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**Influence of Project Staff on Sustainability of Early Childhood Development Projects:  
Case of Baby-Friendly Community Initiative in Dagoretti North Constituency Nairobi  
County Kenya**

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**Influence of Project Staff on Sustainability of Early Childhood Development Projects: Case of Baby-Friendly Community Initiative in Dagoretti North Constituency Nairobi County, Kenya**



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**Abstract**

**Purpose:** The aim of the study was to examine the influence of project staff on sustainability of Early Childhood Development (ECD) projects, a case of the Baby-Friendly Community Initiative (BFCI) project in Dagoretti North Constituency Nairobi County, Kenya.

**Methodology:** The study adopted a descriptive survey design. The target population was made up of 507 BFCI project stakeholders while the sample size was 211. The target population comprised five hundred project beneficiaries, two lead mothers in charge of the mother-to-mother groups, two government officials, two Ministry of Health staff, and one staff from the implementing partner of the project. The sample size of the project beneficiaries was derived using the Yamane formula. Stratified sampling was used to get study participants from each village representing a stratum. Proportionate stratification was used to get the sample size of each stratum. This meant that each stratum had the same sampling fraction. The other study participants were not sampled due to their low number. The use of descriptive survey design helped in obtaining data from a large number of participants who took part in the study. The researchers used self-administered questionnaires to collect quantitative data while an interview guide was used to collect qualitative data in the research. Percentages, frequencies, mean, and standard deviation were the descriptive statistics used while correlation analysis was used for inferential statistics. Data collected from the study was analyzed with the help of the Statistical Package for Social Sciences (SPSS Version 23.0) and triangulated qualitative data was analyzed through themes and content analysis.

**Findings:** The study found out that the relationship between project staffing and sustainability had a moderate correlation value of ( $r=0.428$ ,  $P<0.000$ ). The study found out that project staff contribute to the sustainability of projects if they are supported to develop their skills, are appreciated where they work and are involved in decision making.

**Unique Contribution to Theory, Practice and Policy:**

The study recommends that the recruitment of staff should be objectively carried out so as to get competent and highly qualified staff who will contribute to the sustainability of the project. Project stakeholders need to use transparent recruitment processes when hiring project staff to avoid discontentment that can sabotage the sustainability of a project. The study recommends for studies to be conducted to look at other age groups that are not ECD projects.

**Keywords:** *Project Staffing, Early Childhood Development Projects, Project Sustainability*

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## INTRODUCTION

Many stakeholders around the world, over the years have raised concerns regarding the sustainability of projects, especially when the donors and government exit and cease to support the projects. Sustainable projects may be seen as those projects whose actions enable implementers to meet current needs without interfering with the ability of the future generations to meet their own needs (Silvius & Schipper, 2019). The third goal of Sustainable Development Goals (SDGs) aims at ensuring healthy lives and encouraging well-being for all. This precise goal by the UN recognizes the critical role good health has to play in the attainment of the Sustainable Development Goals 2030. It is pertinent to note that this goal is directly linked to other goals like poverty obliteration, ending of hunger and nutrition improvement (Agbedahin, 2019)

Backed by economic proof, it has been observed that early investments in Early Childhood Development (ECD) projects offer not only the best shot at the attainment of several SDGs, but also the highest rate on investment (Vladimirova & Le Blanc, 2018). With this knowledge, governments and non-governmental institutions around the globe have increased ECD projects to improve the lives of children. Consequently, the death rate of children below five years of age has dropped by an astounding 58 % from 1990 to 2020 (Marczak, O'Rourke, & Shephard, 2018). The number of children who get immunized has also increased tremendously from a mere 16 % in 1980 to 64 % in 2012. The aforementioned have in return led to a reduction of deaths of children under five from preventable diseases like measles from 480,000 in 2000 to 86000 in 2012 as reported by UNICEF.

Despite the tremendous increase in investments in ECD from non-governmental institutions and governments, (Rittah, 2013) noted that sustainability of these projects is a major challenge in many countries. This denotes that enormous resources are being used in carrying out projects while communities are deprived of the benefits of these projects due to sustainability concerns. This is attested by the large number of children who suffer deprivations that include poverty, malnutrition, violence, and preventable diseases notwithstanding the billions of government and donor funding that have been pumped in this countries to alleviate child suffering (Mbugua, 2020). This dictates that there is an urgent need to study determinants of sustainability of ECD projects. Literature review shows that research on project sustainability can be studied by either focusing on project design elements, organizational setting, or environmental features (Lipman, 2020). This study will focus on project staff and how it influences sustainability of ECD projects.

In Kenya, notwithstanding the high number of government, non-governmental, and faith based led projects dealing directly with children, many still face the utmost deprivation. This include lack of nutrition, lack of immunization, various forms of child abuse, natural calamities, and Water Sanitation and Hygiene (WASH) issues (Fotso, Holding, & Ezech, 2009). It is noted that 44 out of 1000 and 74 out of 1000 children die before their first and fifth birthday respectively in Kenya. Pneumonia, malaria, and diarrhea are considered to account for high numbers of these deaths (Gewa, Oguttu, & Yandell, 2011). This numbers point to low sustainability rates of projects created to tackle these challenges. There is need for the government and other stakeholders in the field of ECD to earnestly increase and or develop sustainable projects that can help salvage the situation of the Kenyan child and in the process achieve the SDGs. For this to be successful, it is paramount to establish the numerous aspects that determine the sustainability of projects explicitly in ECD where the number of children who need support has been and is on an upward spiral

## **Statement of the Problem**

The term sustainability has gradually evolved from one domain of environmental space to other spheres like the social and economic space. (Block, Gremmen, & Wesselink, 2018), state that the challenge of attaining project sustainability can be equated to a wicked problem. This they attribute to the nature of sustainability which is a multifaceted concept whose attainability faces many challenges. Ranging from inadequate knowledge, high number of stakeholders involved, enormous resources needed, to interconnectedness of variables influencing sustainability. These gaps that been highlighted mean that many projects have failed the sustainability test. Projects in the ECD space are no different. To highlight the magnitude of this problem, in Malawi, the world bank conducted a mapping exercise of 690 community based childhood centers in four districts and found that more than half had closed (Neuman, McConnell, & Kholowa, 2019). Meaning that the ECD projects had failed the sustainability test. The ripple effect of this was that more 500,000 children who dependent on this centers for nutrition, early stimulation, learning, and nurturing care, had to drop out as indicated from the mapping exercise.

