Effects of Poverty on Pre-School Children's Academic Performance: A Case Study of Nzaui Sub-County, Makueni County, Kenya

Lucia Mutanu Mutie

Department of Education Management and Policy Studies Maasai Mara University P.O Box 861-20500, Narok, Kenya

Abstract

The purpose of this study was to establish the effects of poverty on the academic performance of preschoolers in Nzaui Sub County. Five research questions were formulated to guide the study. The study employed a descriptive survey research design, and data was collected through the use of questionnaires. It was found that parents were unable to provide their children with learning resources, which affected their academic performance. It was also revealed that children who came from poor families had a learning environment that was not conducive, thus affecting their learning. The findings revealed that children were at times forced to be absent from school to do other jobs at home, such as looking after their siblings or performing other tasks, which affected their academic performance. It was also found that parents' economic standards were low, and they were unable to support their children's education, which also had an impact on their academic performance. Additionally, it was discovered that the living environment was not suitable to support children's education such as adequate space for homework. Based on the findings, it was concluded that family conditions, influenced by poverty, affected children's academic performance. Given the above findings, it was recommended that there is a need to support preschools by providing the necessary resources that are not accessible to parents. It was also recommended that the government make pre-school education free, enabling more children to access it. Furthermore, based on the findings, the research recommended conducting a study on how parents' economic activities contribute to the academic performance of their children. Since this study was conducted in one area, it is suggested that the same study be replicated in other areas.

Keywords: Poverty, Academic Performance, Preschool Education, Learning Environment, and Parental Involvement

1. INTRODUCTION

The study focused on the effects of poverty on the academic performance of preschoolers in Nzaui Sub County. Poverty was a major issue that adversely affected many developing households countries, in including Kenya. Poverty led to a? lack of resources such as education, food, and healthcare, which had a detrimental effect on the academic performance of children, especially at the preschool level. Preschool education was essential in laying a foundation for future academic success. Children who received high-quality preschool education were more likely to excel in their academic pursuits. The study was conducted in Nzaui Sub County, a region that had been severely impacted by poverty. The study was prompted by the fact that despite the government's efforts to promote education in the area, the academic performance of preschoolers remained low. The study aimed to establish the factors that contributed to poor academic performance among preschoolers in the area and to identify possible solutions.

2. RESEARCH METHODOLOGY

The research design involved the use of a descriptive survey approach, which enabled the researcher to collect data from a sample of preschool parents, summarize, present, and interpret it to clarify the relationship between poverty and academic performance. As postulated by Borg (1996), a research design provided a logical and valuable way of looking at the world, and as described by Kathuri (1993), it was a plan or strategy for conducting research (Silewey, 2020). The use of a descriptive survey design, as recommended by Gay (1981), was deemed appropriate for this study since it allowed the

researcher to gather preliminary information on the effects of poverty on preschool academic performance in Nzaui County. The target population for this study was all pre-school children in Nzaui Sub County. According to Borg and Gall (1989), a population refers to all the members of a real or hypothetical set of people, events, or objects to which a researcher wishes to generalize the results of the study. In this case, the population included all pre-school children in Nzaui Sub County.In this study, stratified sampling was used to select preschool centers, and non-proportional sampling was used to select participants. The sample consisted of 12 teachers and 25 parents, all of whom were selected from the preschool centers in Nzaui.A structured questionnaire was employed as the research instrument for the study. The questionnaires used in this study had two sections: section one, focused on gathering background information from the respondents, while section two aimed to capture the effects of poverty on children's academic performance.

The data collection procedure involved the researcher discussing the purpose of the study with the administration of each preschool and agreed on the most suitable days, time, and procedures that would guide questionnaires study. The the distributed to teachers to fill out, while the children were given questionnaires to take home to literate parents who brought them back upon completion. In Addition, the researcher conducted interviews with some of the illiterate parents to gather their perspectives and insights on the topic under study.

3. RESULTS 3.1. Introduction

A comprehensive description of the outcomes obtained from the collected and analyzed data is presented. The results are presented based on the study objectives, which were established at the beginning of the research as the Effects of Poverty on Pre-School Children's Academic Performance: A Case Study of Nzaui Sub-County, Makueni County. The study findings are depicted using descriptive statistics.

3.2. Response rate

The study findings revealed that 37 questionnaires were distributed to the respondents. 35 questionnaires out of the 37 were returned, which gives a response rate of approximately 94.6 percent. This response rate can be considered extremely good. Even though the percentage rate of response was number distributed good, the of questionnaires may have implications on the validity of the statistical analysis (Einola & Elvesson, 2020; Baruch & Holtom, 2008). The researcher did however decide to continue with the analysis due to the fact that the theoretical part of the was already done.

