



The Effect of Monitoring and Evaluation on the Performance of Strengthening School Readiness Project In Rwanda

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Abstract

This study focused on the effect of monitoring and evaluation on performance of Non-governmental Organization (NGO) projects using the case study of the Strengthening School Readiness (SSR) project funded by the Voluntary Services Overseas (VSO). The objectives of the study were to establish the effect of formative, process and participatory forms of evaluation on project performance. The stakeholder theory and Logical Framework Approach form the theoretical foundation of this study while monitoring and evaluation and project performance form the conceptual framework. The researcher used a mixed methods approach by incorporating both quantitative and qualitative methods because of the numerical and non-numeric/narrative data that was used in analysis of findings. The sample size was 145 people who were selected by use of stratified, purposive and simple random sampling techniques. Three methods (the questionnaire survey, key informant interviews and documentary review) were used for data collection. These were applied using three research instruments: the questionnaire, interview guide and document checklist respectively. The validity of research instruments was determined by use of the content validity while reliability was verified through test-retest method. Quantitative data was analyzed through descriptive and inferential analysis using Statistical Package for Social Sciences and Microsoft Excel while qualitative data was analyzed through content analysis. Findings show that M&E plays a key role in the performance of the SSR project. For example, it is indicated that the project registered a 139.5% increase in funding, a 125% increase in the number of supported children and a 84% improvement in literacy rate. This is confirmed by the Pearson correlation test which shows that there is a positive relationship between formative evaluation and performance of the SSR project ($r=.601 > .05$, $p < .01$), process evaluation and performance of the SSR project ($r=.718 > .05$, $p < .01$) and participatory evaluation and performance of the SSR project ($r=.852 > .05$, $p < .01$). However, there was insignificant improvement in numeracy rate, conflicting stakeholder interests and needs and stakeholder hesitation to disclose their identities. It is hoped that the study will help VSO to strengthen monitoring and evaluation practices to improve project performance while other academicians will find the study valuable in benchmarking their studies on the same subject.

Keywords: Monitoring and Evaluation, Project performance, NGOs, Rwanda

1. Introduction

Monitoring and evaluation is a critical management function that improves project relevance, efficiency, learning, effectiveness, sustainability, accountability, equity and impact. Early Childhood Education (ECE) was introduced by the government of Rwanda in 2013 in order to combat some of these issues (Crawford & Bryce, 2013). Through the SSR project, VSO is supporting MINEDUC to improve basic education (primary and pre-primary) by collaborating with schools and teachers' colleges to improve the capacity of teachers in implementing and managing learner-centered teaching methodology.

However, despite promising progress registered over the last few years, challenges in the project still remain. For example, children leave school without adequate literacy and numeracy skills. The rate of repetition is high (70% of the children) especially for first year of primary (VSO, 2018). There is low M&E culture in the project management where all evaluation processes of formative, process and participatory evaluations are not given priority. This is compounded by lack of adequate financing and technical expertise for strong M&E systems. This continuously affects project performance.

Despite lack of academic empirical studies that have previously been conducted on similar project in Rwanda, the researcher believes that M&E has a bearing on positively affecting project output, outcomes, impact and sustainability. This study investigates the relationship between M&E and project performance.

1.2 General Objective

The aim of the study was to examine the relationship between monitoring and evaluation and project performance in Rwanda.

1.2.1 Specific objectives

- (i) To determine the relationship between formative evaluation and performance of SSRR project.
- (ii) To examine relationship between process evaluation and performance of SSRR project.
- (iii) To find out the relationship between participatory evaluation and performance of SSRR project

2. Review of Literature

2.1 Effect of formative evaluation on project performance

Formative evaluation helps to align the project objectives and activities with stakeholder needs. Kusek and Rist, (2014) found out that proper formative evaluation of project objectives during project initiation helped to inspire formative corrective action which helped to align project goals with the needs of stakeholders. This was instrumental in directing the project towards improving the welfare of the beneficiaries.

In a related development, formative evaluation has been found to be instrumental tool in responding to the priority needs of project donors. Chianca, (2017) in a study on international development evaluation in Michigan found that formative evaluation provided baseline data which helped to guide project implementers towards fulfilling the priority goals of financing institutions thus creating the trust for further funding. In a related development, projects that were not formatively evaluated to generate baseline data revealed great implementation deviations from the original objectives of the donors, thus creating conflicts which resulted into reduced funding.

Formative evaluation helps to identify locally relevant evaluation questions and empower participants to contribute towards project success and sustainability. Zukoski and Luluquisen, (2012) found that formative evaluation helped to focus project measurements on relevant local evaluation questions which met the interests, needs and expectations of local beneficiaries, management and donors of the interventions. Formative evaluation methods adopted during baseline studies allowed stakeholders to decide which evaluation questions were critical in answering their project needs and which helped to guide the implementation teams in improving the project outcomes. Similarly, formative assessment was found out to empower project initiators by claiming the rights of local communities to have control and ownership of the project processes. By getting involved in formative evaluation from the project start gave project beneficiaries a feeling of ownership of outcomes. Appreciating local personnel and skills helps to build confidence and motivates the local community to commit towards the program goals and established targeted outcomes.