The challenge of unsustainable projects not only in the ECD circle is a concern of 8 out of 10 donor and government funded projects irrespective of the setting, target population or the indicators to be attained (Lipman, 2020). This can be attributed to the fact that different dynamics interplay during project implementation to determine sustainability. Hence, the scientific community is tasked with playing a role through research in engaging in the conversation of sustainable development. This can help us to understand different determinants of sustainability of projects in different setting and to be specific projects in the ECD sector. This can also go a long way in improving the body of knowledge on sustainability of ECD projects since a review of literature has revealed a gap on determinants of sustainability of ECD projects. It is against the backdrop that this study aimed to explore the influence of project staff on sustainability of early childhood development projects with a focus on the baby friendly community initiative project in Dagoretti North Constituency, Nairobi County, Kenya.

## **Theoretical Review**

### **Sustainability Theory**

Various theories have been put forward in regards to sustainability. For the sake of this study, the researchers used the sustainability theory. The United Nations has played and an instrumental role in popularizing the Sustainability Theory (Clark, 2007). As per this theory, sustainability is described as the capacity of a project or an endeavor to continuously maintain a certain level of outcomes over time with little interruption. The theory is pegged on the assumption that all resources are finite hence the utilization of these resources whether natural or not should be done in a way that considers the fact that future generations will require the same resources (Harrington, 2018). In this theory, sustainability is viewed to have three main pillars: the social aspect, the ecological aspect, and the economic aspect. On the economic front, natural and financial resources should be utilized sustainably; on the social aspect, for sustainability to be achieved, social systems should strive to always maintain human dignity; the ecological pillar of sustainability strives to ensure ecological veracity and biological spaces are used sustainably while also maintaining diversity (Pelsa, Pelsa, & Balina, 2020).

This study employed the theory of sustainability in the sense that all ECD projects should be able to continuously benefit caregivers and children even after the exit of donors. For this to be achieved as per the theory, all the resources available whether financial resources, human



resources, learning institutions, health facilities, or WASH facilities should be used in a manner that upholds human dignity, maintains transparency in reporting and ensuring there is continuous effort to improve the available social structures and resources.

### **Project Staff and Sustainability of Early Childhood Development Projects**

The ECD workforce cuts across a diverse group of both salaried and unsalaried workers who are at different levels of their professional careers. The successful implementation of ECD projects and policies whether focused on children's education or health and nutrition is solely hinged on the availability of staff. (Durmic, 2020), notes that project staff is influenced by a myriad of factors like recruitment, training and development, skills of employees, involvement of staff in decision making, and turnover rate of project staff. All these contribute in one way or another to the successful sustainability of project activities or lack of it.

Subjective recruitment of project staff has been pointed out as one of the main mistakes made when initiating projects (Hohoev, 2019). Hiring staff who are not qualified and fit for the job sets up the project for failure. (Onnis, 2017), points out that the leadership of the project in conjunction with the human resource department needs to carry out due diligence when hiring staff involved with children and caregivers. In addition to high qualifications and possession of skills, all staff hired in ECD projects must possess high moral values and respect the right of children. Any violation of children's rights by project staff in any project can lead to the immediate withdrawal of funding from donors who fund ECD projects hence hampering sustainability. Recruiting incompetently trained staff due to corruption and personal interests on the part of the leadership was noted to be an impeding factor when training project staff for effective delivery of project actions (Bosch-Badia, Montllor-Serrats, & Tarrazon-Rodon, 2017). This in turn had a rippling effect on the sustainability of those project activities (Xue, Rasool, Gillani, & Khan, 2020). Integration of new staff hired subjectively to other project members and the community may also be strained due to lack of trust and poor working relationships which negatively affects the sustainability of projects that strives on good working relations and trust (Bergan, Krempig, Utsi, & Boe, 2021).

Continuous staff training and development is essential in sustaining project activities. (Staff, 2018), underscores that all paid and unpaid staff who are involved in the implementation of project activities need to receive continuous training and development to ensure sustainability. This training and development not only helps in the capacity building but also helps in building the confidence of project staff (Vaealiki & Mackey, 2008). Project leadership has a role in ensuring that the project has in place a staff development strategy that will help address factors that may hamper the sustainability of project activities. (Sims & Waniganayake, 2020), point out that training and development may be used to re-culture and change the knowledge, attitudes, and beliefs of project staff. Despite this evidence, staff in the ECD sector often get inadequate to no training, lack proper supervision, are poorly paid, and endure adverse working conditions that affect their enthusiasm and ability to provide quality services to children and caregivers. A study that looked at a program for holistic development of children in India, (Kapil, 2002), noted that a substantial workload for community health volunteers made them work thrice the number of stipulated working time despite lack of proper training. In addition to lack of training and the workload, the ECD workers in the program it was noted were poorly compensated and were constrained resource-wise. All these bottlenecks resulted in the program being unsustainable.

Investing in the ECD workforce calls for sufficient training of all staff involved coupled with frequent professional development and coaching. (Sims & Waniganayake, 2020), noted that this will enhance the capacity-building agenda in ECD projects and enable communities to be able to sustain project activities by being able to manage the daily running of these projects with little help from outside agencies. Provision of onsite coaching and nurturing has been observed to improve the skills of ECD staff like teachers and caregivers. This strategy offers much promise in terms of improving service delivery in the ECD sector (Bergan, Krempig, Utsi, & Boe, 2021), posits, “for project staff to positively impact on the sustainability of ECD projects, definite proficiencies must be bare minimums when working with children, fair remuneration for all, and adequate training and development must be the order of the day.”

Staff turnover adversely undermines the continuity of project activities. In instances where the staff that participates in the initial planning, launch, and implementation of ECD project activities leave the project at any phase, the consequences are often adverse (Huda, 2020). (Decker & Decker, 2009), noted that when key ECD staff left a project they were working on as a result of poor working conditions, low pay, and career advancement, sustainability of the project was a problem since the new staff that was subsequently recruited in the project failed to appreciate the main objectives of the project. This finding is in tandem with empirical evidence (Hirst, 2018), that concluded that high staff turnover is detrimental to the sustainability of ECD projects. commenting on how project managers and other project leaders can tackle the challenge of staff turnover, (Ford & Gilson, 2021), posits that capacity building among project staff should be initiated very early if possible at the planning stage of the project, and be done throughout the project. This, the study comments will allow for repetition hence accommodating the new staff that joins the project midway.