3.3. Demographic Information

The study through the questionnaires sought to accomplish the gender of respondents. The background information was meaningful to the study as it helped to understand the logic of the background factors of various respondents. It laid a basic foundation on which the interpretation of the study was based.

3.4. Gender of respondents

The study sought to find out the gender of the respondents in order to balance the views of both genders during the study.

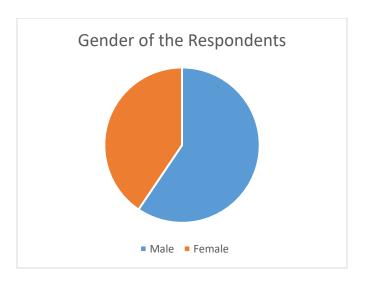


Figure 1: Gender of the Respondents

Figure 1 demonstrates gender representation in the study. The gender distribution data was crucial in determining the mitigation measures to be used as dictated by societal beliefs and the contemporary socio-economic demands.

3.5. Level of Education

The study sought to find out the level of education in order to balance the views of education levels during the study. Figure 2 demonstrates level of education of the respondents.

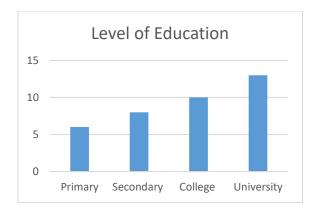


Figure 2: Level of Education

According to figure 2, six respondents had a primary level of education, eight respondents had a secondary level of education, 10 respondents had a college education, and 13 respondents had completed university-level education. These findings agree with Wheatley and Chiu (1977) study on potential education levels in a society.

4. Factors Affecting Parental Income and Children's Participation in Preschool Education

Figure 3 displays the distribution of respondents based on their rating levels.

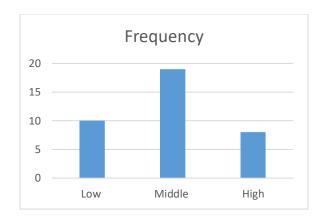


Figure 3: Rating of Household Income

According to the figure 3, 10 respondents had a low rating, 19 respondents had a middle rating, while eight respondents had a high rating.

4.1. Do you think the income level of parents/guardians affects children's participation in preschool education?

Figure 4 presents the distribution of responses regarding the effect of income on children's participation in preschool education.

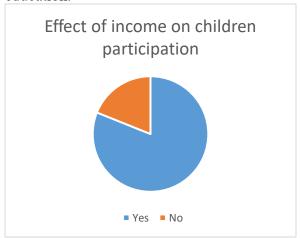


Figure 4: Effect of income on children participation

According to the figure 4, 10 respondents believed that the income level of

parents/guardians does affect children's participation in preschool education, while 19 respondents disagreed with this notion.

- 5. Home-Related Factors Affecting Children's Academic Performance
 - 5.1. Do you believe that home-related factors can affect children's academic performance?

Figure 5, displays the distribution of responses regarding the belief that home-related factors can affect children's academic performance.

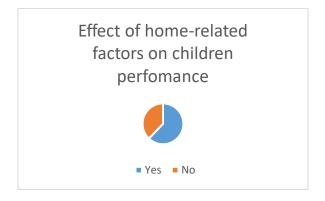


Figure 5: Effect of home-related factors on children performance

According to figure 5, 23 respondents believed that home-related factors can affect children's academic performance, while 14 respondents did not concur.

5.2. Home-related factors that you believe may impact children's academic performance.

Figure 6, presents the distribution of responses regarding home-related factors that respondents believe may impact children's academic performance.

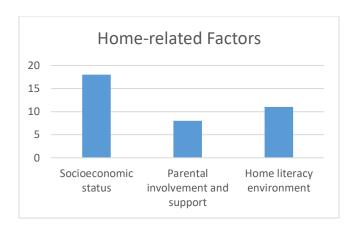


Figure 6: Home-related Factors that impact children's academic performance

According to the figure 6, 18 respondents believe that socioeconomic status is a homerelated factor that impacts children's academic performance. 8 respondents mentioned parental involvement and support as a factor, and 11 respondents identified the home literacy environment as another factor. These findings correspond to an existing study (Alshammari et al., 2017).

5.3. How often do you engage in activities such as reading, storytelling, or educational games with the pre-school child at home?

Figure 7, presents the distribution of responses regarding the frequency of engaging in activities such as reading, storytelling, or educational games with a preschool child at home.

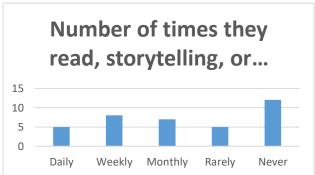


Figure 7: Number of times engaged in reading, storytelling, or educational games with the child.

