

Impande Programme Outcomes ELOM Assessment Report
September – November 2023

26th September

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Executive Summary

In September 2023 Impande conducted an ELOM assessment in 26 early learning programmes in the Eastern Cape and KwaZulu-Natal; in municipalities across the districts of Alfred Nzo, Harry Gwala, OR Tambo, and Ugu. A purposeful sampling methodology was employed to ensure that the learning programmes in the ELOM assessment allowed for comparison of outcomes across different intervention cohorts, which receive different levels of support from Impande.

The ELOM assessment reveals Ugu has the best outcomes with 70% of children in the sample being On Track for their developmental milestones. This is 15 percentage points higher than the next district (Harry Gwala) and 30 percentage points above the poorest performing district (OR Tambo). These results mirror Impande's depth of work across the districts and lend support to the Impande theory of change.

When these ELOM results were further disaggregated by the different intervention cohorts the analysis showed that ELOM outcomes improve as sites participate in deeper levels of support along their Impande journey. The mentored sites have the best ELOM outcomes, even when the analysis takes into account the children's years in an ECD programme. Not only do the mentored sites have better ELOM outcomes within the Impande sample, but they also have better outcomes than the national comparison groups. The mentored sites also see an exponential improvement for each additional year a child has been in the ECD programme. Conversely, ELOM outcomes for sites receiving no support from Impande do not see an improvement for each additional year a child has been in the ECD programme.

This report provides supporting evidence to Impande's theory of change and highlights the potential insights that are available through collecting and maintaining rich ECD Site Profile data for analysis against ELOM assessment outcomes and recommends the replication of this type of research at greater scale with significantly higher levels of scientific and statistical rigour in design and execution.

Introduction

This report presents a synthesis of the Impande 2023 ELOM assessment results and the ECD Centre Profile Data that Impande collects through the course of its interactions with its network. In order to achieve this the ELOM assessment is first introduced and its results discussed. These results will then be carried forward to be analysed in the context of specific ECD Centre Profile characteristics in order to understand which of these characteristics may positively influence ECD programme outcomes.

Introduction to the ELOM 4&5 Years Assessment

The ELOM tool is a standardised assessment that measures outcomes across five key development domains for children 4, and 5 years old.

- i. Gross Motor Development
- ii. Fine Motor Coordination and Visual Motor Integration
- iii. Emergent Numeracy and Mathematics
- iv. Cognition and Executive Functioning
- v. Emergent Literacy and Language

Each domain is scored out of 20, giving a total assessment scored out of 100. For each of these domains and their combined sums, children's scores are compared against expected standards for their age, allowing them to be categorised in one of three performance bands.

- i. On Track for Age
- ii. Falling Behind the Expected Standard
- iii. Falling Far Behind the Expected Standard, and in Need of Significant Assistance to reach the standard.

The purpose of the evaluation is to identify strengths and weaknesses in the sample children's specific benchmarks to inform ECD programming, and track changes in ECD programming impact over time.

The ELOM 4&5 direct assessment tool also includes two developmental checks or screens.

Task Orientation:

There are four items on the questionnaire that ask the assessor about the child's level of attention, concentration, diligence, and interest during the assessment. Based on a score out of 4, children's Task Orientation is deemed either satisfactory or poor.




World Health Organisation (WHO) Disability Screening:

There are four items on the questionnaire to determine whether a child has a disability which might affect their performance on the assessment. The assessor is asked four questions based on a modified version of the WHO Ten Question Screen. These include questions about the child's eyesight, hearing, ability to understand instruction, and movement abilities.

Scoring the ELOM 4&5 Years Assessment

Each of the five ELOM 4&5 domains is measured out of 20 points, giving a total score of 100 points. For each domain and the total score, children's scores are compared against expected developmental standards* for their age, and placed into one of three categories:

Table 1: ELOM Scoring

	On track for their age: Children scoring within a range that meets the standardised scores for children able to perform the tasks expected at their age.
	Falling behind the expected standard for their age: Children in need of support to perform the tasks expected at their age.
	Falling far behind the expected standard: Children in need of a concerted intervention to catch-up to the performance levels expected of their age.

*The expected ELOM performance standards were benchmarked by the ELOM development team against the ELOM 2016 age validation sample.

