**RESOURCE ALLOCATION BY SCHOOL** **BOARD OF MANAGEMENT ON THE READMISSION POLICY FOR ADOLESCENT MOTHERS IN TANA RIVER SUB-COUNTY PUBLIC SECONDARY SCHOOLS**

**ABSTRACT**

The Kenyan government is steadfast in driving sustainable development goals through extensive initiatives. One of the initiatives is to facilitate and empower girl child through the enactment of a readmission policy for adolescent mothers to educational institutions. Nevertheless, the efficacy of this policy appears to be limited, with a significant number of reintegrated adolescent mothers discontinuing their education. In certain regions, the rate of readmissions remains conspicuously low. Little is known about the influence of school board management activities on implementation of readmission policy for adolescent mothers. This research sought to address this by assessing the influence of school board of management resource allocation on implementation of readmission policy for secondary school adolescent mothers in Tana River sub-county. The study utilized mixed research approach that involve both quantitative and qualitative research methods such as interviews and questionnaires with various education stakeholders. The study targeted a population that comprised of 10 public secondary schools in Tana River Sub County, 94 teachers, 10 Principals and 20 BOM members. Purposive and simple random sampling techniques were used to sample. The study sample size included a heterogeneous cohort of participants including 10 principals, 28 teachers and 20 BOM members in Tana River Sub-County. Data was collected through structured questionnaires and interview guides. Cronbach's Alpha method of testing the questionnaire reliability was used. Content validity and face validity were evaluated. Qualitative data analysis used verbatim analysis to analyse qualitative data obtained from in-depth interviews. Descriptive and inferential data analyses was done for Quantitative data. The findings revealed that resource allocation significantly related with readmission policy for adolescent mothers in Tana River Sub-County public secondary schools having p-value less than 0.05. Resource allocation had influence on readmission policy with correlation coefficient, r, of 0.776. Therefore, to enhance readmission policy for adolescent mothers, the study recommends for provision of more resources to secondary schools by the ministry of education. The research findings will benefit school board of management by revealing activities that hinder or facilitate policy implementation. It will also help the ministry of education in designing interventions that promote equity and ensure that all students, including adolescent mothers, have access to education. Future researchers with needs similar to this problem will also find this research useful.

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Introductuion

**BACKGROUND OF THE STUDY**

World over, access to education, particularly ‘girl child education’ is not only a human right but remains a fundamental prerequisite towards addressing Sustainable Development Goal (SDG 4). However, the realization of these agreements is bedevilled by constraints such as adolescent pregnancy and forced early marriages. Adolescent pregnancy is defined as pregnancy among girls aged 10-19 years (Temmerman et al., 2014). Adolescent pregnancy has become a common phenomenon among the student in different parts of the world. Each year, about 16 million adolescent girls between the ages of 15 and 19 worldwide give birth to children (WHO, 2019). According to United Nations Department of Economic and Social Affairs, Population Division report 2022, approximately 13.3 million babies, constituting 10 percent of the global birth rate, were born to adolescent mothers under the age of 20 worldwide with half of them originating from sub-Saharan Africa. The incidence of adolescent childbearing has experienced notable declines, particularly in Northern Africa and Western Asia since the late 1970s, and in Central and Southern Asia since the late 1980s.

Although there has been a recent decrease in adolescent birth rates in sub-Saharan Africa, projections are that pregnancy among adolescent girls will have the greatest increase in sub-Saharan Africa over the next 20 years. Kenya is among the countries with the highest projected increase of 2.3 million adolescent pregnancies (Omoro et al., 2018), alongside Nigeria (9.2 million), the United Republic of Tanzania (3.7 million), the Democratic Republic of the Congo (3.3 million), Uganda (2.5 million) (Loaiza, et al., (2013). Adolescent pregnancy and motherhood pose a major health and social concern because of their higher morbidity and mortality for both the mother and the child (KDHS, 2014). It also has other adverse social consequences that curtail female educational attainment (Undie et al., 2015). Studies by Kost and Henshaw (2012) document that cases of adolescent pregnancy among girls have become rampant with approximately 51% of adolescent pregnancies ending in live births, 35% ending in induced abortion, and 14% resulting in a miscarriage or stillbirth. This has had negative effects on their participation in academic activities at school. To mitigate these problems there is need for different governments to support adolescent mothers in enhancing their access to basic needs such as education and health. Beside that also is to support their aspirations and eliminate practices that do not contribute to the development and empowerment of the girl child.

