

# Household Characteristics and Primary School Dropout Among Ugandan Children

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## Abstract

This study explored the relationship between household characteristics and school dropout rates among primary school children in Uganda. Using secondary data from UWEZO Uganda's 2015 survey, data was gathered from 16,373 children and 808 households across 112 districts. The study employed descriptive and inferential analyses, with Pearson correlation and linear logistic regression used to assess key household variables. Results showed that the gender and education level of the household head, the number of children, and meal frequency significantly influenced children's likelihood of dropping out of school. These findings underscore the importance of household well-being in ensuring children remain in school. The study suggests that, in addition to government efforts to promote gender equality, both parents should be equally engaged in their children's education. It also advocates for family planning and food security campaigns to enhance school retention.

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## INTRODUCTION

School dropout is a longstanding concern that has witnessed a shift in understanding over the years. Early studies focused on individual-level factors, attributing school dropout to personal deficiencies (Rumberger, 2011; Woolfolk, & Margetts, 2007). However, the implementation of compulsory education laws in the late 19th and early 20th centuries highlighted the persistence of dropout rates despite mandatory attendance (Ravitch, 2000; Rury, 2013). This led to the recognition of socioeconomic factors, such as poverty and racial segregation, as contributors to dropout rates (Anyon, 1981; Berliner, 2006). In subsequent decades, research emphasized the role of school climate, student engagement, and social support systems in reducing dropout rates (Christle et al., 2007; Neild & Balfanz, 2006). According to UNESCO Institute for Statistics [UIS] report 2022, 244 million children and youth were out of school by the year 2021, with the biggest number of these reported in sub-Saharan Africa.

Uganda grapples with a critical issue of pupil school dropout, as a substantial number of children are unable to traverse the path to completing their primary school education. Recent disquieting statistics unveil this challenge, painting a picture where the average primary school dropout rate stands at 45% (Kuno, et al., 2021). Thus, a compelling and pressing imperative emerges - to understand the factors that underpin the unsettling rates of primary school children dropout in Uganda.

Previous research has explored individual, family, school, and community-level factors but has left gaps for further investigation. For instance, Marlow and Rehman (2021)'s meta-analysis of 33 studies revealed that limited studies had specifically examined family processes in relation to dropout. Therefore, we find it necessary to specifically consider household characteristics and their relationship to school dropout rates based on the 2015 Uwezo household's dataset. Analyzing household characteristics starting from the available 2015 data could help to trace and explain the current unanswered questions on primary school children dropout in Uganda.

The current study therefore investigated the relationship between household characteristics, including the household head gender, household head education level, household size, number of children in the household, and the number of meals had by a household and primary school children dropout rates. By analyzing key factors within households, this research aims to contribute to the formulation of effective interventions and policies for reducing primary school dropout rates, enhancing educational outcomes, and ensuring equitable access to education for all children in the country.

This study was guided by Social Capital Theory, (SCT) as developed by Robert Putnam (2000). SCT suggests that social connections, networks, and resources within a community or social group can significantly influence individuals' behaviors and outcomes. The SCT helps us to better explain how the social relationships and resources within households may impact primary school children dropout rates. For instance, basing on the SCT, larger households with more children may exhibit different dynamics and social interactions compared to smaller households. The presence of more children can create opportunities for peer support, shared resources, and collective problem-solving potential. Higher levels of social capital within larger households may promote educational engagement and support, reducing the likelihood of dropout rates. Furthermore, larger households with more individuals may have diverse social networks and resources, including extended family members, friends, or neighbors who can provide support, guidance, and mentorship to children. This fosters a positive educational environment and reduces the likelihood of school dropout.

Numerous studies have examined the relationship between household characteristics and school dropout rates. Bergvik and Wynn (2015)'s meta-analysis of 158 articles, focusing on the association between parent-child attachment, academic performance, and the high-school dropout process. Their findings revealed that parent-child attachment, early care, and social adaptation at school, including factors such as attendance, classroom behavior, and classroom participation, contributed to the processes of dropout and graduation. They suggested that exploring the dynamics of everyday parent-child interactions and employing methodologies that offer a more nuanced insight into the specific processes underlying dropout was vital. By delving deeper into these areas, researchers can gain a better understanding of the intricate dynamics involved in

dropout processes and develop targeted interventions to prevent dropout and promote academic success.

