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**EFFECT OF SKILL DEVELOPMENT ON SUCCESSFUL IMPLEMENTATION OF STRATEGIC PLAN IN PUBLIC SECTOR: A CASE OF SELECTED INSTITUTIONS UNDER THE MINISTRY OF HEALTH**

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**ABSTRACT**

The study through the aid of BSC aimed to determine the effect of skill development on implementation of strategic plan in public sector with the objective to examine its effect on successful implementation of strategic plan at selected public sector institutions in Tanzania. The study was positivist research with a quantitative approach under both descriptive and correlational research design through a survey research strategy. Population of the study was 541 permanent staff at MSD, NHIF, TMDA, NIMR and NPHL where a sample of 230 staff was selected through systematic random sampling. Data was collected through questionnaires with a response rate of 96.9 percent and analysed through regression analysis. The study has found that independent variable affects significantly the dependent variable ( $F=152$ ,  $p\text{-value}=0.0 < 0.05$ ) and the coefficient is positive and statistically significant from zero. Consequently, skill development has positive and significant effect on successful implementation of strategic plan in public sector. This finding indicates that skill development has significant effect on successful implementation of strategic plan in public sector. The study recommends PSIs to strengthen provision of employee training to develop appropriate skills required to ensure successful implementation of their strategic plans.

**Keywords:** Strategy, Strategy formulation, Strategy implementation, Strategy execution, Strategic planning, Strategic plan, Training, Successful implementation of strategic plan.

**1. INTRODUCTION**

In the past decade much research in the strategic management field focused on the planning aspect of Strategic Plan (SP) and less or very little was said about its implementation. Over the recent past, there has been development in the field where production of various research works on SP implementation has been witnessed. Despite the development, one of the major unresolved management problems is the great percentage of strategy implementation efforts that fail, estimated between 30 - 70% (Candido & Santos, 2019) and that globally, up to 80% of strategies fail (Wiraeus & Creelman, 2019) while Africa has a start-up failure rate of 54% (Galal, 2023). Olson, (2022) reported that 60 – 90% of SPs never fully launch and there is no agreement as to why there is such high rate of failure (Bushe, 2019) but most scholars arguing poor implementation either because implementation is poorly managed or hasn't taken place (Vigfusson *et al.*, 2021). Extant literatures (Souki *et al.*, 2020; Nyerenga, 2021; Dasan, 2022; Mgute & Nyakwara, 2022; Torres *et al.*, 2023; Mubanga & Lesa, 2024) have associated successful implementation of SP with

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culture, structure, communication, leadership and resources but very little has been said about the effect of skill development on successful implementation of SPs in Public Sector (PS).

Skill development is a key element to improved organization performance as it provides employees with the know-how required to perform the processes critical to the success of the strategy (Kaplan & Norton, 2004). Findings in the study by Mgute & Nyakwara, (2022) showed that skills positively and significantly influence SP implementation. Similarly; Malusu & Mkulu, (2020) and Dlamini *et al.*, (2020) noted that skills shortage was one among the challenges affecting execution of SP. SP within PS came as part of the reforms spearheaded in the New Public Management (NPM) with the aim of improving public service delivery through setting up of long-term strategic direction (Kim & Han, 2015; Lapuente & Van de Walle, 2020). Most commentators (Hood, 1995; Ingrams *et al.*, 2020; Ghosh & Mahavidyalaya, 2021) have associated NPM with seven dimensions of change, most notably; emphasis on standards and measures of performance. SP provides direction for the organization (Ritson, 2019), means for communication of progress (Mintzberg *et al.*, 2020), and enhances management of resources (Dlamini *et al.*, 2020). Various tools for developing SPs are at large use today, Balanced Scorecard (BSC) being one of them, used by 53% of companies globally (Fuertes *et al.*, 2020). BSC provides existence of a cause-and-effect relationship between its four dimensions, stressing on the need for business to invest in reskilling employees to achieve breakthrough performance (Kaplan & Norton, 1992).

