

Impact Evaluation of Level-Based Learning Camps on

Foundational Literacy and Numeracy: Evidence from My Village in Tanzania and Nepal





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EXECUTIVE SUMMARY

Foundational literacy and numeracy are critical building blocks for all future learning. Without acquiring these basic skills in the early years of schooling, children are likely to struggle throughout their academic lives and beyond. Yet, across low- and middle-income countries, millions of children are enrolled in school but unable to read a simple sentence or perform basic arithmetic. This global learning crisis has been well documented, and interventions aimed at improving foundational learning have become central to education policy and planning.

In response to this challenge, the PAL Network launched My Village in 2022, a foundational learning initiative under its "Whole Village" mission. The program aims to reach 1 million children across multiple countries with targeted support in numeracy and literacy by 2027. My Village Phase 2, implemented in Tanzania and Nepal between August

and December 2024, focused on delivering short-term, level-based learning camps using a targeted instruction approach. Children were grouped according to their baseline learning levels and regrouped through midline assessments, enabling teaching at the right level throughout the intervention.

This report presents findings from an impact evaluation of My Village Phase 2. Using both descriptive and econometric analyses—including propensity score matching and difference-in-difference methods—the study estimates the causal effects of learning camps on foundational skills, while controlling for selection bias. Given that the intervention was implemented in different ways across the two countries (in terms of timing, duration, and participant selection), findings are not directly compared across contexts.



KEY FINDINGS

 Positive Impact on Learning Outcomes: Learning camps had a significant and positive effect

on both literacy and numeracy outcomes, with stronger effects in literacy in both countries.

These results align with prior evidence on targeted instruction approaches (e.g., Banerjee et al., 2010; 2017).

- Progress from Lowest Proficiency Levels: The camps were particularly effective in helping children move out of the lowest proficiency band—more than 90% of those who started at the beginner level progressed by at least one level.
- Socio-demographic Variation: The report explores the differential impact of learning camps by gender, age, and

household wealth. While the learning gains were broadly distributed, some differences emerged—such as older children showing greater progress in Tanzania, and younger children progressing more in numeracy in Nepal. However, evidence for intersectional effects was modest.

• Limitations in Comparability: Because implementation was context-specific in each country, the findings are not intended for direct cross-country comparison. Instead, they highlight the effectiveness of adaptive, context-sensitive learning interventions within each national setting.t

WAY FORWARD

The findings confirm that accelerated learning camps using targeted instruction can deliver meaningful gains in foundational learning, particularly for those furthest behind. However, the report also underscores the importance of further research. Future work will explore:

- Midline assessment data to better understand learning trajectories;
- The relationship between literacy and numeracy acquisition;
- The influence of other background factors such as schooling history, parental education,

home learning environment, and language spoken at home;

 Qualitative data from parents, teachers, and children on the perceived value and effectiveness of the learning camps.



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We are equally thankful to the teachers who played a pivotal role in facilitating the learning camps and supporting the data collection processes with dedication and care.

My Village 2 was implemented across 20 villages in Tanzania and 15 villages in Nepal during the period July to December 2024, laying the foundation for this impact evaluation.





This report presents an analysis on the impact of phase 2 of My Village program implemented in Nepal and Tanzania between July and December 2024.

The My Village initiative seeks to ensure that every child within the targeted areas — whether enrolled in school or not — acquires essential literacy and numeracy skills. The program is anchored in the core principle: "Leave no child behind — children learn to read if they do not know how to read; they read to learn once they have mastered reading" (PAL Network, 2023).

Phase 1 of the My Village program was implemented across more than 300 villages in Kenya, Nepal, and Tanzania during 2022 and 2023. Building on those learnings, Phase 2 was carried out in 20 villages in Tanzania and 15 villages in Nepal.

The program takes a holistic approach to improving foundational learning by actively engaging parents and communities in the child's learning journey. This is achieved through a combination of level-based learning camps, community libraries, parental en-

gagement tools, and life skills sessions for adolescents (further details are provided in subsequent sections).

This impact evaluation focuses specifically on the accelerated learning camp component, which is designed to strengthen children's foundational skills in literacy and numeracy.

- Section 2 outlines the intervention design and research methodology.
- Section 3 presents the impact findings, beginning with Tanzania, followed by Nepal.
- Section 4 discusses the results and their implications for future research and policy.
- Section 5 concludes the report with recommendations and the way forward.





INTERVENTION DESIGN AND METHODOLOGY

In alignment with the Teaching at the Right Level (TaRL) approach and Accelerated Learning Pedagogy (ALP), children are grouped according to their current learning levels, as identified through the baseline assessment results.

NUMERACY: In numeracy, the assessment classifies children into the following learning levels:

- Beginner
- One-digit number recognition
- Two-digit number recognition
- Basic operations (addition, subtraction, multiplication, division)
- Advanced operations (more complex arithmetic tasks)

To facilitate effective instruction, these levels are consolidated into broader instructional groups based on factors such as class size, teaching resources, and the distribution of learners across levels.

For example, in many classrooms:

- Children at the beginner and number recognition stages are grouped together.
- Children working on addition and subtraction are placed in a separate group.
- Those who have progressed to multiplication and division are grouped accordingly.

This flexible grouping strategy ensures that teaching is targeted and responsive to each child's current learning level, thereby maximizing learning gains in a short period.

LITERACY: In literacy, the assessment categorizes children into the following levels:

- Non-reader/Beginner
- · Letter recognition
- Word recognition
- · Paragraph reading
- Story reading
- Comprehension

Following the same instructional strategy as in numeracy, children are grouped into three instructional clusters:

- Children at the non-reader, letter recognition, and word recognition levels are grouped together.
- 2. Those at the paragraph reading level form the second group.
- 3. Children at the story reading and comprehension levels make up the third group.

Throughout the program period, children are regrouped every 10 to 15 days based on midline assessments and teacher observations. This allows for continuous, adaptive learning that responds to each child's progress and needs.

The structure and implementation of the learning sessions differ across the two countries, reflecting context-specific adaptations in camp duration and delivery processes to suit local needs and stakeholder dynamics. Table 1 outlines the implementation modalities in Nepal and Tanzania.

To assess the impact of the learning camps on children's foundational skill, we conducted a comparative analysis



of their performance in the baseline and endline assessments. At baseline, the team interviewed 4105 children across 20 villages in Tanzania and 3057 children across 15 villages in Nepal. At endline, follow up interviews were successfully conducted with 85% of the children in Tanzania and 94% in Nepal. The number of children in learning camps, as reported at endline, was 1531 in Tanzania and 662 in Nepal.

Table 1: Implementation of learning camps		
Design aspect	Nepal	Tanzania
Criteria for being assessed for baseline and endline	All the 6-17 years old children in the targeted villages	All the 6-17 years old children in the targeted villages
Total duration	2 cycles of 60 days and 45 days respectively	1 cycle of total 30 days
Duration of each cycle of learning camp (regrouping cycles)	15 days	10 days
Selection criteria of children for the learning camps	The 6-17 years old children who lack proficiency in foundational skills	Grades 3-6 school-enrolled children, plus out of school children who lack proficiency in foundational skills
Average class size	40-50 children	35-50 children
Class duration	1 hour literacy and 1 hour numeracy learning camp, daily for five-six days per week, after school hours.	1 hour literacy and 1 hour numeracy learning camp, daily for five days per week. 1hour in the morning before the school starts and one hour after school hours.
Place of learning camp	Community or personal spaces	Schools

We begin by presenting the demographic characteristics of children, categorized by assessment groups: baseline, endline (learning camp participants), and endline (non-participants). This is followed by an analysis of children's proficiency levels in numeracy and literacy. In this section, we explore performance trends based on key socio-demographic variables, including

gender, age, household wealth, parental education, schooling status, and the home learning environment.

Next, we examine the impact of the learning camps on children's numeracy and literacy outcomes by comparing three groups: baseline (all children), endline (children who participated in camps), and endline (children who did not participate in camps).



To measure overall learning outcomes, we use two key indicators:

- (i) the percentage of total questions answered correctly
- (ii) a learning index that captures the level of proficiency achieved in the assessment.

In numeracy, the learning index is scaled as follows:

- 0 = Beginner
- 1 = Number recognition
- 2 = Addition/Subtraction
- 3 = Multiplication/Division
- 4 = Word problems

In literacy, the learning index ranges from:

- 0 = Beginner
- 1 = Letter recognition
- 2 = Word recognition
- 3 = Paragraph reading
- 4 = Story reading

We also analyze learning outcomes at the sub-domain or item level within each subject to better understand specific areas of growth. In addition, we explore heterogeneous effects, particularly by gender and household wealth. At the outset, the findings indicate that participation in learning camps is associated with significantly higher levels of learning in both numeracy and literacy.





FINDINGS

Section 3: Findings

We discuss the impact of the learning camps separately for each country, presenting the effects on numeracy and reading side by side. We avoid direct comparisons between countries because the implementation of the learning camps varied significantly in each context, shaped by local needs and priorities.

3.1. Tanzania

KEY HIGHLIGHTS:

- Learning camps targeted out-of-school children and grades 3-6; 1,531 participated.
- Girls made up slightly more than half of both camp and non-camp groups
- camp participants were generally older and from poorer households. Camps boosted numeracy scores from 69% to 91%, literacy from 72% to 94%.
- Beginner numeracy dropped from 22% to 4%; advanced problem-solving tripled in camps.
- Literacy story reading rose from 64% to 91% in camps; little change outside camps.
- Camps greatly improved math operations, especially multiplication and division.
- Girls outperformed boys overall; gender gaps narrower in camps.
- Wealth gaps persisted in numeracy but narrowed in literacy after camps.
- · Camps reduced age-related learning

- gaps; younger children showed highest progress.
- 37% advanced in numeracy and 80% in literacy within camps; biggest gains among beginners.

In Tanzania, the learning camp sessions were held at school, outside of regular classroom hours. Only out of school children and children in grades 3 to 6 were eligible to participate in the learning camps. Based on the curriculum expectations, children in grades 1 and 2 are still learning foundational skills in school, while those in grade 7 and above focus on preparing for the primary school leaving examinations. Therefore, out of the 4105 children assessed at baseline. 2477 met the eligibility criteria for the learning camps. Considering the criteria mentioned above, available resources, and assessment results, the partner organization selected 1,531 children to participate in the learning camps.

Table 2 presents the socio-demographic characteristics of children grouped by whether they participated in learning camps or not. Girls constituted the majority in both groups, making up 53% of children in learning camps and 54% of those outside the camps. Due to the eligibility criteria, the age distribution differs notably between the two groups. Among children in learning camps, 36% are aged 6 to 9 years, 60% are aged 10 to 13 years, and only 4% are 14 years or older. In contrast, within the non-camp group, 54% are aged 6 to 9 years, 36% are aged 10 to 13 years, and 10% are 14 years or older. Regarding household wealth, children attending learning camps tend to come

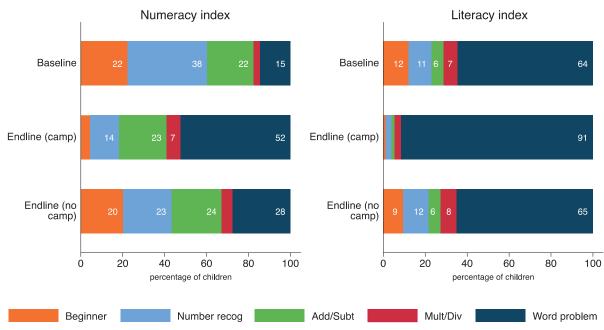


from relatively poorer households compared to those not in camps. Parental education levels, however, are comparable between the two groups.

In numeracy, the percentage of correct answers increased from 69% at baseline to

91% at endline among children who attended learning camps, compared to 74% among children who did not participate in camps. Literacy scores were generally higher, with correct answers increasing from 72% at baseline to 94% at endline for children in camps, and 76% for those not attending.

Figure 1: Tanzania: Proficiency levels in numeracy, by assessment group



Note: Number of children, Baseline = 4105, Endline (camp) = 1531, Endline (no camp) = 1936

Figure 1 illustrates children's performance measured by the learning index across different assessment groups. The results show that learning camps led to substantial improvements in numeracy skills. At baseline, 22% of children were at the beginner level, but by the endline assessment, this dropped dramatically to just 4% among children who attended learning camps. Similarly, the proportion of children at the number recognition level (please refer to the scale in the start of the report) decreased from 38% at baseline to 14% at endline for camp participants.

The share of children proficient in solving advanced word problems involving subtraction and division more than tripled, increasing from 15% at baseline to 52% at endline for those in learning camps. These significant gains clearly demonstrate the effectiveness of the learning camps in advancing children's numeracy skills.

Children's literacy proficiency was notably higher than their numeracy proficiency at baseline. At the most advanced literacy level of story reading, 64% of children were proficient at baseline,



compared to only 15% at the most advanced level in numeracy (word problems). For children who attended the learning camps, the proportion who could read a story increased significantly—from 64% at baseline to 91% at endline. In contrast, among children who did not participate in the camps, the share at the story reading level showed almost no change, increasing only marginally from 64% to 65% between baseline and endline. At the beginner level-defined as children unable to recognize letters—12% of children were at this stage at baseline. By endline, this figure had dropped substantially to just 1% among children who participated in the camps. Among those who did not attend, the decline was modest, with 9% remaining at the beginner level by endline.

We also examine the impact of learning camps across different levels of numeracy proficiency. At baseline, children

demonstrated high proficiency in number sense and single-digit recognition, with over 90% achieving these levels. By endline, proficiency in number sense rose to 95% among children who attended learning camps, compared to 91% among those who did not. In single-digit recognition, learning camp participants reached near-universal proficiency, with 99% answering correctly at endline, while 94% of non-participants achieved the same. The most notable improvement from learning camps is seen in double-digit number recognition. At baseline, 78% of children were able to recognize double-digit numbers. By endline, this figure jumped to 96% among learning camp participants, while the proportion among non-participants increased only slightly to 80%. These results point to significant gains driven by the targeted instructional support provided through the camps.

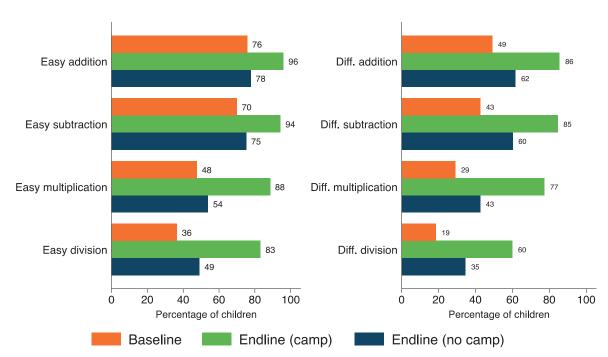


Figure 2: Tanzania: Proficiency in operations, by assessment groups



In operations, we find that learning camps led to large gains in learning. At baseline, 76% of children could perform easy addition and 70% could perform easy subtraction. By endline, these figures rose significantly to 94% in addition and 96% in subtraction among children who attended learning camps. In contrast, for children who did not participate in the camps, only 78% demonstrated proficiency in easy addition and 75% in easy subtraction—highlighting a 16 to 21 percentage point difference in learning outcomes.

Even more pronounced gains are observed in slightly more advanced tasks such as easy multiplication and division. At baseline, 48% of all children could perform easy multiplication. By endline, this figure remained relatively low at 54% for non-participants but surged to 88% among children who attended learning camps—reflecting a striking 34 percentage point difference. These results underscore the effectiveness of the learning camps in strengthening children's foundational math

skills, particularly in areas that require more cognitive engagement.