Different countries worldwide have introduced a “Return-to-School Policy” for adolescent mothers with mixed results. In 2010, the Tanzania Ministry of Education and Vocational Training (MoEVT) released a statement clarifying that there existed no formal policy requiring the expulsion of pregnant adolescent girls from school or barring their re-enrolment following childbirth (UNICEF, 2014). However, the policy didn’t live to see the light at the end of the day. Adolescent mothers faced a societal social setback as their presence in school was deemed bad precedence for their classmates. They seemed encouraging other students to engage in early sexual activity and unfortunately, become pregnant themselves (Niboye, 2018). Kenya government through the ministry of education introduced the school re-admission policy 1994, but despite the policy opening chances that allows the adolescent mothers to re-admission into schooling, only a few of managed to go back to formal schooling (Kurgat, 2016).

One of the guidelines of the Ministry of Education (1998) on re-admission of adolescent mothers stipulated that girls who become pregnant should be admitted back to school unconditionally and school management to develop strategies to assist such girls in joining other schools to avoid psychological and emotional suffering. While progress has been made to readmit adolescent mothers to education institutions in many counties of Kenya, in some regions the policy has had less impact or none as revealed by the dropout cases occurring.

Tana River Sub-County presents an empirical case of implementation of a readmission policy for adolescent mothers, however, since the enactment of the policy only a few adolescent mothers have managed to return to school. Only 24.9% of adolescent mothers had reported back to school after giving birth despite the concerted efforts by the government and school management, many adolescent mothers have not heeded the call to return to school (Shurie, 2015). Previous studies tried to explore on experiences in attempting or succeeding in being able to re-enter the school with less emphasis on school board of management activities. This therefore necessitated a deep contextual and situational study on school board of management resource management and the implementation of readmission policy for adolescent mother.

## STATEMENT OF THE PROBLEM

School board of management activities adopted by school management play an important role in the implementation of readmission policy which provides an academic lifeline for adolescent mothers who have otherwise forgotten about their education. However, in Tana River Sub- County, the situation is quite different with implementation of the readmission policy for adolescent mothers having been never smooth since the number of adolescent mothers who report back to school is still low. No documented data on the influence of school board management activities on the readmission of adolescent mothers.

Previous study revealed that many adolescent mothers have not heeded the call to return to school. Demographic and Health Survey (2014) done in Kenya offer that teenage pregnancy and motherhood has adverse social consequences, particularly for female educational attainment, as women who become mothers in their teens are more likely to curtail education. Despite this situation, much is yet to be done to investigate and contextualize the influence school board of management activities on readmission policy for adolescent mothers which informed the purpose of this study.

**RESEARCH** **OBJECTIVE**

The objective of the study was to assess the influence of school board of management resource allocation on implementation of readmission policy for secondary school adolescent mothers in Tana River Sub-County.

**THEORETICAL REVIEW**

The study adopted the Institutional Theory proposed by David Baker and Gerald Le Tendre (2005). The theory according to Baker & Le Tendre (2005), postulates a fundamental set of belief and norms which has largely influenced child schooling. The proponents argue out that every child should access education, nations and education departments should invest in education. Education functions for the collective goods of the society and neither social nor economic should not limit access to education. The theory further suggests that organizations and institutions structures are shaped more by cultural and social influences than by rational efficiency. For instance, normative pressure dictates school board management realign their activities to societal norms regarding education, gender equality and social inclusion, and social welfare. Other cognitive vices such as perceptions, beliefs, and cultural attitudes toward adolescent pregnancy forms part of cognitive pressure which also shapes the decision of school management towards a certain set of activities.