SP in Tanzania's PS began in 1990s through reforms such as Medium-Term Plan, Performance Management System and Medium-Term Expenditure Framework (Meigaru *et al.*, 2019). As the global statistics opine, implementation of SPs in Tanzania's PS as obliged under section 7.4 of the 3<sup>rd</sup> Five Year Development Plan 2021-2025 remains ineffective as evidenced in CAG reports indicating existence of outdated SPs, poor M&E, unimplemented activities and poor linkage between budget and plans (CAG, 2023). Despite increase in empirical studies, in the context of Tanzania; no existing study to the best knowledge of this study that looked into the effect of skill development on successful implementation of SP in PS. This study therefore, through the aid of BSC theory intended to examine the effect of skill development on successful implementation of SP at Medical Stores Department (MSD), National Health Insurance Fund (NHIF), Tanzania Medicines and Medical Devices Authority (TMDA), National Institute for Medical Research (NIMR) and National Public Health Laboratory (NPHL) to provide an understanding of the extent to which it affects successful implementation of SPs in PS.

## **2. LITERATURE REVIEW**

Strategy refers to an integrated set of choices that position a firm to superior returns (Wiraeus & Creelman, 2019). In developing SPs, organizations establish their strategic goals and objectives, from which strategies are defined on how each objective will be achieved (Retnandari, 2022). Strategies will further be broken down to establish expected outcomes, key performance indicators and targets (Kaplan & Norton, 1996). Effective strategies enable the organization to achieve its strategic goals and gain competitive advantage hence maximizing the organization's strength (Isfahani *et al.*, 2022). Strategy formulation is the match between qualifications and opportunities that positions a firm in its environment (Mintzberg *et al.*, 2020). Wiraeus & Creelman, (2019) opined that chances for shaping the objective or initiative are dependent upon the ability of the team to agree on the definition of the strategy. This will provide proper understanding of what strategies to develop. Strategy formulation process should reveal the different market or customer

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segments, and their preferences along dimensions like price, quality, functionality, image, reputation, relationship, and service (Kaplan & Norton, 1996). The company's strategy can then be defined by those customer and market segments that the business chooses to target.

Strategy implementation is the linking of strategy to operations (Fuertes *et al.*, 2020). It is the process by which initiatives defined in the SP are put into action to achieve the intended output. Whereas strategy formulation is essentially a straightforward task; executing strategies is significantly much more complex. This disconnection is caused by barriers erected by traditional management systems. BSC enables managers to bridge this gap through hierarchically structured strategy maps (Kaplan & Norton, 2008). This structure works fine when executives have a clear vision of organizational destination and the actions needed to be taken to reach that destination (Kaplan & Norton, 1996). Strategic planning refers to envisioning the future and develop procedures and operations to achieve it (Wells & Doherty, 1994). It is crucial to the success and productivity of the organizations since it enhances organization's purposefulness, improves allocation of resource, creates mechanisms for coordination of operations, establishes control and enhances time management (Alkhafaji, 2003; Ritson, 2019; Isfahani *et al.*, 2022). The nature of strategic planning in PS lies on adopting techniques of the private sector aiming at enhancing public service delivery (Kim & Han, 2015; Lapuente & Van de Walle, 2020). When the planning process is completed appropriately, it would produce a comprehensive planning document – strategic plan (Retnandari, 2022).