On Track: 60th – 100th Percentile

Falling Behind: 32nd-59th Percentile

Falling Far Behind: 0-31st Percentile

Comparing ELOM Assessment Results to Comparison Groups

In order to make sense of Impande’s ELOM Assessment results in the absence of a baseline assessment of the sample, results can be compared to comparison groups.

Two comparison groups will be used in this report: The ELOM Standardisation Sample, and the Thrive By Five Index.

1) The ELOM Standardisation Sample

When the ELOM was developed it was standardised on a sample of 1,331 children aged 50-69 Months, drawn from across socio-economic bands and five major language groups (out of the 11 official languages). The sample has been used to provide national averages, and national averages per economic quintile for comparison against both the 50-59 Month and 60-69 Month age groups. The economic quintiles referred to are based on South Africa’s five school quintile classifications which can be used as a proxy for household income levels in a school’s catchment area.

2) Thrive by Five Index: The 2021 Thrive by Five Index in South Africa to date.

The Thrive By Five Index 2021 is the largest representative sample of preschool children, 50-59 Months, and is the first in a series of nationally and provincially representative surveys that will monitor the key areas of development for 50-59 Month old children. The sample data is also comparable by socio-economic quintile as covered above.

Following the publication of the above-mentioned comparison data additional data has allowed for quintile rankings to be replaced with more accurate proxies of socio-economic status; namely the monthly fee level of the ECD centres. With the advent of this development, it has been recommended that subsequent ELOM assessments record the fee levels of centres to augment the dataset that will monitor the opportunity disparities between children from different socio-economic backgrounds.

To this end the 2023 Impande ELOM Assessment used the ECD Centres’ monthly fee as a proxy for socio-economic status as opposed to the school quintiles. All the ECD Centres in the 2023 Impande ELOM were “fee level one”, R0-R110, which falls within the Quintile 1, the lowest of the socio-economic bands, allowing us to compare to the comparison groups.

Interpreting this ELOM 4&5 Years Assessment

The ELOM 4&5 direct assessment provides an indication of how programme children are performing at the point of time of the assessment.

What this data can be used for:

- Indicating the developmental status of children in an early learning programme.
- Indicating developmental domains that require attention and intervention.
- Provide a baseline performance level against which future ELOM assessments of the same children can be compared.

What this data cannot be used for:

- A measurement of individual child performance.
- Measuring the impact of a learning programme. (Unless it is being compared to baseline assessment of the same children.)
- Replacing a programme/project outcomes or implementation evaluation.

The Impande 2023 ELOM Assessment

This section of the report summarises the performance of a sample of children enrolled in 26 early learning programmes in the Eastern Cape and KwaZulu-Natal. In municipalities across the districts of Alfred Nzo, Harry Gwala, OR Tambo, and Ugu. Children were assessed on the ELOM 4&5 direct assessment tool.

Date of Assessments: Oct – Nov 2023

Accredited Assessors: Nosipho Gumede, Sthombe Sibaya and Nondumiso Mbatha

Language of Assessments: Assessment were conducted in isiZulu and isiXhosa

Sample Details

Purposeful sampling was used in this ELOM Assessment. ECD centres were selected purposefully to ensure centres in all municipalities and levels of support were represented in the study. Impande has a database of 2047 ECD centres from which centres meeting the analysis requirements were selected. ELOM guidelines require a sample size of minimum 15 children per ECD site. The reality is that many of the ECD sites in the Impande network have low enrolment numbers, so Impande includes every child in the site who is in the right age group.

The size of the sample was determined by Impande's assessment capacity which was limited to 3 ELOM assessors over two months.

Cleaning of the Sample

	Number of children who did not satisfy this criteria
Criteria	
Children not within the appropriate age band	0
Assessment language not appropriate for child	5
Children who fail World Health Organisation disability screening	0
Children who get zero for two or more ELOM domain scores	1
Duplicate submissions due to fieldworker errors	0
The assessor indicated a problem with the assessment conditions	9
Children did not complete the assessment	0
Children who fail the Task Orientation screening	28
Total Number of Assessments Submitted	365
Total Number of Assessments Excluded	43
Total Number of Assessments Included in Analysis	322