According to to the above figure 7, five respondents engage in these activities with the child on a daily basis, eight respondents do it weekly, seven respondents do it monthly, five respondents do it rarely, and 12 respondents never engage in these activities. These findings support Zhang et al. (2022) study which had similar results.

5.4. How often do you provide a conducive learning environment at home, such as a quiet place for the child to study or do homework?

Figure 8, presents the distribution of responses regarding the frequency of providing a conducive learning environment at home, such as a quiet place for the child to study or do homework.



Figure 8: Frequency of a conducive learning environment

According to the figure 8, eight respondents provide a conducive learning environment at home on a daily basis, five respondents do it weekly, 12 respondents do it monthly, five respondents do it rarely, and seven respondents never provide such an

environment. Mabeya (2020) study is in tandem with the findings of this research.

5.5. Do you think the child's exposure to electronic devices? (TV, smartphones, tablets, etc.) affects their academic performance?

Figure 9, presents the distribution of responses regarding the belief in whether a child's exposure to electronic devices (such as TV, smartphones, tablets, etc.) affects their academic performance.

Does child exposure to electronic devices... Yes No

Figure 9 Effect of child's exposure to electronic devices on performance According to the figure 9, 27 respondents believe that a child's exposure to electronic devices does affect their academic performance, while 10 respondents hold the opposite belief, stating that it has no impact.

6. Factors Affecting Academic Performance of Pre-school Children

6.1. Do you think there are factors other than income level and home-related factors that can affect pre-school children's academic performance?

Figure 10, presents the distribution of responses regarding the belief in the existence of factors other than income level and home-related factors that can affect preschool children's academic performance.

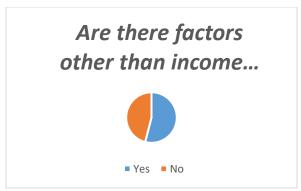


Figure 10: Existence of factors other than income level and home-related factors

According to the figure 10, 20 respondents believe that there are factors other than income level and home-related factors that can affect pre-school children's academic performance, while 17 respondents hold the opposite belief, stating that there are no such factors.

6.2. Do you believe that pre-school curriculum and teaching methods affect children's academic performance?

Figure 11 presents the distribution of responses regarding the belief in whether preschool curriculum and teaching methods affect children's academic performance.



Figure 11: Effects of pre-school curriculum and teaching methods on children's academic performance?

According to the figure 11, 24 respondents believe that pre-school curriculum and teaching methods do affect children's academic performance, while 13 respondents hold the contrary belief.

7. General Information 7.1. How often does the child attend preschool?

Figure 12, presents the distribution of responses regarding the frequency of a child attending preschool.

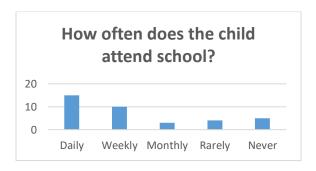


Figure 12: Frequency of the childs school attendance

According to the figure 12, 15 respondents stated that the child attends preschool on a daily basis, 10 respondents mentioned a attendance, three weeklv respondents a monthly attendance, reported respondents stated that the child attends preschool rarely, while five respondents indicated that the child never attends preschool. This figure provides insights into the attendance patterns of the child at preschool, as reported by the respondents. It suggests that a significant portion of the respondents have children who attend preschool daily, while others have children attending less frequently or not at all.

8. Discussion of findings

The findings provide valuable insights into the effects of poverty on pre-school children's academic performance in Nzaui Sub-County, Makueni County. The study achieved a high response rate of approximately 94.6%, indicating a strong level of participation from respondents. The demographic the information revealed balanced a representation of both genders, with 22 male and 15 female respondents. Additionally, the educational background of the respondents varied, with primary, secondary, college, and university levels of education being represented.

The study explored factors affecting parental income and children's participation in preschool education, with a focus on household income ratings. The findings indicated that income level does have an impact on children's participation, as reported by 10 respondents. Home-related factors were also found to play a significant role in children's academic performance, socioeconomic status, parental involvement support, and the home literacy environment being identified as influential factors. Furthermore, the frequency of engaging in activities such as reading, storytelling, or educational games with preschool children at home varied among the respondents. The provision of a conducive learning environment, such as a quiet place for studying or doing homework, was found to differ in frequency as well.

The study also revealed differing beliefs regarding the impact of a child's exposure to electronic devices on academic performance, with a majority of respondents (27) considering it to have an effect. Moreover, the findings emphasized the importance of pre-school curriculum and teaching methods

in influencing children's academic performance. A significant number of respondents (24) believed that these factors have an impact on academic performance. This research study sheds light on the complex interplay of various factors, including income level, home-related factors, parental involvement, and educational practices, that influence pre-school children's academic performance.