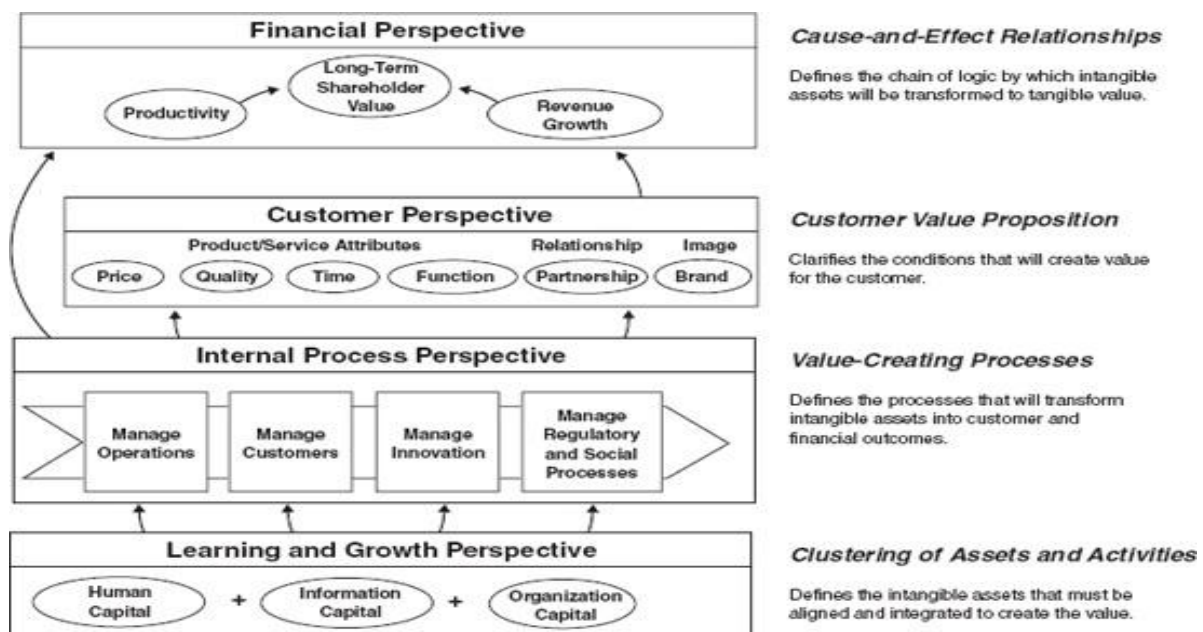
Strategic plan is a document that communicates organization's goals and the activities needed to achieve those goals (Dlamini *et al.*, 2020). Building SP involves deep understanding of the organization where vision, mission and core values are crafted followed by establishment of objectives, strategies, outcomes, KPIs, target, result framework, and finally; resource requirements for execution of the plan (Kaplan & Norton, 2004). SP provides a step-by-step instruction for carrying out the strategies (Wiraeus & Creelman, 2019), provides direction for the organization (Ritson, 2019), defines the organization, focuses efforts and provides consistency (Mintzberg *et al.*, 2020). Skills refers to the know-how required to perform the processes critical to the success of the strategy (Kaplan & Norton, 2004). Training allows employees to acquires new skills or improve existing ones (Mullins, 2005) and eventually influencing positively and significantly implementation of SPs (Mgute & Nyakwara, 2022). Inadequacy of appropriate skills among employees affect successful implementation of SPs (Malusu & Mkulu, 2020). Whenever a person's ability to perform a job is limited by lack of knowledge or skill, it makes sense to bridge that gap by providing the required instructions (Silberman & Auerbach, 2006).

Successful implementation of SP is an interplay between people, process, and plan, thus enabling the organization to achieve its SP (George, 2020). It is a state at which an organization achieves its envisioned vision, mission and objectives. Although attention of academics has increased on strategy implementation over the recent past, managers are still facing remarkably similar problems concerning implementation. Studies show that small percentage of planned strategies are implemented and that too many strategies seem to fail (Vigfusson *et al.*, 2021), and there is no agreement among experts on the reason(s) for such failure (Bushe, 2019). Extant literatures have established success factors for effective implementation of SPs to include culture (Mgute & Nyakwera, 2022; Dasan, 2022; Nowak, 2020), structure (Mubanga & Lesa, 2024), communication (Torres *et al.*, 2023; Souki *et al.*, 2020) leadership (Gande & Hlophe, 2023; Baluhi, 2022) and resources (Torres *et al.*, 2023) but very little has been said regarding the effect of skill development

on implementation of SPs.

**Theoretical Review: Balanced Scorecard (BSC)**

This study was guided by Balanced Scorecard (BSC) theory. The theory was developed by Robert Kaplan and David Norton in 1992 following concerns that financial measures of business performance were ineffective for modern business, affecting the ability of the business to create value (Niven, 2002). BSC is a carefully selected set of measures derived from organization’s strategy representing a tool for communicating the outcomes and performance drivers by which the organization will achieve its vision (Niven, 2002). The BSC theory provides three basic assumptions, that; (1) a cause-and-effect relationship exists among measurements categories, (2) a strategic plan and/or business strategy exist and is in place, and (3) the most important drivers (measures of success) have been correctly identified (Kaplan & Norton, 1992). The theory underscores through its learning and growth perspective (L&G) the need for enhancing skills, talent and knowledge among employees to effectively execute the organization strategy (Kaplan & Norton 1996). It involves changes and improvements that a company must achieve to run its vision, specifying that training of employees will improve or enhance development of appropriate capabilities in terms of skills, adaptability, commitment and morale required to effectively execute the organization’s strategy (Kaplan & Norton, 1996; Mikula *et al.*, 2020).



**Figure 1: The Balanced Scorecard Framework**

Source: Kaplan and Norton, “Strategy Maps,” *Harvard Business Review* (2004).