At times, communities, governments, and non-governmental institutions initiate noble ideas that are meant to tackle the challenges of the neediest in society. Mostly women and children. In some instances, these ideas are seamlessly integrated into societies whether in the education sector or the health sector. Sadly, this is not always the case and most projects require highly skilled and committed individuals who are tasked with designing and successfully implement these ideas while at the same time tailoring the ideas in line with the realities on the ground. (Sarff, Sarff, & O'Brien, 2020), commends that the skills of project staff and the performance of the project are intricately linked to an extent that the success of the project highly depends on the skillset of the project staff taking part in the implementation of the project. A study that assessed the technical skills of staff involved in various ECD projects in Cuba concluded that technical skills in the ECD space are hard to come by and were in high demand. Most staff had basic skills and only those projects that could get access to highly skilled staff were able to continue with project activities for more than three years after the end of funding. According to (Brennan, Bradley, Allen, & Perry, 2008), there is robust data that associates high project quality, high outcomes in children's cognitive development, and project sustainability to high qualification and proficiency of ECD personnel.

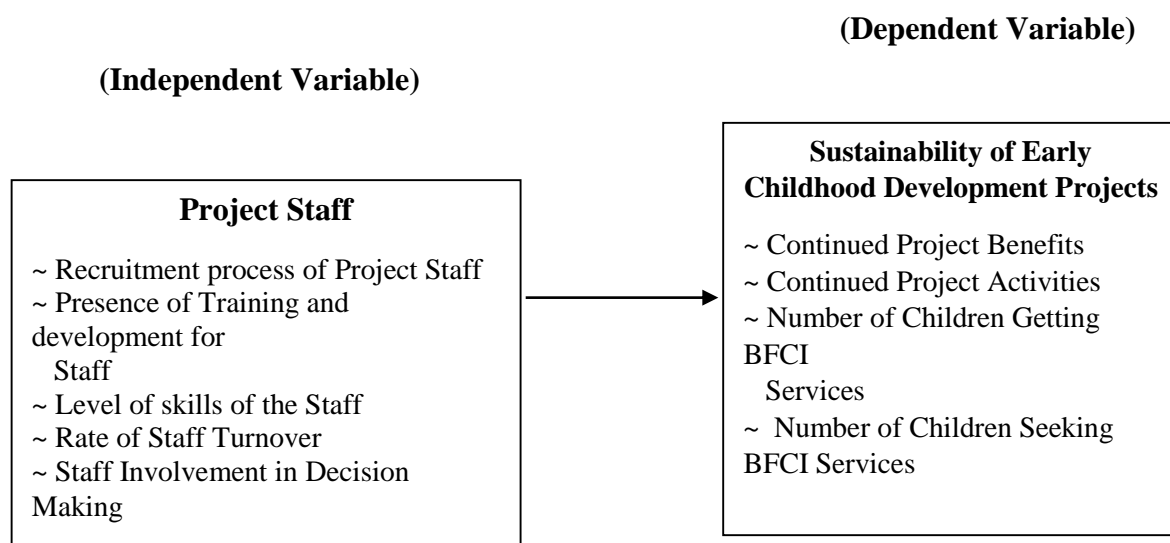
Creating a sense of project ownership amongst project staff can be the difference between successful implementation of projects and failing the endeavor altogether. In ECD projects where low pay and overworking are mostly the order of the day, project leaders need to get creative in motivating and advocating for project ownership to all project staff. Literature review on empirical studies done on the best way to enhance project ownership and increase a sense of belonging among poorly motivated staff in education projects concluded that involving the staff project in decision making from the planning stage worked like “the magic

wand” (Ford & Gilson, 2021). In addition to creating a sense of ownership, (Maringe, 2012), connotes that involvement of staff in decision making helps to improve teamwork, enhance a sense of responsibility, and boost productivity. All these are essential in pushing the sustainability agenda. Despite widespread knowledge on the importance of staff involvement in decision making, literature available has pointed to the presence of gaps on the best way to involve staff in decision making (Gullo, 2013). This, (Delbridge & Whitfield, 2001), posit helps in creating a sense of mistrust among stakeholders involved in the project. The project staff is not trusted with contributing to decision-making on technical matters of the project while the project leadership is not trusted to offer context-based advice on the implementation of projects (Ford & Gilson, 2021).

Summing it up, the role of project staff in the sustainability of ECD projects cannot be underemphasized. Project staff help to ensure that project objectives and visions are implemented in line with the contextual cultural standards. In addition to this, staff involvement in every stage of project implementation cultivates a culture of broad-based involvement in working towards the sustainability and success of ECD projects. (Greenberger, 2018), points out that staff who have invested in project goals and are assured of long-term engagement in the project strive to see the project being sustainable. With this in mind, literature has revealed poor recruitment of project staff, lack of training and development, high staff turnover, and lack of staff involvement in decision making may lead to the unsustainability of ECD projects.

### Conceptual Framework

(Mugenda, 2003) defined a conceptual framework as a scheme of concept (variables) which when operationalized helps the researcher achieve the set objectives). This study sought to investigate influence of project staff on sustainability of ECD projects with a focus on the BFCI project in Dagoretti North Constituency, Nairobi County, Kenya. The framework indicates the relationship that exists between the independent variable (project staff) and the dependent variable (sustainability of ECD projects). Figure 1 shows the conceptual framework of this study.



*Figure 1: Conceptual Framework*

## METHODOLOGY

### Research Design

The study used a descriptive survey design which was helpful in obtaining data from a large number of participants who took part in the study. This design helps to provide insight to the prevailing situations and state of events related to a specific research problem. (Leedy & Ormrod, 2020) point out that a descriptive study cannot irrefutably ascertain answers to why. Descriptive research design was utilized to get information regarding the prevailing position of sustainability of ECD projects and to explain "what existed" concerning variables or circumstances in the situation.