Granular Sample Overview

Table 2: Eastern Cape Sample

Eastern Cape (Raw 180; Cleaned 177)				
ECD Site	Raw Sample	Cleaned Sample	District	Municipality
IMIZAMOYETHU PRE SCHOOL	15	15	Alfred Nzo	Matatiele
LEBOHANG PRE SCHOOL	14	12	Alfred Nzo	Matatiele
LUBALEKO PRE SCHOOL	12	10	Alfred Nzo	Matatiele
ZAMANI PRE SCHOOL	15	13	Alfred Nzo	Matatiele
ZANOVUYO PRE SCHOOL	21	16	OR Tambo	Ngquza Hill
DANGWANE PRE SCHOOL	12	9	OR Tambo	Ngquza Hill
ZANOZUKO PRE SCHOOL	7	7	OR Tambo	Ngquza Hill
NGUBEZULU PRE SCHOOL	11	10	Alfred Nzo	Ntabankulu
THOMO PRE SCHOOL	15	14	Alfred Nzo	Ntabankulu
PHUMELELANI PRE-SCHOOL	15	15	Alfred Nzo	Ntabankulu
GREENVILLE PRE SCHOOL	14	7	Alfred Nzo	Winnie Mandela
MANDLOBE PRE SCHOOL	14	10	Alfred Nzo	Winnie Mandela
LITTLE FLOWER PRE SCHOOL	15	7	Alfred Nzo	Winnie Mandela

Table 3: KwaZulu-Natal Sample

KwaZulu-Natal (Raw 185; Cleaned 145)				
ECD Site	Raw Sample	Cleaned Sample	District	Municipality
MANSFIELD CRECHE	15	14	Ugu	Ray Nkonyeni
ZAMOKUHLE CRECHE	12	12	Harry Gwala	uBuhlebezwe
KHULISA CRECHE	15	14	Ugu	Umdoni
GCINOKUHLE CRECHE	15	15	Ugu	uMuziwabantu
THOLIMFUNDO CRECHE	15	15	Ugu	uMuziwabantu
LINDOKUHLE CRECHE	15	15	Ugu	uMuziwabantu
KHINZINKOSI CRECHE	15	15	Ugu	uMuziwabantu
LITTLE ANGELS PRE SCHOOL	15	12	Harry Gwala	uMzimkhulu
MASAKHE PRE SCHOOL	13	12	Harry Gwala	uMzimkhulu
ZAMUKULUNGA PRE SCHOOL	15	14	Harry Gwala	uMzimkhulu
ENTOKOZWENI EDUCARE CENTRE	15	14	Ugu	uMzumbe
SUNRISE CRECHE	15	15	Ugu	uMzumbe
NTIMBANKULU CRECHE	10	10	Ugu	uMzumbe

Representation of Intervention Cohorts in the Sample

According to the Impande Theory of Change, and the “journey” Impande walks with ECD sites in its network, ECD sites receive and participate in deepening levels of support over time and as they achieve eligibility criteria. These range from “No Support”, “Participating in Network”, “3 Years in Learning Group”, “Mentored”.

The intervention that programmes participating in the Impande networks receive can be characterised by:

- Collection of site profile data to guide resource allocation and allow for tracking of progress
- Provision of a basic nutritional package to address early developmental nutritional needs and to lay the foundation for the children within the ECD site to be more receptive to the further layers of ECD programme improvement that will follow
- Connecting the site to the ECD network: This mitigates of the marginalisation and vulnerability of women ECD practitioners through the sharing of experiences, exchanging of information, collaboration, creating linkages to ECD resource providers and the formation of a collective voice to drive lasting change

The intervention that programmes participating in learning groups receive can be characterised by:

- Facilitating peer learning between trained and untrained ECD practitioners
- Supporting ECD practitioner implement content from ECD training providers
- Facilitating reflection on all areas of children's development
- Supporting ECD practitioners to practice and institute incremental improvements to their skill and practice
- Address institutional capacity constraints that hinder effective ECD delivery
- Share resources to support child protection, parent participation, and inclusion.

