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Fathers' involvement on children's school performance among camped-refugees and local majorities' communities in Tanzania

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ABSTRACT

This study assessed differences in fathers' roles and involvements in children's development and learning in Tanzania. It compared fathers' socio-economic statuses and their implications on children's various indicators of learning attainments. A total of 400 fathers and 400 pre-primary and early grades children aged between 5 and 7 years – 100 from each of rural camped refugees, rural non-refugees, urban poor and urban affluent groups were recruited. Data were collected by fathers' questionnaires and interviews. Learning attainments were measured by Bracken's Basic Concept Scale – Receptive, Early Grades Reading, and Mathematics Assessments. Findings indicated that fathers who were closely involved, their children demonstrated higher learning attainments. Compared to rural non-refugees, rural camped refugee fathers demonstrated close involvement which resulted in higher learning attainments for their children. Further, the role of fathers in children's development and learning varied across the four social groups. These findings broaden our understandings of various supportive factors related to the involvement of fathers on children's development and learning. In Tanzanian contexts with limited educational resources and prevalent inequalities, to maximise children's potentials, fathers' involvement is critically important.

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Fathers involvements; parenting; early learning attainments; Tanzania; refugees of Burundian origin

Introduction

In recent years in Tanzania, children are entering schools with limited essential social, emotional, academic, language and physical skills which would have helped them to maximise in-school resources (RTI International 2014; Shavega, Brugman, and van Tuijl 2014; Uwezo 2015) and successfully adjust to learning environments (Rimm-Kaufman, Pianta, and Cox 2000). Available empirical evidences indicate that the early difficulties disproportionably face children from socio-economically disadvantaged

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backgrounds (Weiland and Yoshikawa 2013). And if no interventions made, the noted impacts are likely to persist through primary school and beyond (Ip, et al., 2015; Koury and Votriba-Drzal; Weiland and Yoshikawa 2013). However, arguing from a developmental and ecological standpoints, a sizable number of scholars in early childhood education establish that “school readiness” is more related to relational and parental beliefs (Ndijuje and Rao 2019), and support available to children at home (Kagan and Kauerz 2007). And the available home support should be prior to and during the transition to school to support children’s actual cognitive and social skills developments (Rimm-Kaufman, Pianta, and Cox 2000).

Studies have tended to put more focus on mothers, especially maternal education (Ip et al., 2015; Melhuish et al., 2008) and family SES (Melhuish et al. 2008). Recently, research has shifted the foci to understanding variability in fathers’ and relational experiences from pre-primary to early grades of primary school (Brady et al. 2017; Knoester, Petts, and Pragg 2019). The shift of foci aims at identifying contextual inputs that could enable effective and achievements of intervention targets (Lamb 2010). Available evidence indicates that fathers with higher SES are more involved in learning (Ip et al., 2015; Tandika and Ndijuje 2019) and development of their children than those with lower SES (Lamb 2010). Further empirical evidence (See Ip, et al, 2015; Golombok 2000; Knoester, Petts, and Pragg 2019) indicates that father’s with higher SES have a greater capacity to provide time to their children. And in fact, fathers’ involvement is linearly associated with children’s educational attainments (Lamb 2010; Liu, Wu, and Zou 2016).

Fatherhood across contexts

The concepts of fatherhood and father involvement have undergone various understanding and operationalisation over time (Tandika and Ndijuje 2019; Brandth and Kvande 1998). The dominant and defining motive has recently shifted sequentially from moral guidance to bread-winning to male role-modelling, and nurturance (Aigner et al. 2013). As a result of these changes in research and practice, the level of father involvement has been regarded and indexed differently across contexts (Aigner et al. 2013; Lamb 2010). From the late 1960s to early 1970s, concerns about the impacts of not having a father in the house were coming to the fore in the western societies (Warin 2018). However, in Tanzania, these concerns gained momentum from 1990s to early 2000s (Mtahabwa 2010; Ndijuje and Rao 2018).

In the field early childhood education, scholars has begun to seek and construct a broader and inclusive understanding of the concept of fatherhood across contexts and cultures (Brady et al. 2017; Fagan and Cherson 2017; Huerta, et al., 2014). Given its importance, these efforts may potentially permit more insightful research findings on the role and effects of variations in performance of the relevant fathers’ responsibilities (Goldberg 2015; Lamb 2010; Warin 2018). The critical role of fatherhood is more elaborate given the recent increase of children growing up in households headed by single-mothers (Huerta, et al., 2014). Be boys or girls, research results have controversially indicated presumed dysfunctionality of single-mother families (Fagan and Cherson 2017; Golombok 2000). In the same breath, there have been increasingly continuous public debates and interests about the need and important roles for more men in learning institutions, especially given the current trend of perceived ‘males’ crisis’ in schools (Aigner

et al. 2013; Foster et al., 2001, Lamb 2010; Skelton 2001). The need for ‘fathers’ presence’ is more critical in sub-Saharan contexts with limited educational resources and socio-cultural beliefs and practices overburdening mothers to take care of young children (Ndijuye and Rao 2018). It is important to note that in Tanzania, while the overall responsibility of fathers is to take good care of the family, mothers are socio-culturally expected to look after children’s upbringing and development (Tandika and Ndijuye 2019).

