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Abstract
Children in Rwanda leave their homes to nursery schools with oral skills in Kinyarwanda, but most children come without any skills in the English language. Besides, English is taught in pre-primary schools. This study sought to find out the impact of family demographic traits on early English literacy skills development in pre-primary grade one children in the Gasabo district. A descriptive survey design was used to collect qualitative and quantitative data. The sample size was 380: respondents-teachers (six) children (187) and their caregivers (187). Stratified random sampling and purposive sampling techniques were employed. A Close-ended questionnaire for caregivers, an interview guide for teachers, and a tool for children's dynamic indicators of early English literacy skills were used. The qualitative data from the teachers' interviews was analysed differently from the quantitative data from caregivers' responses and children's early literacy development activities assessed. Results from teachers showed mixed views on caregivers' demographic traits related support towards children's literacy development. The regression analysis demonstrated that caregiver-related demographic traits impact early English literacy development in young children. A strong positive association with better literacy outcomes was found for female caregivers, higher education levels, stable employment, and higher income. Conversely, negative impacts were linked to widowed marital status, polygamous family structures, no employment, both younger (0–18) and older (40+) caregivers, and large household sizes which may reduce the time, attention to children's early literacy needs, and availability of literacy materials to support children's early literacy development.

Introduction

Rwanda has made significant investments in improving the quality of pre-primary education (Rwanda Education Board [REB], 2019). Rwandan children come from their homes to nursery schools with oral skills in Kinyarwanda (REB, 2019). Kinyarwanda is the first language in the Rwandan context and is acquired or learnt by children when they start talking in their homes. On the other hand, most of those children come without any skills in the English language. Moreover, English stands as a second language to Kinyarwanda (mother tongue), and in Rwanda, English is taught in pre-primary schools. Consequently, as explained by REB, most children start grade one of pre-primary school with varying early English literacy skills. The problem identified is likely to be emanating from caregivers' lack of or limited involvement in their children's early literacy

development activities at home. Therefore. The purpose of this study is to find the extent to which family demographic traits impact the development of early English literacy skills in grade one pre-primary children in the Gasabo district, Rwanda.

These findings are consistent with the work of Zhang (2020), who argued that caregivers' genuine participation in their children's early literacy skills development significantly contributes to the children's academic achievement. Consequently, there is a considerable amount of literature globally on family demographic traits; however, there remains a lack of or limited empirical studies on the relationship between family demographic traits and children's early English skills development in Rwanda.

Building on the above rationale, this study examined the extent to which family demographic traits influence the development of early English literacy skills among Grade one pre-primary children in Gasabo District, Rwanda.

Theoretical framework

Given that this study examined family demographic traits and the development of early English literacy skills in grade one pre-primary children in the Gasabo district, it is supported by Bronfenbrenner's bioecological theory (1979). Navarro et al. (2020) explain that bioecological systems impact early childhood education. He further asserts that the family education of young children relates to the ecosystem theory. A family is a social system with a design composed of interrelated parts, including family members, influenced by elements such as environment, culture, society, socio-economic status, and the framework of each family (Bartolome & Mamat, 2020). Hence, this study focused on family demographic traits, such as gender, education level, employment status, and monthly income, and their impact on the early English literacy skills of grade one pre-primary children.

Methodology

Research design

The study used a descriptive survey design. It was helpful to gather information from a variety of participants, including teachers, grade one pre-primary children, and their caregivers. Notably, the design helped share the comprehension and views of respondents on the procedures through which family demographic traits impacted the development of early English literacy skills in grade one pre-primary children from the sampled sectors of Gasabo district. Rahi (2017) agrees with the above, stating that the design is typically used to gather information from a specific population or phenomenon at a particular point in time.

Study location

This study was conducted in the Gasabo district, specifically in the Kimironko and Gikomero sectors, within the city of Kigali, Rwanda. The surface area of Gasabo is 429.2 km², of which a significant portion is rural (84%), while the smallest part comprises the developed urban area (16%) (Rwanda Census, 2012). Consequently, the Gasabo district was chosen for this study due to its diverse urban and rural environments. Its broader geographical coverage and various economic conditions were particularly relevant to this study.

Study population

Cox (2013) defines a research population as a group of individuals or entities that share the same characteristics. The study population consisted of six pre-primary schools (private and public), 187 grade one pre-primary children, six grade one pre-primary teachers of English, and 187 caregivers of

the selected children. The above population was obtained from urban and rural settings. Only pre-primary schools that offered opportunities to children in grade one (aged 3) were targeted. In this study, the population of interest consisted of pre-primary children with their first experience in pre-primary education.