The theory was used by Mikula *et al.*, (2020) in developing the position of L&G in the BSC model in supporting skills development where it was found that the model was applied at the studied organization (airport) in developing appropriate skills and knowledge which were critical in moving the airport ahead in the market. The theory was also used by Sokah, (2020) in the study on the factors affecting implementation of BSC in Tanzania where it was found that

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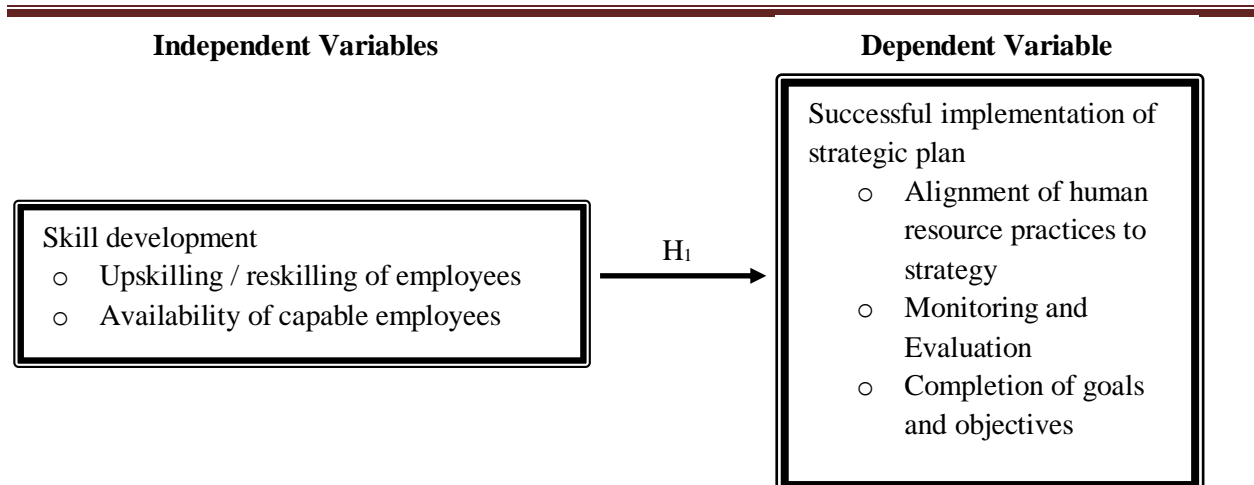
implementation of BSC was affected by management supervision, citing inadequate skills among staff as one of the key factors. The theory was also used by Nafari & Rezaei, (2022) to establish the relationship between HR strategies (staff training and compensation) and organizational performance based on the BSC where it was found that there was a positive and significant correlation between HR strategies and organizational performance, and that; the organizational performance in L&G perspective had the highest correlation with HR strategies.

### ***Empirical Literature Review: Skill Development and Implementation of SP***

Although there has been increase in empirical studies on strategy implementation, most of the studies have focused mainly on culture, structure, communication, leadership and resources to establish how they affect SP implementation, and very little was said regarding the effect of skill development on implementation of SPs. Mgute & Nyakwara, (2022) conducted a study on “*Factors Influencing Implementation of Strategic Plans in Public Secondary Schools in Kenya*”. Respondents were asked to rate the statement; availability of resources (skills, finance and time) is crucial in SP implementation; budgeting influence SP implementation; training, staff development and assets influence SP implementation; and technology affects SP implementation. Findings showed that skills and training positively and significantly influence SP implementation. Baluhi, (2022) conducted a study on “*Assessing the Barriers to Effective Strategic Leadership on Corporate Strategy Implementation in Tanzania*”. 53% of the respondents said there were activities that needed workers to build skills to implement the strategy which were not executed, those executed, some were not executed on time while others executed not in a manner related to strategy implementation; consequently, resulted into poor execution of the developed corporate strategy. Aipinge & Shopati, (2022) conducted a study on “*Identifying the Success Factors for Effective Turnaround Strategy Implementation and Outcomes in Public Sector Organization in Namibia*”. The study found that staff training on the strategy was critical for implementation of the strategy because it provided employees with skills needed to manage its complete delivery timely.