### Target Population

The target population as the complete group of persons or matters from which researcher intends to take a broad view of the conclusions of the research. The target population in most cases is made up of individuals or matters with varying characteristics and it is also referred to as the theoretical population. The research targeted 500 beneficiaries as per records from the Ministry of Health: Department of Children at Riruta Health Centre data recorded in the "BFCI Form 3 – Primary HealthCare Facility Report." The beneficiaries are spread out through three villages; Muslim (227), Precious (125), and Kanungaga (163). In addition to the beneficiaries, two lead mothers in charge of the mother to mother groups, two government officials, two Ministry of Health staff (Ministry of Health) and one staff from the implementing partner of the project were involved in the study.

**Table 1: Target Population**

| Category              |                            | Population |
|-----------------------|----------------------------|------------|
| Project Beneficiaries | Muslim Village             | 227        |
|                       | Precious Village           | 125        |
|                       | Kanungaga Village          | 148        |
| BFCI Stakeholders     | Lead Mothers               | 2          |
|                       | Government officials       | 2          |
|                       | MoH staff                  | 2          |
|                       | Implementing partner staff | 1          |
| <b>Total</b>          |                            | <b>507</b> |

*Source: BFCI Form 3 – Primary HealthCare Facility Report*

### Sample Size and Sampling Procedure

According to (McNeill & Chapman, 2005), sampling is the statistical procedure of choosing a subgroup (known as a "sample") of a populace of interest with an aim of making observations and statistical extrapolations about that population. In this section, the sampling procedure and the sample size are discussed.

### Sample Size

A sample is a smaller representation or subgroup attained from the available population (Mugenda, 2003). The study adopted the stratified sampling technique. This is a probabilistic sampling technique where the entire population is divided into subgroups or strata after which the sample is randomly selected proportionally from each stratum. The study used the following formula proposed by Yamane (Adam, 2020), to determine the sample size of the project recipients;



Yamane (1973) formulae

$$n = N / (1 + N * e)^2$$

Where n = sample size

N = the population size

e = the acceptable sampling error (7%) at 93% confidence level

Thus;

$$n = 500 / (1 + 500) (0.07)^2$$

$$n = 204$$

To determine the sample size from each stratum, proportionate stratification was used. By means of proportional stratification, this ensures that the sample size from each stratum is proportional to the population size of the stratum (Saini & Kumar, 2018). Strata sample sizes are calculated using the following formula:

$$nh = (N_h / N) * n$$

where nh is the sample size for stratum h,

N<sub>h</sub> is the population size for stratum h,

N is total population size,

and n is total sample size.

**Table 2: Sample Size**

| Category              |                            | Population | Sample Size |
|-----------------------|----------------------------|------------|-------------|
| Project Beneficiaries | Muslim Village             | 227        | 93          |
|                       | Precious Village           | 125        | 51          |
|                       | Kanungaga Village          | 148        | 60          |
| BFCI Stakeholders     | Lead Mothers               | 2          | 2           |
|                       | Government officials       | 2          | 2           |
|                       | MoH staff                  | 2          | 2           |
|                       | Implementing partner staff | 1          | 1           |
| <b>TOTAL</b>          |                            | <b>507</b> | <b>211</b>  |

### Sampling Procedure

The study used a stratified sampling technique to select beneficiaries depending on the villages they currently reside in Dagoretti North Constituency; Nairobi County, Kenya. Each village in the study formed a stratum. Simple random sampling of participants from each stratum was done to get participants of the study. This was through assigning beneficiaries' random numbers followed by creation of a random number table from which the participants were selected. Proportional allocation ( $nh = (N_h / N) * n$ ) of sample size was used to get the number of participants from each village. Stratified sampling was used in the study since it allowed the researcher to get representatives from all the villages that are covered by the ECD project that was being implemented in the study site. From the possible 500 target population, simple random sampling was used to get a total of 204 project recipients. Due to their low number, the other 7 BFCI stakeholders were not sampled. The total number of study participants was 211.

## **Research Instruments**

The study used a questionnaire to collect quantitative data while qualitative data was collected using an interview guide. (Mugenda, 2003) defined a questionnaire as a research instrument with various questions which helps a researcher to gather information on a specific topic from respondents. Questionnaires can be easily standardized and this helps to check on reliability (Fowler, 2019). The questionnaire comprised of closed-ended statements with each question targeting specific research questions. The design of the questions was guided by the outlined objectives of the study. A respondent was required to fill all parts. The first part had respondents' background data while part the other parts had items covering the objectives of the study having a five point Likert scale. Interview schedules were used to obtain information from key informants in the project. In-depth interviews ensure exhaustive and comprehensive information is obtained (Montgomery, 2000). In-depth interviews permit the researcher to get an insight into participants' viewpoints and their understandings through continual one on one encounters (Hicks, Schmeidler, & Kirchner, 2020).

### **Questionnaire**

The questionnaire was divided into three sections comprising of structured questions. Section A was comprised of personal information of the respondent such as age, gender, and education level. Section B was composed of questions based on the indicators of project staffing such as; recruitment process of project staff, presence of training and development for staff level of skills of the staff, rate of staff turnover, and staff involvement in decision making. Section C questions were based on the indicators of project sustainability such as; continued project benefits, continued project activities, number of children getting BFCI services, and number of children seeking BFCI services.

### **Interview Guide**

The interview guide was used to collect qualitative data from the key informants who included two lead mothers who are in charge of the beneficiaries at the community level, two government officials, two Ministry of Health officials, and one implementing partner staff. The guide was instrumental in getting the views of these key stakeholders on how the institutional determinants of project resources, project champions, project leaders, and project staff.

### **Pilot Test**

(Mat Roni, Merga, & Morris, 2019) define pilot testing as a tryout of a research study, allowing the researcher to test the research approach with a small number of participants before carry out the main study. Questionnaire's pilot testing was done by randomly selecting 20 respondents from a population that did participate in the real study. The selection of the piloting respondents is informed by (Mugenda, 2003) theory, who indicated that piloting sample should be between 1 % and 10 % of the study sample, depending on the study sample size.

The pilot testing was carried out on an ongoing ECD project that was being implemented in Dagoretti South Constituency Nairobi County because the population of this project shared similar characteristics with those of Dagoretti North Constituency. According to (White & McBurney, 2013), the pilot testing questionnaire was designed as open-ended questions to help identify other research areas that could be added to the questionnaire. The questionnaire was administered by the researchers, allowing explanation of queries as thought necessary and assess the respondents' understanding of the questions of research. The questionnaire was drawn to add in the feedback from the pilot respondents so as to eliminate ambiguity,

inconsistency or redundancy. The researcher involved two experts who are the researcher's supervisor, and lead project managers to check the piloted instruments until such a time that they approved the questionnaires to be capable of getting the required data.