At endline, 86% of children who attended learning camps were able to solve difficult addition problems, compared to just 62% of children who did not participate-reflecting a 26 percentage point difference. A similar gap is observed in difficult subtraction tasks, underscoring the consistent advantage gained through the camps. The most striking differences emerge in more advanced operations such as multiplication and division. At baseline, fewer than 20% of all children could successfully perform difficult division. By endline, proficiency in division rose sharply to 60% among children in learning camps, while only 35% of non-participants reached this level-yielding a substantial 25 percentage point gap. Overall, the findings clearly demonstrate the strong and sustained impact of the learning camps across all components of the numeracy assessment, particularly in higher-order operations where gains were most pronounced.

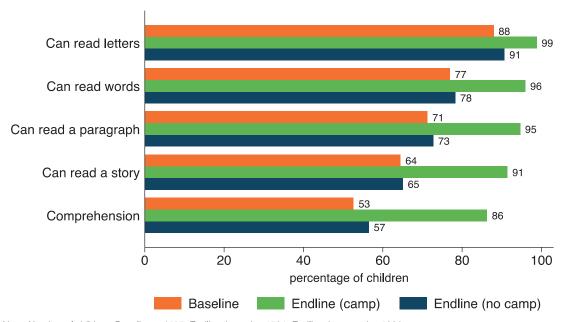


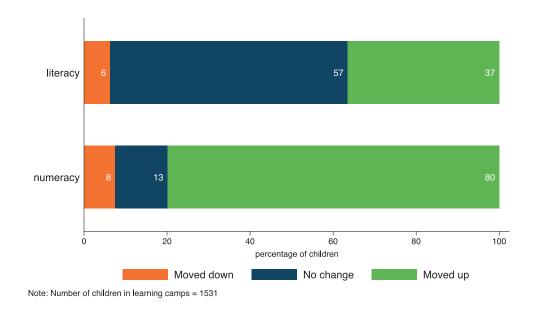
Figure 3: Tanzania: Proficiency in literacy levels, by assessment groups



In literacy, children who participated in learning camps consistently outperformed those who did not, across all assessment items. For children who were not part of the learning camps, improvements between baseline and endline were minimal, with proficiency gains ranging only between 2 to 4 percentage points across different literacy tasks. In contrast, children who attended learning camps demonstrated

substantial progress. Letter recognition was nearly universal among camp participants, with 99% achieving proficiency by endline. For all other literacy components—except for comprehension, which stood at a strong 86%—proficiency rates exceeded 90%, clearly highlighting the effectiveness of the learning camps in accelerating foundational literacy skills.

Figure 4: Tanzania: Progress in numeracy proficiency among children in learning camps



Next, we focus exclusively on children who attended learning camps to assess their individual progress across learning levels in both numeracy and literacy. The outcome measure classifies children into three categories: those who advanced by at least one proficiency band, those who remained at the same level, and those who moved down by at least one level. These proficiency bands correspond to the ordered items in the respective assessments.

We find that 37% of children in learning camps progressed by at least one level in numeracy, while a remarkable 80% did so in literacy. This gap between the two subjects is largely attributed to differences in baseline performance—literacy skills were already stronger at the outset. At baseline, 64% of children in camps were already at the story reading level in literacy, whereas only 10% had reached the difficult division level in numeracy.



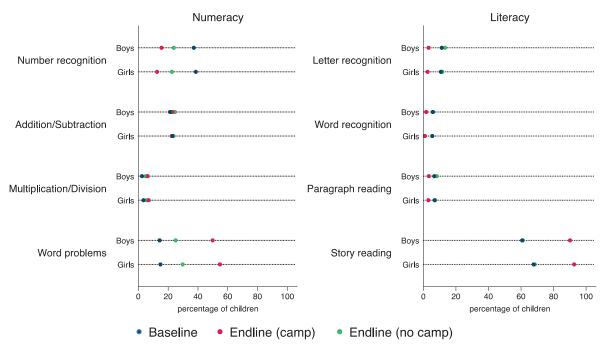
Among children who started at the beginner level, gains were even more pronounced: 93% in literacy and 97% in numeracy advanced by at least one level. For children whose proficiency band remained unchanged at endline, it is crucial to understand their starting point. In literacy, 83% of these children were already at the highest proficiency level, and in numeracy, 50% had also reached the highest level. These findings reinforce the substantial impact of the learning camps, especially for children who started at lower proficiency levels.

3.1.1. Gender

At baseline, girls outperformed boys in both numeracy and literacy, though the degree of variation differed across subjects and proficiency levels. In numeracy, 25% of boys were at the beginner level compared to 20% of girls. As children reached higher levels of numeracy, the gender gap became less pronounced, with 14% of boys and 15% of girls achieving proficiency at the most advanced level (word problems).

In literacy however, gender differences were more pronounced, especially at the lowest and highest proficiency levels. At the beginner level, 15% of boys were unable to recognize letters, compared to only 9% of girls. At the story reading level—the most advanced proficiency band—68% of girls were proficient compared to 61% of boys.





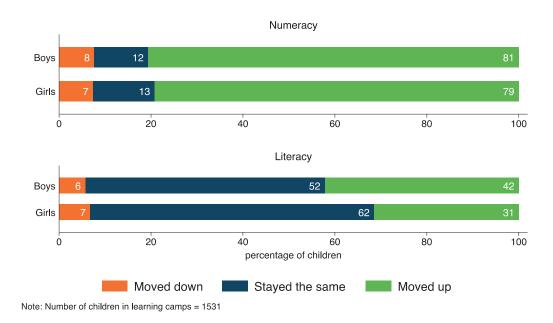


At endline, we find that gender differences are significant at both the beginner and advanced levels in numeracy, and only at advanced level in literacy. At the intermediate levels, there is no evidence of significant gender differences in either subject. In numeracy, girls are more likely than boys to reach the advanced level, with a difference of 5 percentage points in both the learning camp and non-camp groups. In literacy, girls in learning camps are also more likely to be at the advanced level compared to boys; however, the gender gap narrows to 2 percentage points at

endline, compared to 7 percentage points at baseline and among children who did not attend camps.

Additionally, while children who did not attend learning camps did make some progress in numeracy, their improvement was notably less than that of children in camps. In literacy, however, the achievement levels of non-camp children closely resemble those observed at baseline, indicating that there was no significant progress in the absence of learning camps.

Figure 6: Tanzania: Progress in proficiency among children in learning camps, by gender



We also disaggregated progress outcomes by baseline assessment levels. In numeracy, girls consistently demonstrated greater likelihood of improvement compared to boys across various starting levels. Among children who began at number recognition, 96% of girls advanced by at least one level, compared to 92% of boys. This gender gap widened at higher competency levels: among those at the difficult multiplication level at baseline, 72% of girls progressed to difficult division, compared to 66% of boys. However, a small but notable proportion—10–11% of both boys and girls at the difficult multiplication level—regressed by at least one level.

In literacy, similar gender trends were observed at the foundational level. Among children who started at the beginner level, 95% of girls progressed by at least one level, compared to 92% of boys.



At higher levels of the literacy assessment, however, boys and girls were equally likely to show improvement by endline.

3.1.2. Household Wealth

Numeracy Literacy Wealth O2 Wealth Q2 Number recognition Letter recognition Wealth Q3 Wealth Q3 Wealth Q1 Wealth Q1 Addition/Subtraction Word recognition Wealth Q3 Wealth Q4 Wealth Q4 Wealth O2 Multiplication/Division Paragraph reading Wealth Q3 Wealth Q3 Wealth Q4 Wealth Q4 Wealth Q1 Wealth Q2 Word problems Story reading Wealth Q3 Wealth Q3 Wealth Q4 Wealth Q4 100 40 100 40 60 60 80 percentage of children percentage of children

Figure 7: Tanzania: Proficiency levels, by assessment groups and household wealth

Note: Number of children, Baseline = 4105, Endline (camp) = 1531, Endline (no camp) = 1936

Endline (camp)

Baseline

Next, we compared learning outcomes across household wealth quartiles to assess the extent to which learning camps contributed to reducing inequalities in learning based on socio-economic status. Households were categorized into quartiles, from Wealth Q1 (poorest) to Wealth Q4 (richest).

In numeracy, children from wealthier households demonstrated significantly higher proficiency levels than their peers from poorer households—even within the learning camp cohort. By endline, the gap in numeracy outcomes persisted. For instance, 60% of children from the wealthiest quartile reached the advanced level (word problems),

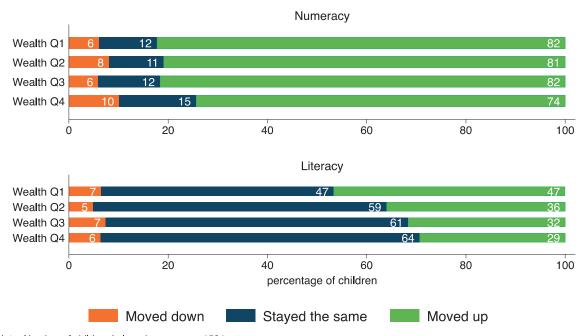
compared to 47% from the poorest quartile, indicating that the learning camps did not fully close the wealth-based learning gap in numeracy.

Endline (no camp)

In literacy, however, the gap narrowed substantially from baseline to endline. Among learning camp participants, 94% of children from the wealthiest households achieved story reading proficiency, compared to 89% from the poorest households—a difference of only 5 percentage points, suggesting a more equitable impact of the camps on literacy outcomes.



Figure 8: Tanzania: Progress in proficiency among childrenin learning camps, by household wealth



Note: Number of children in learning camps = 1531

Next, we examine the progress outcomes of children who participated in learning camps, disaggregated by wealth quartiles. This analysis helps us understand how children advanced across assessment items, further breaking down the proficiency levels defined by the learning index. With the exception of children from the wealthiest households, at least 80% of participants progressed by at least one proficiency level. Among children from the wealthiest households, 74% showed similar progress. Notably, 15% of this group remained at the same level as baseline; however, half of them were already at the most advanced level.

It is important to note that baseline literacy proficiency was generally higher than numeracy, leading to distinct patterns of progress across wealth groups. For instance, 47% of children from the poorest households progressed by at least one level, compared to 29% from the wealthiest households. While the proportion of children who remained at the same level increases with household wealth, over 90% of these children were already performing at the highest level at baseline.

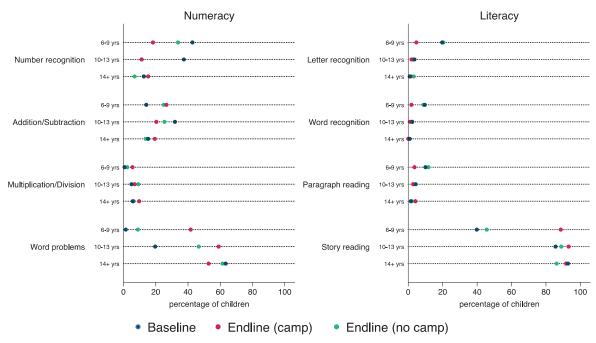


3.1.3. Age

In this section, we examine whether student performance varied across age groups: 6–9 years, 10–13 years, and 14 years and above. The findings provide strong evidence that learning camps helped narrow age-based

differences in proficiency across both literacy and numeracy. By endline, children across all age groups showed substantial gains, suggesting that the camp model was effective in supporting learners regardless of their starting age.

Figure 9: Tanzania: Proficiency levels, by assessment groups and age groups



Note: Number of children, Baseline = 4105, Endline (camp) = 1531, Endline (no camp) = 1936

At baseline, children in the youngest age group (6–9 years) were significantly more likely to be at beginner levels compared to older children. Specifically, 41% of children aged 6–9 were at the beginner level, compared to only 6% of those aged 10–13 years and 3% of children aged 14 and above. At the other end of the spectrum, just 1% of the youngest children were at the word problem level, while 20% of children aged 10–13 and 63% of those aged 14 and above had reached this highest level of numeracy proficiency. Learning camps have

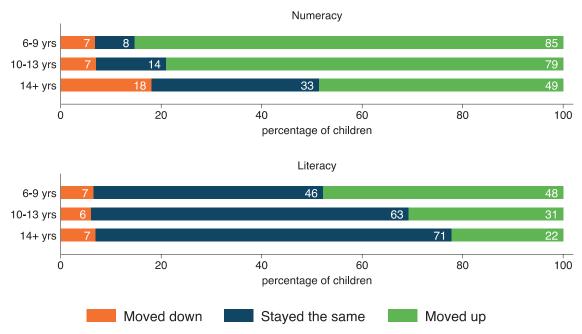
substantially closed these age-related gaps. By endline, 42% of children aged 6–9, 59% of those aged 10–13, and 53% of children aged 14+ achieved the highest level of numeracy proficiency. In literacy, the camps appear to have been even more effective at reducing age-based differences. At endline, 89% of children in the youngest age group reached the highest level of literacy proficiency, compared to 92–93% of children in the older age groups—a gap of just 3 to 4 percentage points. This is a significant improvement from baseline.



where only 40% of the youngest children achieved the highest literacy proficiency,

compared to 86% of children aged 10–13 and 93% of those aged 14 and above.

Figure 10: Tanzania: Proficiency in progress among children in learning camps, by age group



Note: Number of children in learning camps = 1531

Analyzing progress from baseline to endline across age groups in the learning camps, we found that a greater share of children in younger age groups advanced by at least one proficiency level in both literacy and numeracy compared to older children. In numeracy, 85% of children aged 6-9 progressed by at least one level, compared to 79% in the 10-13 age group and 49% in the 14+ age group. The lower progression rates among older children can be explained by their higher baseline proficiency; 14% of children aged 10-13 and 33% of those aged 14 and above remained at the same level. often because they were already performing at advanced levels. A similar pattern was observed in literacy, with younger children showing a higher likelihood of progression than their older peers.

3.1.4. Regressions

To address selection bias in the assignment of children to learning camps, we employed a propensity score matching (PSM) approach. We matched children in the treatment group (learning camp participants) with those in the control group (non-participants) based on observable characteristics: baseline learning level, gender, household wealth, age, and school enrollment status. Using kernel matching, weights were assigned to control group observations based on their similarity in propensity scores to the treatment group, with closer matches receiving higher weights.



Since the outcome variable is ordinal, representing the child's learning level, we used an ordered logistic difference-in-differences model to estimate the impact of learning camps on numeracy and literacy outcomes. In Table 3, columns (1) and (3) show regressions including learning camp participation and baseline learning level, while columns (2) and (4) add covariates such as gender, age, school enrollment, household wealth, and parental education.

Our results indicate that learning camps had a significant positive effect on both numeracy and literacy outcomes, with a somewhat larger effect size for numeracy. Learning camps effectively shifted children from beginner levels to more advanced proficiency. Initially, participation in learning camps increased the probability of achieving the highest numeracy and literacy levels by 29 and 21 percentage points, respectively. After adjusting for child and household characteristics, these effects remained statistically significant, with marginally reduced magnitudes of 21 percentage points for numeracy and 20 percentage points for literacy.

Our analysis reveals that girls outperform boys in numeracy proficiency, although this gender gap does not extend to literacy. Older children (10 years and above) consistently achieve higher proficiency levels than their younger peers (6–9 years) in both subjects. School enrollment emerges as a strong predictor of literacy skills, but surprisingly, it has no significant effect on numeracy outcomes. Household wealth does not appear to influence learning achievements in either literacy or numeracy. Lastly, while parent's education is positively related with learning outcomes, the relationship was found to be statistically insignificant.

Next, we disaggregated proficiency into individual outcome levels for both literacy and numeracy and estimated linear probability models to assess the

effect of learning camp participation while controlling for standard covariates (Table 4a). The results indicate that learning camps positively impact all numeracy proficiency levels, with particularly strong effects on advanced numeracy skills such as multiplication and division. Consistent with expectations, children with higher baseline proficiency are more likely to maintain or improve their performance by endline. Gender differences are minimal overall, though girls tend to perform better at intermediate proficiency levels, with no significant differences observed at the lowest or highest ends of the scale. Older children (ages 10-13 and 14+) show a greater likelihood of reaching higher numeracy levels, especially in complex operations.