It is worth to note that project relevance, effectiveness, efficiency and equity are important performance indicators in the Strengthening School Readiness Project in Nyamasheke District and use of formative evaluation is expected to identify beneficiary needs that can be used as benchmarks for project design and evaluation to assess performance.

2.2 Effect of process evaluation on project performance

Process evaluation plays important contribution to enhance effectiveness as well as the efficiency of the project. Effectiveness means doing what is right in a right time scope during project implementation while efficiency means doing things rights in respect of the available resources. This is corroborated by Sundqvist, Backlund and Chroner, (2014) found that process evaluation was an important process that helped to improve effectiveness and efficiency thus enhancing product quality. However, the interviewing process showed that the two terms were intentionally adopted by the organizations and no separation between the two was made. It was also observed that all effort focused on meeting the costs, time and scope based on the project specifications without considering external factors like clients and beneficiaries who relate more to effectiveness.

A study by Maxima Consulting, (2013) focusing on the cost-effectiveness of development donations given to the Republic of Serbia found that process evaluation helped to make mid-term reviews and recommendations which improved the effectiveness and efficiency of the projects that were being implemented in the covered sectors. For example, ODA was concentrated and integrated towards the maximization of the impact, planning for policy and coordinating the implementation were strengthened at the central government level, application of modalities that are most efficient and effective in achieving agreed targets and outcomes based on regulations, policies culture and systems of evaluation.

In a related development, Smith, (2012), while examining the impact of practices for project management in project-focused organizations project-driven organizations found that in case the goals of the project including time, cost, quality and scope were applied as amalgamated fixed variables, the combined outcomes of the success factors indicated that monitoring and control was an important factor for project efficiency. The success factors that were confirmed in process evaluation were stakeholder commitment, scope modifications in the project and evaluation. Other factors also were considered when the project outcomes regarding time scope, cost and quality were combined as well as the number of skilled personnel assigned to project evaluation (Kusek & Rist, 2014). Based on the assessment of the evaluation outcomes, it is worth to conclude that there is a relationship between process evaluation and project performance in terms of outcomes.

2.3 Effect of participatory evaluation on project performance

Involving stakeholders in evaluation is one of the hallmarks of participatory evaluation (PE) in programing. PE is a critical tool for improving social equity and accountability in program implementation and outcomes access as well as developing a movement knowledge strategy for social change. Borgman-Arboleda and Clark, (2012) found that when PE approach was adopted as a learning opportunity for an organization to tackle social inequality and injustice, it provided significant opportunities for developing a "knowledge strategy." The generated knowledge from various stakeholders became an important part of society change strategy, and the evaluation process was a chance to develop collaborations, organizations as well as other strategic options in

numerous interventions. For example it provided: i) opportunities for teams to define clarifications for themselves regarding the ways of integrating equity in social change, ii) space needed for reflecting which forms the basis for acting on the strategy, iii) a progress tracking, measuring and accounting, iv) a system for collecting and analyzing information for decision making, and v) a prospect for involving teams and other important stakeholders in a fair, equitable way.

Participatory evaluation encourages targeted action for disadvantaged groups and enhances the provision of universal services for fair treatment. Jones, (2019) found that programme implementation was not inclusive and some groups were excluded from accessing interventions. After participatory evaluation, the gaps were identified and government expenditures were focused to favor special-need regions, groups or communities. The establishment of quotas was used to facilitate the process of accessing jobs for special-interest groups. Service delivery targeted to these identified groups was important (for example, education for girls) as provision of assistance at critical stages of human development like early childhood. Providing empowerment tools to those groups was critical as well as organizational strengthening, forming social movements and unionizing of workers.

3. Materials and Methods

The researcher used a mixed research design which incorporated qualitative and quantitative techniques. The quantitative approach involved use of correlation analysis which aimed at assessing the relationship between M&E and project performance. The qualitative approach involved the use of a case study design. This was preferred because the investigator was interested in generating in-depth data on a single entity. The population for the study was 212 people who included 12 VSO staffs and 200 household beneficiary heads. However, only 200 household heads were sampled because of their numerical strength while the 12 project staffs were all considered to participate in the study. The sampling equation below shows the application of Yamane's formula to the 200 household heads. Therefore, the overall sample size was 133 beneficiary household heads, plus 12 project management and staffs which gave the combined sample size of 145 people.

The researcher used two sampling methods (stratification and simple randomization). Population stratification was applied by dividing the population into two strata based on their unique characteristics. Then a simple randomized sampling was used in determining the sample size for the beneficiary household head stratum. In applying simple random, the researcher was able to write numbers 1-200 on pieces of paper after which the papers were folded and mixed in a box. Project beneficiary household heads were requested to pick their lucky numbers where household heads who picked numbers 1-133 were considered for participation. However, all the 12 project management and staffs were included in the study because they were small in number. The researcher used three instruments/methods during data collection process. These included the questionnaire, interview guide and documents review/desk research. The questionnaire was used during primary data collection. It was preferred because it collected information from many respondents in a projected time frame. Only close-ended questions were used in the questionnaire because they were considered easy to answer.