### **Validity of the Research Instruments**

According to (Carmines & Zeller, 2008), validity is simply the means by which a test or an instrument is able to accurately measure what it's supposed to. They go on to point out that validity helps to strengthen conclusions, inferences, and or propositions. Content validity of the questionnaire was tested by carrying out a pilot on the instruments. Any ambiguity and suggestions noted from the pilot study were corrected on the questionnaires before the actual study. The supervisor was also instrumental in checking both the construct and content validity.

### **Reliability of the Research Instruments**

Carmines & Zeller, (2008) defined reliability is a measure of stability or consistency of test scores, the degree to which the instrument being used in the research gives consistent data under the same condition when the respondents used are the same. The reliability of this study was tested through Cronbach's Alpha which was used to measure the internal reliability. (Litwin, 2020) points out that Cronbach's alpha reliability coefficient usually ranges between 0 (when no variance is reliable) and 1 (when all variance is reliable). When the coefficient is closer to 1.0, this shows that the internal consistency of the items in the scale is very high. An alpha ( $\alpha$ ) score of 0.70 or higher is considered satisfactory (Kirk & Miller, 2005). The SPSS application was used to calculate this reliability. The pilot study was also helpful in testing the reliability of the instruments. The Cronbach Alpha for this study was 0.816 which was considered as an excellent level of internal consistency.

### **Data Collection Procedures**

The process started by the researcher obtaining a letter of approval from the university that allowed the researcher to go to the field. On top of this, the researcher sought for a research permit from both NACOSTI and the Nairobi County Commission authorizing the study to go ahead. The data to be used in this study was collected by the researcher with the support of well-trained research assistants who administered the questionnaires after intensive training.

The researchers personally conducted the interviews in the qualitative phase with the key informants. Prior to this, the researchers carried out pilot collection of data to test validity and reliability. The questionnaires mainly consisted of closed ended statements. The researchers also collected secondary data which helped to supplement the primary data.

### **Data Analysis Techniques**

The process started with the verification of all the questionnaires to ascertain that all questions had been fully filled. This helped identify unanswered questions. The quantitative data that was collected in this study was analyzed through descriptive statistical methods and inferential statistics. These were through analysis of distribution, central tendency, dispersion, correlation, and regression. Statistical Package for Social Science (SPSS Version 23.0) was used to analyze the data collected. Qualitative data was analyzed through themes and content analysis. Data was presented through use of frequency tables and narrative analysis, while correlation analysis was used for inferential statistics.

## Ethical Considerations

Commenting on ethics, (di Norcia, 2006) defined ethics as a way of distinguishing between that which is acceptable behavior and that which unacceptable behavior in a scientific study. The researcher considered four critical ethical practices in addition to others. First, confidentiality was observed through the safeguarding of confidential information from the participant. Second, informed consent was administered to ensure the voluntary involvement of study participants in the research study. Thirdly, through truthful and authentic reporting of data, outcomes, and the avoidance of misrepresentation, or distortion of data was done to maintain the integrity of the research. Lastly, all the intellectual property that contributed to this study was credited through referencing and citation. Study participants were also informed that the information collected was only to be used for academic purposes.

## FINDINGS AND DISCUSSIONS

### Questionnaire Return Rate

A total of 204 questionnaires were administered to project beneficiaries in the study. 2 interviews were administered to the lead mothers involved in the project, 2 interviews for the government officials, 2 interviews for the MoH staff, and 1 interview for the implementing partner staff. Table 3 shows the return rate of the questionnaires that were administered to the study participants.

**Table 3: Questionnaire Response Return Rate**

| Category                       | Frequency Returned | Percentage (%) |
|--------------------------------|--------------------|----------------|
| Returned and completely filled | 192                | 94.12          |
| Not returned                   | 12                 | 5.88           |
| <b>Total</b>                   | <b>204</b>         | <b>100</b>     |

Table 3 shows that the response rate from project beneficiaries was 94.12 %. Overall, the return rate from the participants was 94.12 % was considered as sufficient for data analysis as outlined by (Mugenda, 2003) who recommend that a response rate of 50% can be used for data analysis.

### Interview Guide Completion Rate

Table 4 shows the completion rate of the interview guide that were administered to the study participants.

**Table 4: Interview Guide Response Return Rate**

| Category                   | Sample Size | Interviews Carried Out | Percentage (%) |
|----------------------------|-------------|------------------------|----------------|
| Lead Mothers               | 2           | 2                      | 100            |
| MoH Staff                  | 2           | 2                      | 100            |
| Government officials       | 2           | 2                      | 100            |
| Implementing partner staff | 1           | 1                      | 100            |
| <b>TOTAL</b>               | <b>7</b>    | <b>7</b>               | <b>100</b>     |

Table 4 shows that all the Lead mothers, MoH officials, government officials and the implementing partner staff involved in the study were able to respond to the interview guide. implementing partner staff involved in the study were able to respond to the interview guide.



## Demographic Characteristics of Respondents

### Gender

Table 5 shows that most of the respondents were female at 178 with project beneficiaries accounting for 173 of this number. This implies that most ECD projects target women who were mostly the main caregivers of children. This is consistent with (Emilsen & Koch, 2010) who observed that women were more engaged and involved in ECD projects as compared to men. This ranged from the beneficiaries to the people implementing the projects. Due to their role, the leads interviewed were female. On the other hand, both the MoH staff and the government officials interviewed had an equal representation of male and female of one each. Only one staff of the implementing partner was interviewed who was female.

**Table 5: Distribution of Respondents According to Gender**

| Category                   | Female     | Male      | Total      | %          |
|----------------------------|------------|-----------|------------|------------|
| Project beneficiaries      | 173        | 19        | 192        | 96         |
| Lead Mothers               | 2          | 00        | 1          | 1          |
| MoH Staff                  | 1          | 1         | 1          | 1          |
| Government officials       | 1          | 1         | 1          | 1          |
| Implementing partner staff | 1          | 00        | 1          | 1          |
| <b>TOTAL</b>               | <b>178</b> | <b>21</b> | <b>199</b> | <b>100</b> |

### Level of Education

Findings in Table 6 show that majority of the respondents in the study, 44.2%, managed to complete secondary school. This group is followed by respondents who did not manage to complete primary schooling with this group representing 21.6% of the respondents. 20 respondents who have college/university education managed to take part in the study. This number represented 10.1 % of the respondents. The percentage of respondents who have not completed secondary school and those who have not completed primary schooling stood at 20.6% and 3.5% respectively.