Brief educational context of refugees in Tanzania

Tanzania has been home for about three million refugees and immigrants from neighbouring countries such as Burundi, Rwanda, Democratic Republic of Congo, Mozambique and Uganda (Tanzania’s Ministry for Home Affairs, 2020). In total, 263,393 refugees and asylum-seekers, mainly from Burundi (73%) and the Democratic Republic of Congo (27%), and a small number from other countries. Until 2020, there were about 263,393 refugees and asylum-seekers, mainly from Burundi (73%) and the Democratic Republic of Congo (27%), as well as a small number of refugees from other countries living in various refugee camps in north-western Tanzania (UNHCR, 2020). Of the total registered refugee population, about 50% were female and 55% were pre-primary and primary school-aged children. As a distinctive minority group, the educational needs of this group in Tanzania are not extensively documented (MEST 2020; Ndijuye and Rao 2018, 2019).

However, in 2020 there were 54,208 pupils from this group registered at primary school level, while about 18, 235 of them were at secondary school level. It is important to note that basic education – which span from pre-primary to lower secondary school level, in Tanzania is free and compulsory (MoEVT, 2014). Findings from various national and independent studies (NECTA, 2020; Ndijuye and Rao 2019; RTI International 2020; Uwezo, 2020) indicated that while Tanzania offers inclusive education, however school preparedness and early learning attainments of children of refugee backgrounds were comparable to those from more advantaged urban groups. On various literacy tests, girls from this group have been performing relatively as higher as those from urban groups (Ndijuye 2020; Ndijuye and Rao 2019).

Rationale of the study

There is a consensus among educational stakeholders on the important role played by fathers’ involvements in children’s upbringing (Goldberg 2015; Knoester, Petts, and Pragg 2019) and holistic development (Lamb 2010; Warin 2018). Empirical evidence has consistently established a strong association between family socio-economic status (SES) and children’s learning attainments (Coleman 1966; Ip et al. 2016; Kafle and Jolliffe 2015; Magnuson et al. 2004; Melhuish et al. 2008). More emphasis has been on maternal support (Aboud and Hosain 2010) and maternal education (Melhuish et al. 2008). Little is known about fathers’ role and involvement in children’s development and learning from sub-Saharan Africa in general, and Tanzania in particular. More specifically, very little is known about sub-Saharan refugee fathers involvements in children’s development and learning.

Problem statement

This study compares fathers' SES and its implications on children's various indicators of learning attainments. Specifically, it compares fathers' level of involvements as determined by family SES, and children's learning attainments. While there are other self-reported metrics of fathers' involvements such as home learning environments and policy contexts, family SES was appropriate for this study given the number and diversity of participating groups, i.e. camped refugees, rural non-refugees and urban affluent, and that family SES can be easily measured and compared than other metrics. For example, it is not possible to precisely measure home learning environments among these groups given the nature and scope of extended families, centralisation of education policy, and variations in parental beliefs and practices towards children's education (Ndijuje and Rao 2019).

Research questions

1. Are there any differences in the level of involvement of fathers in children's development and learning across various social groups in Tanzania?
2. How do differences in family SES relate to fathers' roles and involvements, ultimately children's learning attainments across various social groups in Tanzania?

Methods

Study method and design

Given the nature and scope of the learning and development of children of refugee backgrounds in Tanzania, this study employed a mixed method with concurrent design in which both qualitative and quantitative data were collected and analysed. The mixed method research approach allowed triangulation of data sources (urban poor, camped refugees, urban affluent and rural majority), data collection methods (interviews, questionnaires and tests), data analyses (statistical and verbatim) and interpretation of results (holistic understanding of disparities of paternal involvements) (Creswell 2012). This led to broad and in-depth understanding of the role of fathers' involvements in children's learning and development in a context with limited educational and nutritional resources.