Formal and informal interviews with selected project staffs and beneficiaries were also conducted. The interview guide with guiding open-ended questions was used and this was intended to give respondents a chance to support their opinions in a free atmosphere. Results from open-ended questions in the interviews helped to complement the questionnaire since it did not provide respondents with an opportunity to express their views beyond the predetermined response options. Desk research involved the use and review of documents such as membership registers, annual reports, newspapers, magazines, brochures, budgets, etc. These were reviewed to generate relevant data M&E and project performance. Documentary analysis was used to enhance the researcher's overall understanding of the situation under study, by providing information which could not be obtained using other instruments.

After securing the approval of the research proposal by Mount Kenya University, the investigator acquired a letter of introduction to the management of VSO seeking permission to administer the research instruments to the VSO project staffs and beneficiaries. The major research instrument, the questionnaire was given to technical staffs and experts to get their opinions and comments on where changes were needed. The mode of questionnaire and interview administration were through physical interaction, probing.

This analysis was used to elaborate the characteristics of data and provide summaries about the response items. In other words, descriptive statistics are preferred because they presented lots of quantitative measures/descriptions in a manageable form. For example, the researcher used frequency distribution and percentage tables to describe the nature of responses on each of the response items under the study variables (formative evaluation, process evaluation and participatory evaluation).

Using SPSS software, the researcher conducted a Pearson correlation analysis to determine the relationship between monitoring and evaluation and project performance. The Pearson correlation coefficients (r) range between negative one (-1) and positive ($+1$) where -1 indicates the existence of perfect negative relationship between the study variables, 0 indicates existence of no relationship between the variables and $+1$ represents a perfect positive relationship between the variables. Table 3.3 shows the correlation matrix that guided the correlation analysis.

Qualitative data from interview was analyzed by use of content analysis where the researcher sought to understand the context of how respondents perceived the effect of M&E on project performance. During the conceptual content analysis, the researcher generated content categories to guide their coding and analysis process. Each item in the interview guide represented an idea and the investigator then extensively reviewed

the text while highlighting specific words relevant to the study I order to examine the conceptual meaning of the responses. From the conceptual analysis, the researcher also conducted relational content analysis to explore how concepts in the responses related to project performance in 2019-2021. This helped to determine how different variables of the M&E were related to the performance of the projects. Then conclusions were drawn based on these findings.

4.1 Research findings

4.1.1 Effect of Formative Evaluation on Project Performance

The Formative evaluation (FE) was an assessment conducted at the start of a project to establish the project’s indicator baselines. The researcher requested respondents to indicate their perceived importance of this evaluation function on the performance of SSR project in as far as relevance, effectiveness and efficiency of the project were concerned. Questions were constructed in a 3-point likert scale. For each item, respondents were requested to select and tick (✓) one response (that is, either agree, neutral or disagree) as Table 4.2 shows.

Table 4.2: Respondents' Perceived Effect of FE on Project Performance

Response Items	Agree	Neutral	Disagree	Mean	St. Dev.
5. FE provided knowledge on the current status of the project	82%	11%	7%	2.502	.205
6. FE helped to benchmark all future activities	92%	8%	-	2.678	.456
7. FE helped to establish priority areas for the SSR project	83%	7%	8%	2.524	.721
8. FE helped to review indicators and targets	94%	4%	2%	2.726	.342
9. Fe eased stakeholder identification	96%	4%	-	2.984	.109
10. FE provided tools for further evaluation	89%	5%	6%	2.562	.413

Source: Primary Data, 2022

As Table 4.2, item 5 shows, it was observed that 82% of respondents perceived formative evaluation as critical for providing knowledge on the current status of the project environment. On the other hand 11 % were neutral while 7% disagreed with the statement. This study also recognized that FE involves contextual and situational analysis which provided highlights for understanding of the problem context.

Rewarding item 6, it was demonstrated that 92% perceived FE as important for benchmarking all future activities while 8% remained neutral. This could be attributed to the fact that FE helps project management team in establishing baselines upon which future evaluations will be based.

In the same vein, item 7 showed that 83% perceived FE to be a significant function in establishing priority areas for the SSR project. This guided the research to recognize that FE helped to assess project beneficiary needs and aligned the intervention towards providing solutions to those needs.

Regarding tracking performance, item 8 showed that 94% perceived/agreed that FE helped in reviewing project indicators and targets, 4% were neutral while 2% disagreed with the statement. This showed that FE was instrumental in monitoring and updating project KPIs which guided project implementers in evaluating the success of project towards achieving improved literacy among children.

In regard to stakeholder mapping, item 9 showed that 96% perceived FE as an important function for stakeholder identification while 4% remained neutral. This could be attributed to the fact that FE involved determining the people who can affect or be affected by the project and how to engage them and address their needs, concerns and expectations.

It was further shown in item 9 that 89% perceived FE as an important function that provided tools for further evaluation of the project. Only 5% were neutral to the statement while 6% disagreed. This perception was based on the fact that during FE, various evaluation tools such as questionnaires, interview guides, documentary and observation check lists were designed which tools are used for the subsequent project evaluation such as PrE, ex-poste evaluation or impact evaluation thus improving project outcomes.