Dlamini *et al.*, (2020) conducted a study on “*Challenges to Strategic Planning in Public Institutions*”, Department of Telecommunication and Postal Services in South Africa being the case study. The study found that poor project management skills and shortage in strategic planning skills were among the challenges resulting into strategy execution gap. Nyerenga, (2021) conducted a study on “*Factor Influencing Implementation of Strategic Plan in Tanzania*”, Mbeya District Council (MDC) being the case study where 94.9% of the respondents responded that MDC had regular training for employees to be skilled to support SP implementation while Malusu & Mkulu, (2020) conducted a study on “*Administrative Challenges Facing Heads of Public Secondary Schools in Implementation of Strategic Plans in Kondoa Town Council*” in Tanzania and the study found out that lack of planning skills was among the factors affecting successful implementation of SP. Therefore, this study puts forth the hypotheses that: ***Alternative Hypothesis (Ha): Skill development has positive and significant effect on successful implementation of strategic plan in public sector. Null Hypothesis (Ho): Skill development has no positive and significant effect on successful implementation of strategic plan in public sector.***

Conceptual framework proposed for this study shows that successful implementation of SP is explained by skill development. This framework guided this study to examine the effect of skill development on successful implementation of SP at selected PSIs.



**Figure 2:** Conceptual Framework

**Source:** Literature Review – Conceptualized and drawn by the Researcher, 2024.

### 3. METHODOLOGY

The study was conducted at MSD, NHIF, TMDA, NIMR and NPHL; PSIs under the Ministry of Health (MoH) in Tanzania on three grounds, firstly; their strategic position in ensuring effective provision of health services to the public, secondly; strategic initiatives taken to improve their performance, and thirdly; findings in CAG reports that performance of many PSIs has remained questionable; with noted existence of outdated SPs, poor implementation of existing SPs, poor M&E, inefficiencies in internal control, and poor linkage between budget and plans (CAG, 2023). Population of the study was all 1,918 permanent staff with a target population of 541 staff where 230 staff were sampled (Yamane Formula) through systematic random sampling. This study used positivist philosophy because it allows the researcher to use existing theory to develop hypotheses which can be confirmed or refuted. Positivist relates to the philosophical stance of the natural scientist and entails working with an observable social reality to produce law-like generalisations (Saunders *et al.*, 2019). Positivists underscore that real events can be empirically studied and explained using logical analysis and scientifically validated models by testing to prove or disprove the hypotheses (Greener, 2008).

The study used quantitative approach as it focused on collecting data that were numerical, which could be analysed statistically to establish relationship between variables (Saunders *et al.*, 2019). This study employed correlational research design since it is appropriate for studies that apply correlation statistics to measure and describe the degree of association between variables (Creswell, 2012), which was appropriate for this study as it sought to examine the effect of skill development on successful implementation of SPs. Supported also by Kaliyadan & Kulkarni, (2019); descriptive design was applied to provide a summary about the sample being studied without drawing any inferences to the theory. Since this study was a quantitative, survey strategy was employed because it is effective in questionnaires (Saunders *et al.*, 2019). Primary data were used in this study, collected through Odd Likert Scale type questionnaires under five-point Likert label since it is most commonly used by survey specialists, and it provides optimal response options (Taherdoost, 2019). Questionnaires were adopted from various studies (Souki *et al.*, 2020; Nyerenga, 2021; Mgute & Nyakwara, 2022; Gande & Hlophe, 2023) whose language was adjusted

to capture the setting of this study.

Through the aid of Statistical Package for Social Sciences (SPSS), data were analysed through Regression Analysis. Reliability was tested through Cronbach’s alpha ( $\alpha$ ) where the  $\alpha$  of 0.70 was considered a cut-off; and the level of agreement with the statement given in the construct under this study was the weighted mean of 3.5 or above, which is also supported by Nassar *et al.*, (2021). Regression assumptions to this study were that there is a linear relationship between skill development as independent variable and successful implementation of SP as the dependent variable, and that the dependent variable observations are selected independently and randomly from the population, residuals are normally distributed with a mean of 0 and a constant variance at every point in the linear model, which is also supported by Hayes, (2023). These assumptions were checked through scatter plot, Variance Inflation Factor (VIF), quantile-quantile plot to check their distribution and creating a plot of standardized residuals versus predicted values.

**Table 1: Likert Response Labels for the Study**

| Options         | 1                 | 2        | 3       | 4     | 5              |
|-----------------|-------------------|----------|---------|-------|----------------|
| <b>5-points</b> | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |

**Source:** Adopted and modified from Taherdoost (2019).

**Table 2: Weighted Mean – Level of Agreement**

| S/n | Weighted Mean | Level of Agreement |
|-----|---------------|--------------------|
| 1   | 4.3 - 5       | Very High          |
| 2   | 3.5 – 4.2     | High               |
| 3   | 2.7 – 3.4     | Average            |
| 4   | 1.9 – 2.6     | Low                |
| 5   | 1.8 and less  | Very Weak          |

**Source:** Adopted and modified from Nassar *et al.*, (2021)

#### 4. RESULTS

##### *Response Rate*

This study distributed 230 questionnaires to MSD, NHIF, TMDA, NHIF and NPHL staff where 223 (96.9%) questionnaires were successfully completed and received back. Easterby-Smith *et al.*, (2012) considered surveys with response rates greater than 30% as acceptable.