Sample selection and recruitment

Given that Kigoma region has the highest number of camped Burundian refugees in Tanzania, it was purposively chosen. Schools serving urban poor, camped refugees, urban affluent and rural majority, were selected. In Tanzania, all public pre-primary and primary schools are free and comparable low quality. As such, public schools serve children from predominantly poor families; while high-quality private, tuition-fee-demanding schools, serve children from relatively affluent and rich families. It was important to

include schools serving children from various backgrounds to portray range of diversities across contexts.

While the selected groups are relatively different, however, they are similar as follows (a) have been living side-by-side for about 15–50 years, (b) provision of education for their children is guided by the same policy – Tanzania’s 2014 Education and Training Policy, (c) available empirical evidence from our previous research project indicated that learning attainments of rural naturalised refugee children of Burundian origin were comparable to those of more advantaged urban non-refugees. One of the reasons for this was parental beliefs and attitudes towards education. Naturalised refugee parents considered education for their children as a path to upward social mobility and increased status. As such, it was necessary to explore more about this phenomenon by comparing more groups of Burundian origin and local majorities. (d) Kigoma is the only region in Tanzania which hosts camped refugees of Burundian origin, has rural refugees living side-by-side with naturalised and camped refugees. Therefore, it was a perfect context for this study.

From each group, stratified random sampling was used in the selection of 01 public and 01 private school (eight schools in total). From each school, 50 fathers – total 400; were selected and recruited for this study. Fathers’ selection criteria were: (i) those who had pre-primary and/or early grades children registered in the selected schools; (ii) those cohabiting with children selected in this study; and (iii) must belong to the specific social group selected for this study. A total of 400 pre-primary and early grades children (100 from each of the four groups) whose fathers were recruited for this study, were selected. The age ranged from 56 to 60 months for pre-primary and from 72 to 84 months for early grades children. In total, the study has a sample size of 800 participants.

Data collection instruments

Fathers’ questionnaire

This study used a contextualised version of Rao and colleagues (2013) Parents’ Questionnaire, to collect information related to families’ SES. Data on family SES focused on fathers’ education (from non-formal to postgraduate), occupation (from peasant to professional) and family wealth, indexed by ownership of assets essential for survival in the context of developing countries (e.g. number of people in the home, ownership of bicycle, land, radio and livestock).

Further, the questionnaire included questions about frequency of parent–child interactions and regular habits, and demographic information such as gender, and whether the languages spoken at home was similar to official medium of instruction. For camped refugees, new items such as length of time the family had been to Tanzania, civil status, and whether the child had had malaria – a common tropical disease among children in Tanzania, were added. At the end, the calculated Cronbach’s alpha for internal consistency was 0.9. Given the importance of rapport and comfortability of respondents, individual families were visited by the authors to administer the questionnaires.

Follow-up interviews

Given the necessity of collecting rich data, the fathers’ questionnaire was set to flexibly allow for the asking of follow-up questions. These open-ended questions focused on

specific issues of interest, such as language of instruction, language spoken at home, family wealth, and father–child interactions. However, in some instances, the researchers had to ask specific questions about issues that emerged in the course of interviews. To create a more friendly, comfortable and relaxed environment, fathers were visited at home and individually interviewed.

Measures for learning attainments

School readiness

This study used School Readiness Composite sub-tests of the Bracken's Basic Concept Scale. The instrument was modified to reflect Tanzania contexts and fit into the mental schema of a typical child from Tanzania. For example, the blobs of yellow, brown and orange were replaced with drawings of a ripe yellow banana, a cup of brown coffee and a half-piece of an orange. In Tanzania, consonants and vowels are separately taught. As such, the authors redrew them on separate paper during the training sessions for enumerators. This tool had standard instructions for administration and scoring which were translated into Kiswahili. Back-translation was independently done by two local experts with experience in Kiswahili-English linguistics and pre-primary education. There were very insignificant discrepancies between the original and back-translated drafts.

Early Grades Reading Assessment test

The study had a sample of Grade 1 and 2 children. This necessitated making changes and contextualising Early Grades Reading Assessment (EGRA) test as follows: double consonants, sound, words and letters were eliminated. Given that skills for reading full words are taught in the final months of Grade 2, and this study was done around the middle of the academic year, it was necessary to eliminate story reading exercises. X and Q alphabets were eliminated because they do not exist in Kiswahili alphabet list.

Early Grades Mathematic Assessment test

In this study, items related to addition and subtraction re-arranged to proceed from simple to complex. Further, multiplication items were eliminated because divisions and multiplications concepts are not taught until close to the end of the final term of Grade 2. Further, word problems were changed to reflect a typical rural Tanzania context.