4.2.2 Effect of Process Evaluation (PrE) on Project Performance

Process Evaluation (PrE) is an evaluation function that focuses on project implementation processes and how the successfully the project followed the strategy laid out in the logic model.

The researcher requested respondents to rate their perceived importance of PrE on the performance of SSR project in as far as relevance, effectiveness and efficiency of the project was concerned. Questions were constructed in form of items on a 3-point likert scale. For each item, respondents were requested to select and tick (✓) one response (that is, either agree, neutral or disagree) as Table 4.3 shows.

Table 4.3: Respondents' Perceived Effect of PrE on Project Performance

Response Items	Agree	Neutral	Disagree	Mean	St. Dev.
11.PrE helped to evaluate adequacy & quality of inputs	78%	12%	10%	2.386	.378
12.PrE facilitated the review of resource allocation	83%	9%	8%	2.501	.451

13.PrE helped to review project schedules	87%	7%	6%	2.587	.491
14.PrE helped in the project skills appraisal	81%	12%	7%	2.498	.194
15.PrE helped to evaluate the degree of teamwork	96%	4%	-	2.884	.701
16.PrE facilitated the review of implementation strategy	93%	4%	3%	2.706	.109
17.PrE helped assess the quality of outputs	92%	8%	-	2.698	.549

Source: Primary Data, 2022

As Table 4.3 shows, it was observed in item 11 that 78% perceived PrE as an important function for evaluating the adequacy and quality of project inputs, 12% were neutral while 10% disagreed with the statement. This could be attributed to the fact that PrE assessed the quality of project inputs to better estimate the project success rate.

In the same vein, it was observed in item 12 that 83% of respondents perceived PrE as significant in facilitating the review of resource allocation. However, 9% were neutral and 8% disagreed with statement. This indicated that during PrE, project resources were reviewed to determine their adequacy, quality and allocation across project activities to achieve efficiency and effectiveness.

Furthermore, item 13 shows that 87% perceived PrE as an important function for reviewing project schedules and 7% were neutral while 6% disagreed with the statement. This perception was premised on the importance of PrE in assessing project scope and conducting reviews to ensure that project activities are aligned with project goals.

In a related development, item 14 shows that 81% of respondents perceived PrE to be important for appraising the project’s human capital. Only 12% remained neutral while 7% disagreed with the statement. The response could be attributed to the fact that PrE enabled implementers of the SSR project to assess the performance of team members and align their performance towards project goals.

Furthermore, item 15 shows that 96% perceived PrE to had played a critical role in evaluating the degree of teamwork among project staffs while 4% remained neutral to the statement. The findings concurred with the role of PrE in assessing the degree to which project teams collaborated to achieve project goals.

In the same vein, item 16 shows that 93% perceived PrE as an important function for facilitating the review of the SSR project’s implementation strategy, 4% were neutral while 3% disagreed with the statement. This argument could be attributed to the fact that PrE helped project managers to establish if the project was implemented based on the defined strategy.

Lastly, it was also observed in item 17 that 92% of respondents perceived PrE to be an effective tool for assessing the quality of project outputs while 8% remained neutral. This showed that PrE helped to establish whether activities were performed in the right order to produce the require deliverables for fulfilling the objectives. This process improved the way beneficiaries rated the performance of the project.

4.2.3 Effect of Participatory Evaluation on Project Performance

Participatory evaluation (PE) is an approach that involves the stakeholders of a programme or project in the *evaluation* process. This involvement can occur at any stage of the *evaluation* process, from the *evaluation* design to the data collection and analysis and the reporting of the study. The researcher requested respondents to rate their perceived importance of PE on the performance of SSR project in as far as relevance, effectiveness and efficiency of the project was concerned. Questions were constructed in form of items on a 3-point likert scale. For each item, respondents were requested to select and tick (✓) one response (that is, either agree, neutral or disagree) as Table 4.4 shows.

Table 4.4: Respondents’ Perceived Effect of PE on Project Performance

Response Items	Agree	Neutral	Disagree	Mean	St. Dev.
18. PE facilitated stakeholder mapping	91%	5%	4%	2.699	.805
19. PE improved stakeholder engagement	98%	2%	-	2.998	.421
20. PE improved local ownership of project	94%	3%	2%	2.706	.392
21. PE improved stakeholder empowerment	87%	9%	4%	2.689	.641
22. PE sustained organizational learning and growth	97%	3%	-	2.998	.867

Source: Primary Data, 2022

As table 4.4 shows, item 18 indicated that 91% of respondents agreed that PE facilitated SSR performance by enabling stakeholder mapping, 5% were neutral while 4% disagreed with the statement. The nature of the response could be attributed to the fact that PE facilitated project managers to identify stakeholders, establish their varying needs and level of influence, interest and authority over the project which helped in determining the best engagement strategy.

It is also observed in item 19 that 98% perceived and agreed that PE improved SSR project performance by improving stakeholder engagement while 2% disagreed with the statement. This could be attributed to the fact that PE created an opportunity for stakeholders to be engaged in project management processes which increased their level of engagement thus improving project outcomes.