**Table 3: Response Rate**

| S/n          | Institution | Questionnaires Distributed | Questionnaires Completed | %           |
|--------------|-------------|----------------------------|--------------------------|-------------|
| 1            | MSD         | 78                         | 71                       | 91          |
| 2            | NHIF        | 83                         | 83                       | 100         |
| 3            | TMDA        | 38                         | 38                       | 100         |
| 4            | NIMR        | 14                         | 14                       | 100         |
| 5            | NPHL        | 17                         | 17                       | 100         |
| <b>Total</b> |             | <b>230</b>                 | <b>223</b>               | <b>96.9</b> |

**Source:** Field Data, 2024.

##### *Reliability of Results*

The computed Cronbach’s alpha coefficients for skill development was 0.885 showing a strong internal consistency between items representing a given construct as shown in Table 4.

**Table 4: Reliability Score of Results**

| Construct                   | Coding | No. of Questions | Cronbach's Alpha |
|-----------------------------|--------|------------------|------------------|
| Effect of skill development | SD     | 12               | 0.885            |

**Source:** Data Analysis, 2024.

**Descriptive Statistics Results**

This study had one construct, namely; Skill Development. The construct consisted Likert scale with twelve (12) items in the questionnaire. After reliability test, the construct remained with its original Likert scale items. The scale had the overall mean falling in the range of agreement with given statements (3.5 and above) as depicted in Table 5.

**Table 5: Likert Scale Summary Statistics**

| Scale(Construct)            | Mean  | Std. Deviation |
|-----------------------------|-------|----------------|
| Effect of skill development | 4.155 | 0.206          |

**Source:** Field Data, 2024.

**Effect of Skill Development Descriptive Statistics**

Descriptive statistics were computed to determine the effect of skill development on successful implementation of SP in PS where the highest mean of 4.54 and standard deviation of 0.206 (M=4.54 SD=0.206) were received. In the evaluation of statements, respondents rated very high the availability of employees with required skills agreeing that it is crucial in implementation of SPs (M=4.54 SD=0.620), rated very high training and development of staff agreeing that it is crucial for SP implementation as it increases the level of skills within institutions (M=4.49 SD=0.670), and rated high that employees are trained on various skills in order to effectively implement the SP timely (M=4.26 SD=0.819). Respondents also agreed that they are encouraged to learn from experience (M=4.17 SD=0.685); to share knowledge (M=4.29 SD=0.663); and that there is annual training plan designed to address shortage of skills among employees in executing their responsibilities (M=3.90 SD=1.094).

Respondents also rated high availability of fund in the annual budget to facilitate implementation of skills development programs to eligible employees (M=4.00 SD=0.968); training attended has enabled employees to develop skills required to successful implement the organization's SP (M=4.15 SD=0.896) and that there is adequate knowledge among employees translated into effective implementation of SP (M=4.04 SD=0.781). Respondents also agreed that training needs assessment is conducted before employees are allocated for any training (M=4.00 SD=0.970); employees are able to track their performance outcomes (M=4.07 SD=0.824); and they are allocated into various training programs designed to address shortage of skills in implementing SP (M=3.95 SD=0.992). The general findings on effect of skill development show that all respondents had perception falling in the range of agreement (M=4.155 SD=0.206). Hence, the findings under this construct implies that all respondents in this study feel that skills development affect implementation of SP.