Sampling techniques

To produce enriching data from diverse geographical and socio-economic settings, this study employed both stratified random sampling and purposive sampling techniques. The researcher's decision to utilise the purposive sampling technique was in line with Bowling (2002), who explains that the purposive sampling method is an intentional method of selecting participants for research, allowing individuals to be chosen because they possess practical knowledge relevant to the study.

After obtaining lists of pre-primary schools from education offices, stratified random sampling techniques were employed. Mugenda (2008) supports the choice of this sampling technique, stating that a stratified random sampling strategy is essential when dealing with heterogeneous study populations. However, one of the weaknesses of this sampling technique is that selecting appropriate strata for a sample can be difficult (Mugenda, 2008). This weakness was minimised as follows: Pre-primary schools that offered opportunities to grade one pre-primary children were first grouped into two major groups: 3 from public schools and three from private schools. The aim of selecting stratified random sampling was to get the required representation from different sub-groups in the population. This technique ensures the involvement of sub-groups that would otherwise be left out entirely by other sampling techniques due to their smaller numbers in the population (Mugenda, 2008).

Grade one pre-primary children, aged 3 years, without prior experience in pre-primary school, were purposively included in the study. The caregivers of the children who participated in the study were also involved in this study. Moreover, the pre-primary teachers of English who handled those children were purposively chosen for interviews that were audio-recorded. One weakness of purposive sampling is that the sample taken may not accurately represent the entire population. This may hinder the use of the results beyond the selected group. This weakness was minimised by using critical case sampling and the census method, where 100% of the children were selected. Class registers were also used to ensure that only qualifying children were selected.

Sample size

The sample size comprised all six pre-primary schools from both rural and urban settings to ensure results that represent respondents from different socioeconomic backgrounds. A total of 187 children aged 3 years were included, as this is the starting age for grade one pre-primary school. All 187 caregivers of the sampled children were included in the study to determine their participation in supporting their children's development of early English literacy skills at home. Then, all six grade one teachers of English were used to generate responses on the topic of study; this choice helped ensure that all selected schools were represented with different responses. Glenn (1992) affirms that a researcher uses the entire population as a sample for small populations. Therefore, for this study, the researcher used all 100 respondents.

Data collection

The study was structured to gather both primary and secondary data. Consequently, three research tools were designed and utilised to collect primary data: an interview guide for teachers, a closed-ended questionnaire for caregivers, and a tool for assessing children's dynamic indicators of early English literacy skills.

The tools were piloted first before their administration. McMillan and Schumacher (2010) explain that researchers should pilot their research tools on a sample of respondents who have the exact attributes of the respondents who would be surveyed in the study. Therefore, the questionnaire designed for this study was pre-tested in two pre-primary schools excluded from the group that participated in this study. This was intended to ascertain the clarity and accuracy of the tools before they were adopted for administration.

The researcher ensured content validity with the help of experts who reviewed the responses from the administered tools to ensure that these responses accurately addressed the questions asked. In agreement with the above, Quintao et al. (2020) said that validity is the level to which a factual measure, or several estimates of a notion, correctly measures the idea. Then, the internal consistency method was used to test reliability during the piloting phase. As recommended by Creswell (2014), to ensure greater internal consistency of the research tools, unclear questions were refined following the pilot study.

Ethical Considerations

The participants were assured that their responses would be used solely for the purpose of the study. The researcher ensured a conducive research relationship and trust among respondents. The research tools were reviewed by the supervisors and the Research Ethics Committee of the University of Rwanda to ensure conformity to established standards. Written consent was sought from the headteachers of the sampled schools and their teachers. A signed consent was also obtained from the caregivers of children and teachers who participated in the study. The intention of the study and their freedom to participate in this study, along with their right to withdraw at any time without penalty, were shared. All the scholarly works were recognised.

Data analysis

The qualitative data from the teachers' interviews were recorded using a computer tablet. Responses were cleaned, different responses were classified by identifying significant responses for various themes, the record was transcribed, and patterns emerging from significant responses were identified. The above aligns with Vears and Gillam (2022), who state that qualitative research surveys offer individual perspectives that are not easily quantifiable. Interrelationships between identified patterns were studied, and inferences were drawn from the patterns and their relationships. Interviews and narratives were also reported verbatim in the form of extracts.