Interestingly, school enrollment increases the probability of proficiency at beginner numeracy levels but does not significantly influence higher-order skills. Additionally, we observe a small but statistically significant negative association between household wealth and numeracy outcomes, meaning children from wealthier households are slightly less likely to achieve advanced numeracy proficiency. This counterintuitive finding may reflect that children from wealthier households start at higher proficiency levels, leaving less room for measurable improvement during the intervention period

Table 4b presents the results for literacy proficiency. Like numeracy, learning camps helped children improve across all levels, with stronger effects at higher levels of literacy. For example, the probability of reaching the story reading level increased by 20 percentage points for children in learning camps.

Children with higher baseline literacy levels were more likely to achieve better outcomes at endline, though the connection between starting and ending levels is weaker in literacy than in numeracy. Older children



were more likely to reach higher literacy levels, but the effect of age was smaller in literacy (4–10 percentage points) compared to numeracy (12–19 percentage points). Unlike numeracy, where girls performed better at some levels, there were no major differences between boys and girls in literacy.

Schooling had a consistently positive effect on literacy across all levels. Children enrolled in school were 7 to 11 percentage points more likely to achieve higher literacy proficiency — a stronger pattern than what we observed in numeracy.

Next, we examine how the impact of learning camps differs based on gender, age, and household wealth — and how these factors intersect. We use the same model specifications as in the previous section. For gender, we find that learning camps had a slightly greater impact on numeracy outcomes for girls and on literacy outcomes for boys, but these differences are not statistically significant.

Tables 6a and 6b break down the effects further by individual proficiency levels. These show that learning camps were more effective for boys at the beginner level of literacy. However, across both subjects and other proficiency levels, learning camps appear to have been equally effective for boys and girls.

While older children are generally more likely to achieve higher levels of numeracy and literacy, we find that learning camps had a greater impact on younger children, particularly those aged 6 to 9 years (Table 7). The effects are also stronger in numeracy compared to literacy.

Based on marginal effects, learning camps increased the probability of reaching the highest level of numeracy by 30 percentage points for children aged 6–9 years, 27 percentage points for those aged 10–13 years, and 13 percentage points for children aged 14–16 years.

The impact on beginner-level numeracy was

small and not statistically significant for the youngest group. Among older children, the probability of reaching beginner level increased by only 5 percentage points for ages 10-13, and by 1 percentage point for ages 14-16. However, learning camps had a more noticeable effect on intermediate numeracy skills. For number recognition and addition/subtraction, the likelihood of achieving these increased by 17 to 25 percentage points and 12 to 30 percentage points for older children. In literacy, we observe varying effects by age across most skill levels, with the exception of beginner level among the oldest children, where no significant improvement was seen.

Children from the poorest households tend to show slightly higher levels of proficiency in both numeracy and literacy compared to children from wealthier households, although the differences are small. However, when we look at the interaction effects, we find that learning camps had a stronger impact on children from the wealthiest households than on those from poorer backgrounds. This pattern holds true for both subjects, with particularly stronger effects in literacy.

Looking at the results more closely, learning camps increased the probability of achieving higher numeracy proficiency by around 30 percentage points for children in the top two wealth

quartiles, compared to 23–26 percentage points for children in the bottom two quartiles.

This suggests that although children from all backgrounds benefit, those from relatively better-off families may be able to make greater gains and reach the highest levels of proficiency more easily.

In numeracy, these differences are mainly driven by improvements in multiplication and division skills, where the likelihood of achieving these levels increases by 9–12 percentage points for children in the wealthiest groups (Table 9a). In literacy, the strongest effects are seen at the story reading level, which is the highest level of



proficiency (Table 9b).

Next, we explore how gender and wealth intersect to shape the impact of learning camps. Overall, we do not find strong or consistent evidence that learning camps had a significantly different effect on proficiency levels based on both gender and wealth combined. However, there are some notable patterns. In numeracy, boys in the third wealthiest quartile show slightly greater gains than girls. In literacy, boys from relatively wealthier households are more likely to benefit at the lower levels of proficiency—such as letter and word recognition—but these advantages fade at higher levels like story reading.

These findings are consistent with the earlier patterns seen in our gender- and wealth-specific regressions. Finally, we look at how gender and age interact. Unlike the analysis based only on gender, we now find that learning camps had a significantly stronger impact for boys compared to girls, particularly in literacy. While the effects by age are generally aligned with our previous results, the intersectional analysis reveals that older girls benefit less from learning camps in literacy compared to boys in the same age group.

3.2. Nepal

KEY HIGHLIGHTS:

- Camp participants improved from 60% to 74% in numeracy and 48% to 66% in literacy, surpassing non-participants.
- Sharp drop in low proficiency: share
 of children at beginner level in numeracy
 dropped from 34% to 8%, and in literacy
 from 24% to 1%.
- Strong gains in foundational skills: number and digit recognition in numeracy, and letter/word recognition in literacy reached near-universal levels among camp children.

- Mixed impact on higher-order skills: limited differences in advanced numeracy (multiplication/division), but strong gains in story reading proficiency (up to 45%).
- About 73% of camp children progressed by at least one level in both subjects, with highest progress among those starting at lowest levels.
- Minimal gender differences in literacy; girls slightly outperformed boys in basic numeracy, while boys performed better in advanced numeracy.
- Poorest children made the largest learning gains (84–86% progressed) with minimal regression.
- Wealthier children showed better outcomes in advanced skills but were more likely to stagnate or regress.
- Younger children (6–9 years) showed highest learning gains (79–81%), compared to 52–54% for those aged 14 and above.

In Nepal, children were selected for learning camps based on their baseline assessment performance and household socio-economic status, with efforts made to maintain balance across gender, age, and other demographic factors. Table X presents the socio-demographic profile of children who participated in the learning camps compared to those who did not. Out of 3,057 children assessed at baseline, 612 participated in learning camps.

Gender distribution is nearly identical across groups, with girls making up 50 percent of learning camp participants and 51 percent of non-participants. However, there are more pronounced differences in age distribution. Among learning camp participants, 58 percent are aged 6–9 years, 35 percent are aged 10–13, and only 8 percent are 14 years or older. In contrast, the non-camp group includes a smaller share of younger children (40 percent aged 6–9), and a much higher



proportion of older children (27 percent aged 14+).

In terms of household wealth, children in learning camps generally come from relatively poorer households than those who did not participate. School enrollment at baseline was slightly higher among learning camp participants, with 88 percent enrolled compared to 83 percent of non-participants.

Parental education patterns show a mixed picture. While a smaller proportion of parents in the learning camp group had completed primary education, a larger

share had completed secondary education compared to parents of children in the non-camp group.

Overall, numeracy scores improved from 60% correct answers at baseline to 74% at endline among children attending learning camps, compared to 67% for those who did not participate. This reflects a clear positive impact of the learning camps. In literacy, the improvement was even more pronounced, with correct responses rising from 48% at baseline to 66% for camp participants, while non-participants showed a smaller increase to 62%.

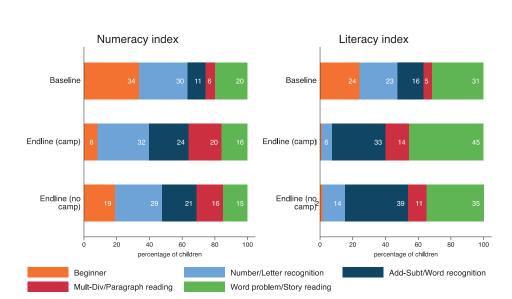


Figure 11: Nepal: Proficiency levels, by assessment groups



Figure 11 compares children's performance across assessment groups using a learning index scale for both subjects. In numeracy, the share of children at the beginner level dropped from 34% at baseline to 8% at endline among those in learning camps. At baseline, only 11% and 6% of children reached the addition/subtraction and multiplication/division levels, respectively. By endline, these proportions increased to 24% for addition/subtraction and 20% for multiplication/division in the learning camps. The difference between camp and non-camp children is most pronounced at the beginner level-8% in camps versus 19% who aren't. However, at higher proficiency levels, differences are small (1 to 3 percentage points), indicating limited camp effects on advanced skills.

In literacy, the progress observed is notably more pronounced across all assessment groups. The proportion of children at the beginner level declined sharply, from 24% at baseline to just 1% at endline in both

groups. Similarly, the share of children at the letter recognition level decreased from 23% at baseline to 6% among learning camp participants, compared to 14% for those who did not attend. The most significant improvement is observed in the increase of children reaching the story reading level, which rose from 31% at baseline to 45% for children in learning camps, while those outside the camps reached 35% at endline.

Next, we compare proficiency across different numeracy skill levels. Children in learning camps demonstrated impressive gains, with 96% achieving number sense, 99% single-digit recognition, and 92% double-digit recognition. Compared to baseline, these represent increases of 17, 15, and 26 percentage points respectively. While children outside the learning camps also showed significant improvement from baseline, their proficiency rates lagged behind those of learning camp participants by 10 to 13 percentage points.

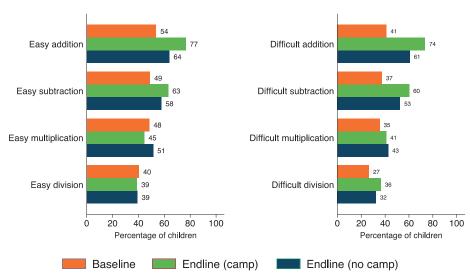


Figure 12: Nepal: Proficiency in operations, by assessment groups



operations become more complex. At baseline, 54% of children could perform easy addition and 41% difficult addition. By endline, these rates rose to 77% for learning camp participants and 64% for non-participants. For easy subtraction, proficiency increased from 49% at baseline to 63% in learning camps and 58% outside them—a narrower 5 percentage point gap. Interestingly, for easy multiplication and division, we do not see a positive difference favoring learning camp children. In easy multiplication, proficiency is actually lower in learning camps (45%) than among those who did not attend (51%), while in easy division, proficiency rates are similar across both groups.

In difficult operations, the patterns largely mirror those seen in easy operations. For difficult addition, the difference between assessment groups remains about 13 percentage points, similar to easy addition, but the overall gains from baseline (41%) are notably larger. Consistent with easy multiplication, proficiency in difficult multiplication is slightly lower among children in learning camps (41%) than those not in camps (43%). However, unlike easy division, children in learning camps show higher proficiency in difficult division (36%) compared to their non-camp peers (32%). Overall, these results suggest that learning camps effectively boost proficiency in addition and division, while their impact on multiplication skills is less consistent.

76 Can read letters 99 98 53 93 Can read words 85 37 Can read a paragraph 60 Can read a story 45 35 20 60 80 100 0 40 percentage of children Baseline Endline (no camp) Endline (camp)

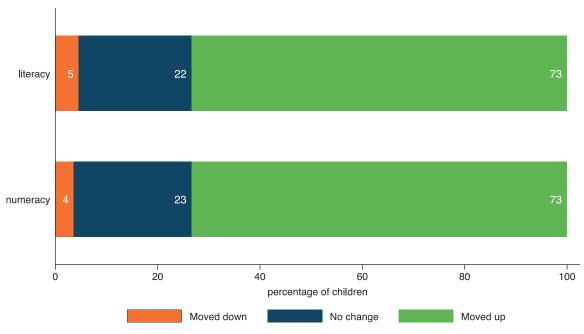
Figure 13: Nepal: Proficiency in literacy levels, by assessment groups



and 98% for those not attending, a minimal gap of 1 percentage point. However, as the assessment advances, the gaps become more pronounced: word recognition (8 p.p.), paragraph reading (14 p.p.), and story reading (10 p.p.). While learning camps help close the gap in letter and word recognition, larger differences remain in paragraph and story reading proficiency. At endline, 99% and 93% of children in learning

camps achieved letter and word recognition respectively—reflecting a 6 p.p. gap—but only 60% and 45% could read paragraphs and stories, with a wider 15 p.p. difference between groups. These results suggest that while learning camps effectively boost foundational literacy skills, greater support is needed to close gaps in higher-level reading comprehension.

Figure 14: Nepal: Progress in proficiency levels among children in learning camps



Note: Number of children in learning camps = 612

Next, we examine the progress of children in learning camps between baseline and endline, categorizing their movement as progressing at least one level up, remaining at the same level, or moving down at least one level. Interestingly, the patterns of progress are similar for literacy and numeracy. About 73% of children advanced by at least one level, 22–23% stayed at the same level, and 4–5% regressed by one or more levels. Among those who remained at the same level, a majority were already

at the highest proficiency levels—70% in numeracy and 48% in literacy. Progress also varied based on baseline proficiency: 93% of children starting at beginner levels progressed in both subjects; 90% of children at the number recognition level in numeracy moved forward; and 82% of children at letter or word recognition levels in literacy advanced. At the top end, most children maintained their advanced status, with 70% holding steady in numeracy and 80% in literacy by endline.



3.2.1 Gender

At baseline, there were no significant gender differences in either subject. By endline, some gender differences emerged in numeracy, specifically in operations, while literacy showed no such differences. In addition and subtraction, girls in learning camps outperformed boys, with 27% of girls

reaching that level compared to 21% of boys. However, at higher levels like multiplication and division, the pattern reversed: 23% of boys versus 18% of girls achieved this level. At the most advanced numeracy level, boys (17%) were slightly ahead of girls (15%), though the difference observed was small (2 percentage points). In literacy, boys and girls showed equal proficiency across all levels.

Figure 15: Nepal: Proficiency levels, by gender and assessment groups

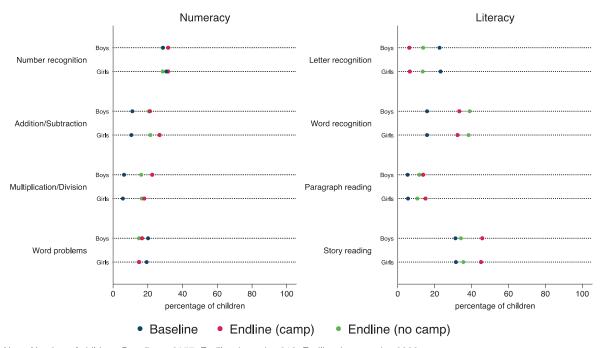
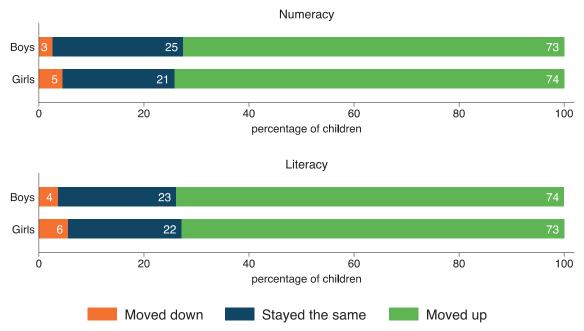




Figure 16: Nepal: Progress in proficiency levels, by gender and assessment groups



Note: Number of children in learning camps = 612

Focusing on children in learning camps, the progress indicator shows minimal gender differences in numeracy and none in literacy. The proportion of children who advanced by at least one level is nearly identical for boys and girls (73-74%) in both subjects, indicating equal likelihood of progress. In

numeracy, 25% of boys versus 21% of girls remained at the same level, while 5% of girls compared to 3% of boys regressed by at least one level. Notably, among those who stayed at the same level, boys were more often at higher baseline levels than girls.