Furthermore, item 20 shows that 94% perceived PE to be a significant function for improving local stakeholder ownership. Only 3% were neutral while 2% disagreed with the statement. The pattern of these responses was

attributed to the fact that PE process enabled local stakeholders to make substantial inputs and own the intervention.

In related responses, item 21 shows that 87% also perceived PE as playing a crucial role in project performance by improving stakeholder empowerment, 9% were neutral while 4% disagreed with the statement. This was true due to the fact that PE process provided the necessary tools for stakeholder capacity development in all project processes.

Lastly, item 22 also shows that 97% agreed that they perceived PE as significant for promoting project performance by sustaining organizational learning and growth while only 3% were neutral to the statement. This was attributed to the fact that PE involved stakeholders in all capacity building functions which enabled them to learn and share knowledge across functional teams.

4.2.4 Project performance

The researcher also investigated the level of project performance among respondents who were requested to rate how they perceived the performance of the SSR project. Table 4.5 shows the results.

Table 4.5: Response of project performance

Response Items	Agree	Neutral	Disagree	Mean	St. Dev.
23. There is project quality	68%	7%	25%	2.699	.723
24. The project considers all relevant elements	82%	5%	13%	2.897	.345
25. Our project costs are controlled	65%	14%	21%	2.642	.601
26. Project is completed within the agreed time	57%	26%	17%	2.389	.324

Source: Primary data, 2022

According to Table 4.5, item 23, it can be observed that 68% respondents agreed that the SSR project offered quality services to the beneficiaries, 25% disagreed with the statement while 7% remained neutral. This indicates that the SSR project offers satisfactory benefits to the majority stakeholders.

In regard to project scope, it is also observed that 82% of respondents agreed that the SSR project considers all relevant elements, 13% disagreed with the statement while 5% remained neutral. This indicates that the SSR project management is committed to comprehensively meet stakeholders' needs by considering all project details in the implementation plan.

In item 25, it can be observed that 65% also agreed that project costs were correctly controlled, 21% disagreed with the statement while 14% remained neutral. The pattern of response suggests SSR project resources are efficiently utilized.

In regard to timely delivery, item 26 shows that 57% agreed that project deliverables were completed within the set agreed time, 17% disagreed with the statement while 26% were neutral. This indicates that there was timely delivery of the needed services thus improving beneficiary satisfaction.

a) 4.2.5 Trend of Project Performance in 2017-2021

Table 4.6 shows the performance of the SSR project between 2017 and 2021. Performance is measured based on funds donated to the project, the number of children supported by the project (beneficiaries) and child literacy rate.

Table 4.6: Performance of the SSR Project in 2017-2021

Performance measure	2017	2018	2019	2020	2021
Level of funding (RwF millions)	43	57	78	94	103
Number of children supported	96	119	147	162	216
Child literacy rate (%)	11%	19%	68%	73%	95%

Source: SSR Project Assessment Reports 2017-2021

As Table 4.6 shows, the SSR project had been performing positively between 2017 and 2021 on all performance indicators covered by the study. In terms of funding, the project registered an increase of 139.5% between 2017 and 2021, having increased from Rwf 43 million in 2017 to Rwf 103 million as of December 2021. The increase in donations could be attributed to the satisfaction of donors with project performance which had been made possible by strong and participatory M&E processes where all stakeholders were engaged.

The increase in project funding had also been followed by a 125% increase in the number of children supported by the project (from 96 in 2017 to 216 in 2021) in the same period. This had also been followed by a 84% corresponding increase in child literacy rate from 11% in 2017 to 95% in 2021, thus indicating that 84% of the children under the project had acquired the ability to easily read, write and draw diagrams, etc. courtesy of the project.

Although high literacy rate was registered, there was little and insignificant progress in numeracy skills among pupils supported by the project as guardians reported that their children did not show significant improvement in skills such as counting. This was attributed to the negligence of guardians to continuously monitor and help their children to learn. Similarly, it was found out that many pupils dropped out of school soon after being enrolled. This was attributed to the fact that some parents wanted the pupils to stay at home and help them in farming and other household activities. On the other hand, some pupils dropped out of schools on their own to engage in income generating activities of their own such as offering household help for pay, transporting people and goods by bicycle riding, etc.

4.3 Inferential analysis

4.3.1 Correlation analysis

The study also conducted Pearson correlations for the relationship between formative evaluation (FE), process evaluation (PrE) and participatory evaluation (PE) on one hand and performance of the Strengthening School Readiness (SSR) project on the other. Table 4.7 shows the results.

Table 4.7: Pearson correlations for M&E and project performance

Variables	N	FE	PrE	PE	PP
Formative evaluation (FE)	142	1			
Process evaluation (PrE)	141	.674**	1		
Participatory evaluation (PE)	138	.735**	.612**	1	
Project performance (PP)	141	.601**	.718**	.852**	1

** Correlation is significant at the .01 level (2-tailed); $p < .01$

According to Table 4.7, the correlation coefficient $r = .601$ for FE shows that there was a positive relationship between FE and performance of the SSR project in VSO. The probability value of $p < .01$ and $r = .601 > .05$ indicate that a positive change in FE function brought about an improvement in the performance of the SSR project.