Institutional theory has been adopted in many studies revolving around school management decision and activities. School management is charged with the responsibility of ensuring that every child, including adolescent mothers, should access education. Consequently, the board of management for each school should thus implementation readmission policy for secondary school adolescent mothers to ensure that these mothers too access education. The board should thus initiate activities such as resources allocation to support these adolescent mothers. Thus a theoretical framework grounded in institutional theory helped to explore how school boards’ resources allocation activities regarding adolescent mothers impact readmission guidelines for adolescent mothers in Tana River Sub-County public secondary schools.

**EMPIRICAL LITERATURE**

**Provision of Resources for Adolescent Mothers in Public Secondary Schools**

Re-entry policy implementation faces challenges of resources inadequacy and less legitimacy (Mwenje, 2015). Pressman and Wildavsky (1973) offer that programs implementation only starts after formalization of policy, legitimization of policy and provision of Government resources. Economist Intelligence Unit Survey (2010), show that organizations devote insufficient financial resources and time for effective implementation of policy. The failure of providing requisite resources resulted from overwhelming cost and also impediment of existing issues. For effective policy implementation, there has to be sufficient resources mobilization and planning. Once strategies are determined, policy makers estimate and also mobilize the financial, human, structural and legal resources necessary for effective implementation of the policy by the concerned organizations.

For instance, a policy requires legal backup so that redress can be given to those aggrieved. Coordination is also necessary for successful policy implementation for ensuring availability of all resources and preparation to work together (Bhuyan et al., 2010). Others studies highlight the multifaceted barriers faced by adolescent mothers in accessing education. These barriers encompass social stigma, lack of support networks, financial constraints, and inadequate resources within educational institutions (Smith et al., 2017; Jones & Higgins, 2020). Insufficient provision of resources exacerbates these challenges, hindering adolescent mothers' ability to continue their education effectively. Similarly, Resource provision plays an immense role in mitigating the barriers faced by adolescent mothers in public secondary schools. Access to resources such as childcare facilities, counselling services, academic support programs, and flexible learning arrangements can significantly enhance adolescent mothers' educational outcomes (Sharma & Singh, 2019; O'Connor et al., 2021).

Moreover, comprehensive resource provision contributes to addressing the broader socio-economic inequalities perpetuated by adolescent pregnancy. Other studies such as Anderson et al (2007; Mitchell et al., (2020) have documented the efficacy of on-site childcare facilities in facilitating adolescent mothers' attendance and engagement in school activities. Similarly, counselling services tailored to address the unique needs of adolescent mothers have been shown to improve mental health outcomes and resilience (Thabethe et al., 2020). Despite the recognized importance of resource provision, challenges exist in ensuring equitable access to support services for adolescent mothers in public secondary schools. Mangeli et al., (2017) offer these challenges to include; limited funding, inadequate staffing, and a lack of institutional policies addressing the specific needs of this vulnerable population. Additionally, cultural and societal norms may impede the implementation of comprehensive resource interventions, further marginalizing adolescent mothers.

Bunyi (2008) offers that high level of poverty in many African countries influences the girls’ education in numerous ways. Her report show inadequacy of resources from Governments constrains their effort in providing education resulting in inadequate in schools and girls are more excluded than boys. Adolescents from low-income families may find it a bit challenging to continue their education due to financial constraints (Chinkondenji 2022). Grant and Hallman (2008) posit that adolescent parents usually experience inadequate support and resources at home and in school before and after pregnancy. Gachukia (2003) also Points out that though financial support is recommended in re-admission policy, many years later, no form of financial support has ever been provided to the adolescent mothers. Schools are expected to provide textbooks, learning materials and bursary to those girls who return to school (Wanyama and Simatwa, 2011).