3.2.2. Household Wealth

Numeracy Literacy Wealth Q1 Wealth Q1 Wealth O2 Wealth O2 Number recognition Letter recognition Wealth Q3 Wealth Q3 Wealth Q1 Wealth Q1 Wealth Q2 Wealth Q2 Addition/Subtraction Word recognition Wealth Q4 Wealth Q4 Wealth Q1 Wealth Q1 Wealth Q2 Wealth Q2 Multiplication/Division Paragraph reading Wealth Q4 Word problems Story reading Wealth Q3 Wealth Q4 Wealth Q4 40 60 100 60 100 80 80 percentage of children percentage of children

Figure 17: Nepal: Proficiency levels, by household wealth and assessment groups

Note: Number of children, Baseline = 3057, Endline (camp) = 612, Endline (no camp) = 2222

• Endline (camp)

Baseline

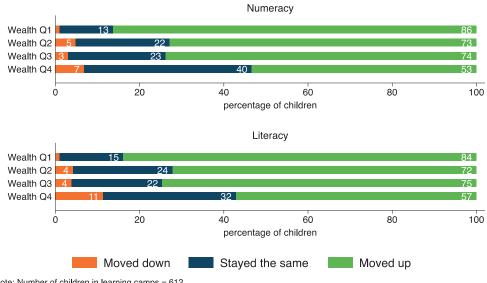
While children across all wealth quartiles benefit from learning camps, those from wealthier households (Q3 and Q4) show greater gains—particularly in higher-order skills. In numeracy, endline differences at the addition/subtraction and multiplication/division levels are more pronounced among wealthier children. For example, only 1% of children from the poorest households (Q1) achieved

multiplication/division proficiency at baseline, rising to 9% at endline—compared to an increase from 14% to 35% among the wealthiest (Q4). In literacy, a similar pattern is observed: 56–58% of children in Q3 and Q4 reached story reading level at endline, compared to 44% in Q2 and just 30% in Q1—highlighting persistent equity gaps despite overall progress.

• Endline (no camp)



Figure 18: Nepal: Progress in proficiency among children in learning camps, by household wealth



Note: Number of children in learning camps = 612

Next, we look at how children across wealth quartiles progressed along the assessment within the learning camps. Strikingly, children from the poorest households (Wealth Quartile 1) showed the greatest gains, with 84–86% progressing by at least one level. This compares to 72-73% in Quartile 2, 74–75% in Quartile 3, and just 53-57% in the wealthiest quartile (Quartile 4). Among children in the wealthiest quartile, a significant proportion remained at the same level as at baseline-40% in numeracy and 32% in literacy. However, the majority of these children had already reached the most advanced level at the outset: 89% in numeracy and 74% in literacy. Interestingly, some children regressed in their learning levels, and this was more common among the wealthier groups. Between 3–7% of children in the wealthiest quartile moved down by at least one level in numeracy, and 4–11% in literacy. In contrast, less than 1%

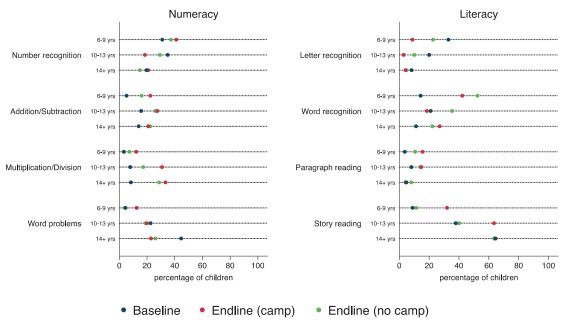
of children from the poorest households experienced such a decline. This pattern suggests that learning camps were particularly effective in supporting learning gains among the most disadvantaged children.

3.2.3. Age

Next, we compare achievement levels across age groups: 6-9 years, 10-13 years, and 14 years and above. The learning camps had a disproportionately higher share of younger children (6-9 years) and fewer older children (14+ years). While older children were more likely to already be at higher proficiency levels at baseline, younger children demonstrated more dynamic learning trajectories. This sets the stage for a closer look at learning progress within the camps by age.

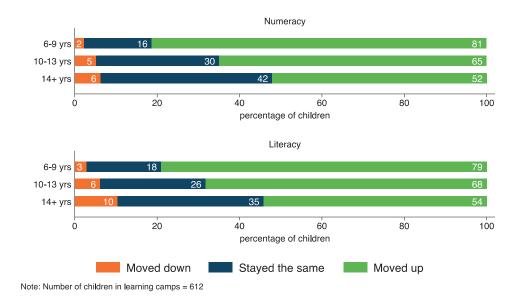


Figure 19: Nepal: Proficiency levels, by age and assessment groups



Note: Number of children, Baseline = 3057, Endline (camp) = 612, Endline (no camp) = 2222

Figure 20: Nepal: Progress in proficiency, by age and assessment groups



In both numeracy and literacy, younger children were more likely to show progress. Among children aged 6–9 years, 79–81% advanced by at least one level, compared to 65–68% of children aged 10–13 years, and only 52–54% of those aged 14 years and

above. Older children were more likely to remain at the same level as baseline—42% in numeracy and 35% in literacy. However, a substantial share of these older children had already reached the most advanced levels before the camps: 75%



in numeracy and 65% in literacy. This contrasts with younger children who remained at the same level but were more widely distributed across the assessment spectrum. Among the 6–9-year-olds who did not progress, 16% in numeracy and 18% in literacy remained at their baseline level. Within this group, in numeracy, 27% were still at number recognition while 53% were already at the most advanced level (difficult division); in literacy, 33% were at word recognition and 38% had already reached the comprehension level.

3.2.4. Regressions

To address potential selection bias in the assignment of children to learning camps, we employ a Propensity Score Matching (PSM) approach. Children in the treatment (learning camp) and control (non-camp) groups are matched based on observable characteristics, including baseline learning level, gender, household wealth, age, and current school enrollment status. Using kernel matching, we assign weights to control group observations based on the similarity of their propensity scores to those in the treatment group, with higher weights given to better matches. Given that our primary outcome variable—children's learning level—is an ordinal categorical variable, we estimate an ordered logistic difference-in-differences (DiD) model to assess the impact of learning camps on numeracy and literacy outcomes. In addition, we use linear probability models to analyze the effect of the camps on the likelihood of children reaching specific proficiency levels.

Table 16 presents regression estimates of the impact of learning camps on children's learning outcomes, using a binary indicator for camp participation as the key independent variable. In columns (1) and (3), we control only for baseline proficiency level, while in columns (2) and (4), we include additional covariates: gender, age, current school enrollment, household wealth, and parental education. The results indicate a positive and significant impact of learning camps on both numeracy and literacy

outcomes, with larger effects observed for literacy. To facilitate interpretation, we compute marginal effects. Participation in the camps increased the probability of achieving the highest level of numeracy by 9 percentage points, and the highest level of literacy by 20 percentage points—more than double the effect. When additional covariates are included, these effects remain robust, at 9 percentage points for numeracy and 14 percentage points for literacy. As expected, baseline proficiency is a strong predictor of endline outcomes, with a stronger association observed for numeracy compared to literacy.

Table 18 shows no significant gender differences in numeracy. In literacy, however, boys are marginally more likely than girls to attain the highest proficiency level, with a 2-percentage-point (p.p.) increase in the probability of doing so. Age effects are more pronounced. Relative to children aged 6-9 years, being 10-13 years old raises the likelihood of reaching the advanced level by 4 p.p. in numeracy and 8 p.p. in literacy; for those 14 years and older, the corresponding increases are 5 p.p. and 7 p.p., respectively. School enrollment status is not significantly associated with end-line learning outcomes in either subject. Household wealth matters only for literacy, where children in the second wealth quartile have a statistically significant advantage over those in the poorest quartile. Parental education shows a mixed pattern: children whose parents completed up to primary school are more likely to reach higher literacy proficiency than peers whose parents have no schooling.

Next, we disaggregate proficiency into individual outcome levels for both subjects and estimate linear probability models, controlling for the same set of covariates. In numeracy, learning camps increase the probability of achieving each proficiency level by 14–20 percentage points, except for the most advanced level, where the effect is smaller (4 p.p.). In contrast, the impact of learning camps on literacy is more pronounced at advanced levels: the probability of achieving paragraph and story reading increases by 25–26 p.p., compared to smaller gains at beginner



xlevels (1 p.p. for letter recognition and 12 p.p. for word recognition). This breakdown also highlights patterns observed in the earlier models. Gender remains unrelated to learning outcomes. In numeracy, older children are significantly more likely to achieve proficiency in number recognition and addition/subtraction. In literacy, older children are more likely to attain all proficiency levels except for letter recognition, where age does not appear to play a significant role.

In this section, we examine the heterogeneous impact of learning camps on outcomes by gender, age, and household wealth, while also exploring potential intersectionality across these factors. We apply the same model specifications as in the previous analysis. Across both numeracy and literacy, we find no evidence of differential effects by gender—suggesting that learning camps benefit boys and girls equally. Disaggregating the analysis by proficiency levels further confirms this pattern, with no significant gender-based differences in the likelihood of achieving any specific learning level.

We find significant evidence of heterogeneous impacts of learning camps by age, with notable differences between numeracy and literacy outcomes. In numeracy, learning camps were most effective for children in the youngest age group (6-9 years), while in literacy, the strongest impact was observed among children in the middle age group (10–13 years). Although older children (10 years and above) were more likely to achieve higher levels of numeracy proficiency overall, the marginal impact of the learning camps was greatest for the youngest group. This differential effect is statistically significant when comparing children aged 6-9 years with those aged 10-13 years, but not when compared with the oldest group (14+ years). Marginal effects show that for children aged 6-9 years, learning camps increased the likelihood of achieving the highest level of numeracy proficiency by 9 percentage points and the multiplication/division level

by 7 percentage points. In literacy, children aged 10–13 years were not only more likely to attain higher proficiency levels, but also benefited the most from participation in learning camps. The marginal effect of camp participation on achieving the highest literacy proficiency was 31 percentage points for this group, compared to 15 percentage points for children aged 6–9 years and 22 percentage points for those aged 14 years and older.

In Table 20, we disaggregate the heterogeneous impact of learning camps across different proficiency levels by age group. Older children are significantly more likely to achieve basic numeracy skills such as number recognition and addition/subtraction; however, these advantages diminish at higher proficiency levels. In contrast, learning camps had the strongest impact on number recognition among the youngest children (6-9 years), increasing the probability of proficiency by 19 percentage points. This differential effect, however, does not persist for more advanced numeracy skills. The impact of camps on younger children declines as proficiency level increases, and for multiplication and division, the highest effect is observed among children aged 10-13 years (11 p.p.). In literacy, learning camps show limited impact on foundational skills (letter and word recognition) across all age groups. The effects are more pronounced at advanced levels—paragraph and story reading—with the most substantial gains observed among children in the 10-13 year age group. This suggests that learning camps are particularly effective in enabling middle-aged children to achieve higher-order literacy skills, compared to both younger and older children.

Next, we examine whether the impact of learning camps varies by household wealth quartile. In numeracy, we find that learning camps were significantly more effective for children from the poorest households compared to their wealthier peers, particularly when contrasted with children from the wealthiest quartile



(Table 22). In literacy, although the interaction coefficients for children from wealthier households are positive and sizable-suggesting greater benefit-these effects are statistically insignificant. Table 23 (a & b) presents the disaggregated results by proficiency level. In numeracy, the wealth-based differences are primarily driven by gains in number recognition, with children from poorer households showing the largest improvements. In literacy. children from wealthier households (Q3 and Q4) appear to benefit more, especially in achieving the highest proficiency level. However, these positive effects are limited in scope and only statistically significant for advanced literacy outcomes.

In exploring intersectionality, we first examine the interaction between gender and household wealth, followed by gender and age. Table 24 presents the findings on the heterogeneous impact of learning camps by gender and wealth quartiles. Overall, we do not find statistically significant differences in the impact of learning camps across gender

and wealth subgroups. However, when outcomes are disaggregated by proficiency levels, we observe that boys from the poorest households benefit more than girls from similarly disadvantaged backgrounds in reaching intermediate proficiency levels—specifically, addition/subtraction in numeracy and word recognition in literacy. Table X explores intersectionality by gender and age groups. While the interaction coefficients are consistently positive-suggesting that girls in older age groups may benefit more than their peers—these effects are not statistically significant at the aggregate level. However, proficiency-level regressions reveal more nuanced patterns. Learning camps appear to be particularly beneficial for girls aged 10−13 years in both beginner numeracy and advanced literacy. Specifically, the probability of achieving number recognition increases by 8 percentage points, and paragraph reading by 18 percentage points, for girls in the 10–13 age group compared to boys in the youngest age group.





The My Village learning camps led to substantial improvements in foundational literacy and numeracy skills in both Tanzania and Nepal. These findings are drawn from a combination of descriptive and econometric analyses, using a multidimensional measurement framework that includes: (i) a five-point learning index; (ii) the distribution of children across proficiency levels; and (iii) a progress metric capturing movement along assessment tasks from baseline to endline.

These results reinforce existing evidence on the effectiveness of short-term, focused interventions in improving foundational skills, particularly the Teaching at the Right Level (TaRL) model (Banerjee et al., 2007; 2016). Our findings further suggest that learning camps are especially effective for children at the lowest learning levels and have the potential to unlock progress toward more advanced skills when sustained with adequate support.

Patterns of Improvement Across Skills and Proficiency Levels

In Tanzania, learning gains were significant in both subjects, with a slightly larger impact on literacy. Notably, children who started at the beginner level showed considerable progress—over 90% improved by at least one level between baseline and endline. This underscores the effectiveness of targeted instruction for those most in need. Moreover, the differences between children with and without learning camp exposure were more prominent at higher proficiency levels, suggesting that camps also foster learning continuity and progression toward advanced competencies.

In Nepal, camps were also effective across both subjects, again with greater improvement in literacy. However, the pattern differed slightly: numeracy differences were more prominent at beginner levels, while literacy showed impact across the proficiency spectrum. This variation may be tied to local pedagogical practices, baseline learning levels, or implementation dynamics that shaped subject-specific trajectories.

Regression Findings and Key Impact Drivers

The regression analysis confirms the strong average treatment effects of the learning camps, controlling for child-, household-, and community-level covariates. These effects remain robust across multiple model specifications, reinforcing the causal interpretation of observed gains. Notably, the regression findings highlight those improvements in higher-order skills—such as subtraction, sentence reading, and paragraph comprehension—were statistically significant. These are critical for deepening children's learning and enabling their progression in school and beyond.

Gender Dynamics in Learning Outcomes

Gender disparities at baseline were visible in both contexts, albeit with different patterns. In Tanzania, girls outperformed boys in literacy, while differences in numeracy were marginal. By endline, the gender gap in literacy had narrowed significantly, indicating that the learning camps helped equalize opportunities. However, boys appeared to benefit more in achieving initial literacy milestones, which may point to differentiated learning needs.



In Nepal, baseline differences were less stark. Boys were marginally ahead in literacy, while no significant gender gap was observed in numeracy. Importantly, regression analysis did not show significant heterogeneous treatment effects by gender, suggesting that the learning camps were broadly equitable. The descriptive evidence, however, hints at some subtle differences, particularly in how boys and girls distribute across intermediate learning levels, warranting further investigation.

The Role of Socioeconomic Status

Socioeconomic status—proxied through household wealth—played a defining role in shaping children's baseline learning and the effectiveness of the intervention. In both countries, wealthier children were more likely to start at higher proficiency levels. In Tanzania, these children also gained more from the intervention, particularly at advanced skill levels. In Nepal, however, the pattern diverged: poorer children made greater progress in numeracy (notably in number recognition), while wealthier children showed marginal advantages in achieving higher literacy levels.

These findings reflect both the equity-enhancing potential and limits of short-term interventions. As highlighted in prior research (UNICEF, 2022; World Bank, 2021), structural inequalities—especially those tied to household resources—can mediate educational outcomes. Interventions like My Village can offset these imbalances, but sustained support may be required to close the gap entirely.

Intersecting Disadvantages: Gender and Wealth

We also explored intersectional dynamics between gender and wealth. While overall differences were small, a few patterns emerged: in Tanzania, girls from wealthier households were more likely to make progress in both beginner literacy and advanced numeracy. In Nepal, boys from

wealthier households benefited more at beginner levels in both subjects. Although these effects were modest, they point to the importance of considering multiple layers of disadvantage in the design and targeting of interventions.