**Table 6: Skill Development Descriptive Statistics**

| Statement  | Min | Max  | Mean | Std. Dev. |
|--|-----|------|------|-----------|
| 1. The availability of employees with required skills is | 3.9 | 4.54 | 4.54 | .620      |



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|     |  |     |      |      |       |
|-----|--|-----|------|------|-------|
|     | crucial in strategic plan implementation.  |     |      |      |       |
| 2.  | Training and development of staff to increase the level of skills within institutions is crucial for strategic plan implementation.              | 3.9 | 4.54 | 4.49 | .670  |
| 3.  | Employees are trained on various skills in order to effectively implement the strategic plan timely.   | 3.9 | 4.54 | 4.26 | .819  |
| 4.  | Employees are encouraged to learn from experience.   | 3.9 | 4.54 | 4.17 | .685  |
| 5.  | Employees are encouraged to share knowledge.   | 3.9 | 4.54 | 4.29 | .663  |
| 6.  | There is annual training plan within the Institution designed to address shortage of skills among employees in executing their responsibilities. | 3.9 | 4.54 | 3.90 | 1.094 |
| 7.  | There is fund set aside in the annual budget to facilitate implementation of skills development programs to eligible employees.                  | 3.9 | 4.54 | 4.00 | .968  |
| 8.  | Training attended by employees have enabled employees to develop skills required to successful implement the organization's strategic plan.      | 3.9 | 4.54 | 4.15 | .896  |
| 9.  | There is adequate knowledge among employees translated into effective implementation of strategic plan.  | 3.9 | 4.54 | 4.04 | .781  |
| 10. | Training needs assessment is conducted before employees are allocated for any training program.  | 3.9 | 4.54 | 4.00 | .970  |
| 11. | Employees are able to track their performance outcomes such as improved job performance and increased efficiency.                                | 3.9 | 4.54 | 4.07 | .824  |
| 12. | Employees are allocated into various training programs designed to address shortage of skills in implementing strategic plan.                    | 3.9 | 4.54 | 3.95 | .992  |

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**Source:** Field Data, 2024.

### ***Inferential Results***

All assumptions associated with this study were checked and were in order with the  $VIF \ll 10$  as depicted in Table 9. The histogram shape resembles a bell curve, indicating that the residuals follow a normal distribution. This normality is evident as the mean of the residuals is close to 0, and the standard deviation is close to 1 ( $M=2.81E-15$ ,  $SD=0.993$ ). This normal distribution is further confirmed as the residuals align closely along the diagonal line, although some outliers are present. This alignment indicates that the data exhibits linearity. Further, the case residuals are distributed evenly around zero in a rectangular fashion, suggesting homoscedasticity, which implies that the variance of the data is consistent across all groups being compared. Consequently, there should not be any concern regarding heteroscedasticity, which would indicate unequal variance in the data. The regression analysis was carried out to estimate the effect of independent variable (Skill development) on dependent variable (Successful implementation of strategic plan). The analysis involved testing of Model Fit which provides the amount of variation on dependent variable which is explained by independent variable; Analysis of Variance (ANOVA) and

Regression Coefficient. The regression analysis shows that the model has an R-square of 0.736, which indicates that 73.6% of variability in dependent variable can be explained by independent variable. The overall regression model summary suggests that the model is statistically a significant predictor of successful implementation of strategic plan.

**Table 7: Model Fit Summary Results**

| Model Summary |      |          |                   |                            |
|---------------|------|----------|-------------------|----------------------------|
| Model         | R    | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1             | .858 | .736     | .731              | .347                       |

Source: Field Data, 2024.

The analysis of variation indicates that independent variable affects significantly the dependent variable ( $F=152$ ,  $p\text{-value}=0.0 < 0.05$ ) and the coefficient is positive and statistically significant from zero.

**Table 8: ANOVA Results**

| ANOVA |            |                |     |             |         |      |
|-------|------------|----------------|-----|-------------|---------|------|
| Model |            | Sum of Squares | df  | Mean Square | F       | Sig. |
| 1     | Regression | 73.269         | 4   | 18.317      | 152.000 | .000 |
|       | Residual   | 26.271         | 218 | .121        |         |      |
|       | Total      | 99.540         | 222 |             |         |      |

Source: Field Data, 2024.

**Table 9: Regression Coefficients Results**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig.        | Collinearity Statistics |       |
|-------|------------|-----------------------------|------------|---------------------------|--------|-------------|-------------------------|-------|
|       |            | B                           | Std. Error | Beta                      |        |             | Tolerance               | VIF   |
| 1     | (Constant) | -.415                       | .207       |                           | -1.999 | <b>.047</b> |                         |       |
|       | SD         | .217                        | .058       | .182                      | 3.731  | <b>.000</b> | .510                    | 1.960 |

Source: Field Data, 2024.