Procedure

The researchers had to hire and train two enumerators recently graduated with Bachelor of Education (B.Ed.) degrees in Early Years' Education. Enumerators were trained to administer the tests for five days. Practical training was done in a nearby primary school belonging to urban poor group. Even though all the tools used in this study had been previous used in Tanzanian context (Ndiujye 2020; Ndiujye and Rao 2018, 2019), the authors noted the importance of re-contextualising them. Inter-rater reliabilities assessed before starting data collection was between the first author (0.85), second author (0.88) and each of the two enumerators were (0.90) and (0.89). The

calculated internal consistency (Cronbach's alpha value) for BBCS-R was $\alpha = 0.91$; for EGRA was $\alpha = 0.86$; and for Early Grades Mathematic Assessment (EGMA) $\alpha = 0.87$.

Children were individually administered their respective instruments, and the order of the assessments was counterbalanced. In each assessment, a child was given a question booklet, while the assessor kept the scoring booklet. While children were assessed at school by the research team – authors and two research assistants, the authors visited and spent some time with each family to interview fathers and observed the home environment. This was purposely done for researchers to familiarise themselves with local environments, establish rapport and control fathers' social desirability biases. The interviewing process involved face-to-face conversations where information was noted down in the questionnaire or field notebook.

Ethical considerations and parental consent

Researchers obtained ethical clearance from Research and Publication Ethics Committee of the University of Dodoma where they are attached. Further, they requested for an introduction letter from the Ministry of Education of Tanzania, and permission from local government authorities. Given that the study recruited children aged below 18 years, the authors obtained parents' consents. Parents and children were given information about the current study, and then asked for their willingness to participate. Confidentiality was observed by assigning respondents with codes and pseudonyms, and unauthorised person had no access to the collected data. Parents were visited and interviewed at their respective homes to give them ample time, relaxation and sense of ownership and confidence to participate in the study.

Methods of data analyses

Preliminary tests focused on demographic information such as children's age, grade and gender and learning attainments to determine differences. To identify co-variables for the final analyses, frequencies, means and correlations among variables were calculated. Final analyses examined the differences in school readiness, EGRA and EGMA mean scores among refugees, in comparison with urban poor, urban affluent and rural majorities, using two-way analyses of variance (ANOVA). A two-way ANOVA was an appropriate and very useful model of analysis given that this study has four different but related groups.

Further, this study was interested to estimate how the mean of a quantitative variable (mean scores of children from various groups) changes according to the levels of two categorical variables (Pallant, 2011). With the controlling of children's Age, Gender and fathers SES, the hierarchical linear regression analyses were conducted to find-out the association between children's social group and school readiness, literacy and numeracy mean scores. Hierarchical linear regression was a very useful model of analysis for this study because it showed whether variables of interest would explain a statistically significant amount of variance in the dependent variable (children's mean scores) after accounting for all other variables (Creswell 2012). Thematic analyses approach by Miles and Huberman (1994) was used to analyse qualitative data. To develop themes and sub-themes, data were reduced, coded and described.

Results

Differences in the level of fathers' involvement in children's development and learning across social groups

Family socio-economic status

Fathers' education across social groups. While about 20 percent of camped refugee fathers had no formal education, about quarter (24%) of rural majority parents did not have formal education. However, about 80 percent of rural camped refugee fathers had basic to upper secondary education. Urban affluent fathers were the most educated group with about 60 percent of them having between high school diplomas to postgraduate degrees. On average, non-refugee fathers revealed to have spent 2.3 more years schooling than those of refugee backgrounds. More details can be found in [Table 1](#).

Family wealth. In this study, family wealth was indexed by the ownership of properties and assets which are considered important for survival in Tanzania context (see [Table 2](#)). However, it is important to note that availability of most of the home appliances, such as refrigerator and television, depended on the availability of electricity. Across rural Tanzania where this study took place, about 30 percent had access to electricity (National Bureau of Statistics [NBS], 2012). Without degrading the importance of electricity and television in influencing children's learning, in the absence of such assets alone, should not be considered as an indicator of poverty.

Similarly, all fathers in rural areas from both groups – camped refugees, rural non-refugees, urban poor and urban affluent groups, reported to own a farm. In this context, farming is not primarily for wealth generation, rather, a means of survival. About 93.3 percent of camped refugees, 86.7 percent of rural majority and 73 percent of urban poor fathers reported to own houses. The authors speculated that one of the possible reasons for this disparity could be the fact that in urban areas houses are constructed by estate developers. In rural areas, individual villagers have to build their own houses. This saves them with much architectural and construction expenses.

Fathers' involvement and support of children's learning across groups

Fathers were asked whether in the past two weeks, any adult family member aged above 15 years of age, had engaged children in learning activities. The asked activities included storytelling, singing, reading children's books, playing games, taking the child outside the home, naming, drawing and counting. Collected data were coded, entered and analysed to calculate mean, standard deviation, median and range for each of family member involved in children's learning activities.