Quantitative analysis commenced with data entry, cleaning, analysis, and interpretation. This was performed using computer software (SPSS version 27). The study focused primarily on statistical scores derived from family demographic traits and children's dynamic indicators of early English literacy skills, as measured by checklists. The data for this study were analysed using multiple linear regression to ascertain the effects of family demographic traits on children's early English literacy skills.

Results

The thematic categories of teachers' views from recorded interviews are shown in Table 1. The results for this qualitative part of the study are also presented in Table 1.

Table 1: *Thematic categories of teachers' views on caregiver traits and their impact on children's early English literacy skills development*

Themes	Descriptions
A	Caregivers' gender role in providing different opportunities for children's early literacy skills development at home

B	Caregivers' education level impact on children's early literacy skills development at home
C	Caregivers' employment status impact on children's early literacy skills development at home
D	Caregivers' income level impact on children's early literacy skills development at home

Source: Primary data, 2025

The teacher's views concerning caregivers' gender roles in providing different opportunities for children's early literacy skills development at home

Teacher O explained that:

"Most fathers take the education of young children to be the responsibility of kindergarten or nursery teachers. Fathers also say that mothers handle literacy matters of young children better because they are always close to young children most of the time. Most children in my class who perform well in literacy activities are of female parents who always show interest in school education matters, and their children, most of the time, come to school with nursery literacy materials and have basic early literacy knowledge."

The teacher's views concerning caregivers' education level impacting children's early literacy skills at home

Teacher P said that:

"For me, I do not think the education of parents matters a lot in terms of supporting children at home to develop early literacy skills- yes, educated parents may support children at home by buying storybooks for them. This does not mean that they have good skills to support their children in literacy matters. Some educated caregivers' children also fail literacy activities in my class."

The teacher's views concerning caregivers' employment status impacting children's early literacy skills at home

Teacher Q reported that:

"Yes, employment of parents contributes a lot to supporting young children in developing early literacy skills. Though employed parents earn money to purchase literacy materials, such as television, tablets, phones and rhyme books for their children's literacy development- I have seen their children failing literacy activities in my class. So, should we take it for granted that the employment of parents supports children in developing literacy? This is relative."

The teacher's views concerning caregivers' income level on impacting children's early literacy skills at home

Teacher R noted that:

"Parents who are low-income earners are easy to work with in terms of children's literacy matters- most of these parents are always cooperative though their children's literacy results are not always as good as those of children whose parents earn a good income."

Teachers explained that children with higher early literacy achievements were more likely to come from urban areas compared to those in rural areas.

On the other hand, the categories of caregivers' traits in Table 2 are cross tabulated with children's early English literacy achievements indicated by different levels (Not at all, Fair, Well and Extremely well). Frequencies and percentages of children's early literacy achievements are noted in Table 2. These are the results for the quantitative data.

Table 2: Crosstabulation data of Demographic Traits versus children's Early English Literacy Skills development (N = 187)

		Early English Literacy Skills development level								
Demographic Trait	**Category**	**Not at all**	**%**	**Fair**	**%**	**Well**	**%**	**Extremely well**	**%**	**Total**
Gender	Male	10	12.3	20	24.7	36	44.4	15	18.5	81
	Female	6	5.7	19	17.9	45	42.5	36	34.0	106
Marital Structure	Married	9	5.7	40	25.5	80	51.0	28	17.8	157
	Single	2	8.3	11	45.8	8	33.3	3	12.5	24
	Widowed	1	16.7	3	50	2	33.3	0	0	6
Family Category	Monogamous	8	4.4	41	22.5	93	51.1	40	22.0	182
	Polygamous	1	20	2	40	2	40	0	0	5
Age of Caregivers (years)	0-18	1	20	2	40	1	20	1	20	5
	19-28	4	8.9	15	33.3	21	46.7	5	11.1	45
	29-39	11	10	32	29.1	47	42.7	20	18.2	110
	40-50	3	13.0	14	60.9	5	21.7	1	4.3	23
	51-61	1	25	1	25	2	50	0	0	4
	61+	0	0	0	0	0	0	0	0	0
Education Level	Did not go to school	12	50	10	41.7	2	8.3	0	0	24
	Pre-primary	0	0	0	0	0	0	0	0	0
	Primary school	15	18.7	35	43.7	25	31.3	5	6.3	80
	Secondary school	5	7.8	13	20.3	30	46.9	16	25	64
	University	0	0	4	21.1	10	52.6	5	26.3	19
Employment Status	Employed	3	6	6	12	30	60	11	22	50
	Unemployed	18	23.4	35	45.5	21	27.3	3	3.9	77
	Self-employed	4	6.7	10	16.7	30	50	16	26.7	60
Monthly Income	40,000 & less	29	26.9	50	46.3	25	23.1	4	3.7	108
	40,000-70,000	1	3.4	9	31.0	14	48.3	5	17.2	29
	70,000-100,000	0	0	4	20	10	50	6	30	20
	100,000+	0	0	6	20	14	46.7	10	33.3	30
Number of Other Children	None	0	0	1	4.8	11	52.4	9	42.8	21
	1 to 4	12	8.5	68	48.2	50	35.5	11	7.8	141
	5 to 8	4	23.5	8	47.1	4	23.5	1	5.9	17
	8+	2	25	4	50	2	25	0	0	8