**RESEARCH METHODOLOGY**

This research was conducted within Tana River Sub County, situated in the North-eastern region of Kenya. The Tana River Sub-county is one of the administrative divisions within the larger Tana River County. It is located approximately between 1.0°S and 2.5°S latitude, and 39.0°E and 40.0°E longitude. Adolescent dropout rates are a persistent problem in Tana River County that has serious implications for mother and child health, educational attainment, and socioeconomic development. This study adopted descriptive survey research design as it accepts use of mixed research methodology (Orodho, 2016). The study target population comprised of 10 public secondary schools in Tana River Sub County, 94 teachers, 10 Principals and 20 BOM members. This study used purposeful sampling method to include all the ten principals of public secondary schools in Tana River Sub County. Purposeful sampling method was also used to include BOM Chairman and Treasurer for each school making a total of twenty members. For teachers, the study used simple random method to select 30% of 94 teachers in public secondary schools in Tana River Sub County making a total of 28 teachers

The instrumentation for data collection in this study involved a combination of quantitative and qualitative instruments, carefully selected to capture the multifaceted nature of board of management activities and implementation of readmission policy for secondary school adolescent mothers in Tana River Sub-County. Semi-structured questionnaires were developed to gather quantitative data from teachers. Qualitative data was collected from teachers and also through in-depth interviews to principals and BOM members allowing for a thorough examination of participants' viewpoints. The interviews enabled participants to articulate their perspectives using their own language, therefore offering profound and contextual understandings of the activities that contribute to the readmission policy of adolescent mothers. The researcher used the Statistical Package for the Social Sciences (SPSS) version 27 for Windows to analyze the data. Descriptive statistics such as frequencies, means, and standard deviations were used to summarize the general trends and characteristics of the data. Inferential statistical technique was by use of correlation analysis. Qualitative data analysis used verbatim analysis to analyse qualitative data obtained from in-depth interviews

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**RESEARCH FINDINGS**

This researcher distributed 28 questionnaires to 28 teachers out of which, 24 were filled and returned. This gave a response rate of 85.55% considered good in conformity to Mugenda and Mugenda (2003) recommendation of at least 70%. The study sought to evaluate the impact of resource allocation by BOM on the readmission policy for adolescent mothers in Tana River Sub-County public secondary schools

**Table 1-Components of Resource Allocation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | | | | |
|  | N | Minimum | Maximum | Mean | Std. Deviation |
| Breast feeding rooms | 24 | 3.00 | 5.00 | 3.4583 | .58823 |
| Incentives | 24 | 2.00 | 4.00 | 2.6667 | .56466 |
| Sanitary resources | 24 | 2.00 | 5.00 | 2.7917 | .83297 |
| Valid N (Listwise) | 24 |  |  |  |  |

The study examined the various components of resource allocation in relation to the implementation of the readmission policy for adolescent mothers. The findings indicated that the provision of breastfeeding rooms was the highest-rated component of resource allocation, with a mean score of 3.4583. This suggests that schools are reasonably successful in addressing some of the basic needs of adolescent mothers, particularly in providing private and secure spaces for breastfeeding. Such provisions are essential as they support the well-being of adolescent mothers and allow them to maintain their education while caring for their children. However, the provision of incentives, which could include financial or material support to ease the burdens faced by adolescent mothers, received the lowest rating, with a mean score of 2.6667. This suggests that there is a lack of sufficient financial or material incentives for adolescent mothers, which could hinder their ability to fully reintegrate into the school system. Adequate incentives could help alleviate some of the challenges faced by these students, such as financial constraints or the cost of raising a child while pursuing education.

In general, the moderate ratings across the different components of resource allocation indicate that while some support structures are in place, they are not sufficient to fully address the needs of adolescent mothers. The lack of comprehensive resources could partly explain the challenges faced by adolescent mothers in Tana River Sub-County, particularly the low levels of readmission. To improve the readmission process and ensure the successful reintegration of adolescent mothers, schools and the Board of Management should consider increasing their resource allocation in key areas. This includes providing more comprehensive support mechanisms, such as financial incentives, adequate sanitary resources, and additional resources to support both the academic and caregiving responsibilities of adolescent mothers. By strengthening these areas, schools can create a more supportive and conducive environment for adolescent mothers to thrive academically and personally.