Table 1. Paternal education across groups.

	U/Affluent	Urban poor	Camped refugees	Rural majority
1. None	11%	13%	20%	24%
2. Primary	33%	47%	66%	62%
3. Secondary	46%	35%	13%	13%
4. Dip/grad	10%	05%	01%	01%

NOTE: U/Affluent – Urban affluent; R/C/refugee – Rural camped refugees R/N refugees – Rural non-refugee.

Table 2. Family assets across social groups.

	U/Affluent	Urban poor	Camped refugees	Rural majority
1. Electricity	93.7%	6.7%	6.7%	30%
2. Radio	100%	100%	60%	100%
3. Television	93.7%	6.7%	6.7%	27%
4. Mobile phone	100%	100%	93.7%	87%
5. Refrigerator	90%	5.2%	3%	20%
6. Watch	100%	93.3%	60%	80%
7. Bicycle	78%	86.7%	73.3%	86.7%
8. Motorcycle	67%	46.7%	26.7%	66.7%
9. Animal-drawn cart	12%	86.7%	34%	89%
10. A car	89%	6.7%	0%	20%
11. Own a farm/garden	59%	100%	10%	60%
12. Own livestock	34%	100%	12.3%	80%
13. Own bank account	100%	60%	10%	36.7%
14. Own a house	97%	93.3%	0%	73%

NOTE: U/Affluent – Urban affluent.

As illustrated in Table 3, comparatively, urban affluent and camped refugee fathers were more and closely involved in supervising their children's learning than rural non-refugee fathers. Among rural non-refugees, children were supervised mostly by 'other family members'. However, given the nature of relationship among extended rural families where this study was conducted, these findings were not unexpected. Among urban poor families, both parents (fathers and mothers) were almost equally involved in supervision of their children's learning.

Relationship between fathers' involvements and children's learning attainments across social groups

Learning attainments

School readiness composite. A two-way analysis of variance (ANOVA), with groups (*camped refugees, rural non-refugees, urban poor, and urban affluent groups*) and gender (*male and female*) as between-subjects variables, indicated significant main effects of Gender ($F(1, 90) = 25.04, p = 0.032$). Follow-up tests indicated that urban

Table 3. Family support across social groups.

	U/Affluent	Urban poor	Camped refugees	Rural majority
Father				
Mean	4.80	3.20	2.53	2.87
SD	0.74	0.86	0.92	1.38
Median	3.00	3.00	3.00	3.00
Range	3.9–4.7	3.5–4.2	2.2–3.0	2.6–3.1
Mother				
Mean	4.67	3.87	2.62	3.67
SD	0.51	0.56	0.63	0.72
Median	3.00	4.00	2.00	3.00
Range	3.9–4.7	3.3–4.1	2.3–3.0	2.3–3.0
Other				
Mean	1.47	2.11	3.43	2.99
SD	0.18	0.23	0.67	0.53
Median	2.00	2.00	2.00	2.00
Range	2.1–2.8	2.8–3.2	2.6–3.0	2.8–3.0

NOTE: U/Affluent – Urban affluent.

affluent ($M = 32.86$, $SD = 8.4$) performed significantly better than rural non-refugees children ($M = 17.60$, $SD = 8.62$) in SRC. Boys from the urban affluent group ($M = 36.50$, $SD = 7.94$) demonstrated significantly higher school readiness than all other gender groups; girls from urban affluent group ($M = 33.85$, $SD = 13.88$) outperformed girls from other groups (more details are in Table 4).

Relationship between fathers' SES and children's school readiness. A three block hierarchical multiple regressions was conducted to examine the factors that would predict children's school readiness across the four social groups in relations to fathers SES. It was important to use fathers' SES as an appropriate proxy of involvement because empirical evidence (Ip, et al, 2015; Golombok 2000; Knoester, Petts, and Pragg 2019) indicates that fathers' with higher SES have a greater capacity to provide time to their children. And that fathers' involvement is associated with educational attainment (Lamb 2010; Liu, Wu, and Zou 2016). While there are other self-reported self-metrics of fathers' involvements such as home learning environments and policy contexts, fathers' SES was appropriate for this study given the number and diversity of participating groups – camped refugees, rural non-refugees and urban affluent. As such, in a context of developing countries as it is Tanzania, fathers' SES could be accurately measured and compared than other metrics. At block one, control variables of Gender and Age were entered. The variables which indexed family SES – parental education and family wealth, were entered at the second block. Social group was entered in the final block of the regression model.