Age-Based Differences in Impact

Despite the level-based approach of the camps, age played a significant role in shaping learning gains. In Tanzania, older children (ages 10–13) made more progress, especially at intermediate and advanced levels, potentially due to better cognitive maturity or greater school exposure. Conversely, in Nepal, younger children (ages 6–9) improved more in numeracy, while older children performed better in literacy. These patterns suggest age-specific learning pathways that merit deeper exploration, particularly in contexts where multigrade or overage enrollment is common.

Estimating Cycles Needed for Universal Proficiency

Finally, we address a key forward-looking question: how many learning camp cycles would be required for all children to reach minimum proficiency, assuming full participation? Based on the observed average gain of 1.3–1.6 index levels per cycle (with some variation by country and subject), and given the current distribution of baseline learning levels, we estimate that between two to three cycles of learning camps would be sufficient for the majority of children to achieve at least basic proficiency in both literacy and numeracy. For children at the very bottom of the distribution, or for achieving advanced competencies, additional cycles may be necessary. These projections highlight the scalability of the intervention and its potential to close learning gaps with sustained, level-targeted programming.





CONCLUSION AND WAY FORWARD

The findings from the My Village learning camps reaffirm the transformative potential of level-targeted instruction in improving foundational literacy and numeracy. Their impact is strongest when tailored to children's learning levels, irrespective of age or background. While some inequalities persist, the camps represent a powerful model for bridging gaps in low-resource settings. The findings also highlight the multifaceted influences of socio-economic factors-such as gender, household wealth. and age-on children's learning trajectories. While the gains from the intervention are evident, the patterns of impact underscore the importance of tailoring pedagogical approaches to meet the needs of diverse learners.

Moving forward, several avenues for deeper investigation and program refinement emerge. Future research will build on the current analysis by exploring the socio-economic determinants of learning outcomes more rigorously. In particular, we aim to disaggregate the effects of parental education, home learning environments, language spoken at home etc. These dimensions are likely to play a significant role in shaping both baseline competencies and post-intervention gains, and understanding them can inform more equitable and responsive program designs.

We also plan to incorporate insights from midline assessments conducted during the intervention. Although these tools differ from the formal baseline and endline instruments, they offer valuable data on children's learning trajectories over shorter periods. Analyzing these assessments can help us understand the pace and continuity of learning progress, and whether certain

children respond differently to regrouping strategies based on their performance levels.

In addition, we intend to analyze the intersection between literacy and numeracy outcomes. A more systematic exploration of whether children who perform well in one subject tend to do so in the other could illuminate cognitive and instructional linkages, as well as inform strategies for integrated learning. Exploring this relationship may also reveal whether skills in one domain act as a scaffold for the other—particularly relevant in early grades.

Our forthcoming research will also draw from qualitative data collected through endline surveys and interviews with parents, teachers, and children. These narratives can enrich our understanding of how learning camps are experienced, what motivates learners, and which aspects of the model are most or least effective in different contexts. This mixed-methods approach will help us complement quantitative findings with voices from the field, ensuring that our insights remain grounded in lived realities.



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Appendix

Table 2: Tanzania: Socio-demographic characteristics, by learning camp

		(1)		(2)	
		Learning Cam	р	Learning Camp	
	(Yes)			(No)	
Variable	N	Mean/SE	N	Mean/SE	
Gender, female	1531	0.531	1936	0.541	
		[0.013]		[0.011]	
Age, 6-9 years	1531	0.361	1936	0.544	
		[0.012]		[0.011]	
Age, 10-13 years	1531	0.592	1936	0.358	
		[0.013]		[0.011]	
Age, 14+ years	1531	0.047	1936	0.098	
		[0.005]		[0.007]	
Household wealth index	1531	0.011	1936	0.071	
		[0.027]		[0.023]	
Parent's education level, no schooling	1531	0.033	1936	0.028	
		[0.005]		[0.004]	
Parent's education level, primary	1531	0.813	1936	0.809	
		[0.010]		[0.009]	
Parent's education level, secondary	1531	0.154	1936	0.163	
		[0.009]		[800.0]	

Note: ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.



Table 3: Tanzania: Impact of learning camps on numeracy and literacy proficiency

	(1)	(2)	(3)	(4)
	Numeracy	Numeracy	Literacy	Literacy
Learning camp, yes	1.68***	1.61***	2.23***	2.11***
	(0.23)	(0.21)	(0.31)	(0.29)
Baseline, Number recognition	1.63***	1.48***		
	(0.25)	(0.24)		
Baseline, Addition/Subtraction	2.29***	1.94***		
	(0.30)	(0.27)		
Baseline, Multiplication/Division	2.59***	2.07***		
	(0.41)	(0.38)		
Baseline, Word problems	2.78***	2.22***		
	(0.61)	(0.57)		
Baseline, Letter recognition			0.55**	0.46
			(0.27)	(0.30)
Baseline, Word recognition			1.77***	1.68***
			(0.48)	(0.46)
Baseline, Paragraph reading			1.59***	1.50***
			(0.41)	(0.44)
Baseline Story reading			2.74***	2.38***
			(0.42)	(0.42)
Gender, girl		0.20**		0.16
		(80.0)		(0.15)
Age group, 10-13 yrs		0.89***		0.75***
		(0.14)		(0.18)
Age group, 14+ yrs		0.88***		0.77*
		(0.26)		(0.44)
Enrolled in school, yes		0.41		0.61**
		(0.29)		(0.30)
Household wealth, Q2		-0.22*		-0.21
		(0.11)		(0.18)
Household wealth, Q3		-0.19		-0.20
		(0.13)		(0.14)
Household wealth, Q4		-0.23		-0.29
		(0.17)		(0.19)
Parents' education, primary		0.12		0.35
		(0.23)		(0.27)
Parents' education, secondary		0.15		0.32
		(0.28)		(0.31)
Observations	3,466	3,466	3,466	3,466
Pseudo R-squared	0.166	0.182	0.229	0.241

Note: This table presents results from an ordered logistic regression using propensity score matching with a kernel matching algorithm to test the impact of learning camps on children's learning outcomes in numeracy and literacy. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects. Kernel weights are applied to all regressions to account for the matching algorithm.



Table 4a: Tanzania: Impact of learning camps on numeracy proficiency

	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/	Multiplication/	Word
	recognition	Subtraction	Division	problems
Learning camp, yes	0.12***	0.23***	0.26***	0.31***
	(0.04)	(0.05)	(0.04)	(0.04)
Baseline, Number recognition	0.22***	0.27***	0.14***	0.14***
	(0.06)	(0.04)	(0.04)	(0.04)
Baseline, Addition/Subtraction	0.24***	0.32***	0.26***	0.22***
	(0.05)	(0.05)	(0.05)	(0.04)
Baseline, Multiplication/Division	0.23***	0.30***	0.24***	0.26***
	(0.06)	(0.07)	(0.07)	(0.07)
Baseline, Word problems	0.21***	0.38***	0.28***	0.29***
	(0.06)	(0.06)	(0.07)	(0.07)
Gender, girl	0.01	0.03**	0.04*	0.02
	(0.01)	(0.01)	(0.02)	(0.02)
Age group, 10-13 yrs	0.04**	0.12***	0.19***	0.18***
	(0.01)	(0.03)	(0.03)	(0.03)
Age group, 14+ yrs	0.04**	0.11***	0.21***	0.18***
	(0.02)	(0.04)	(0.05)	(0.05)
Enrolled in school, yes	0.08**	0.09*	0.02	0.07
	(0.04)	(0.04)	(0.05)	(0.06)
Household wealth, Q2	-0.03**	-0.02	-0.04	-0.01
	(0.01)	(0.03)	(0.03)	(0.03)
Household wealth, Q3	-0.02*	-0.04*	-0.02	-0.00
	(0.01)	(0.03)	(0.03)	(0.02)
Household wealth, Q4	-0.03	-0.03	-0.07**	0.02
	(0.02)	(0.03)	(0.03)	(0.03)
Parents' education, primary	0.00	0.00	0.04	-0.06
	(0.03)	(0.04)	(0.06)	(0.05)
Parents' education, secondary	0.02	-0.01	0.08	-0.05
	(0.04)	(0.04)	(0.07)	(0.05)
Constant	0.56***	0.21**	0.00	0.07
	(0.09)	(0.09)	(0.09)	(0.09)
Observations	3,466	3,466	3,466	3,466
R-squared	0.25	0.33	0.30	0.29

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the impact of learning camps on numeracy proficiency levels. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 4b: Tanzania: Impact of learning camps on literacy proficiency

	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story
	recognition	recognition	reading	reading
Learning camp, yes	0.07**	0.12***	0.16***	0.20***
	(0.03)	(0.04)	(0.04)	(0.04)
Baseline, Word problems	0.07***	0.10*	0.14**	0.07
	(0.02)	(0.06)	(0.07)	(0.06)
Baseline, Letter recognition	0.08*	0.27***	0.32***	0.30***
	(0.04)	(0.07)	(80.0)	(0.07)
Baseline, Word recognition	0.07**	0.24***	0.31***	0.26***
	(0.03)	(0.06)	(0.07)	(0.06)
Baseline, Paragraph reading	0.12***	0.31***	0.37***	0.37***
	(0.03)	(0.06)	(0.07)	(0.07)
Gender, girl	0.01	0.01	0.01	0.02
	(0.01)	(0.01)	(0.01)	(0.01)
Age group, 10-13 yrs	0.01	0.04***	0.06***	0.10***
	(0.01)	(0.01)	(0.02)	(0.02)
Age group, 14+ yrs	-0.02	0.03	0.07***	0.11***
	(0.02)	(0.02)	(0.02)	(0.04)
Enrolled in school, yes	0.09*	0.08*	0.08**	0.11*
	(0.05)	(0.04)	(0.04)	(0.05)
Household wealth, Q2	0.01	-0.01	-0.03*	-0.02
	(0.01)	(0.02)	(0.02)	(0.02)
Household wealth, Q3	0.00	-0.02	-0.03**	-0.01
	(0.01)	(0.01)	(0.01)	(0.02)
Household wealth, Q4	0.00	-0.01	-0.02	-0.02
	(0.01)	(0.01)	(0.02)	(0.02)
Parents' education, primary	-0.01	-0.01	0.01	0.06
	(0.02)	(0.02)	(0.03)	(0.03)
Parents' education, secondary	-0.01	-0.01	0.01	0.05
	(0.02)	(0.03)	(0.04)	(0.04)
Constant	0.74***	0.51***	0.38***	0.21**
	(0.06)	(0.07)	(0.06)	(80.0)
Observations	3,466	3,466	3,466	3,466
R-squared	0.21	0.27	0.29	0.33

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the impact of learning camps on literacy proficiency levels. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 5: Tanzania: Impact of learning camps on numeracy and literacy, by gender

	(1)	(2)
VARIABLES	Numeracy	Literacy
Learning camp, yes	1.55***	2.16***
	(0.23)	(0.29)
Gender, girl	0.14	0.19
	(0.11)	(0.16)
Learning camp#Gender	0.11	-0.10
	(0.14)	(0.32)
Observations	3,466	3,466
Pseudo R-squared	0.183	0.241

Note: This table presents results from an ordinary logistic regression using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps by gender on numeracy and literacy. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.

Table 6a: Tanzania: Impact of learning camps on numeracy proficiency, by gender

·	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/Sub	Multiplicatio	Word
	recognition	traction	n/Division	problem
Learning camp, yes	0.13***	0.23***	0.25***	0.31***
	(0.04)	(0.05)	(0.04)	(0.05)
Gender, girls	0.02	0.03	0.03	0.01
	(0.01)	(0.02)	(0.03)	(0.03)
Learning camp#Gender	-0.00	0.01	0.02	0.01
	(0.01)	(0.03)	(0.03)	(0.04)
Constant	0.56***	0.21**	0.01	0.07
	(0.09)	(80.0)	(0.09)	(0.09)
Observations	3,466	3,466	3,466	3,466
R-squared	0.25	0.33	0.30	0.29

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels by gender. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 6b: Tanzania: Impact of learning camps on literacy proficiency, by gender

		<u> </u>	<u> </u>	
	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story reading
	recognition	recognition	reading	
Learning camp, yes	0.08**	0.13***	0.17***	0.22***
	(0.03)	(0.04)	(0.04)	(0.04)
Gender, girls	0.02*	0.02	0.02	0.03
	(0.01)	(0.02)	(0.02)	(0.02)
Learning camp#Gender	-0.02*	-0.03	-0.02	-0.03
	(0.01)	(0.02)	(0.02)	(0.03)
Constant	0.74***	0.50***	0.37***	0.20**
	(0.06)	(0.07)	(0.06)	(80.0)
Observations	3,466	3,466	3,466	3,466
R-squared	0.21	0.27	0.29	0.33

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels by gender. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.

Table 7: Tanzania: Impact of learning camps on numeracy and literacy, by age

	(1)	(2)
VARIABLES	Numeracy	Literacy
Learning camp, yes	1.96***	2.57***
	(0.22)	(0.33)
Age group, 10-13 yrs	1.16***	1.09***
	(0.21)	(0.31)
Age group, 14+ yrs	1.36***	0.98**
	(0.33)	(0.44)
Learning camp#Age group, 10-13 years	-0.56*	-0.98*
	(0.29)	(0.51)
Learning camp#Age group, 14+ years	-1.25***	-0.71
	(0.43)	(0.45)
Observations	3,466	3,466
Pseudo R-squared	0.185	0.244

Note: This table presents results from an ordinary logistic regression using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps by age groups on numeracy and literacy by age. The reference age group is children in 6-9 years. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 8a: Tanzania: Impact of learning camps on numeracy proficiency, by age

<u>-</u>	<u>.</u>			
	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/Su	Multiplicatio	Word
	recognition	btraction	n/Division	problem
Learning camp, yes	0.15***	0.33***	0.34***	0.42***
	(0.04)	(0.06)	(0.05)	(0.05)
Age group, 10-13 yrs	0.06**	0.21***	0.26***	0.26***
	(0.03)	(0.05)	(0.04)	(0.04)
Age group, 14+ yrs	0.04	0.21***	0.33***	0.32***
	(0.03)	(0.05)	(0.07)	(0.07)
Learning camp#Age group, 10-13 years	-0.05	-0.17***	-0.12**	-0.16***
	(0.04)	(0.06)	(0.05)	(0.04)
Learning camp#Age group, 14+ years	-0.01	-0.25***	-0.30***	-0.34***
	(0.05)	(0.08)	(80.0)	(0.10)
Constant	0.55***	0.15*	-0.05	0.00
	(0.09)	(0.08)	(0.09)	(0.09)
Observations	3,466	3,466	3,466	3,466
R-squared	0.26	0.34	0.30	0.30

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels by gender. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.