Similarly, the correlation coefficient $r = .718$ for PrE shows that there was a positive relationship between PrE and performance outcomes of the SSR project in VSO. The probability value of $p < .01$ and $r = .718 > .05$ indicated that a positive change in PrE function generated an improvement in the performance outcomes of the SSR project.

Additionally, the correlation coefficient $r = .852$ for PE also show that there was a positive relationship between PE and performance of the SSR project in VSO. The probability value of $p < .01$ and $r = .852 > .05$ indicated that a positive change in PE processes facilitates an improvement in the performance outcomes of the SSR project.

4.3.2 Hypothesis testing

The first hypothesis indicated that formative evaluation has no statistically significant relationship with the performance of SSR project. However, findings show that there was a positive and statistically significant relationship ($r = .601 > .05$, $p < .01$) between the performance of the SSR project and formative evaluation. Therefore, the research finds no supportive evidence (fails to accept) the first hypothesis.

The second hypothesis indicated that process evaluation has no statistically significant relationship with the performance of the SSR project. However, findings show that there was a positive and statistically significant relationship ($r = .718 > .05$, $p < .01$) between the performance of the SSR project and process evaluation. Therefore, the research finds no supportive evidence (fails to accept) the second hypothesis.

The third hypothesis indicated that participatory evaluation has no statistically significant relationship with the performance of SSR project. However, findings show that there was a positive and statistically significant relationship ($r = .852 > .05$, $p < .01$) between the performance of the SSR project and participatory evaluation. Therefore, the research finds no supportive evidence (fails to accept) the third hypothesis.

4.4 Qualitative Data Analysis

The researcher also conducted in-depth group interviews with the SSR project staffs in regard to how various M&E functions affected the performance of the project. The items of interview discussion focused on the research objectives as the subsequent analysis shows.

Firstly, through interviews, project staffs indicated that FE was important for improving project performance by providing knowledge on contextual situation of the project. To this effect on respondent revealed thus, "*when an evaluation is conducted at the start of the project, it helps management to understand the conditions of the beneficiaries, the organizational process assets as well as the project's external environmental factors that may have an influence on the way the project is delivered*". Therefore, it ought to be argued that FE helped project implementers to better understand the core project and influencing factors, their effect and how to mitigate the likely risks which improved on project deliverables.

In a related development, members of the project staffs also indicated that FE was critical in reinforcing project performance by enabling stakeholder identification (SI). SI here referred to the process of identifying people, groups of people or organizations that could be affected by the project or which could affect the project processes. One respondent argued thus, "*during formative evaluations, especially when participatory methodologies employed, project managers are able to identify stakeholders who may have not been identified during the project planning process. This helps to consider their concerns as integral aspects of the project thus reducing stakeholder resistance*". However, during the initial project phases, some beneficiaries were hesitant to provide information on their background and current situation until the village chairperson was invited to participate on the stakeholder mobilization team. Each stakeholder also had a different need and it was challenging to harmonize their conflicting needs and come up with similar expectations from the project. Nevertheless, it was worth to note that indeed, stakeholders were easy to identify during formative evaluation as different groups might have come up to present their expectations during the FE processes.

Interviewees also indicated that FE was an important evaluation function for boosting the performance of the SSR because it provided tools for further project evaluation at specific intervals. One respondent argued that, "*during formative evaluation, different evaluation tools, frameworks and instruments are developed for generating baseline data on various performance indicators. It is these tools that are continuously used for midterm and impact evaluation of the project*". It was worth to note that many tools that were used to generate baseline data during FE were also used to measure the effectiveness of the project at midterm or ex-poste.

In the same vein, interviewees also noted that PrE was an important function for enhancing the performance of the SSR project in VSO because it facilitated the review of project resource allocation. One respondent argued thus, *"process evaluation is conducted to determine how project activities are being implemented, their success rates and gaps. During this process, project managers are able to identify how resources are allocated to different project activities and the financing gaps between activities"*. This observation recognized that process evaluation helped SSR project management to effectively and efficiently allocate resources.

It was also revealed through interviews that PrE influenced the performance of the SSR project by assessing the degree of teamwork and coordination among project staffs which process helped to close the human resource performance gaps in the project. One respondent argued that this was an essential function because teamwork and coordination was a critical element that integrated all other project components to work together towards achieving project goals.

In a related discussion, interviewees also revealed that PrE was important for enhancing the performance of the SSR project because it facilitated the review of the project implementation strategy. One respondent noted thus, *"the purpose of reviewing the implantation strategy is to evaluate whether project objectives are being met, to determine how effectively the project is being run, to learn lessons for the future, and to ensure that the organization gets the greatest possible benefit from the project"*. This was an important function in the process evaluation because it covered the entire project delivery systems and plans to determine their effectiveness and efficiency.

Furthermore, respondents in the interview also revealed that participatory evaluation influenced the performance of the SSR project by expediting stakeholder mapping. Stakeholder mapping is the practice of visually organizing project stakeholders based on the criteria with which they will be managed in the project. One respondent argued that *"this function is important because stakeholders can be organized based on their level of influence over the project, their interests, their legitimacy, urgency or impact thus helping project management to determine the most effective stakeholder management strategy"*. It was worth to argue that PE had enabled the SSR project management to determine the best effective strategy for stakeholder management.