Results showed that, at block one, Age and Gender contributed significantly to the regression model ($F(2, 43) = 170.735$, $p = 0.000$), accounting for 55 percent of the variance. At block two, family SES variables were quite significant for they explained an additional 28.3 percent of the variance $F(4, 41) = 163.405$, $p = 0.000$. Finally, at block three the addition of social group explained an additional 0.27 percent of the variance $F(5, 40) = 132.352$, $p = 0.000$. However, this change of R^2 was insignificant. The most important predictors of children's school readiness were age ($\beta 0.08$, $p = 0.013$), gender ($\beta 0.052$, $p = 0.033$) and parental education ($\beta 0.348$, $p = 0.025$), and family wealth ($\beta 0.313$, $p = 0.016$). Social group (being of refugee or non-refugee background) was found to not be a significant predictor of school preparedness. The five predictors together accounted for 83.57 percent of the variance.

Table 4. SRC, EGRA and EGMA Mean scores across groups (Sample size = 400 children).

TOOL	Urban poor Gender	Rural majorities		Urban affluent		Urban affluent		Camped refugees	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
SRC	Mean	33.75	29.00	23.38	21.28	36.50	33.85	18.43	14.22
	SD	8.38	9.17	4.59	4.22	7.94	13.88	4.78	10.12
EGRA	Mean	32.28	33.88	11.86	12.28	30.31	33.88	11.97	13.66
	SD	10.30	6.56	6.46	4.33	4.20	4.56	3.40	2.50
EGMA	Mean	33.25	31.21	13.35	12.59	37.44	35.49	13.34	10.45
	SD	8.48	6.34	4.81	3.91	8.97	7.07	3.51	4.32

SRC – the School Readness Composite of the Brackens Basic Concept Scale.

EGRA – the Early Grades Reading Assessment.

EGMA – the Early Grades Mathematics Assessment.

Literacy attainment. A two-way ANOVA, with Social Groups (*camped refugees, rural non-refugees, urban poor, and urban affluent groups*) and Gender (*male and female*) as between-subjects variables, showed a significant main effects of Gender ($F(1, 39) = 6.22, p = 0.041$). Follow-up tests found mean literacy scores for urban affluent children ($M = 33.13, SD = 8.23$) significantly higher than those from both camped refugee ($M = 21.04, SD = 4.37$), urban poor ($M = 18.56, SD = 4.2$) and rural majority ($M = 12.08, SD = 5.38$). Urban affluent girls demonstrated the highest literacy attainments ($M = 33.88, SD = 6.56$).

Fathers' SES and literacy attainment. A multiple regressions analyses were conducted to examine the factors that would predict children's literacy attainment across the social groups. As control variables, demographic variables (Age and Gender) were entered at the first block. Variables indexing family SES – parental education and family wealth, were entered at the second block. Available empirical literature suggests that during early years, parental education is the most potent predictor of family SES (See Ip, et al., 2015; Melhuish et al. 2008). Social Group was entered in the final block of the regression model.

Findings from the regression model indicated that Age and Gender significantly predicted children's literacy attainments ($F(2, 41) = 61.65, p = 0.0023$). This accounted for 33.7 percent of the variance. Fathers' SES explained an additional 42.1 percent of the total variance ($F(2, 40) = 64.501, p = 0.0021$). Finally, Social group explained additional 12.2 percent of the variance, $F(5, 40) = 70.641, p = 0.0014$, and the change of R^2 was also significant. Chronologically, predictors of children literacy attainments were Age ($\beta 0.085, p = 0.021$), Gender ($\beta 0.137, p = 0.026$), Parental education ($\beta 0.191, p = 0.023$), and by Family wealth ($\beta 0.225, p = 0.036$). Social Group (being of camped refugee, rural non-refugee, urban poor or urban affluent background) was found to be a significant predictor ($\beta 0.072, p = 0.018$). In the final model, the five variables together accounted for 71 percent of the variance in literacy attainment.

Numeracy attainment. A two-way ANOVA, in which Social Groups (*camped refugees, rural non-refugees, urban poor, and urban affluent groups*); and Gender (*male and female*) were between-subjects variables, was conducted. Results indicated the main effects of Gender ($F(1, 39) = 10.272, p = 0.032, d = 0.17$) were significant. Follow-up tests pointed-out the mean for children from urban poor background ($M = 32.26, SD = 7.37$) was comparable to that of children from rural non-refugee background ($M = 36.53, SD = 7.92$). And, it was significantly higher than that of camped refugee children ($M = 12.94, SD = 4.21$). Across groups, boys ($M = 29.43, SD = 8.31$) outperformed girls ($M = 22.35, SD = 7.18$). Further, boys from the urban affluent group ($M = 37.44, SD = 8.97$) had the highest mean than other boys from other social groups.