Table 8b: Tanzania: Impact of learning camps on literacy proficiency, by age

		<u> </u>	• • • • • • • • • • • • • • • • • • • •	<u> </u>
	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story reading
	recognition	recognition	reading	
Learning camp, yes	0.09**	0.17***	0.23***	0.32***
	(0.04)	(0.05)	(0.05)	(0.05)
Age group, 10-13 yrs	0.03*	0.08**	0.13***	0.20***
	(0.02)	(0.03)	(0.04)	(0.03)
Age group, 14+ yrs	-0.02	0.06**	0.13***	0.21***
	(0.02)	(0.03)	(0.03)	(0.05)
Learning camp#Age group, 10-13 years	-0.04*	-0.09*	-0.12**	-0.19***
	(0.02)	(0.04)	(0.05)	(0.04)
Learning camp#Age group, 14+ years	0.01	-0.07*	-0.12**	-0.22***
	(0.03)	(0.03)	(0.04)	(0.04)
Constant	0.73***	0.48***	0.34***	0.15*
	(0.06)	(0.07)	(0.06)	(80.0)
Observations	3,466	3,466	3,466	3,466
R-squared	0.22	0.27	0.30	0.34

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels by gender. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 9: Tanzania: Impact of learning camps on numeracy and literacy, by household wealth

	(1)	(2)
VARIABLES	Numeracy	Literacy
Learning camp, yes	1.37***	1.86***
	(0.23)	(0.33)
Household wealth, Q2	-0.31*	-0.32*
	(0.19)	(0.19)
Household wealth, Q3	-0.38*	-0.24
	(0.23)	(0.21)
Household wealth, Q4	-0.42**	-0.47**
	(0.20)	(0.21)
Learning camp#Household wealth, Q2	0.18	0.34
	(0.26)	(0.36)
Learning camp#Household wealth, Q3	0.41	0.09
	(0.34)	(0.42)
Learning camp#Household wealth, Q4	0.43*	0.63*
	(0.24)	(0.33)
Observations	3,466	3,466
Pseudo R-squared	0.183	0.242

Note: This table presents results from an ordinary logistic regression using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps by age groups on numeracy and literacy by household wealth quartile. The reference wealth group is children from the poorest quartile of households. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 10a: Tanzania: Impact of learning camps on numeracy proficiency, by household wealth

	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/	Multiplicatio	Word
	recognition	Subtraction	n/Division	problem
Learning camp, yes	0.12**	0.19***	0.19***	0.30***
	(0.04)	(0.05)	(0.04)	(0.05)
Household wealth, Q2	-0.03	-0.04	-0.08*	0.01
	(0.03)	(0.04)	(0.04)	(0.05)
Household wealth, Q3	-0.02	-0.08**	-0.07	-0.02
	(0.03)	(0.04)	(0.05)	(0.05)
Household wealth, Q4	-0.04	-0.05	-0.13***	-0.00
	(0.03)	(0.04)	(0.03)	(0.04)
Learning camp#Household wealth, Q2	0.00	0.03	0.08	-0.03
	(0.04)	(0.04)	(0.05)	(0.07)
Learning camp#Household wealth, Q3	-0.01	0.08	0.09*	0.02
	(0.04)	(0.05)	(0.05)	(0.07)
Learning camp#Household wealth, Q4	0.02	0.05	0.12**	0.05
	(0.03)	(0.04)	(0.05)	(0.05)
Constant	0.57***	0.22**	0.03	0.07
	(0.10)	(0.09)	(0.10)	(0.09)
Observations	3,466	3,466	3,466	3,466
R-squared	0.25	0.33	0.30	0.29

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels by household wealth. The reference wealth group is children from the poorest quartile of households. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 10b: Tanzania: Impact of learning camps on literacy proficiency, by household wealth

	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story
	recognition	recognition	reading	reading
Learning camp, yes	0.08**	0.12**	0.15**	0.18***
	(0.04)	(0.05)	(0.05)	(0.04)
Household wealth, Q2	0.01	-0.01	-0.03	-0.04
	(0.01)	(0.03)	(0.03)	(0.04)
Household wealth, Q3	0.02	-0.01	-0.03	-0.02
	(0.01)	(0.02)	(0.03)	(0.03)
Household wealth, Q4	0.01	-0.02	-0.03	-0.05
	(0.02)	(0.02)	(0.03)	(0.03)
Learning camp#Household wealth, Q2	-0.01	-0.01	0.01	0.03
	(0.02)	(0.04)	(0.04)	(0.04)
Learning camp#Household wealth, Q3	-0.03	-0.02	0.01	0.00
	(0.02)	(0.04)	(0.05)	(0.05)
Learning camp#Household wealth, Q4	-0.01	0.01	0.01	0.05*
	(0.03)	(0.04)	(0.04)	(0.03)
Constant	0.74***	0.51***	0.38***	0.22**
	(0.06)	(0.07)	(0.06)	(80.0)
Observations	3,466	3,466	3,466	3,466
R-squared	0.21	0.27	0.29	0.33

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels by household wealth. The reference wealth group is children from the poorest quartile of households. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 11: Tanzania: Impact of learning camps on numeracy and literacy, by household wealth and gender

	(1)	(2)
VARIABLES	Numeracy	Literacy
Learning camp, yes	1.40***	1.93***
	(0.22)	(0.34)
Gender, girls	0.38*	0.51**
	(0.22)	(0.20)
Learning camp#Gender, girls	-0.05	-0.12
	(0.27)	(0.46)
Household wealth, Q2	-0.02	-0.20
	(0.21)	(0.24)
Household wealth, Q3	-0.16	0.22
	(0.33)	(0.25)
Household wealth, Q4	-0.38	-0.37
	(0.25)	(0.24)
Learning camp#Household wealth, Q2	-0.14	0.60*
	(0.33)	(0.36)
Learning camp#Household wealth, Q3	0.35	-0.22
	(0.48)	(0.57)
Learning camp#Household wealth, Q4	0.48*	0.62*
	(0.28)	(0.36)
Gender, girls#Household wealth, Q2	-0.51*	-0.26
	(0.28)	(0.26)
Gender, girls#Household wealth, Q3	-0.40	-0.89**
	(0.36)	(0.37)
Gender, girls#Household wealth, Q4	-0.08	-0.21
	(0.28)	(0.34)
Learning camp#Gender, girls#Household wealth, Q2	0.59	-0.54
	(0.42)	(0.53)
Learning camp#Gender, girls#Household wealth, Q3	0.10	0.57
	(0.43)	(0.73)
Learning camp#Gender, girls#Household wealth, Q4	-0.11	0.02
	(0.36)	(0.58)
Observations	3,466	3,466
Pseudo R-squared	0.184	0.244

Note: This table presents results from an ordinary logistic regression using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy and literacy by household wealth and gender. The reference wealth group is boys from the poorest quartile of households. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 12a: Tanzania: Impact of learning camps on numeracy proficiency, by household wealth and gender

Tuble 12a. Tunzama. Impact of tourning camps of	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/	Multiplicati	Word problem
	recognition		on/Division	·
Learning camp, yes	0.14**	0.22***	0.20***	0.32***
	(0.05)	(0.06)	(0.04)	(0.05)
Gender, girls	0.01	0.04	-0.04	0.04
	(0.03)	(0.05)	(0.05)	(0.07)
Learning camp#Gender, girls	0.01	0.00	-0.06	0.05
	(0.04)	(0.06)	(0.06)	(0.07)
Household wealth, Q2	0.00	-0.03	-0.15***	0.01
	(0.03)	(0.05)	(0.04)	(0.06)
Household wealth, Q3	-0.02	-0.04	-0.01	-0.04
	(0.04)	(0.07)	(0.07)	(0.09)
Household wealth, Q4	-0.02	0.03	0.09	-0.06
	(0.06)	(80.0)	(0.07)	(0.11)
Learning camp#Household wealth, Q2	-0.00	0.05	0.13**	0.05
	(0.05)	(0.06)	(0.05)	(0.06)
Learning camp#Household wealth, Q3	0.06*	0.11**	0.04	0.06
	(0.03)	(0.05)	(0.04)	(0.04)
Learning camp#Household wealth, Q4	-0.03	-0.05	-0.02	-0.03
	(0.03)	(0.06)	(0.05)	(0.07)
Gender, girls#Household wealth, Q2	-0.07**	-0.14*	-0.06	-0.06
	(0.03)	(0.07)	(0.07)	(0.07)
Gender, girls#Household wealth, Q3	-0.06	-0.16**	-0.02	-0.13
	(0.04)	(0.07)	(0.07)	(0.09)
Gender, girls#Household wealth, Q4	-0.07	-0.04	0.03	-0.02
	(0.05)	(80.0)	(0.05)	(0.06)
Learning camp#Gender, girls#Household wealth, Q2	0.04	0.13	0.18**	0.02
	(0.04)	(0.10)	(80.0)	(0.09)
Learning camp#Gender, girls#Household wealth, Q3	0.02	0.09	0.01	0.15
	(0.05)	(0.09)	(0.07)	(0.12)
Learning camp#Gender, girls#Household wealth, Q4	0.04	-0.00	-0.03	-0.00
	(0.05)	(0.09)	(0.06)	(0.09)
Constant	0.54***	0.19**	0.03	0.05
	(0.10)	(0.09)	(0.09)	(0.09)
Observations	3,466	3,466	3,466	3,466
R-squared	0.26	0.33	0.30	0.30

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels by household wealth. The reference wealth group is children from the poorest quartile of households. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 12b: Tanzania: Impact of learning camps on literacy proficiency, by household wealth and gender

	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story
	recognition	recognition	reading	reading
Learning camp, yes	0.09**	0.15**	0.17**	0.22***
	(0.04)	(0.06)	(0.06)	(0.06)
Gender, girls	0.04	0.06*	0.05	0.09**
	(0.02)	(0.03)	(0.03)	(0.04)
Learning camp#Gender, girls	-0.02	-0.05*	-0.04	-0.07
	(0.02)	(0.03)	(0.03)	(0.05)
Household wealth, Q2	0.01	-0.01	-0.03	-0.01
	(0.02)	(0.04)	(0.04)	(0.05)
Household wealth, Q3	0.05**	0.05	0.02	0.05
	(0.02)	(0.03)	(0.04)	(0.04)
Household wealth, Q4	0.01	0.02	-0.02	-0.02
	(0.03)	(0.04)	(0.05)	(0.04)
Learning camp#Household wealth, Q2	0.00	0.01	0.01	0.02
	(0.03)	(0.06)	(0.06)	(0.05)
Learning camp#Household wealth, Q3	-0.06**	-0.07	-0.04	-0.06
	(0.03)	(0.06)	(0.06)	(0.07)
Learning camp#Household wealth, Q4	0.01	-0.01	0.02	0.05
	(0.04)	(0.05)	(0.06)	(0.04)
Gender, girls#Household wealth, Q2	0.00	0.01	-0.01	-0.05
	(0.04)	(0.04)	(0.04)	(0.04)
Gender, girls#Household wealth, Q3	-0.05*	-0.10**	-0.10*	-0.13**
	(0.03)	(0.04)	(0.06)	(0.06)
Gender, girls#Household wealth, Q4	0.00	-0.06	-0.03	-0.05
	(0.03)	(0.04)	(0.05)	(0.04)
Learning camp#Gender, girls#Household wealth, Q2	-0.03	-0.03	-0.01	0.02
	(0.05)	(0.05)	(0.05)	(0.05)
Learning camp#Gender, girls#Household wealth, Q3	0.05*	0.11*	0.09	0.11
	(0.03)	(0.05)	(0.07)	(80.0)
Learning camp#Gender, girls#Household wealth, Q4	-0.03	0.04	-0.01	0.00
	(0.04)	(0.04)	(0.06)	(0.05)
Constant	0.73***	0.48***	0.36***	0.19**
	(0.07)	(80.0)	(0.06)	(0.09)
Observations	3,466	3,466	3,466	3,466
R-squared	0.22	0.27	0.29	0.33

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels by household wealth. The reference wealth group is children from the poorest quartile of households. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 13: Tanzania: Impact of learning camps on numeracy and literacy, by household age and gender

by flouseflotta age and gender	(4)	(0)
V/ABIABI 50	(1)	(2)
VARIABLES	Numeracy	Literacy
Learning camp, yes	1.95***	2.79***
	(0.27)	(0.35)
Gender, girls	0.05	0.18
	(0.10)	(0.20)
Learning camp#Gender, girls	0.03	-0.45*
	(0.22)	(0.27)
Age, 10-13 years	1.06***	1.08***
	(0.23)	(0.25)
Age, 14+ years	1.30***	0.94*
	(0.41)	(0.51)
Learning camp#Age, 10-13 years	-0.59**	-1.38***
	(0.29)	(0.45)
Learning camp#Age, 14+ years	-1.34**	-0.17
	(0.64)	(0.60)
Gender, girls#Age, 10-13 years	0.19	0.02
	(0.28)	(0.41)
Gender, girls#Age, 14+ years	0.11	0.09
	(0.51)	(0.47)
Learning camp#Gender, girls#Age, 10-13 years	0.08	0.84
	(0.36)	(0.62)
Learning camp#Gender, girls#Age, 14+ years	0.21	-1.02*
	(0.82)	(0.60)
	, ,	
Observations	3,466	3,466
Pseudo R-squared	0.185	0.246

Note: This table presents results from an ordinary logistic regression using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy and literacy by child's age and gender. The reference wealth group is boys from the youngest age group of 6-9 years. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 14a: Tanzania: Impact of learning camps on numeracy proficiency, by age and gender

	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/	Multiplicati	Word
	recognition	Subtraction	on/Division	problem
Learning camp, yes	0.17***	0.32***	0.34***	0.41***
	(0.05)	(0.06)	(0.06)	(0.06)
Gender, girls	0.06**	0.17***	0.25***	0.25***
	(0.03)	(0.04)	(0.04)	(0.04)
Learning camp#Gender, girls	0.07*	0.17**	0.34***	0.30***
	(0.04)	(0.07)	(0.09)	(0.10)
Age, 10-13 years	-0.07	-0.14***	-0.13**	-0.15***
	(0.05)	(0.05)	(0.06)	(0.04)
Age, 14+ years	-0.04	-0.22**	-0.35**	-0.31**
	(0.05)	(0.10)	(0.13)	(0.15)
Learning camp#Age, 10-13 years	0.02	-0.01	0.02	-0.00
	(0.02)	(0.02)	(0.02)	(0.03)
Learning camp#Age, 14+ years	-0.02	0.03	0.00	0.02
	(0.02)	(0.04)	(0.05)	(0.04)
Gender, girls#Age, 10-13 years	-0.00	0.07*	0.01	0.02
	(0.03)	(0.04)	(0.05)	(0.03)
Gender, girls#Age, 14+ years	-0.06	0.08	-0.01	0.03
	(0.05)	(0.06)	(0.11)	(0.11)
Learning camp#Gender, girls#Age, 10-13 years	0.03	-0.04	0.01	-0.02
	(0.03)	(0.06)	(80.0)	(0.04)
Learning camp#Gender, girls#Age, 14+ years	0.06	-0.06	0.13	-0.06
	(0.06)	(0.12)	(0.17)	(0.16)
Constant	0.54***	0.18**	-0.04	0.01
	(0.09)	(80.0)	(80.0)	(0.09)
Observations	3,466	3,466	3,466	3,466
R-squared	0.26	0.34	0.30	0.30

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels by age and gender. The reference group is boys from the youngest age group of 6-9 years. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 14b: Tanzania: Impact of learning camps on literacy proficiency, by age and gender

	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story
	recognition	recognition	reading	reading
Learning camp, yes	0.13**	0.20***	0.25***	0.36***
	(0.05)	(0.06)	(0.06)	(0.05)
Gender, girls	0.06*	0.09**	0.12***	0.20***
	(0.03)	(0.04)	(0.04)	(0.04)
Learning camp#Gender, girls	-0.02	0.06	0.13**	0.21***
	(0.03)	(0.04)	(0.05)	(0.07)
Age, 10-13 years	-0.09**	-0.11*	-0.13**	-0.23***
	(0.04)	(0.05)	(0.05)	(0.04)
Age, 14+ years	0.02	-0.07	-0.12**	-0.21***
	(0.04)	(0.05)	(0.06)	(0.06)
Learning camp#Age, 10-13 years	0.05*	0.03	0.02	0.04
	(0.03)	(0.03)	(0.04)	(0.04)
Learning camp#Age, 14+ years	-0.07**	-0.05	-0.03	-0.07*
	(0.03)	(0.03)	(0.03)	(0.04)
Gender, girls#Age, 10-13 years	-0.06	-0.01	0.00	-0.00
	(0.04)	(0.03)	(0.04)	(0.04)
Gender, girls#Age, 14+ years	-0.00	-0.01	-0.01	-0.00
	(0.04)	(0.05)	(0.05)	(0.07)
Learning camp#Gender, girls#Age, 10-13 years	0.09*	0.04	0.02	0.06
	(0.04)	(0.04)	(0.04)	(0.05)
Learning camp#Gender, girls#Age, 14+ years	-0.05	0.01	0.00	-0.03
	(0.06)	(0.06)	(0.06)	(0.10)
Constant	0.71***	0.47***	0.33***	0.14*
	(0.07)	(0.07)	(0.06)	(80.0)
Observations	3,466	3,466	3,466	3,466
R-squared	0.22	0.28	0.30	0.35