**Table 2. Inferential Statistical results**

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
|  | | Provision of Resources | Number of Adolescent mothers readmitted in five years |
| Provision of Resources | Pearson Correlation | 1 | .776\*\* |
| Sig. (2-tailed) |  | .000 |
| N | 24 | 24 |
| Number of Adolescent mothers readmitted in five years | Pearson Correlation | .776\*\* | 1 |
| Sig. (2-tailed) | .000 |  |
| N | 24 | 24 |
| \*\*. Correlation is significant at the 0.05 level (2-tailed). | | | |

The Pearson's correlation analysis between resource allocation by the Board of Management (BOM) and the number of adolescent mothers readmitted in the past five years reveals a strong and statistically significant relationship, with a correlation coefficient of 0.776 (p-value = 0.000). This suggests that resource allocation is highly influential in the successful implementation of the readmission policy for adolescent mothers in public secondary schools in Tana River Sub-County.Moreover, when respondents were asked whether they believed resource allocation influences the implementation of the readmission policy, 87.5% (21 out of 24) affirmed this view, highlighting the general consensus among educators that adequate resources are crucial for supporting the reintegration process. This high level of agreement further emphasizes the significance of resource provision in enhancing the outcomes of readmission policies for adolescent mothers.

According to the responses from the interview schedule, the provision of resources was identified as having a high impact on the implementation of the readmission policy for adolescent mothers in public secondary schools. Both principals and Board of Management (BOM) members expressed a consensus on the critical role that resources play in the effective execution of this policy. Specifically, eight principals and fifteen BOM members highlighted the shortage of resources as a major challenge hindering the full implementation of the readmission policy. In light of this challenge, the respondents strongly advocated for an increase in funding for public secondary schools from the Ministry of Education. They argued that a boost in financial support would enable schools to address the resource gaps, such as the need for additional infrastructure and human resources. This, in turn, would facilitate a more effective reintegration of adolescent mothers into the education system. By improving resource allocation, schools would be better equipped to support these students' academic and social needs, ultimately enhancing the success of the readmission policy.

**CONCLUSION**

Given the strength and significance of this correlation, the study concludes that the allocation of resources whether financial, human, or infrastructural plays a pivotal role in facilitating the readmission of adolescent mothers. The findings indicate that better resource provision can positively impact the effectiveness of these policies, promoting the successful reintegration of adolescent mothers into the educational system. This reinforces the importance of ensuring adequate resources for the successful implementation of such policies.

**RECOMMENDATION**

Findings established that resources allocation highly and positively influenced implementation of readmission policy for secondary school adolescent mothers in Tana River Sub-County. Thus, to improve implementation of readmission policy for adolescent mothers in these schools, this study recommends that secondary schools should ensure that sufficient financial resources are allocated specifically for programs that support adolescent mothers’ reintegration, such as childcare services, counselling, academic tutoring, and healthcare. These schools, in collaboration with local non-governmental organizations (NGOs), community groups, and government agencies, should secure additional resources for adolescent mothers

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# REFFERENCES

Abonyo, O., & Ogumbo, S. (2017). Bio hazard management practices by occupationally exposed medical laboratory personnel in health facilities in Kisumu east sub county, Kisumu County Kenya. Dissertation project Kenyatta University.

Adamu G. U. & Aisha, A 2017). Common occupational health hazards amongst healthcare workers in a Tertiary Health Institution in Bida, North-central Nigeria. International Journal of Biomedical Research 8(01), 01-06.

Amponsah-Tawiah, K., Ntow, M. A., & Mensah, J. (2016). Occupational health and safety management and turnover intention in the Ghanaian mining sector. Safety and Health at Work, 7(1), 12-17.

Barad, M., & Even Sapir, D. (2003). Flexibility in logistic systems—modeling and performance evaluation. International Journal of Production Economics, 85(2), 155-170.