Predictors of numeracy attainment across fathers' SES. As indicated on the regression model in Table 5, the hierarchical multiple regressions were conducted with EGMA mean score as a dependent variable. The analyses aimed to examine the factors that would predict children's numeracy attainment across groups. At the first block, Age and Gender were entered as control variables. At the second block, paternal education

Table 5. Regression model predicting fathers' SES in relation to children's attainment.

Predictor	Predictor data					
	B	β	R^2	ΔR^2	ΔF	t
BBCS-R: Block 1: Demographic variables						
Age	3.807	0.572*	0.550	0.550	10.314	4.513
Gender	2.458	0.106*				0.838
Block 2: Family SES						
Fathers' edu	3.759	0.401**	0.833	0.283	21.019	3.240
Family wealth	1.115	0.424**				3.137
Block 3: Final model						
Social group	0.647	0.046*	0.8357	0.0027	0.111	0.333
EGRA predictive scores						
Block 1: Demographic variables						
Age	2.68	0.39**	0.337	0.337	7.79	2.76
Gender	0.525	0.02**				0.16
Block 2: Family SES						
Fathers' edu	-4.20	20.43*	75.8	0.421	14.58	-2.97
Family wealth	2.388	0.88**	15.40			5.40
Block 3: Final model						
Social group	9.471	0.649**	0.880	0.122	25.13	4.89
EGMA predictive scores						
Block 1: Demographic variables						
Age	4.142	0.538**	0.328	0.328	8.54	4.12
Gender	-0.039	-0.001**				-0.01
Block 2: Family SES						
Fathers' edu	2.597	0.239*	0.630	0.302	11.08	1.64
Family wealth	1.429	0.47**				2.94
Block 3: Final model						
Social group	1.33	0.081**	0.63.4	0.004	0.261	0.53

* $p < 0.05$, ** $p < 0.01$.

and family wealth were entered as determining family SES variables. Finally, Social group was entered in the regression model.

Results indicated that Age and Gender significantly contributed to the regression model ($F(2, 44) = 108.12, p = 0.0014$) accounting for 32.8 percent of the total variance. At block two, the introduction of family SES variables was significant and explained 30.2 percent of the variance $F(2, 42) = 84.123, p = 0.001$. At the end, Social group was added at the third block, insignificantly explaining additional 0.4 percent of the variance, $F(6, 41) = 68.756, p = 0.0012$, and this change in R^2 was also significant. The predictors of children's numeracy attainments across groups were: Age ($\beta 0.074, p = 0.037$), Gender ($\beta 0.092, p = 0.054$) and Paternal education ($\beta 0.251, p = 0.024$), followed by Family wealth ($\beta 0.233, p = 0.017$). Social Group was found to be insignificant predictor ($\beta 0.0002, p = 0.0056$). Together in the final model, the five variables accounted for 70 percent of the variance in numeracy attainment.

Medium of instruction. Fathers from camped refugee and rural majority groups reported that one major obstacle to their children's learning was knowledge and command of spoken and written Kiswahili. This is the official medium of instructions in all public pre-primary and primary schools in Tanzania. However, among camped refugees, fathers reported progressive improvements in children's command of Kiswahili as they moved to upper grades. They revealed to use specific strategies to improve children's mastery of language of instruction (LoI). For example, some fathers revealed to sending their children for church sermons conducted in Kiswahili. Other fathers

reported to limit the use of vernacular languages at home on selected days of the week. One father revealed the following:

‘At our home, children are allowed to speak Kirundi – the vernacular language of Burundian refugees, twice per week on Wednesday and Friday. The remaining days are for Kiswahili – the medium of instruction in Tanzania. We deliberately do that not because we are harsh or rude to our children, rather we focus on their schooling and future’

Fathers’ beliefs and involvements in children’s learning and development. Fathers from the studied groups indicated different beliefs towards education, which shaped their roles, expectations and practices. Among the urban affluent, education for their children, though highly regarded, was considered a child’s right, and practically a new way of living. Among camped refugees, education was regarded as a path to upward social mobility and perhaps raised hopes for future prospects for naturalisations. One of them revealed that he and his wife send their children to school so that they may have better future. He revealed the following:

‘I’m a former combatant. But that’s not the kind of life any responsible and caring father would wish for his children. I put my children in schools to learn so that some day they will have better future even moving to other countries which observes rule of law and democracy. I hope they will have enough courage and money to take me and their mother to live with them’

Among rural and urban poor, education was regarded as another ‘government initiative’. Literally, this may imply limited fathers’ involvements in children’s learning and development. To them, children were to be sent to school simply to satisfy and avoid the government’s punishment such as panelised to pay fines and imprisonments. Such perspectives may have limited fathers’ involvements, ultimately impacted children learning attainments and development.