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels by age and gender. The reference group is boys from the youngest age group of 6-9 years. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 15: Nepal: Socio-demographic characteristics, by learning camp

		(1)		(2)
		Learning camp (Yes)		Learning camp (No)
Variable	N	Mean/SE	N	Mean/SE
Gender, female	612	0.500	2222	0.514
		[0.020]		[0.011]
Age, 6-9 years	612	0.577	2222	0.397
		[0.020]		[0.010]
Age, 10-13 years	612	0.345	2222	0.338
		[0.019]		[0.010]
Age, 14+ years	612	0.078	2222	0.265
		[0.011]		[0.009]
Household wealth index	612	-0.065	2222	0.020
		[0.038]		[0.021]
Parent's education level, no schooling	612	0.650	2222	0.635
_		[0.019]		[0.010]
Parent's education level, primary	612	0.188	2222	0.232
		[0.016]		[0.009]
Parent's education level, secondary	612	0.162	2222	0.133
•		[0.015]		[0.007]





Table 16: Nepal: Impact of learning camps on numeracy and literacy

	(1)	(2)	(3)	(4)
VARIABLES		Numeracy	Literacy	Literacy
Learning camp, yes	1.31***	1.34***	1.67***	1.72***
	(0.25)	(0.25)	(0.45)	(0.45)
Baseline, Number recognition	2.37***	2.24***		
	(0.34)	(0.32)		
Baseline, Addition/Subtraction	3.17***	2.91***		
	(0.52)	(0.52)		
Baseline, Multiplication/Division	4.50***	4.23***		
	(0.54)	(0.58)		
Baseline, Word problems	5.36***	5.03***		
	(0.52)	(0.50)		
Baseline, Letter recognition			0.89***	0.82***
			(0.21)	(0.21)
Baseline, Word recognition			1.34***	1.13***
			(0.27)	(0.27)
Baseline, Paragraph reading			3.22***	2.90***
			(0.43)	(0.46)
Baseline Story reading			5.14***	4.85***
			(0.75)	(0.78)
Gender, girl		0.02		-0.17*
		(80.0)		(0.09)
Age group, 10-13 yrs		0.58***		0.67***
		(0.18)		(0.17)
Age group, 14+ yrs		0.77*		0.57*
		(0.41)		(0.32)
Enrolled in school, yes		0.62		0.02
		(0.60)		(0.47)
Household wealth, Q2		-0.06		0.32*
		(0.16)		(0.17)
Household wealth, Q3		-0.04		0.22
		(0.18)		(0.15)
Household wealth, Q4		-0.25		0.13
		(0.17)		(0.20)
Parents' education, primary		0.22		0.25**
		(0.15)		(0.11)
Parents' education, secondary		-0.00		-0.34*
		(0.22)		(0.19)
Observations	2,834	2,834	2,834	2,834
Pseudo R-squared	0.267	0.276	0.273	0.283

Note: This table presents results from an ordered logistic regression using propensity score matching with a kernel matching algorithm to test the impact of learning camps on children's learning outcomes in numeracy and literacy. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status.



Table 17a: Nepal: Impact of learning camps on numeracy proficiency

Table 17a. Nepat. Impa	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/	Multiplicatio	Word
	recognition	Subtraction	n/Division	problem
Learning camp, yes	0.17***	0.20***	0.14***	0.04
	(0.04)	(0.05)	(0.04)	(0.03)
Baseline, Number recognition	0.33***	0.33***	0.14***	0.10***
	(0.04)	(0.05)	(0.03)	(0.03)
Baseline, Addition/Subtraction	0.30***	0.52***	0.25***	0.16**
	(0.04)	(0.09)	(0.07)	(0.07)
Baseline, Multiplication/Division	0.29***	0.61***	0.69***	0.33**
	(0.05)	(0.07)	(0.05)	(0.14)
Baseline, Word problems	0.32***	0.68***	0.75***	0.46***
	(0.04)	(0.06)	(0.06)	(0.12)
Gender, girl	-0.00	0.01	-0.01	0.00
	(0.01)	(0.02)	(0.02)	(0.01)
Age group, 10-13 yrs	0.07**	0.11***	0.06	0.01
	(0.03)	(0.02)	(0.04)	(0.02)
Age group, 14+ yrs	0.10*	0.13**	0.09	0.00
	(0.05)	(0.05)	(0.06)	(0.05)
Enrolled in school, yes	0.09	0.07	0.00	0.01
	(0.12)	(0.06)	(0.02)	(0.03)
Household wealth, Q2	-0.01	0.00	-0.01	-0.03
	(0.02)	(0.03)	(0.03)	(0.02)
Household wealth, Q3	-0.02	0.01	0.01	-0.04*
	(0.02)	(0.02)	(0.04)	(0.02)
Household wealth, Q4	-0.03	-0.04	0.00	-0.03
	(0.03)	(0.02)	(0.04)	(0.03)
Parents' education, primary	0.03	0.05	-0.01	0.01
	(0.02)	(0.03)	(0.02)	(0.02)
Parents' education, secondary	0.03	-0.04	-0.01	0.00
2	(0.03)	(0.04)	(0.04)	(0.03)
Constant	0.46***	0.03	0.00	-0.01
	(0.12)	(0.07)	(0.04)	(0.05)
Observations	2,834	2,834	2,834	2,834
R-squared	0.37	0.47	0.49	0.38

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 17b: Nepal: Impact of learning camps on literacy proficiency

	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story
	recognition	recognition	reading	reading
Learning camp, yes	0.01	0.12	0.26***	0.25***
	(0.01)	(80.0)	(0.07)	(0.04)
Baseline, Word problems	0.03*	0.14***	0.08**	0.07
	(0.02)	(0.05)	(0.03)	(0.04)
Baseline, Letter recognition	0.03**	0.18***	0.12**	0.10*
	(0.02)	(0.05)	(0.04)	(0.05)
Baseline, Word recognition	0.02*	0.23***	0.59***	0.35***
	(0.01)	(0.06)	(0.06)	(0.10)
Baseline, Paragraph reading	0.02*	0.23***	0.64***	0.72***
	(0.01)	(0.07)	(80.0)	(80.0)
Gender, girl	-0.00	-0.02	-0.02	-0.02
	(0.00)	(0.02)	(0.02)	(0.02)
Age group, 10-13 yrs	0.01	0.04**	0.12**	0.10**
	(0.01)	(0.02)	(0.04)	(0.04)
Age group, 14+ yrs	0.02	0.05**	0.07	0.11*
	(0.01)	(0.02)	(0.05)	(0.06)
Enrolled in school, yes	0.02	0.02	-0.02	-0.00
	(0.02)	(0.07)	(0.06)	(0.05)
Household wealth, Q2	0.01	0.02	0.05	0.05*
	(0.01)	(0.03)	(0.03)	(0.02)
Household wealth, Q3	0.01*	0.02	0.02	0.05
	(0.01)	(0.03)	(0.03)	(0.03)
Household wealth, Q4	0.01*	-0.01	0.04	0.02
	(0.00)	(0.02)	(0.03)	(0.03)
Parents' education, primary	0.00	0.02	0.02	0.03
	(0.00)	(0.02)	(0.02)	(0.02)
Parents' education, secondary	-0.01	0.01	-0.08**	-0.03
	(0.01)	(0.02)	(0.03)	(0.03)
Constant	0.94***	0.64***	0.09*	-0.05
	(0.03)	(0.09)	(0.05)	(0.05)
Observations	2,834	2,834	2,834	2,834
R-squared	0.07	0.30	0.44	0.47

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 18: Nepal: Impact of learning camps on numeracy and literacy, by gender

	(1)	(2)
VARIABLES	Numeracy	Literacy
Learning camp, yes	1.38***	1.73***
	(0.27)	(0.44)
Gender, girls	0.05	-0.16*
	(0.11)	(0.09)
Learning camp#Gender, girls	-0.06	-0.02
	(0.20)	(0.25)
Observations	2,834	2,834
Pseudo R-squared	0.276	0.283

Note: This table presents results from an ordinary logistic regression using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps by gender on numeracy and literacy. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.

Table 19a: Nepal: Impact of learning camps on numeracy proficiency, by gender

	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/	Multiplicatio	Word
	recognition	Subtraction	n/Division	problem
Learning camp, yes	0.18***	0.20***	0.16***	0.03
	(0.04)	(0.05)	(0.04)	(0.03)
Gender, girls	0.01	0.02	-0.00	-0.01
	(0.02)	(0.02)	(0.02)	(0.01)
Learning camp# Gender, girls	-0.02	-0.00	-0.03	0.02
	(0.03)	(0.04)	(0.03)	(0.01)
Constant	0.45***	0.03	-0.00	0.00
	(0.12)	(0.07)	(0.05)	(0.05)
	0.004	0.004	0.004	0.004
Observations	2,834	2,834	2,834	2,834
R-squared	0.37	0.47	0.49	0.38

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels by gender. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 19b: Nepal: Impact of learning camps on literacy proficiency, by gender

	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story
	recognition	recognition	reading	reading
Learning camp, yes	0.01	0.12	0.26***	0.26***
	(0.01)	(0.09)	(0.06)	(0.04)
Gender, girls	-0.01	-0.02	-0.02	-0.01
	(0.01)	(0.02)	(0.02)	(0.01)
Learning camp# Gender, girls	0.01	-0.00	-0.01	-0.02
	(0.01)	(0.04)	(0.04)	(0.04)
Constant	0.94***	0.64***	0.09	-0.05
	(0.03)	(0.09)	(0.05)	(0.05)
Observations	2,834	2,834	2,834	2,834
R-squared	0.07	0.30	0.44	0.47

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels by gender. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.

Table 20: Nepal: Impact of learning on numeracy and literacy, by age

	(1)	(2)
VARIABLES	Numeracy	Literacy
Learning camp, yes	1.53***	1.38***
	(0.29)	(0.48)
Age group, 10-13 yrs	0.78***	0.20*
	(0.18)	(0.10)
Age group, 14+ yrs	1.03***	0.37
	(0.29)	(0.23)
Learning camp#Age group, 10-13 years	-0.38*	1.02***
	(0.21)	(0.28)
Learning camp#Age group, 14+ years	-0.58	0.38
	(0.83)	(0.64)
Observations	2,834	2,834
Pseudo R-squared	0.277	0.288

Note: This table presents results from an ordinary logistic regression using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps by age on numeracy and literacy. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 21a: Nepal: Impact of learning camps on numeracy proficiency, by age

	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/	Multiplication	Word
	recognition	Subtraction	/Division	problem
Learning camp, yes	0.25***	0.22***	0.10***	0.04*
	(0.06)	(0.06)	(0.03)	(0.02)
Age group, 10-13 yrs	0.16***	0.11***	0.00	-0.00
	(0.03)	(0.02)	(0.03)	(0.02)
Age group, 14+ yrs	0.17***	0.18***	0.06	0.01
	(0.03)	(0.03)	(0.04)	(0.04)
Learning camp#Age group, 10-13 years	-0.19***	-0.01	0.11*	0.02
	(0.06)	(0.05)	(0.05)	(0.03)
Learning camp#Age group, 14+ years	-0.14	-0.12	0.06	-0.01
	(0.12)	(0.12)	(0.10)	(0.10)
Constant	0.41***	0.02	0.03	-0.00
	(0.11)	(0.08)	(0.04)	(0.05)
Observations	2,834	2,834	2,834	2,834
R-squared	0.38	0.48	0.50	0.38

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels by age. The reference group is children in the youngest age category 6-9 years. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 21b: Nepal: Impact of learning camps on literacy proficiency, by age

	0 - 1 -			
	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story
	recognition	recognition	reading	reading
Learning camp, yes	0.01	0.13	0.23**	0.18***
	(0.02)	(0.09)	(80.0)	(0.04)
Age group, 10-13 yrs	0.02*	0.05*	0.06*	0.02
	(0.01)	(0.02)	(0.03)	(0.02)
Age group, 14+ yrs	0.01	0.07*	0.09**	*80.0
	(0.01)	(0.04)	(0.04)	(0.05)
Learning camp#Age group, 10-13 years	-0.01	-0.02	0.11*	0.17**
	(0.02)	(0.05)	(0.06)	(0.06)
Learning camp#Age group, 14+ years	0.01	-0.05	-0.07	0.05
	(0.03)	(0.07)	(80.0)	(0.10)
Constant	0.93***	0.63***	0.11*	-0.01
	(0.03)	(0.09)	(0.06)	(0.05)
Observations	2,834	2,834	2,834	2,834
R-squared	0.07	0.30	0.45	0.48

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels by age. The reference group is children in the youngest age category 6-9 years. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 22: Nepal: Impact of learning camps on numeracy and literacy, by household wealth

	(1)	(2)
VARIABLES	Numeracy	Literacy
Learning camp, yes	1.68***	1.51**
	(0.27)	(0.69)
Household wealth, Q2	0.15	0.22
	(0.17)	(0.22)
Household wealth, Q3	0.08	-0.04
	(0.15)	(0.30)
Household wealth, Q4	0.12	0.03
	(0.22)	(0.39)
Learning camp#Household wealth, Q2	-0.44	0.19
	(0.29)	(0.59)
Learning camp#Household wealth, Q3	-0.25	0.55
	(0.33)	(0.61)
Learning camp#Household wealth, Q4	-0.77**	0.20
	(0.39)	(0.73)
Observations	2,834	2,834
Pseudo R-squared	0.277	0.284

Note: This table presents results from an ordinary logistic regression using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps by household wealth on numeracy and literacy. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 23a: Nepal: Impact of learning camps on numeracy proficiency, by household wealth

	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/	Multiplicatio	Word
	recognition	Subtraction	n/Division	problem
Learning camp, yes	0.25***	0.20***	0.15***	0.07
	(0.06)	(0.04)	(0.03)	(0.04)
Household wealth, Q2	0.02	0.02	0.01	-0.01
	(0.04)	(0.03)	(0.02)	(0.01)
Household wealth, Q3	0.04	-0.03	-0.01	-0.02
	(0.04)	(0.03)	(0.02)	(0.02)
Household wealth, Q4	0.04	-0.02	0.01	-0.01
	(0.04)	(0.04)	(0.03)	(0.02)
Learning camp#Household wealth, Q2	-0.06	-0.03	-0.03	-0.05
	(0.07)	(0.04)	(0.05)	(0.05)
Learning camp#Household wealth, Q3	-0.12**	0.08	0.03	-0.04
	(0.05)	(0.07)	(0.07)	(0.05)
Learning camp#Household wealth, Q4	-0.16***	-0.05	-0.01	-0.03
	(0.05)	(0.06)	(0.07)	(0.05)
Constant	0.42***	0.03	0.00	-0.02
	(0.11)	(0.06)	(0.04)	(0.06)
Observations	2,834	2,834	2,834	2,834
R-squared	0.38	0.48	0.49	0.38
11-34na16n	0.36	0.40	0.49	0.30

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels by household wealth. The reference group is children from the poorest quartile of households. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 23b: Nepal: Impact of learning camps on literacy proficiency, by household wealth