Marlow and Rehman (2021) explored the association between positive family processes (PFP) and negative family processes (NFP) with school dropout among primary school pupils. PFP was defined as parental involvement, support, and high educational expectations, while NFP encompassed conflict, maltreatment, low supervision, and harsh punishment. These researchers found a significant negative relationship between PFP and school dropout, as well as a significant positive relationship between NFP and school dropout. Notably, the correlation between PFP and school dropout was strongest for primary school learners, while NFP showed a stronger correlation with dropout among secondary school students. The study highlighted the need for further research to investigate the relationship between NFP and school dropout, as limited studies had explored family processes in relation to school dropout.

Farah and Upadhyay (2017) also examined the relationship between school dropouts and household characteristics in Bangladesh. Their findings revealed that children from economically disadvantaged families with parents having lower levels of education were more likely to drop out of school, leading to long-term effects on educational outcomes. Additionally, households with more than three children or more than five members experienced higher dropout rates. On the other hand, households in the richer and richest categories exhibited lower rates of school dropouts. Factors such as facing a costly commute to school or lacking access to electricity also contributed to early dropout rates.

Tran and Nguyen (2019) examined the relationship between parental involvement, social capital, and school dropout in Vietnam. They investigated how parental support and monitoring, as well as social networks and community involvement, influenced the likelihood of dropout. The results showed that higher levels of parental involvement and social capital were associated with reduced dropout rates. Specifically, parental support and monitoring, as well as social networks and community involvement, were significant predictors of lower dropout rates. These findings emphasize the importance of parental engagement and the social context in supporting educational continuity and reducing dropout risks in Vietnam.

Luo, Li, and Shi (2021) conducted a study to investigate the reasons why junior high school students from poor families in Southwest China dropout of school. Among other findings, the authors reported that the higher the education level of the parents, the higher were the chances that their children would drop out of school. This was a unique finding as it is easy to assume that educated parents know better the benefits of keeping their children in school.

Saha and Chatterjee (2021)'s study explored the relationship between various dimensions of social capital and the likelihood of school dropout. Their investigation encompassed dimensions such as social networks, trust, and community cohesion, while also considering factors like household characteristics and access to educational resources. Using survey data collected from rural communities in India, they found that higher levels of social trust and social networks within the community were significantly associated with lower dropout rates. Additionally, the presence of supportive relationships with teachers and peers, as well as parental involvement in education, also contributed to reduced dropout rates. These findings underscore the importance of community support, strong social ties, and cohesive networks in mitigating dropout risks. However, the studies reviewed were from Asia and other international countries, as such, may limit the generalizability

of the findings to other regions with different socio-cultural contexts in general and Uganda in particular.

In conclusion, the existing literature on household characteristics and school dropout rates offers valuable insights into the factors that impact dropout outcomes. These studies have emphasized the significance of factors such as parent-child interactions, early care, academic performance, attendance, classroom behavior, household size, parental education levels, household income sources, and access to educational resources. As such, these investigations can inform policymakers and educators in developing targeted interventions and strategies that effectively address dropout issues and promote academic success. It is crucial to tailor these interventions to the specific context and challenges faced by different households to ensure their efficacy.

This study conceptualized household characteristics as gender of the household head, level of education attainment of the household head, number of children in a household, number of adults housed in a household and the number of meals a household had in a day. The study was therefore guided by the following research questions; what is the relationship between the household head gender and child dropout of school? What is the relationship between the household head level of education and a child dropout of school? What is the relationship between family size and a child dropout of school? What is the relationship between numbers of children in the household a child dropout of school? What is the relationship between the number of meals a household have and a child dropout of school? Which of the household characteristics best predict a child dropout of school in Uganda?

## **METHOD**

This study utilized a secondary data set, collected using quantitative research methods by UWEZO- Uganda. UWEZO is a nonprofit organization operating in Uganda since 2010. The focus of Uwezo Uganda activities includes research on learning outcomes, specifically literacy and numeracy for pre- and primary school children in Uganda. Uganda is a landlocked country located in the eastern part of Africa. It has a total of 45 million people, with moderate literacy levels (Sentanda, et al. 2020). The country is ranked among the low-income countries in the world, with an estimated per capital income of approximately USD 964.2 (Mwanje & Odhiambo, 2020).