Burns, N., & Groove, S. (2002). Introduction to Nursing Research: Incorporating Evidence-based Practice. (2007). United Kingdom: Jones and Bartlett Publishers.

Chan, A., & Wong, B. (2022). Socio-demographic predictors of health risk perception and management of biological hazards: A cross-sectional study in Hong Kong. Journal of Health Risk Management, 15(2), 123-135.

Chan, S. W., R, T., Nor Aziati, A. H., Rasi, R. Z., Ismail, F., Ruslan, R., R, R., Nojumuddin, N. S., Ahmad, M., Omar, S. S., Zaman, I., & Anuar, M. F. (2018). Psychosocial Workplace Hazards and Workers’ Health in Factory Sector. International Journal of Integrated Engineering, 10(5)

Chebet, C. (2022). Work-related health and safety risks associated with hairdressers in Nairobi city county, Kenya.

Cohen, J., Cohen,P.,West, S.G., & Aiken, L.S. (2002). Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences (3rd ed.). Routledge.

Collins, J. (2011). Understanding accident causation: The domino theory and its modern relevance. Safety Science Journal, 24(3), 112-130.

Cooper, C. L., & Quick, J. C. (2017). The handbook of stress and health: A guide to research and practice.Wiley Blackwell.

Cooper, C. R., & Schindler, P. S. (2006). Business Research Methods (9th ed.). New York: McGraw-Hill Irwin

Courties, G., Allard, K., & Smith, A. (2019). Occupational health and safety in Africa: Challenges and opportunities for development. Journal of African Studies and Development, 11(5), 67-76.

Diallo S.Y.K, Mweu M.M, Mbuya S.O, Mwanthi M.A. (2019). Prevalence and risk factors for low back pain among university teaching staff in Nairobi, Kenya: a cross-sectional study. F1000Res.

Dollard, M. F., & Bakker, A. B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement. Journal of Occupational and Organizational Psychology*, 83*(3), 579–599.

European Agency for Safety and Health at Work (EU-OSHA). (2019). Biological agents: Health risks and preventive measures.

Giorgi, G., Lecca, L. I., Alessio, F., Finstad, G. L., Bondanini, G., Lulli, L. G., Arcangeli, G., & Mucci, N. (2020). COVID-19-related mental health effects in the workplace: A narrative review*.* International Journal of Environmental Research and Public Health, 17(21), 7857.

Grainger, J., Smith, T., & Jones, L. (2013). Ergonomics and the workplace: A guide to improving safety and efficiency. Health and Safety Executive.

Griffiths, A. (2017). Psychological hazards in the workplace. Health and Safety Executive.

Groove, S. (2003). Factor analysis of the construct validity of the postgraduate hospital educational environment measure (PHEEM). Al-Quds University

Harrington, J.M., Myers, R.A. and Rosenberg, A.A. (2005) Wasted Resources: Bycatch and discards in US Fisheries. Oceana, Washington,Husni, H. (2005).

Hou, X. (2024). The impact of psychosocial safety climate on job performance and workplace well-being. International Journal of Occupational Health and Safety, *12*(1), 45–60.

ILO. (2011). ILO Introductory Report: Global Trends and Challenges on Occupational Safety and Health. Geneva: International Labour Office

Indiatsy, C.M., K'obonyo, P.O., Muindi, F.K., Munjuri, M.G., & Mwangi, I.C. (2019). Analysis of The Effect of Employee Age, Human Resource Management Practices and Employee Competence on Employee Performance in Kenyan State Corporations. European Journal of Business and Management.

Institute for Health Metrics and Evaluation (IHME). (2015). Global burden of disease study 2015 results. IHME.

International Labour Organization (ILO). (2009). Global trends and challenges on occupational safety and health. International Labour Office.

International Labour Organization (ILO). (2016). Psychosocial hazards at work: Guidance for employers and workers.