**Table 6: Distribution of Respondents According to Level of Education**

| Category                       | Frequency  | Percentage |
|--------------------------------|------------|------------|
| None                           | 00         | 0.00       |
| Primary school not completed   | 7          | 3.5        |
| Primary school completed       | 43         | 21.6       |
| Secondary school not completed | 41         | 20.6       |
| Secondary school completed     | 88         | 44.2       |
| College/university and above   | 20         | 10.1       |
| <b>TOTAL</b>                   | <b>199</b> | <b>100</b> |

### Project Staff and Sustainability of ECD Projects

To establish the influence of project staffing on the sustainability of early childhood development projects, the participants were invited to indicate the extent to which project staffing determines the sustainability of ECD projects in Dagoretti North Constituency. The indicators in the questions were; recruitment, training and development, skills of employees, turnover, and involvement in decision making. The results are presented in Table 7.

**Table 7: Project Staff and Sustainability of ECD projects**

|  | Statement  | 1  |     | 2  |     | 3  |      | 4  |      | 5   |      | MEAN | SD    |
|--|--|----|-----|----|-----|----|------|----|------|-----|------|------|-------|
|  |  | F  | %   | F  | %   | F  | %    | F  | %    | F   | %    |      |       |
| 1  | Project staff play an important role in the sustainability of the ECD project.   | 12 | 6.3 | 11 | 5.7 | 16 | 8.3  | 65 | 33.9 | 88  | 45.8 | 4.1  | 1.155 |
| 2  | The recruitment process of project staff is key to the sustainability of the ECD project   | 7  | 3.6 | 12 | 6.3 | 20 | 10.4 | 47 | 24.5 | 106 | 55.2 | 4.2  | 1.093 |
| 3  | Project staff involved in the ECD project are well trained to implement project activities. This can be seen in how they deliver services. | 7  | 3.6 | 14 | 7.3 | 6  | 3.1  | 55 | 28.6 | 110 | 57.3 | 4.3  | 1.071 |
| 4  | Adequate training and development of project staff is essential in the sustainability of ECD projects.                                     | 4  | 2.1 | 0  | 0.0 | 1  | 0.5  | 42 | 21.9 | 145 | 75.5 | 4.7  | 0.691 |
| 5  | The ECD project has staff who are highly skilled in the work they are doing in the project.  | 6  | 3.1 | 13 | 6.8 | 14 | 7.3  | 49 | 25.5 | 110 | 57.3 | 4.3  | 1.063 |
| 6  | The skills of the project staff determine the sustainability of the ECD project.   | 6  | 3.1 | 5  | 2.6 | 9  | 4.7  | 52 | 27.1 | 120 | 63.5 | 4.4  | 0.935 |
| 7  | The ECD project has a low rate of staff turnover. This can be seen in how often staff leave the project.                                   | 3  | 1.6 | 4  | 2.1 | 4  | 2.1  | 60 | 31.3 | 121 | 63.0 | 4.5  | 0.779 |
| 8  | The level of project staff turnover has an influence in the sustainability of the ECD project.   | 4  | 2.1 | 0  | 0.0 | 1  | 0.5  | 42 | 21.9 | 145 | 75.5 | 4.7  | 0.691 |
| 9  | Involvement of project staff in decision making determines the sustainability of the ECD project   | 8  | 4.2 | 17 | 8.9 | 13 | 6.8  | 49 | 25.5 | 105 | 54.7 | 4.2  | 1.149 |
| 10   | Lack of involvement of project staff in decision making influences the sustainability of the ECD project.                                  | 10 | 5.2 | 7  | 3.6 | 26 | 13.5 | 86 | 44.8 | 63  | 32.8 | 3.9  | 1.040 |
| <b>Composite mean and Standard Deviation</b> |  |    |     |    |     |    |      |    |      |     |      | 4.3  | 0.363 |

From Table 7, the study beneficiaries agree that project staff determines the sustainability of early childhood development projects. This is indicated by a composite mean of 4.3 and a standard deviation of 0.363. In statement number 1, the study sought to know if project staff play an important role in the sustainability of the ECD projects. A mean of 4.1 and a standard deviation of 1.155 indicated that the participants highly viewed staff central to the sustainability

of ECD projects. This is consistent with (Vaealiki & Mackey, 2008), who pointed out that sustainability of projects is pegged on the availability of staff who are able to carry out project activities in a timely manner. On the issue of whether the recruitment process of project staff is key to the sustainability of the ECD project, it had a mean of 4.2 and a standard deviation of 1.093 which indicated that the respondents were of the opinion that recruitment is key to the sustainability process of projects. (Onnis, 2017), states that proper recruitment process of project staff enables leaders to get competent staff who can enable the project achieve its objectives. In statement number 3, with a mean of 4.3 and a standard deviation of 1.071 it showed that the participants were of the opinion that project staff involved in the ECD project were well trained to implement project activities. In statement number 4 in regards to whether adequate training and development of project staff is essential in the sustainability of ECD projects, it had a mean of 4.7 and a standard deviation of 0.691 which indicated that study respondents believed that project staff should be trained so as to be in a position to enhance project sustainability.

The study in statement 5 sought to find out if the ECD project had staff who were highly skilled in the work that they are doing in the project. This had a mean of 4.3 and a standard deviation of 1.063 indicated that the respondents agreed that project staff were highly skilled. In statement number 6, with a mean of 4.4 and a standard deviation of 0.935 indicated that the participants viewed skills of the project staff as a determinant of sustainability. In a study that looked at how project staff can play a part in the sustainability of projects, (Vaealiki & Mackey, 2008), pointed out that gaining and improving skills that are useful in the project can help a great deal. A mean of 4.5 and a standard deviation of 0.779 was an indication that the project did not have a high rate of staff turnover as per statement number 7. In statement number 8, a mean of 4.7 and a standard deviation of 0.691 indicates that respondents believed that the level of project staff turnover has an influence in the sustainability of the ECD project. This result is supported with (Hirst, 2018), who affirms that a high turnover negates all the good work that may have been done in the project hence hampering sustainability.