Therefore, Skill development is statistically a significant predictor of successful implementation of strategic plan ( $p\text{-value} < 0.05$ ) since a t-value greater than 2.00 or less than -2.00 is considered to be statistically significant and a p-value less than 0.05 is considered to be statistically significant while a tolerance value less than 0.1 or VIF value greater than 10 indicates that the predictors are highly correlated, which may lead into problems with the interpretation of the regression results. In the regression analysis P value was less than 0.05 ( $p=0.000$ ) at 5% significant level as indicated in Table 9 above. Therefore, the *null hypothesis (Ho)* is rejected, *alternative hypothesis (Ha)* is accepted; that Skill development has positive and significant effect on successful implementation of strategic plan in public sector. Furthermore, from correlation analysis; all methods (parametric and non-parametric) indicate that Skill development has positive and significant (at  $1\% < 5\%$ ) correlations (0.644) with dependent variable, suggesting that Skill development has a positive effect on Successful implementation of strategic plan.

**5. DISCUSSION**

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***Effect of Skill Development on Successful Implementation of SP in Public Sector***

The findings indicate that skill development has positive and significant effect on successful implementation of SPs in PS since P value was less than 0.05 ( $p=0.000$ ) at 5% significant level. The findings further indicate that, skill development highly enhances availability of employees with skills that are crucial in SP implementation; increases the level of skills within the institutions which are crucial for SP implementation; enhances effective and timely implementation of SPs; encourages employees to learn from experience; enhances sharing of knowledge among employees; and provides employees with the ability to track their performance outcomes.

The findings have not shown surprising results since employees will need to acquire new skills or improve existing ones to achieve breakthrough performance. The findings are supported by BSC theory on the scorecard's learning and growth assumptions, that business should focus on identifying infrastructure that organization must build to create growth and improvement, stressing on the need to reskill employees (Kaplan & Norton, 1996). These findings are consistent with previous studies by Mgute & Nyakwara, (2022) that skills positively and significantly influence implementation of SPs; Aipinge & Shopati, (2022) and Dlamini *et al.*, (2020) that skills are among the factors for effective strategy implementation. The findings are also consistent with the findings in the study by Malusu & Mkulu, (2020) that inadequate skills affected successful implementation of SP. Mikula *et al.*, (2020) in developing the position of L&G in supporting skills development also reported similar findings that BSC supported developing of appropriate skills which were critical in moving the studied organization ahead in the market. The findings are also similar to the findings in the study by Nafari & Rezaei, (2022) on the relationship between HR strategies (staff training and compensation) and organizational performance where it was found that there was a positive and significant correlation between HR strategies and organizational performance.

**6. CONCLUSION AND RECOMMENDATIONS*****Conclusion***

The objective of this study was to examine the effect of skill development on successful implementation of SPs in PS. The objective consisted of both alternative and null hypotheses, which had to be either confirmed or rejected by the study findings. The findings of the study accepted the *alternative hypothesis (Ha)* that skill development has positive and significant effect on successful implementation of SP in PS since P value was less than 0.05 ( $p=0.000$ ) at 5% significant level, therefore confirming the BSC assumptions that a cause-and-effect relationship exists among its measurements categories. Following this finding, the study has contributed to the ongoing debate among scholars on the existence of cause-and-effect relationship in the four dimensions of the BSC theory (Bukh & Malmi, 2005; Ratnaningrum, *et al.*, 2020) that there is a positive and significant relationship between skill development and successful implementation of SP in PS, that skill development affects positively and significantly successful implementation of SP. Further, the study has contributed to the BSC theory on the claimed over-complexity in deriving the cause-and-effect relationship (Kerklaan, 2024) by adding skill development to the cause-and-effect drivers for clarity in successful strategy implementation. Moreover, following concerns that there is no empirical evidence to support the proposition that a cause-and-effect relationship exists among the scorecard's measurement categories (Tawse & Tabesh, 2023), the study has also contributed to the existing body of knowledge by empirically establishing the effect of skill development on successful implementation of SP in PS.

**Recommendations**

Based on the findings that skill development is positively and significantly related to successful implementation of SP in PS, organizations should ensure the availability of employees with required skills since it is crucial in SP implementation and they should ensure that training and development of staff is conducted to increase the level of skills within their institutions which is crucial for SP implementation. Organizations should also ensure that employees are encouraged to learn from experience and share knowledge among themselves as they have been noted to have significant effect on SP implementation. Further, since the study focused only on selected PSIs under MoH in Tanzania, it is still unclear if the findings under this study can be generalized to other PSIs in other Ministries, Department and Agencies (MDAs); hence, including other MDAs in future studies remains critical to obtain across-the-board understanding of the effect of skill development on successful implementation of SPs in PS.

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