In a related development, interviewees also revealed that PE enhanced project outcomes by improving stakeholder empowerment. Through this function, respondents argued that *"stakeholders have been able to receive decision making power, skills and competences of making decisions affecting the SSR project"*. The researcher appreciated that stakeholder empowerment was an important function that that enabled full involvement and provided guarantee for stakeholders to contribute towards project outcomes.

Lastly, respondents also revealed that PE was instrumental in sustaining organizational learning and growth. One respondent argued that *"involving stakeholders in project processes helped VSO to collectively create, share, retain and transfer knowledge within the organization and the project which knowledge will be useful in the next phase of the project"*. This research also appreciated the importance of organizational learning as it helped the organization to improve and grow over time as it gained experience.

4.5 Discussion of Findings

Monitoring and evaluation had been applauded by this study for enhancing learning, accountability and project performance. However, some empirical literature suggested that on some situations and specific projects, the M&E function did not register positive change in performance while others produced mixed results. This section provided a discussion of the main findings from the research and links them with findings from the selected empirical literature.

The first objective focused on finding out the effect formative evaluation on the performance of the SSR project in VSO. The questionnaire survey item 5 and interview data revealed that FE was instrumental in facilitating the performance of the project because it provided knowledge on the current status. This finding was corroborated by Prennushi, *et al.* (2013) whose study on the impact of evaluation on organizational learning indicated that FE helped the organizational project managers to properly understand the contextual background of the project environment.

In the same vein, it was revealed through the questionnaire in item 9 and interviews that FE eased stakeholder identification by establishing the entities that could affect or could be affected by the project. This helped to improve project support from stakeholders as well as helping to ease stakeholder management. A similar study by Mebratu, (1998) conducted on the role of stakeholder engagement on project success indicated that proper stakeholder identification helped to improve stakeholders' support towards the projects which improved resource generation and implementation.

In a related development, the questionnaire and interview revealed that FE provided tools for further evaluation which helped project managers to reduce on time wastage in designing new evaluation tools. The effectiveness in time management helped the management to allocate more time on priority activities thus improving on project outcomes. This was also consistent with Lange and Luescher (2003) whose study of monitoring and evaluation system for South African higher education revealed that FE was important for teachers in generating tools for student assessment which tools were archived in the school libraries for future use in the same function. The second objective was aimed at establishing the effect of PrE on the performance of the SSR project in VSO Rwanda. Findings from the survey and the interviews revealed that facilitating the review of resource allocation was one of the elements of PrE which ensured that resources were appropriately allocated to the project activities thus enhancing effective project implementation. In related findings, Kaye, *et al.* (2011) in a study on "Lessons learnt from comprehensive evaluation of community-based education in Uganda" also found out that

continuous assessment of implementation activities helped to identify resource allocation gaps among the surveyed projects which helped to review the project resource allocation methodology.

Furthermore, it was revealed by the questionnaire survey item 15 that PrE helped to assess and strengthen teamwork among project implementers. This finding was corroborated by Gomby and Larson, (1992) whose evaluation of school-linked services indicated that process evaluation was instrumental in identifying coordination gaps among teachers which reduced teamwork spirit and crippled knowledge transfer among teachers thus influencing the education administrators to adopt teambuilding approaches in teaching.

It was also demonstrated by the survey item 16 and interviews that PrE facilitated the review of implementation strategy which helped to align the project activities with the project objectives and goal. This is corroborated by Crawford and Bryce (2003) who also concurred with this finding by indicating that flexibility in project implementation helped to close the gaps in the project implementation methodology and plans which improved on the project outcomes.

The third objective was intended to establish the effect of PE on the performance of the SSR project in VSO. Findings in item 18 of the survey indicated that PE enhanced stakeholder analysis which process was pivotal in identifying stakeholder authority, legitimacy urgency impact and interests. This finding was collaborated by the Project Management Institute, (2018) which showed that mapping stakeholder helped project managers to design the most effective stakeholder engagement strategy that eliminated stakeholder resistance.

Furthermore, it was revealed by the survey questionnaire item 21 and the interviews that PE was an important function for improving stakeholder empowerment. This revelation was corroborated by Chouinard, (2013) whose study on "the case for participatory evaluation in an era of accountability" who revealed that PE was an important evaluation approach that helped to collaboratively engage all stakeholders in the project management processes thus empowering to participate in project decision making processes.

In a similar note, findings from the questionnaire survey item 22 and the interview guide revealed that PE played a key role in project performance by sustaining organizational learning, knowledge sharing and growth. This was attributed to the fact that stakeholders' engagement in project activities helps them to learn and acquire knowledge and skills on what works and what does not work and therefore be able to decide on the best practices. This finding was supported by an empirical study conducted by Alkin, (2004) who found out that involving stakeholders in project processes helped project teams to learn various project management practices from each other and this broadened the teams' knowledge, sustained learning and organizational growth.