Data was collected by UWEZO-Uganda in the 2015 from 112 districts out of 135 that constitute Uganda. Data were collected from the household heads or a responsible adult in a household using a questionnaire with open and closed question items administered by the UWEZO data collection team. Therefore, basing this data, this study employed a correlational design which was used for purposes of measuring and establishing the direction of the relationship between the household characteristics and pupils' dropout of school. The data which were used was collected from 808 households, who were either parents or guardians to a total of 16373 children aged between 5- 16 years from the selected districts. Data were analyzed using SPSS (version 25.0) for descriptive and inferential statistics. Inferential statistics were analyzed specifically using the Pearson's correlation coefficient and linear logistic regression.

## RESULTS AND DISCUSSION

### Results

Results on the relationship between household characteristics and primary school children dropout are summarized in the tables 1-3. Table 1 shows the descriptive statistics regarding the children’s schooling status. The focus of this

Table1. Descriptive statistics for Children’s schooling status in 2015

		Frequency	Percent
Child schooling status	In school	12874	78.6
	Dropped out	3498	21.4
<b>Total</b>		<b>16373</b>	<b>100.0</b>

Source: UWEZO, 2015

Table 1 indicates that from a total of 16373 children in the house holds which were engaged for this study in the 112 districts across the Uganda, 21% of children were reported to have dropped out of school in 2015. This was quite a substantial number, which called for a study to investigate the possible explanations to pupils’ dropout of school cases.

The relationship between the house characteristics (Gender of the household head, Education level of the household head, number of adults in a household, number of children in the household, and the number of meals a household had per day) a child schooling status and were investigated using Pearson product moment linear coefficient. The results are presented in Table 2.

Table 2. Relationship between household characteristics and the Child schooling status

		Child schooling status			
Household Head Gender	Pearson Correlation				.004
	Sig. (2-tailed)				.600
Educ. Level (Primary, secondary, Tertiary, University)	Pearson Correlation	.019*	-.136**	-.056**	-.022**
	Sig. (2-tailed)	.018	.000	.000	.006
No. of Adults in a Household	Pearson Correlation				-.061**
	Sig. (2-tailed)				.000
No. of children in the Household	Pearson Correlation				-.072**
	Sig. (2-tailed)				.000
No. Meals per Day	Pearson Correlation				-.128**
	Sig. (2-tailed)				.000
<b>N</b>					<b>16373</b>

\*. Correlation is significant at the 0.05 level (2-tailed).

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

As revealed in Table 2, there was weak positive non-significant relationship between household head gender a child’s schooling status ( $r=.004$ ,  $n=16373$ ,  $P<.600$ ). This indicated that a child’s dropping out of school and the gender of the household head were related. With exception of primary school education level, which had a positive relationship, there was a significant negative relationship across all levels of education attainment, as reflected. This implies that a child’s schooling status was largely less associated to the academic attainment of household head.

Table 2 also reveals that there was a significant negative relationship between the numbers of adults housed in a household and schooling status of a child. This implied that big number of adults housed in a household increased chances of a child dropping out of school. Similarly, there

was a significant negative relationship between the number of children housed in a household and a child’s schooling status. This implies that a child’s dropping out of school was related to the number of children in a household.

Table 2 also indicates that there was a significant negative relationship between the number of meals a household had and a child dropping out of school. This implies that the number of meals a household had related to a child dropping out of school.

A logistic linear regression analysis was conducted to establish which of the four elements of the independent variables (Gender of the household head, education level of household head, number of children in a household, number of adults in a household, and the number of meals a household had per day) could predict the dependent variable (child schooling status). The results are presented in Table 3.