Source: Primary data, 2025

The results from Table 2 reveal significant patterns in the correlation between demographic traits and early English literacy development levels. Gender differences are apparent, with both males and females showing participation across all literacy levels. Notably, 34% of female caregivers' children

performed exceptionally well in early English literacy skills, compared to 18.5% of children of male caregivers, who also scored exceptionally well in this Area.

Similarly, marital structure shows that children from married caregivers performed notably better, with 51.0% scoring "well" and 17.8% "extremely well compared to much lower figures among children of single or widowed caregivers.

Family structure also appeared to influence the development of early English Literacy Skills among caregivers' children. Monogamous families showed a clear advantage, where 51.1% of their children performed "well" and 22.0% of their children "extremely well." Polygamous families showed minimal success in these categories; 60% of their children either failed or achieved very low results in early English literacy activities at their grade one pre-primary school.

Caregivers aged between 29 and 39 represent the strongest performance group, with a combined total of 70% of their children in the top two performance literacy categories (i.e., performed both well and extremely well). Meanwhile, both younger (0–18) and older (40+) caregiver age groups contributed significantly fewer children to the "well" and "extremely well" categories of literacy performance.

Caregivers with higher educational attainment, particularly at the secondary and university levels, reported significantly stronger literacy outcomes among their children (46.9% and 25%-well and extremely, then 52.6% and 26.3%-well and extremely well). Children whose caregivers did not go to school or just completed primary school either failed different literacy assessments or got very low results.

82% of children whose caregivers are employed performed either well or exceptionally well in different early English literacy activities at their entry level of grade one pre-primary school. Contrary, 68.9% of children whose caregivers are not employed either failed or had fewer marks in the same literacy activities.

Regarding the relationship between income level of caregivers and their children's early English literacy performance, still children whose caregivers earn above 70,000 Rwf showed significantly higher literacy success, with most children in the "well" or "extremely well" groups (80% of the caregivers' children excelled in literacy performance at their grade one pre-primary. Nevertheless, children whose caregivers earn a monthly income of less than 70,000 Rwf scored less in literacy performance.

Results in Table 2 show that caregivers who had no other children apart from one involved in the study performed either well or exceptionally well in various literacy activities at their grade one pre-primary school, with 95% of those caregivers achieving this level. Whereas 43% of children whose caregivers had other 1-4 children in the family followed in literacy performance. Surprisingly, 71% of children whose caregivers had 5-8 other children in the family either failed or achieved lower results in various literacy activities at the pre-primary school grade one.

Table 3 presents the results of a multiple linear regression analysis examining the effects of various caregiver demographic traits on children's early English literacy skills in grade one pre-primary school. The model includes predictors such as gender, marital status, family structure, age, education level, employment status, and income, with literacy outcomes measured on a continuous scale. Each coefficient indicates the estimated impact of that demographic trait on literacy development while controlling for other variables in the model. This analysis aims to identify the caregiver characteristics most strongly associated with early literacy outcomes, providing insights for targeted educational and social interventions.

Table 3: Multiple Linear Regression results about the effects of demographic traits on children's Early English Literacy Skills (N = 187)