Discussions

Differences in fathers’ roles and involvements in children’s learning and development across social groups

Converse to popular beliefs, our hypothesis, and existing empirical evidences (Brandth and Kvande 1998; Lamb 2010), findings of the current study indicated that rural camped refugee fathers who were of relatively low SES were closely involved in their children’s learning and development. This attachment was one of the reasons for their children demonstrating higher learning attainments than rural non-refugees. Close father involvement has been associated with children’s increased learning attainments distinct from the contributions of mothers (Harris 2019; Skelton 2001).

Available empirical evidence have established that fathers’ involvements develop children’s academic performance and other related factors which are strong contributors of performance (Downer and Mendez 2005; Lamb 2010; Ndijuye and Rao 2018). As such, the findings of the current study which indicated urban affluent children demonstrating higher learning attainment could be attributed to their having fathers closely involved in their learning and development. However, these findings contradicts those by Gaydosh (2015) who found that most male parents – fathers, in East African context do not

spend enough time with their children, and are less involved with their development and learning. However, this need to be further empirically explored.

Family SES was strongly correlated with the level of fathers' involvement. This is not uncommon given that available evidences indicates that parents from upper SES percentile tend to be closely involved in their children's learning and development (Lamb 2010; Liu, Wu, and Zou 2016). Fathers' involvement in children's learning and development did not influence differences in attainments by gender. Rather, it was found that family SES influenced fathers' involvement, and retrospectively, that of children. The reason for this indifference is still unknown given the strongly held socio-cultural beliefs for Tanzanian fathers to favour boys. It is equally important to note that girls in sub-Saharan Africa (including Tanzania), regardless of their age, do have to help with household chores after school (Matafwali and Nunsaka 2011). The after-school chores potentially leave them less time to revise their school work or do homework.

Relationship between fathers' involvements and children's learning attainments across social groups

While there is a common consensus among early childhood researchers that fathers' involvement is critical in children's learning and development (Aigner et al. 2013; Downer and Mendez 2005; Foster et al. 2001, Lamb 2010; Skelton 2001); in the current study, the level of involvement varied across groups and was strongly correlated with family SES. While urban affluent parents were closely involved in their children's development and learning, the less privileged urban poor parents were found to be less concerned with their children's well-being. These findings concur with those by Aigner and colleagues (2013) and Downer and Mendez (2005) who found strong relationship between family SES and level of fathers' involvement.

An interesting finding was that rural non-refugee and rural camped refugee fathers – who were both from lower SES families, had different levels of involvement in their children's development and learning. Camped refugee fathers, who survived solely on the aids by the UN agencies, were more involved than comparably more privileged rural fathers. Interviews revealed that camped refugee fathers were of the view that education for their children was a path towards a promising and better future. Similar beliefs among Burundian refugees were also identified by Ndiujye and Rao (2019) and Kuch (2016).

Findings revealed that children's mastery of the medium of instruction was reported to be among the reasons for camped refugee children's higher learning attainments than rural non-refugee children. While a body of empirical evidence from sub-Saharan Africa has consistently indicated that children learn well in the language they master (Brock-Utne 2007; Nikiema 2011), however, the effectiveness of the strategies employed by camped refugee fathers are not empirically known. It is an area which needs empirically close scrutiny. A shared childrearing responsibility by both parents is critically important in Tanzanian context with limited school-related resources.

Conclusion and recommendations

This study focused on disparities of fathers' involvements in children learning and development across socio-economic groups in Tanzania. However, nature and scope of the

current study did not enable the researchers to collect more systematic quantitative and/or qualitative data that could explore in more depth variations in fathers' aspirations, values and practices in supporting early learning and parental engagement in school activities.

To maximise children's learning and development potentials in a context with limited educational resources, involvements of both parents – father and mother; is critically important. Integrated early childhood care and education policy and practices are important to bring together efforts of various ECCE stakeholders to tackle learning disparities across urbanicity, social groups and families in Tanzania. While Tanzania has recently stepped-up as a middle income country (See [World Bank, 2020](#)), there is a need to translate the new status into realities of lives among rural and disadvantaged communities. Potentially, increased family SES will tremendously improve parental involvements – especially fathers, in children's learning and development.


Understanding the roles of fathers' involvements in children's learning and development may potentially help in forging strong parental – school partnership. To enhance this, requires a clear policy guidelines. As such, this study recommend to Tanzanian policy-makers to draft practical education and child development policies which encourage fathers from various social groups to be involved in children's development and learning.

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