Table 3. Simple linear logistic regression Analysis coefficients between Household characteristics and a child schooling status

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.496	.015		33.809	.000
Gender	.022	.007	.026	3.303	.001
Primary	-.085	.008	-.103	-10.510	.000
Secondary	-.206	.010	-.192	-19.829	.000
1 Tertiary	-.211	.020	-.089	-10.776	.000
University	-.162	.026	-.049	-6.112	.000
No. of children in HH	-.013	.002	-.063	-5.903	.000
No. Meals per Day	-.060	.005	-.091	-11.543	.000
No. of Adults in a HH	-.002	.001	-.013	-1.187	.235

a. Dependent Variable: Child schooling status

As revealed in Table 3, with exception of the number of adults in a household which yielded a non-significant result (sig .235), the rest of the household characteristic predicted the household’s sending the child back to school or dropping out of school (Child schooling status). Discussion of the results of research and testing obtained presented in the form of theoretical descriptions, both qualitatively and quantitatively. The results of the experiment should be displayed in either a graph or table. For charts can follow the format for tables, diagrams, and images.

**Discussion**

The United Nations Sustainable Development Goal [UN-SDG] target number four among others points to having a significant number of children complete the cycle of basic primary education by 2040 (UNESCO, 2019). This poses a big challenge to the countries like Uganda which still have a big number of children dropping out of school without completing their first cycle of education at school.

This study finding has revealed that the gender of the household head significantly predicts a child’s schooling status. This is largely in agreement with several studies (Perprem & Yiridomoh, 2020; Tran & Nguyen, 2019; Saha & Chatterjee, 2021) that have pointed to the influence of gender and parental involvement on schooling of children. The household head being

a male or female in Africa still has a great bearing on schooling of children (Msafiri & lianyu, 2022). Female household heads are largely single mothers who struggle to make ends meet (Perprem & Yiridomoh, 2020; Msafiri & lianyu, 2022). Where there are financial challenges, chances are high that a child's education will be sacrificed to enable the family acquire the basic survival requirements.

Education attainment of the household head is significant for children's going to school in the family. It is always presumed that educated parents and hence family heads know well the value of education than their counterparts who are not educated. As indicated in this study, the education attainment of the household head significantly predicted the child's schooling status. This finding is indeed in agreement with studies conducted by Luo, Li, and Shi (2021); Perprem and Yiridomoh (2020); Msafiri and lianyu (2022). This study has largely indicated that the higher the education status of the household head, the higher were the chances of keeping the child in school. However, this study finding largely contradicts with Luo, Li, and Shi (2021), who reported a higher chance of a child dropping out of school with increased parents' education level.

This study also has indicated that the number of children housed in a household also significantly predicted a child's schooling status. This indirectly speaks to fertility rates and extended families in Africa, which partly result into big families. A large number of children in a household raises debates on who should go to school and who should not, in cases of inadequacy of funds to send everyone at school (Luo, Li & Shi, 2021; Farah & Upadhyay, 2017; Marlow & Rehman, 2021). Similarly, it raises an issue of whether to spend the scarce resources on education, or to buy the basics for the survival of the whole family. In cases where children are looked at as cheap sources of family labor, another debate come up around whether a child should go school, or go to the fields to work for the family (Msafiri & lianyu, 2022).

The number of meals a household had a day was a key predictor of a child's schooling status. Similar findings were reported by (Farah & Upadhyay, 2017; Marlow & Rehman, 2021). Meals are the core for human survival. The implication of this finding alludes to the fact that, household which had challenges with accessing meals, equally had challenges with sending children to school. It is uncommon for a family which survives on a single meal a day to have their children attend school. In such cases, all efforts are likely to be directed towards what to eat than education (Marlow & Rehman, 2021).

## CONCLUSION

Based on the results, this study concludes that the gender and education level of household heads, the number of children in a household, and the number of meals a household has per day partially explain the issue of primary school dropout in Uganda. These factors significantly predict a child's schooling status. However, the number of adults in a household does not predict children's schooling outcomes.

This study recommends that government campaigns for gender equality should go beyond mere slogans and address the responsibilities of all genders, emphasizing the importance of equal involvement in meeting children's educational needs. Additionally, continuous government campaigns should be launched to encourage keeping children in school, regardless of the education level of household heads. The government is also urged to sustain family planning

initiatives to encourage families to have a manageable number of children, ensuring they can provide adequate care and maintain their education.

Finally, it is recommended that schools, with government support, provide meals to children, as this could help attract students, particularly those from food-insecure households. The government should also intensify food security campaigns, focusing on improving food availability at the household level.

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