terms of teachers' involvement in the allocation and distribution of their roles, enhances their levels of motivation towards hard working which in turn influences students' academic performance. This finding supports the empirical work by Meigaru et al. [20] who observed that, involvement of tutors in setting goals and operational activities made it easier to scale up and improve students' academic performance in public teacher colleges in Tanzania. Likewise, Kwaslema and Onyango [26] revealed that, strategic implementation practices in terms of teachers' involvement in determination of short-term plans and school activities contributed to enhanced motivation among the school community to work hard as a team and eventually improved students' performance [51].

Furthermore, the above findings were also supported by evidence gleaned from documentary review analysis whose results revealed that, the adoption of strategic implementation practices in the school development planning process had significant influence on students' academic performance. Notably, the researcher investigated the NECTA examination results for the period 2018-2021 to observe the trend of students' academic performance in schools which linked their long-term school objectives, short-term school plans, implementation structures and academic oriented activities in their SDPs with the school mission and vision. Consequently, the results from 10 public secondary schools revealed that, 4 schools that incorporated the link between their long-term school objectives, short-term plans, implementation structures related to academic activities and the school mission within their SDPs had relatively more progress in students' academic performance compared to those which did not.



**Fig. 4. The estimated structural model for the influence of strategic implementation practices on students' academic performance**

**Table 7. Estimated parameters of the final structural model for the influence of strategic implementation practices on students’ academic performance**

| Endogenous | Exogenous  | Estimate ( $\beta$ ) | P-Value | Status      |
|------------|------------|----------------------|---------|-------------|
| SAP        | <--- SIPs  | 0.543                | <0.001  | Significant |
| SAP        | <--- SIPs1 | 1.000                |         |             |
| SAP        | <--- SIPs2 | 0.932                | <0.001  | Significant |
| SAP        | <--- SIPs3 | 0.840                | <0.001  | Significant |
| SAP        | <--- SIPs4 | 0.925                | <0.001  | Significant |
| SAP        | <--- SIPs5 | 0.963                | <0.001  | Significant |
| SAP        | <--- SIPs6 | 0.802                | <0.001  | Significant |

Source: Survey Data (2023)

The analysis of both quantitative and qualitative results revealed that strategic implementation practices significantly influence students’ academic performance. Notably, the quantitative results revealed that, all the observable variables used to measure the influence of strategic implementation practices on students’ academic performance were statistically significant. In addition, the analysis of qualitative data obtained through interview and documentary review also revealed that, public secondary schools are actively engaged in strategic implementation practices which are reflected in various forms. It was therefore concluded that, strategic implementation practices significantly influence students’ academic performance.

## 5. CONCLUSIONS AND RECOMMENDATIONS

The study examined the influence of strategic implementation practices on school performance in which three hypotheses were tested using a structural equation modelling. The results revealed that, all the tested hypotheses were statistically significant and therefore they were all accepted. Based on the results, it was concluded that, the adoption of strategic implementation practices in the school management has significant influence on school performance. These findings have wide implications on the policy and managerial practices of public secondary schools in Tanzania. Notably, it was established that, effective translation of the school strategies into action plans and activities is essential for successful achievement of the school’s long-term objectives. Hence, the school management teams should ensure that, all teachers and other key stakeholders are actively involved in setting the school short-plans and determination of school operational activities based on the school’s long-term objectives.

## CONSENT

As per international standard or university standard, respondents’ written consent has been collected and preserved by the author(s).

## ACKNOWLEDGEMENTS

The authors acknowledge the Chief Executive of the Agency for the Development of Educational Management (ADEM) for the financial support to conduct the study.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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