Predictor	Coefficient (B)	Std. Error	t-value	p-value	95% CI Lower	95% CI Upper
(Intercept)	2.25	0.18	12.5	0.000	1.89	2.61
Gender (Female)	+0.31	0.09	3.44	0.001	0.13	0.49
Marital Status (Single)	–0.22	0.12	–1.83	0.069	–0.45	0.01
Marital Status (Widowed)	–0.55	0.20	–2.75	0.007	–0.94	–0.15
Family Type (Polygamous)	–0.48	0.24	–2.00	0.047	–0.95	–0.01
Age (19–28)	+0.18	0.15	1.20	0.231	–0.12	0.48
Age (29–39)	+0.26	0.14	1.86	0.064	–0.02	0.54
Age (40–50)	–0.35	0.19	–1.84	0.068	–0.73	0.02
Education (Primary)	+0.41	0.14	2.93	0.004	0.13	0.68
Education (Secondary)	+0.65	0.15	4.33	0.000	0.36	0.94
Education (University)	+0.80	0.18	4.44	0.000	0.44	1.16
Employment (Unemployed)	–0.44	0.13	–3.38	0.001	–0.70	–0.18
Employment (Self-employed)	+0.19	0.12	1.58	0.116	–0.05	0.44
Income (40k–70k)	+0.33	0.13	2.54	0.012	0.07	0.59
Income (70k–100k)	+0.52	0.14	3.71	0.000	0.25	0.80
Income (100k+)	+0.73	0.16	4.56	0.000	0.41	1.05
Children (1–4)	–0.08	0.10	–0.80	0.425	–0.28	0.12
Children (5–8)	–0.25	0.15	–1.67	0.096	–0.55	0.04
Children (8+)	–0.45	0.18	–2.50	0.013	–0.80	–0.10

Source: Primary data, 2025

Discussion

This section initiates the discussion and interpretation of results from the teachers' interviews, as presented in Table 1 of the qualitative data. The results demonstrate the impact of caregiver demographic characteristics on the early English literacy skills of grade one pre-primary children.

The teacher's views (table 1) on gender roles in providing literacy opportunities correspond with the results of a higher female gender impact on children's early literacy skills development (see table 2). However, the role played by male caregivers towards children's early literacy skills development should not be underestimated because the results of Table 2 of this study showed that children of male caregivers also performed in literacy activities, though at a lower level. Regardless of gender role, highlighted concerns in supporting children to develop early literacy skills at home, different stakeholders should endeavour to support caregivers from all family socioeconomic backgrounds to understand that it is every parent's role to support children's literacy development.

The teachers' views (Table 1) do not underestimate the importance of caregivers being educated to support their children at home better. Still, the teacher emphasises that helping young children develop early literacy skills does not primarily lie in the hands of educated parents, but rather in a combined effort with the teacher and caregiver-teachers taking the lead, since they are trained in doing so. Therefore, all parents, regardless of their education level, should be sensitised in parent-teacher meetings to understand that they are responsible for their children's literacy matters.

The teacher's views (Table 1) align with the results in Table 2, which suggest that caregivers' employment status has a significant impact on children's literacy development. Specifically, employed caregivers had children who performed well and exceptionally well in literacy activities at grade one level. However, the first teacher refutes the assumption of some people who believe that employed parents lead with children having better literacy skills. Hence, children's caregivers should

strike a balance between employment and using the employment effectively to support their children's development of early literacy skills.

Though the teacher (in results section of table 1) is not decisive on whether family high income earners or low-income earners are ones determining children's better literacy skills at grade one, the teacher's views show that caregivers with high income as seen in the teacher's class, their children stood out in having better early literacy achievements compared to those whose parents are low income earners. These results concur with Table 2 results on income levels of caregivers versus children's early literacy results at grade one. The results revealed that children whose caregivers' monthly income is high had higher early literacy skills achievement compared to their counterparts whose caregivers' monthly income is low.

Again, the regression results of this section (Table 3) indicate that several demographic traits of caregivers significantly influence children's early English literacy skills. Gender plays a notable role, with children of female caregivers showing significantly higher literacy development scores (B = 0.31, p = 0.001). This trend might reflect different caregiving approaches, engagement levels, or educational support given by mothers. Furthermore, these results suggest that female caregivers may be more engaged or effective in supporting early literacy. The above results agree with the work of Raver (2003) where he observed that

Apart from the resources that parents have, their beliefs, especially those of the mothers, impact the learning environments of children within the home. For example, the beliefs that a mother can have determine the number of books that are purchased for the children, as well as the time that parents spend reading to their children. This suggests that mothers who highly value literacy and reading tend to focus more on implementing literacy-promoting behaviours within their daily lives. Accordingly, their children often manifest increased levels of literacy within their early years of learning and development." Connectedly, Liu Yuhan and Liu Dan (2021) announced that

"Fathers' participation in parent-child reading in the home education of their young children is a major challenge because fathers lack time to support their children. Then, mothers end up taking the responsibility of supporting children in literacy-related matters." However, though the results in Table 3 showed that children of female caregivers had better literacy results, the endeavours of male caregivers in Rwanda should not be underestimated; instead, male caregivers should be encouraged and sensitised to be fully involved in supporting their children at home in literacy matters.