In the last two questions that sought to know how project staffing determines the sustainability of projects, means of 4.2 and 3.9, and standard deviations of 1.149 and 1.040 respectively indicate that participants were of the opinion that involvement of staff in decision making is important in ensuring project sustainability. (Gullo, 2013), suggests that as much as decision making may be viewed as a role played by project leaders, involving project staff in decision making is important in boosting morale and enhancing working relations. In the long run, all this contribute to the delivery of project objectives hence augmenting project sustainability.

### **Triangulation of Quantitative and Qualitative Data Analysis on Project Staffing and Sustainability of ECD Projects**

The in-depth interviews with the key informants show that they were of the opinion that;

**Lead Mother** “...the nurses at the facility have high skills. There is no time we have referred a mother to the hospital and they did not get help.”

**Government officials** “...in conjunction with our implementing partner, we organize short refresher trainings for each quarter of the year so as to enhance their skills and improve service delivery to the mothers in the program. This has helped us attain most of the indicators.”

**MoH staff** “...we try our level best to retain all the staff in the project because we know if any of them leaves, it will take a lot of time to get and train a replacement. I hope we won't have any turnover until the project ends.”

**Implementing partner staff** “...I can confidently say we were as objective as possible when we were recruiting the staff in the project since we wanted to get the best. We understand how the recruiting process can be politicized in the organization.”

The triangulation of quantitative data and the qualitative data confirms that project staff are important in project sustainability. This results are consistent with (Brennan, Bradley, Allen, & Perry, 2008), who found out that project staff can contribute to the sustainability of projects if they are supported to develop their skills, they are appreciated where they work and this can happen through involving them in decision making. They go on to advice project stakeholders on the need to having transparent recruitment processes when hiring project staff as this can be a cause of discontentment if not done in a proper manner and can sabotage the sustainability of the project.

### **Correlation of Project Staff and Sustainability of ECD Projects**

The study sought to investigate the relationship between project staff and the sustainability of Early Childhood Development projects using Pearson Correlation Method. The results are shown in Table 8.

**Table 8: Correlation of Project Staff and Sustainability of ECD Projects**

|                                |                     | <b>Sustainability of ECD Projects</b> | <b>Project Staff</b> |
|--------------------------------|---------------------|---------------------------------------|----------------------|
| Sustainability of ECD Projects | Pearson Correlation | 1                                     | .428**               |
|                                | Sig. (2-tailed)     |                                       | .000                 |
|                                | N                   | 192                                   | 192                  |
| Project Staff                  | Pearson Correlation | .428**                                | 1                    |
|                                | Sig. (2-tailed)     | .000                                  |                      |
|                                | N                   | 192                                   | 192                  |

\*\*. Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 8 there was a moderate relationship between project staff and sustainability of early childhood projects with a magnitude of ( $r=0.428$ ,  $P<0.000$ ).

### **Project Staff and the Sustainability of Early Childhood Development Projects**

Based on the indicators of; staff recruitment, staff training and development, skills of employees, the level of staff turnover, and staff involvement in decision making the study found out that there is a relationship between project staff and sustainability of early childhood projects ( $r=0.428$ ,  $P<0.000$ ). The results from the quantitative study were backed up by the qualitative data where the key informants also agreed to the importance of project staff to the sustainability of the project. These results are in agreement with (Rosenberg, Hartwig, & Merson, 2008), in a study on Government–NGO collaboration and sustainability of orphans and vulnerable children projects in southern Africa found out that project staff involved in the project played an important role by ensuring that all families got access to the grants that were being provided in addition to medication. Project staff were also essential in setting up community-based solutions hence steering sustainability of Orphan and Vulnerable Children (OVC) projects.



## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

The study established that project staff are instrumental to the sustainability of early childhood development projects considering that many ECD projects are service based and rely on the quality of services provided by staff like nurses, teachers, nutritionists, and community health workers. Other indicators that make project staff members to play a role in project sustainability include; the turnover rate of project staff, the recruitment process of the staff involved in the project, and how involved the staff members are in decision making.

### **Recommendations**

Project staff involved in the ECD projects should be recruited based on merit and this should not be subjective. In addition, the leadership of projects should ensure that project staff undergo frequent refresher training that will enable project staff to develop and improve their skills in service delivery. Project staff should actively be involved in decision making as this enhances harmony and creates a good working environment between the leadership and staff which can enhance sustainability of projects. In view of the findings of this study that was focused on Early Childhood Development, it is recommended that another study can be carried out to look at determinants of sustainability of projects that target other age groups.

## REFERENCES

- Adam, A. (2020). Sample Size Determination in Survey Research. *Journal of Specific Research and Reports*, 26(5), 90-97.
- Agbedahin, A. (2019). Sustainable development, Education for Sustainable Development, and the 2030 Agenda for sustainable Development: Emergence, efficacy, eminence, and Future. *Sustainable Development*, 27(4), 669-680.
- Bergan, V., Krempig, I., Utsi, T., & Boe, K. (2021). I want to Participate - Communities of Practice in Foraging and Gardening Projects as a Contribution to Social and Cultural Sustainability in Early Childhood education. *Sustainability*, 13(8), 43-68.
- Block, V., Gremmen, B., & Wesselink, R. (2018). Dealing with the Wicked Problem of Sustainability in advance. *Business and Professional Ethics Journal*.
- Bosch-Badia, M., Montllor-Serrats, J., & Tarrazon-Rodon, M. (2017). Efficiency and Sustainability of CSR Projects. *Sustainability*, 9(10), 1714.
- Brennan, E., Bradley, J., Allen, M., & Perry, D. (2008). The Evidence Base for Mental Health Consultation in Early Childhood Settings: Research Synthesis Addressing Staff and Program Outcomes. *Early Education & Development*, 19(6), 982-1022.
- Carmines, E., & Zeller, R. (2008). *Reliability and validity assessment*. Newbury Park, California: Sage Publishers.
- Clark, W. C. (2007). Sustainability science: A room of its own., 104(6), 37-38.
- Decker, C., & Decker, C. (2009). *Planning and administering early childhood programs*. Upper Saddle River: Merrill/Pearson Education.
- Delbridge, R., & Whitfield, K. (2001). Employee Perceptions of Job Influence and Organizational Participation Employee Perceptions. *Industrial Relations*, 40(3), 472-489.
- di Norcia, V. (2006). The Ethics in Human Research Ethics. *Journal of Empirical Research On Human Research Ethics*, 1(2), 1-2.
- Durmic, N. (2020). Factors Influencing Project Success: A Qualitative Research. *TEM Journal*, 1011-1020.
- Emilsen, K., & Koch, B. (2010). Men and women in outdoor play – changing the concepts of caring findings from Norwegian and Austrian research projects. *European Early Childhood Education Research Journal*, 18(4), 543-553.
- Ford, J., & Gilson, A. (2021). Influence of participation in a quality improvement collaborative on staff perceptions of organizational sustainability. *BMC Health Services Research*.
- Fotso, J., Holding, P., & Ezech, A. (2009). Factors Conveying Resilience in the Context of Urban Poverty: The Case of Orphans and Vulnerable Children in the Informal Settlements of Nairobi, Kenya. *Child and Adolescent Mental Health*, 14(4), 175-182.
- Fowler, F. (2019). *Survey research methods*. London: Sage Publication.
- Gewa, C., Oguttu, M., & Yandell, N. (2011). Maternal nutrition in rural Kenya: health and socio-demographic determinants and its association with child nutrition. *Maternal & Child Nutrition*, 8(3), 275-286.