9. Conclusion

The findings provide valuable insights for policymakers, educators, and parents to enhance the educational experiences and outcomes of pre-school children in poverty-affected areas. Further research and interventions focused on addressing these factors can contribute to the development of effective strategies to support the academic success of pre-school children and mitigate the effects of poverty on their educational journey.

10. Recommendations

Based on the findings of the study, the following recommendations are proposed to improve the academic performance of preschool children in poverty-affected areas:

1. Enhance parental involvement and support: Encourage parents/guardians to actively participate in their child's education by providing support at home. This can include engaging in activities such as reading, storytelling, and educational games on a regular basis. Promote awareness among parents about the positive impact of their involvement on their child's academic performance.

- 2. Develop and implement targeted interventions: Design and implement interventions that specifically target the home environment and address factors such as socioeconomic status and home literacy environment. Provide resources and support to parents to create a conducive learning environment at home, including a quiet place for studying or doing homework.
- 3. Strengthen pre-school curriculum and teaching methods: Enhance the quality of pre-school curriculum and teaching methods to ensure they are effective in promoting academic performance. Incorporate interactive and engaging activities that foster cognitive development and encourage active learning. Provide professional development opportunities for pre-school teachers enhance their instructional practices.
- 4. Provide access to high-quality preschool education: Increase access to high-quality pre-school education for children in poverty-affected areas. This can be achieved through partnerships between government agencies, non-profit organizations, and community stakeholders. Ensure that pre-schools in these areas have well-trained teachers, appropriate facilities, and a nurturing learning environment.
- 5. Promote digital literacy skills: Recognize the impact of electronic device exposure on academic performance and develop strategies to promote responsible and balanced use of technology among pre-school

- children. Educate parents about the potential benefits and risks associated with electronic device use and provide guidance on setting healthy boundaries and age-appropriate content.
- 6. Conduct further research: Encourage further research to explore additional factors that may influence pre-school children's academic performance in poverty-affected areas. This could include investigating the role of nutrition, health, and access to early childhood development programs.

References

- Alshammari, F., Saguban, R., Pasay-an, E., Altheban, A., & Al-Shammari, L. (2017). Factors affecting the academic performance of student nurses: A cross-sectional study. *Journal of Nursing Education and Practice*, 8(1), 60.
- Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human relations*, 61(8), 1139-1160.
- Connell, R. (1994). Poverty and education. *Harvard educational review*, 64(2), 125-150.
- Einola, K., & Alvesson, M. (2020). Behind the Numbers: Questioning Questionnaires. *Journal of Management Inquiry*, 30(1), 102-114. https://doi.org/10.1177/1056492620938 139
- Engle, P. L., & Black, M. M. (2008). The effect of poverty on child development and educational outcomes. *Annals of the New York Academy of Sciences*, 1136(1), 243-256.
- Goodman, S. M., Mandl, L. A., Mehta, B., Navarro-Millan, I., Russell, L. A., Parks, M. L., & Bass, A. R. (2018). Does education level mitigate the effect of poverty on total knee arthroplasty outcomes? *Arthritis care & research*, 70(6), 884-891.
- Guo, G., & Harris, K. M. (2000). The mechanisms mediating the effects of poverty on children's intellectual development. *Demography*, *37*(4), 431-447.

- Jilcha. S. K. (2020). Research Design and Methodology. IntechOpen. doi: 10.5772/intechopen.85731
- Lacour, M., & Tissington, L. D. (2011). The effects of poverty on academic achievement. *Educational Research and Reviews*, 6(7), 522-527.
- Mabeya, M. T. (2020). Distance learning during COVID-19 crisis: Primary and secondary school parents' experiences in Kenya. *East African Journal of Education Studies*, 2(1), 173-186.
- Porterfield, S. L., & McBride, T. D. (2007). The effect of poverty and caregiver education on perceived need and access to health services among children with special health care needs. *American journal of public health*, 97(2), 323-329.
- Scherrer, J. (2014). The role of the intellectual in eliminating the effects of poverty: A response to Tierney. *Educational Researcher*, 43(4), 201-207.
- Van der Berg, S. (2008). Poverty and education. *Education policy series*, 10(28), 1-28.
- Vandsburger, E., Duncan-Daston, R., Akerson, E., & Dillon, T. (2010). The effects of poverty simulation, an experiential learning modality, on students' understanding of life in poverty. *Journal of Teaching in Social Work*, 30(3), 300-316.
- Wheatley, J. J., & Chiu, J. S. (1977). The effects of price, store image, and product and respondent characteristics on perceptions of quality. *Journal of Marketing Research*, 14(2), 181-186.

Zhang, Z., Xu, Y., Wang, Y., Yao, B., Ritchie, D., Wu, T., ... & Li, T. J. J. (2022, April).

Storybuddy: A human-ai collaborative chatbot for parent-child interactive storytelling with flexible parental involvement. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* (pp. 1-21).