Joseph, R.N and David Minja. (2022). Effect of Individual Attributes on Job Satisfaction of Healthcare Workers in Murang’a County Referral Hospital - Kenya. Journal of Public Policy and Administration. Vol. 5, No. 4, 2021, pp. 123-130

Karazsia, B. T., et al. (2014). Moderation is a statistical mirage: The role of measurement inferences. The Journal of Experimental Education, 82(1), 93-115.

Kimani, J., Mutua, E., & Ndungu, P. (2020). Occupational safety and health compliance in Kenyan healthcare facilities: Challenges and implications*.* Journal of Occupational Health and Safety, 15(2), 45-60.

Kothari, C. R. (2004). Research Methodology: Methods and Techniques. India: New Age International (P) Limited.

Kumar, Dr. A.S. (2020). A Study on Employee Attitude Towards the Organization and Job Satisfaction. International Journal of Science and Research. ISSN-2319-7064.

Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. Journal of Management, 43(6), 1854-1884.

Laloo, M., Smith, J., & Tan, R. (2023). Leadership and psychosocial safety climate: A critical review of workplace well-being and employee performance. Workplace Psychology Review, 18*(*2), 112–130.

Leech, N. L., & Onwuegbuzie, A. J. (2011). Beyond constant comparison qualitative data analysis: Using NVivo. School Psychology Quarterly, 26(1), 70-84.

Luchini, M., Estrin, D., & Morabito, A. (2014). Occupational health and safety management in developed nations: A comparative analysis of regulatory frameworks and safety initiatives. International Journal of Occupational Health and Safety, 8(2), 75-89.

Marete, G. M., Lalah, J. O., Mputhia, J., & Wekesa, V. W. (2021). Pesticide usage practices as sources of occupational exposure and health impacts on horticultural farmers in Meru County, Kenya. Heliyon, 7(2), e06118.

Mbaye, K. D., Diallo, M., & Sy, A. O. (2018). Occupational health and safety challenges in sub-Saharan Africa: An overview. International Journal of Environmental Research and Public Health, 15(9), 1987.

Mburuet.al. (2018). Occupational safety and health hazards exposure among farm workers at Ahero irrigation scheme Kenya. Vol. 4 No. 2: EPH - International Journal of Agriculture and Environmental Research (ISSN: 2208-2158)

Metzeler, M. (2019). Understanding psychological hazards in the workplace. Health and Safety Executive.

Mogwambo, O. (2019). Occupational health and safety challenges in the public sector in Kenya: A review. Journal of Occupational Health and Safety, 15(3), 123-130.

Mugenda, O. M., & Mugenda, A. G. (2008). Research methods: Qualitative and quantitative approaches. Nairobi Kenya. act press.

Muhamad, A., et al. (2018). Management of chemical hazards for academic staff productivity in public universities in River State. Journal of Occupational Health and Safety, 22(4), 130-145.

Nagaraju, Y.S. (2022). Moderating effect of employee attitude and work environment on learning and behavior of the employees: evidence from Indian Steel Industry. International Journal of Science and Research. Volume 10.

Ngaruiya, F. W., Ogendi, G. M., & Mokua, M. A. (2019). Occupational Health Risks and Hazards Among the Fisherfolk in Kampi Samaki, Lake Baringo, Kenya. Environmental health insights, 13, 1178630219881463

NIOSH (National Institute of Occupational Safety and Health) (1997). Musculoskeletal Disorders and Workplace Factors: A Critical Review 159 of Epidemiologic Evidence for Work -Related Musculoskeletal Disorders of the Neck, Upper Extremity, and Low Back, ed. Bernard, B. P, DHHS (NIOSH) Publication No. 97B141.

Okoye, P.U., Okolie, K.C., Nzeneri, O.P.F., & Ohazulume, G.C. (2022). Payment of Labour Wage for Safety Risk Building Construction Site Operations. Management Dynamics in the Knowledge Economy, 10(2), 124-141

Oluoch &Njogu. (2017). Effects of occupational safety and health hazards on work environment in water service industry within Kisumu County, Kenya. Kenyatta university press, (doctoral dissertation) International Journal of Business and Management Invention, 5(10), 108-113.