5.2 Conclusion

In conclusion, the study was aimed at examining the effect of M&E on the performance of NGOs projects in Rwanda between 2017 and 2022 with VSO's SSR project as a case study. M&E was the independent variable while project performance forms the dependent variable. This study defined monitoring as a routine process of keeping track of all project performance metrics, collecting information on performance indicators, identifying potential problems and taking corrective actions to ensure that project met its objectives and goal. Similarly, in light of this study, evaluation was considered to mean the systematic and terminal assessment of the design, implementation or results of a project for purpose of accountability, learning and decision making. It was also aimed to determine the project's relevance, coherence, effectiveness, efficiency, impact and sustainability.

Monitoring and evaluation was assessed based on three variables which include formative evaluation, process evaluation and participatory evaluation. It was observed that these M&E functions had played a key role in the performance of the SSR project. Formative evaluation was conducted at the start of the project to establish project performance indicators and baselines. This helped the SSR project in contextual analysis, activity benchmarking, and stakeholder identification and provided tools for future evaluations. Process evaluation focused on the implementation process of the SSR project and attempts to determine how successfully the project follows the established strategy and methodology. This function was appreciated for helping to evaluate inputs and activities, review resource allocation and project schedules, evaluate the degree of teamwork and assess the quality of outputs.

Furthermore, participatory evaluation was considered by this study to mean the involvement of project stakeholders in the evaluation processes of the SSR project. This approach was of significant importance to the project because it helped in stakeholder mapping, engagement, and empowerment and facilitated sustained organizational learning and growth. A Pearson correlation showed that there was a positive and statistically significant relationship between formative evaluation and project performance ($r=.601; p<.01$), between process evaluation and project performance ($r=.718; p<.01$) and between participatory evaluation on and performance ($r=.852; p<.01$). This showed that a change in FE, PrE and PE strategies results into a change in project performance outcomes. It was worth to note that M&E had improved project performance between 2017 and 2022. For example, project funding increased by 139.5%, child beneficiaries increased by 125% while literacy rate also increased by 84% in the same period.

Monitoring and evaluation processes of formative evaluation, process evaluation and participatory evaluation have a significant effect in strengthening the performance of SSR project in VSO. It is therefore important that the management makes adequate resource and time investment in these evaluation processes.

However, there was little and insignificant progress in numeracy skills among pupils supported by the project due the negligence from guardians to continuously monitor and help their children to learn. Similarly, school dropout was significant among pupil beneficiaries. Nevertheless, the strong M&E function of VSO has significantly enabled the SSR project to deliver significant development outcomes for the beneficiaries.

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6. References

- Borgman-Arboleda, C., & Clark, H. (2012). Considering Evaluation: Thoughts for Social Change and Movement-Building Groups. <http://www.racialequitytools.org/resourcefiles/borgman.pdf>
- Chianca, T. (March 2018). The OECD/DAC Criteria for International Development Evaluations: An Assessment and Ideas for Improvement. *Journal of Multi-Disciplinary Evaluation*, 5(9), 41-51
- Chianca, T.C. (2017). *International development Evaluation: An analysis and policy proposals*. Unpublished doctoral dissertation, Western Michigan University, Kalamazoo.
- Crawford, P., & Bryce, P. (2013). Project monitoring and evaluation: a method for enhancing the efficiency and effectiveness of aid project implementation. *International Journal of Project Management*, 21, 363-373, doi:10.1016/S0263-7863(02)00060-1
- Jones, H. (2019). Equity in development: Why it is important and how to achieve it. Working Paper 311. Westminster Bridge Road, London: Overseas Development Institute [<https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/4577.pdf>]
- Kusek, J.Z., & Rist, R.C. (2014). *Ten steps to a results based monitoring and evaluation system*. A handbook for development practitioners. Washington, DC: The World Bank.
- Maxima Consulting (2013). Evaluation of effectiveness and efficiency of development assistance to the Republic of Serbia per sector - Final Report. <http://www.evropa.gov.rs/Documents/Home/DACU/5/194/Final%20Evaluation%20Report.pdf>
- Reed, M.S. (2018). Stakeholder participation for environmental management: A literature Review. *International Journal of Biological Conservation*, 141, 2417-2431
- Smith, M. (2012). Assessing the effectiveness of project management practices in project-driven organizations. Paper presented at African Rhythm Project Management Conference on 22 - 24 April 2002, Johannesburg, South Africa, Hosted by Project Management Institute of South Africa.
- Sundqvist, A., Backlund, F., & Chroneer, D. (2014). What is project efficiency and effectiveness? *Procedia - Social and Behavioral Sciences* 119, 278 – 287. https://www.researchgate.net/publication/261512636_What_is_Project_Efficiency_and_Effectiveness/download
- VSO ([Voluntary Service Overseas], 2018). Rwanda: Quality education for all. Website [<https://www.vsointernational.org/fighting-poverty/where-we-fight-poverty/Rwanda>] Accessed April 20, 2019 at 10:18pm
- VSO (2015). National Volunteer in Early Childhood Education In-Service Methodology (Nyamasheke District)
- Zukoski, A., & Luluquisen, M. (2012). Participatory Evaluation: Community-Based Public Health Policy and Practice, Issue No. 5. https://depts.washington.edu/ccph/pdf_files/Evaluation.pdf.