	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story
	recognition	recognition	reading	reading
Learning camp, yes	0.01	0.09	0.28***	0.20***
	(0.02)	(0.13)	(0.06)	(0.03)
Household wealth, Q2	0.01	0.02	0.04	0.01
	(0.01)	(0.04)	(0.03)	(0.03)
Household wealth, Q3	0.01	-0.02	0.04	-0.01
	(0.01)	(0.05)	(0.04)	(0.03)
Household wealth, Q4	0.01	-0.05	0.08	0.02
	(0.01)	(0.06)	(0.07)	(0.04)
Learning camp#Household wealth, Q2	-0.00	-0.00	0.03	0.07
	(0.01)	(0.11)	(0.09)	(0.06)
Learning camp#Household wealth, Q3	0.01	0.08	-0.02	0.12*
	(0.02)	(0.12)	(0.07)	(0.06)
Learning camp#Household wealth, Q4	-0.00	0.08	-0.08	0.01
	(0.02)	(0.12)	(0.12)	(0.06)
Constant	0.94***	0.66***	0.08*	-0.02
	(0.03)	(0.07)	(0.04)	(0.04)
Observations	2,834	2,834	2,834	2,834
R-squared	0.07	0.31	0.44	0.47

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels by household wealth. The reference group is children from the poorest quartile of households. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 24: Nepal: Impact of learning camps on numeracy and literacy, by gender and household wealth

by genuer and nousehold wealth	(1)	(2)
VARIABLES	Numeracy	Literacy
Learning camp, yes	1.57***	1.47*
	(0.25)	(0.78)
Gender, girls	-0.01	-0.16
	(0.18)	(0.20)
Learning camp#Gender, girls	0.22	0.10
	(0.31)	(0.38)
Household wealth, Q2	-0.04	0.13
	(0.26)	(0.26)
Household wealth, Q3	0.03	0.04
	(0.16)	(0.35)
Household wealth, Q4	0.19	0.06
	(0.25)	(0.42)
Learning camp#Household wealth, Q2	-0.19	0.17
	(0.22)	(0.67)
Learning camp#Household wealth, Q3	-0.07	0.57
	(0.29)	(0.76)
Learning camp#Household wealth, Q4	-0.54	0.60
	(0.51)	(0.99)
Gender, girls#Household wealth, Q2	0.38	0.20
	(0.26)	(0.22)
Gender, girls#Household wealth, Q3	0.08	-0.19
	(0.20)	(0.26)
Gender, girls#Household wealth, Q4	-0.15	-0.05
	(0.14)	(0.29)
Learning camp#Gender, girls#Household wealth, Q2	-0.50	0.03
	(0.36)	(0.40)
Learning camp#Gender, girls#Household wealth, Q3	-0.35	-0.02
	(0.39)	(0.81)
Learning camp#Gender, girls#Household wealth, Q4	-0.42	-0.72
	(0.38)	(0.72)
Observations	2,834	2,834
Pseudo R-squared	0.278	0.286

Note: This table presents results from an ordinary logistic regression using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy and literacy by household wealth and gender. The reference group is boys from the poorest quartile of households. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 25a: Nepal: Impact of learning camps on numeracy proficiency, by gender and household wealth

VARIABLES Number recognition Addition/subtraction Multiplication on/Division Multiplication Multiplica	(4) Vord bblem 0.04 0.04) 0.03 0.02) 0.03* 0.03* 0.02) 0.04* 0.02) 0.02
Learning camp, yes	0.04 0.03 0.02) 0.04 0.03) 0.03* 0.02) 0.04* 0.02) 0.04*
Gender, girls	0.04) 0.03 0.02) 0.04 0.03) 0.03* 0.02) 0.04* 0.02) 0.02
Cender, girls	0.03 0.02) 0.04 0.03) 0.03* 0.02) 0.04* 0.02) 0.02
Learning camp#Gender, girls (0.04) (0.03) (0.02) (0.08) (0.08) (0.05) (0.06) (0.08) (0.05) (0.06) (0.08) (0.05) (0.06) (0.06) (0.07) (0.08) (0.08) (0.09) (0.09) (0.00) (0.02) 0.04 0.03) 0.03* 0.02) 0.04* 0.02)
Learning camp#Gender, girls 0.03 0.04 0.03 0.04 Household wealth, Q2 -0.02 0.03 -0.03 -0.03 Household wealth, Q3 0.02 0.01 -0.03 -0.02 Household wealth, Q4 0.06 -0.00 0.00 -0.00 Household wealth, Q4 0.06 -0.00 0.00 -0.00 Learning camp#Household wealth, Q2 -0.01 0.03 0.01 -0.00 Learning camp#Household wealth, Q3 -0.05 0.07 0.07 -0.07 Learning camp#Household wealth, Q4 -0.15**** -0.02 0.04 0.00 Learning camp#Household wealth, Q4 -0.15**** -0.02 0.04 0.00	0.04 0.03) 0.03* 0.02) 0.04* 0.02)
Household wealth, Q2	0.03) 0.03* 0.02) 0.04* 0.02) 0.02
Household wealth, Q2 -0.02 (0.05) (0.03) (0.02) (0.04) Household wealth, Q4 -0.06 (0.03) (0.04) (0.03) (0.04) (0.03) (0.04) (0.04) (0.05) (0.04) (0.05) (0.04) (0.05) (0.04) (0.05) (0.05) (0.07) (0.07) Learning camp#Household wealth, Q4 -0.05 (0.05) (0.07) (0.08) (0.08)).03*).02)).04*).02) 0.02
Household wealth, Q3	0.02) 0.04* 0.02) 0.02
Household wealth, Q3).04*).02) 0.02
Household wealth, Q4	0.02) 0.02
Household wealth, Q4 0.06 -0.00 0.00 -0 (0.03) (0.04) (0.04) (0.04) (0.04) (0.04) (0.04) (0.04) (0.05) (0.05) (0.04) (0.06) (0.05) (0.07) (0.10) (0.05) (0.07) (0.10) (0.05) (0.05) (0.08) (0.08) (0.08)	0.02
Learning camp#Household wealth, Q2	
Learning camp#Household wealth, Q2 -0.01 0.03 0.01 -0.01 (0.05) (0.04) (0.06) (0.06) Learning camp#Household wealth, Q3 -0.05 0.07 0.07 -0.07 (0.05) (0.07) (0.10) (0.05) Learning camp#Household wealth, Q4 -0.15*** -0.02 0.04 0.04 (0.05) (0.08) (0.08) (0.08)	1 001
(0.05) (0.04) (0.06) (0.04) (0.06) (0.04) (0.06) (0.05) (0.07) (0.07) (0.07) (0.07) (0.07) (0.07) (0.07) (0.07) (0.07) (0.08) (0.08) (0.08) (0.08)	0.02)
Learning camp#Household wealth, Q3 -0.05 0.07 0.07 -0.05 (0.05) (0.07) (0.10) (0.10) (0.10) (0.01)	0.04
(0.05) (0.07) (0.10) (0	0.05)
Learning camp#Household wealth, Q4 -0.15*** -0.02 0.04 (0.05) (0.08) (0.08)	0.03
(0.05) (0.08) (0.08)	0.04)
	0.00
Gender, girls#Household wealth, Q2 0.09 -0.01 0.07* 0	0.05)
	0.04
	0.03)
	0.03
	0.03)
	0.01
	0.03)
	0.01
Q2	
	0.05)
	0.01
Q3	
	0.04)
	0.05
Q4 (0.00) (0.00) (0.00) (0.00)	0.04)
	0.04)
	0.00
(0.11) (0.07) (0.04) (0.04)	0.06)
Observations 2,834 2,834 2	,834
R-squared 0.38 0.48 0.50 0	

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels by household wealth and gender. The reference group is boys from the poorest quartile of households. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 25b: Nepal: Impact of learning camps on literacy proficiency, by gender and household wealth

	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story
	recognition	recognition	reading	reading
Learning camp, yes	0.01	0.05	0.31***	0.21***
	(0.02)	(0.15)	(0.07)	(0.03)
Gender, girls	0.01	0.01	0.04	-0.02
	(0.01)	(0.04)	(0.04)	(0.03)
Learning camp#Gender, girls	0.01	-0.01	0.07	-0.04
	(0.01)	(0.05)	(0.05)	(0.05)
Household wealth, Q2	0.01	-0.05	0.11	0.01
	(0.01)	(0.06)	(0.07)	(0.05)
Household wealth, Q3	-0.01	0.06	-0.04	0.03
	(0.01)	(0.13)	(0.07)	(80.0)
Household wealth, Q4	0.01	0.14	-0.05	0.11
	(0.01)	(0.14)	(0.07)	(0.07)
Learning camp#Household wealth, Q2	-0.00	0.14	-0.11	0.05
	(0.02)	(0.15)	(0.13)	(80.0)
Learning camp#Household wealth, Q3	-0.01	-0.02	0.01	-0.04
	(0.01)	(0.04)	(0.03)	(0.02)
Learning camp#Household wealth, Q4	0.01	80.0	-0.07*	-0.03
	(0.01)	(80.0)	(0.03)	(0.05)
Gender, girls#Household wealth, Q2	-0.01	0.02	0.00	0.06*
	(0.02)	(0.03)	(0.05)	(0.03)
Gender, girls#Household wealth, Q3	-0.00	-0.02	-0.06	0.05
	(0.01)	(0.04)	(0.04)	(0.05)
Gender, girls#Household wealth, Q4	-0.00	-0.00	-0.04	0.01
	(0.01)	(0.04)	(0.06)	(0.03)
Learning camp#Gender, girls#Household wealth, Q2	0.01	-0.14*	0.14	0.07
	(0.01)	(80.0)	(0.08)	(0.08)
Learning camp#Gender, girls#Household wealth, Q3	0.00	-0.12	0.06	0.03
	(0.01)	(0.10)	(0.10)	(0.14)
Learning camp#Gender, girls#Household wealth, Q4	0.01	-0.13	0.06	-0.06
	(0.01)	(0.10)	(0.10)	(0.07)
Constant	0.94***	0.66***	0.07	-0.01
	(0.03)	(0.07)	(0.04)	(0.04)
Observations	2,834	2,834	2,834	2,834
R-squared	0.07	0.31	0.45	0.48

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels by household wealth and gender. The reference group is boys from the poorest quartile of households. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 26: Nepal: Impact of learning camps on numeracy and proficiency, by gender and age

	(1)	(2)
VARIABLES	Numeracy	Literacy
Learning camp, yes	1.58***	1.48***
	(0.30)	(0.46)
Gender, girls	0.02	-0.19
	(0.11)	(0.12)
Learning camp#Gender, girls	-0.10	-0.20
	(0.23)	(0.29)
Age, 10-13 years	0.74***	0.16
	(0.19)	(0.15)
Age, 14+ years	0.99***	0.29
	(0.30)	(0.23)
Learning camp#Age, 10-13 years	-0.45	0.83**
	(0.31)	(0.34)
Learning camp#Age, 14+ years	-0.62	0.14
	(0.76)	(0.83)
Gender, girls#Age, 10-13 years	0.07	0.08
	(0.11)	(0.19)
Gender, girls#Age, 14+ years	0.06	0.13
	(0.19)	(0.28)
Learning camp#Gender, girls#Age, 10-13 years	0.14	0.34
	(0.35)	(0.45)
Learning camp#Gender, girls#Age, 14+ years	0.11	0.49
	(0.73)	(1.27)
Observations	2,834	2,834
Pseudo R-squared	0.277	0.288

Note: This table presents results from an ordinary logistic regression using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy and literacy by household age and gender. The reference group is boys from the youngest age group of 6-9 years old. The outcome variable is a 5-point scale categorized as: 1 = Beginner, 2 = Number OR Letter recognition, 3 = Addition/Subtraction OR Word recognition, 4 = Multiplication/Division OR Paragraph reading, 5 = Word problem OR Story reading. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 27a: Nepal: Impact of learning camps on numeracy proficiency, by gender and age

	/4\	(0)	(2)	(4)
V/ABIABI EQ	(1)	(2)	(3)	(4)
VARIABLES	Number	Addition/	Multiplicati	Word
	recognition	Subtraction	on/Division	problem
Learning camp, yes	0.27***	0.21***	0.10**	0.03
	(0.06)	(0.05)	(0.04)	(0.02)
Gender, girls	0.01	-0.00	-0.01	-0.01
	(0.03)	(0.02)	(0.02)	(0.01)
Learning camp#Gender, girls	-0.04	0.01	-0.00	0.02
	(0.04)	(0.06)	(0.04)	(0.01)
Age, 10-13 years	0.17***	0.09***	-0.00	-0.01
	(0.04)	(0.02)	(0.03)	(0.02)
Age, 14+ years	0.17***	0.17***	0.05	0.00
	(0.04)	(0.04)	(0.04)	(0.04)
Learning camp#Age, 10-13 years	-0.23***	0.00	0.15*	-0.00
	(0.06)	(0.05)	(80.0)	(0.05)
Learning camp#Age, 14+ years	-0.16	-0.11	0.06	0.02
	(0.11)	(0.09)	(0.10)	(0.13)
Gender, girls#Age, 10-13 years	-0.01	0.04	0.01	0.01
	(0.03)	(0.03)	(0.03)	(0.02)
Gender, girls#Age, 14+ years	-0.01	0.02	0.02	0.02
	(0.04)	(0.05)	(0.04)	(0.04)
Learning camp#Gender, girls#Age, 10-13 years	0.08*	-0.03	-0.08	0.04
	(0.04)	(0.06)	(0.09)	(0.04)
Learning camp#Gender, girls#Age, 14+ years	0.03	-0.03	-0.00	-0.08
	(0.07)	(0.16)	(0.10)	(0.09)
Constant	0.41***	0.03	0.03	0.01
	(0.11)	(0.07)	(0.05)	(0.05)
	` ,	` ,	,	, ,
Observations	2,834	2,834	2,834	2,834
R-squared	0.38	0.48	0.50	0.38
				-

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on numeracy proficiency levels by gender and age. The reference group is boys from the youngest age group 6-9 years old. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



Table 27b: Nepal: Impact of learning camps on literacy proficiency, by age and gender

	(1)	(2)	(3)	(4)
VARIABLES	Letter	Word	Paragraph	Story
	recognition	recognition	reading	reading
Learning camp, yes	0.01	0.13	0.26***	0.21***
	(0.02)	(0.10)	(0.07)	(0.05)
Gender, girls	-0.01	-0.03	-0.01	-0.00
	(0.01)	(0.02)	(0.03)	(0.02)
Learning camp#Gender, girls	0.02	0.00	-0.08	-0.04
	(0.02)	(0.05)	(0.05)	(0.06)
Age, 10-13 years	0.02	0.03	0.07**	0.02
	(0.01)	(0.03)	(0.03)	(0.03)
Age, 14+ years	0.01	0.07	0.09**	0.07
	(0.01)	(0.05)	(0.04)	(0.04)
Learning camp#Age, 10-13 years	-0.00	-0.00	0.01	0.15*
	(0.02)	(0.05)	(0.05)	(0.07)
Learning camp#Age, 14+ years	0.01	-0.09	-0.08	0.03
	(0.02)	(80.0)	(80.0)	(0.11)
Gender, girls#Age, 10-13 years	0.00	0.03	-0.01	-0.01
	(0.01)	(0.02)	(0.04)	(0.03)
Gender, girls#Age, 14+ years	0.00	0.02	-0.00	0.02
	(0.02)	(0.03)	(0.06)	(0.04)
Learning camp#Gender, girls#Age, 10-13 years	-0.02	-0.02	0.18**	0.04
•	(0.02)	(0.05)	(80.0)	(80.0)
Learning camp#Gender, girls#Age, 14+ years	0.00	0.07	0.04	0.05
	(0.02)	(0.10)	(0.20)	(0.19)
Constant	0.94***	0.64***	0.11*	-0.02
	(0.03)	(0.09)	(0.06)	(0.04)
Observations	2,834	2,834	2,834	2,834
R-squared	0.07	0.30	0.45	0.48

Note: This table presents results from a linear probability model using propensity score matching with a kernel matching algorithm to test the heterogeneous impact of learning camps on literacy proficiency levels by gender and age. The reference group is boys from the youngest age group 6-9 years old. The outcome variable is a binary indicator of whether the child achieved the said proficiency level or not. The propensity score model includes baseline score, gender, household wealth, child age, school enrollment status. Standard errors are clustered at the village level. All regressions include village fixed effects.