- Greenberger, L. (2018). Effective Communications for Project Success. *Remediation Journal*, 26(2), 121-128.
- Gullo, D. (2013). Improving Instructional Practices, Policies, and Student Outcomes for Early Childhood Language and Literacy Through Data-Driven Decision Making. . *Early Childhood Education Journal*, 41(6), 413-421.
- Harrington, L. (2018). Sustainability Theory and Conceptual Considerations: A Review of Key Ideas for Sustainability, and the Rural Context. *Papers in Applied Geography*, 2(4), 365-382.
- Hicks, D. W., Schmeidler, E., & Kirchner, C. (2020). Investigating Question Meaning and Context Through In-Depth Interviews. *Quality & Quantity*, 38(4), 367-379.
- Hirst, N. (2018). Education for sustainability within early childhood studies: collaboration and inquiry through projects with children. *Education*, 47(2), 233-246.
- Hohoev, T. (2019). Assessment center and staff recruitment. *Scientific development trends and education*.
- Huda, K. (2020). Mapping the dimensions of human resources development: A scoping review. *Journal On Innovation and Sustainability RISUS*, 11(3), 109-128.
- Kapil, U. (2002). Integrated child development services (ICDS) scheme: A program for holistic development of children in India. *The Indian Journal of Pediatrics*, 69(7), 597-601.
- Kirk, J., & Miller, M. (2005). *Reliability and validity in qualitative research*. Newbury Park, California.
- Leedy, P., & Ormrod, J. (2020). *Practical Research*. Harlow, United Kingdom:: Pearson Education Limited.
- Lipman, A. (2020). Community Participation -- Hope and Reality. *Transformation: Critical Perspectives On Southern Africa*, 53(1), 53-68.
- Litwin, M. (2020). How to measure survey reliability and validity? *Thousand Oaks*:: Sage Publications.
- Marczak, L., O'Rourke, K., & Shephard, D. (2018). Mortality Rates for Children Younger Than 5 Years, 1990-2013. *JAMA*, 315(9), 859.
- Maringe, F. (2012). Staff involvement in leadership decision making in the UK further education sector. *Journal of Educational Administration*, 50(4), 463-482.
- Mat Roni, S., Merga, M., & Morris, J. (2019). *Conducting Quantitative Research in Education*. Singapore: Springer.
- Mbugua, T. (2020). Early Childhood Care and Education in Kenya. *Childhood Education*, 80(4), 191-197.
- McNeill, P., & Chapman, S. (2005). *Research methods*. London: Routledge.
- Montgomery, K. (2000). Getting organized: Qualitative data collection. *Applied Nursing Research*, 13(2), 103-104.
- Mugenda, M. a. (2003). *Research Methods: Qualitative and Quantitative Approaches*. Nairobi, Kenya:: Act Press.

- Neuman, M., McConnell, C., & Kholowa, F. (2019). From Early Childhood Development Policy to Sustainability: The Fragility of Community-Based Childcare Services in Malawi. *International Journal of Early Childhood*, 46(1), 81-99.
- Onnis, L. (2017). Human resource management policy choices, management practices and health workforce sustainability: remote Australian perspectives. *Journal of Human Resources*, 57(1), 3-23.
- Pelsa, I., Pelsa, I., & Balina, S. (2020). Sustainability Theory: A Review of Key Ideas for Sustainability and green procurement context. *11Th Global Conference On Business and Social Sciences*, 11(1), 135.
- Rittah, K. (2013). Access, quality and equity in education for sustainable development in Southern Africa:. *Child Development. Greener Journal of Social Sciences*, 3(3), 120-127.
- Saini, M., & Kumar, A. (2018). Ratio estimators using stratified random sampling and stratified ranked set sampling. *Life Cycle Reliability and Safety Engineering*, 8(1), 85-89.
- Sarff, L. &., Sarff, L., & O'Brien, R. (2020). Evidence-Based Quality Improvement Training Programs. *Journal of Nursing Care Quality*, 35(2), 95-101.
- Silvius, A., & Schipper, R. (2019). Sustainability in Project Management Competencies: Analyzing the Competence Gap of Project Managers. *Journal of Human Resource and Sustainability Studies*, 02(02), 40-58.
- Sims, M., & Waniganayake, M. (2020). The Role of Staff in Quality Improvement in Early Childhood. *Journal of Education and Training Studies*.
- Staff, S. (2018). Getting your project from start to finish. *Science*.
- Vaealiki, S., & Mackey, G. (2008). Ripples of action: Strengthening environmental competency in an early childhood centre. *Early Childhood Folio*, 12, 7-11.
- Vladimirova, K., & Le Blanc, D. (2018). Exploring Links Between Education and Sustainable Development Goals Through the Lens of UN Flagship Reports. *Sustainable Development*, 24(4), 254-271.
- White, T., & McBurney, D. (2013). *Research methods*. Belmont, California: Cengage Learning.
- Xue, J., Rasool, Z., Gillani, A., & Khan, A. (2020). The Impact of Project Manager Soft Competences on Project Sustainability. *Sustainability*, 12(16), 6537.