Oluoch, I., Ndeda, J. O., & Njogu, P. (2017). Effect of occupational safety and health awareness on work environment in the water service industry within Kisumu County - Kenya. IOSR Journal of Environmental Science, Toxicology and Food Technology, 11(06), 35-41.

Ouma, D., & Wanjohi, C. (2019). Occupational safety and health risk factors in public hospitals: An assessment of policy enforcement and protective equipment availability*.* African Journal of Health and Safety, 12(4), 78-92.

Pexsters, A., Luts, J., Van Schoubroeck, D., Bottomley, C., Van Calster, B., Van Huffel, S., Abdallah, Y., D'Hooghe, T., Lees, C., Timmerman, D., & Bourne, T. (2011). Clinical implications of intra- and interobserver reproducibility of transvaginal sonographic measurement of gestational sac and crown-rump length at 6-9 weeks' gestation. Ultrasound in obstetrics &gynecology: the official journal of the International Society of Ultrasound in Obstetrics and Gynecology, 38(5), 510–515.

Polit, D. F., & Beck, C. T. (2006). The content validity index: are you sure you know what's being reported? Critique and recommendations. Research in nursing & health, 29(5), 489–497

Polit, D. F., & Hungler, B. P. (1999). Nursing research: Principles and methods.6th edition, Lippincott Williams & Wilkins Philadelphia.

Rebmann, T. (2017). Biological hazards: Health and safety implications. Journal of Occupational and Environmental Medicine, 59(4), 389-395.

Segbenya, M., & Yeboah, E. (2022). Effect of Occupational Health and Safety on Employee Performance in the Ghanaian Construction Sector. Environmental health insights, 16

Singh, R., Gautam, N., Mishra, A. and Gupta, R. (2011) Heavy Metals and Living Systems: An Overview. Indian Journal of Pharmacology

Stirling, J. (2019). Employee well-being and workplace health: An evolving priority. Journal of Workplace Health Management, 12(4), 245-260.

Streiner, D. L., & Norman, G. R. (2003). Health measurement scales: A practical guide to their development and use.

Tabachniek, B. G., & Fidell, L. S. (1984). Book review: Reply to Widaman's review of using multivariate statistics. Applied Psychological Measurement, 8(4), 471-471.

Tait, F. N., Mburu, C., & Gikunju, J. (2018). Occupational safety and health status of medical laboratories in Kajiado County, Kenya. The Pan African medical journal, 29, 65.

Tinubu, B. M., Mbada, C. E., Oyeyemi, A. L., & Fabunmi, A. A. (2010). Work-related musculoskeletal disorders among nurses in Ibadan, South-west Nigeria: a cross-sectional survey. BMC musculoskeletal disorders, 11, 12

Tumolo, M. (2018). Workplace culture and employee well-being: Understanding the modern workplace. Business and Management Journal, 12(2), 45-58.

Umugwaneza, C., Nkechi, I.E. & Mugabe, J.B. (2019). Effect of workplace safety and health practices on employee commitment and performance in steel manufacturing companies in Rwanda. European Journal of Business and Management Research, 4(5), 45-56

Walter Ogutu Amulla, Aaron Gichaba Misati. (2021): Ergonomic Hazards among Supermarket Luggage Attendants and Security Personnel at A Leading Urban Center in Kenya. Fortune Journal of Health Sciences 4 299-309.

Workman, D. E., Kielhofner, G., & Taylor, R. R. (2017). Ensuring ethical research. Kielhofner’s research in occupational therapy: Methods of inquiry for enhancing practice, 144-161.

World Health Organization. (2002). Good practice in occupational health services: a contribution to workplace health (No. EUR/02/5041181). Copenhagen: WHO Regional Office for Europe.

World Health Organization. (2013). Healthy Workplace Framework and Model: Background and Supporting Literature and Practices, WHO Press, Geneva, Switzerland

World Health Organization. (2020). Preparedness for health emergencies: A guide for health sector managers.