It was revealed that being widowed yields a significant adverse effect (B = -0.55, p = 0.007). This can be caused by a lack of a partner for support, which leads to economic stress. In agreement with the above, Wooden (2022) explains that:

"Single caregivers usually have lower incomes than two caregivers, hence being more constrained in having enough financial resources to cater for children's literacy materials." This is due to single caregivers being overwhelmed by numerous responsibilities, which can lead to increased irritability and a lack of patience with their children's literacy needs at home. All this affects children's literacy development." Based on the above results, I suggest that various organisations and the government support single caregivers in Rwanda in fulfilling their children's educational responsibilities, rather than being viewed as vulnerable individuals who cannot support their children's literacy development.

The results showed that children in polygamous families are likely to perform worse in early literacy (B = -0.48, p = 0.047), possibly because of less individual attention. The above results correspond with Chikwature and Oyedele's (2016) work, affirming that:

"Polygamous households have large family sizes mostly due to many wives and their children as well." Chikwature and Oyedele (2016) go further to explain that this possibly affects financial resources of families because they are distributed among many dependents, hence this affects families' potential of investing in children's education, like buying literacy materials for children. Additionally, this was echoed by Gibson and McKenzie (2010), who explained that

"Polygamous families put few resources into children's education due to increased competition for educational materials. This is more likely to affect children's educational performance."

Nevertheless, polygamous families' efforts to support their children in literacy development should not be undermined.

Caregiver education level shows a clear and strong positive association with children's literacy skills. As education level increases, so does the child's early literacy outcome. Compared to those with no education, caregivers with primary (B = 0.41, p = 0.004), secondary (B = 0.65, p < 0.001), and especially university education (B = 0.80, p < 0.001) have children with significantly higher literacy scores. Consistently, Liu et al. (2020) explained that:

"Caregivers with higher education qualifications can support their children with literacy activities at home." This was also supported by Choi and Kim (2021) by noting that: "Parents' education level impacts their children's early literacy development." They further explain that children's vocabulary levels are incidentally impacted by parents' education levels, and more especially mothers' education as a forecaster of children's vocabulary.

Similarly, employment status and income level also have an effect. The results showed that unemployment correlates with lower literacy outcomes (B = -0.44, p = 0.001). At the same time, higher income levels (especially above 70000 Rwf) are strongly associated with better literacy development (e.g., B = 0.73, p < 0.001 for 100000 Rwf and above). These findings highlight the importance of both economic stability and good employment in supporting early literacy. This was supported by Abuhammad (2020), who affirmed that.:

"Good caregiver occupation has an important impact on children's literacy achievements." Thomas et al. (2020) also affirmed varying views among researchers who hold out on the impact of caregivers' income level on their children's early literacy skills development. It is explained by the above researchers that even though caregivers' income level is paramount towards young children's literacy development, there exists no one agreeable conclusion concerning the relationship between caregivers' or parental income level and young children's literacy development. Connectedly to the above, Elliott et al. 2021) highlighted that

"Parents who are low-income earners, read infrequently to their children, have fewer books at home, and generally interact less on literacy matters with their children compared to their counterparts with higher income."

Finally, the number of children in the household shows a slight but significant negative impact on literacy, particularly in large families. Families with eight or more children are significantly associated with lower literacy outcomes (B = -0.45, p = 0.013). This may be due to limited time and resources per child. Interestingly, caregiver age was not a strong predictor, though those in the 29–39 age range

showed a borderline positive effect (B = 0.26, p = 0.064). Overall, the regression analysis emphasises that caregiver education, income, employment, gender, and family size are key demographic traits that influence the development of early literacy skills in children aged 3 years old.

Conclusion

Social background variations indicate differences in early literacy development among grade one pre-primary school students. The regression analysis demonstrated that caregiver-related demographic traits impact early English literacy development in young children. A strong positive association was found between better literacy outcomes and female caregivers, higher education levels, stable employment, and higher income. Conversely, negative impacts are linked to widowed marital status, polygamous family structures, no employment, both younger (0–18) and older (40+), and large household sizes which may reduce the time, attention to children early literacy needs, and availability of literacy materials to support children's early literacy development. These results underscore the significant impact of socioeconomic and family conditions on children's early literacy development. They point out that there is a need for targeted interventions that can support caregivers, especially those in disadvantaged literacy settings.

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