The intervention that mentored sites receive can be characterised by:

- Pre and post programme assessments covering institutional capacity and programme implementation to inform mentoring and measurement of impact
- Goals are developed with sites and progress towards them tracked by working closely with ECD practitioners and their committees.
- Monthly onsite mentoring sessions to address challenges and improve ECD practice
- Strengthening parent participation and learning at home
- Yearly ELOM assessments to track progress and evaluate impact

Table 4: Children Per Intervention Cohort in Sample

	Children Per Intervention Cohort Pre-Cleaning	Children Per Intervention Cohort Post-Cleaning
No Support	96	82
Participating in Network	139	113
3 Years in Learning Group	55	53
Mentored	74	74

Profile Data across Intervention Cohorts Support

As per its Theory of Change (discussed in detail later) Impande identify, visit and collect data on all ECD sites in the area before starting work in a new municipality. This data is used to create site profiles which then allows Impande to mobilise and allocate resources appropriately and track progress of the ECD programmes along the Impande journey. Because all ECD sites are profiled it is possible to compare specific characteristics of ECD sites across the different intervention cohorts, those receiving No Support, those in the ECD Network, those who have spent 3 years in Learning Groups, and those that are Mentored. This section of the report will present the different characteristics of ECD sites across these intervention cohorts.

Table 5: Infrastructure General across intervention cohorts

	No Support	Network	3-year LG	Mentoring
Proportion of ECDs received building from Impande	0%	40%	50%	100%
Average No. of Classrooms	1.1	1.6	2	2.2
Average number of children enrolled per ECD	32	40	81	56
Average number of staff/volunteers per ECD	2	3	4	4
Average number of books per ECD	3	23	43	33
Average fees	R74	R80	R76	R119
Average types of resources per ECD	1	9	9	11

Infrastructure Characteristics of ECD Sites Across Intervention Cohorts

The typical infrastructural characteristics ECD sites is markedly different across the intervention cohorts; with sophistication increasing as ECD sites move deeper along the Impande journey. ECD sites receiving no support, and participating in the Network but

not in Learning Groups or Mentoring, are more likely to be run out of private homes, be built out of informal or traditional materials, have no toilets, be open to the environment, and no have a piped water source. The graph below depicts this, and it is interesting to note that none of the ECD sites who have received deeper intervention (3 years in Learning Group, or Mentoring) have any of these characteristics.

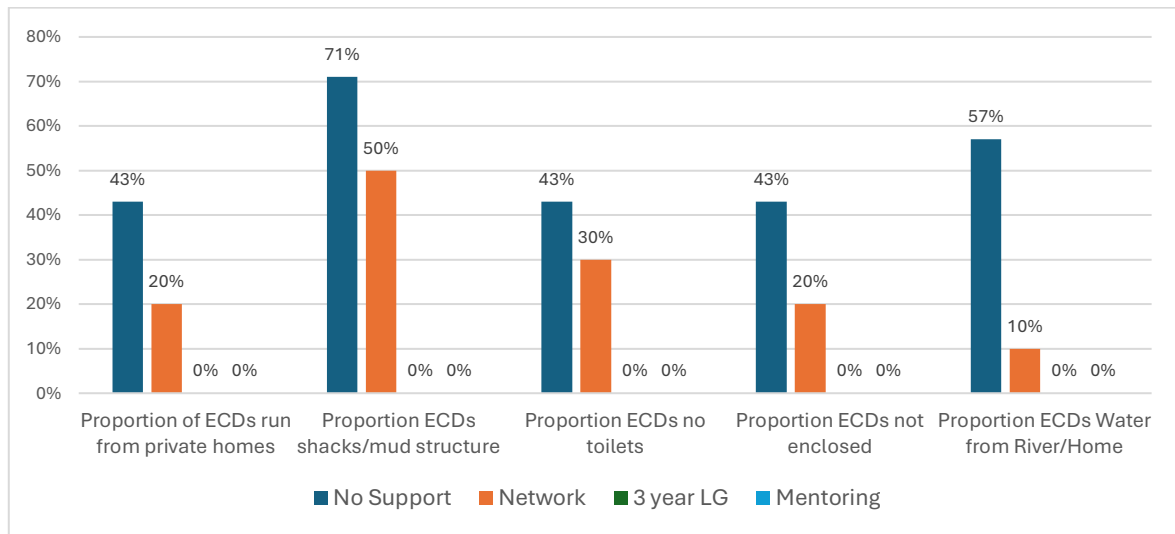


Figure 1: Infrastructure Characteristics of ECD Sites Across Intervention Cohorts

Resourcing of ECD Sites across Intervention Cohorts

The graph below shows how ECD sites that receive no support from Impande, lack support by other NGOs, do not have many resources, and are less well equipped with books. The ECD sites which participate in the Networks, Learning Groups, and Mentoring, on the other hand are more likely to have access to these resources.

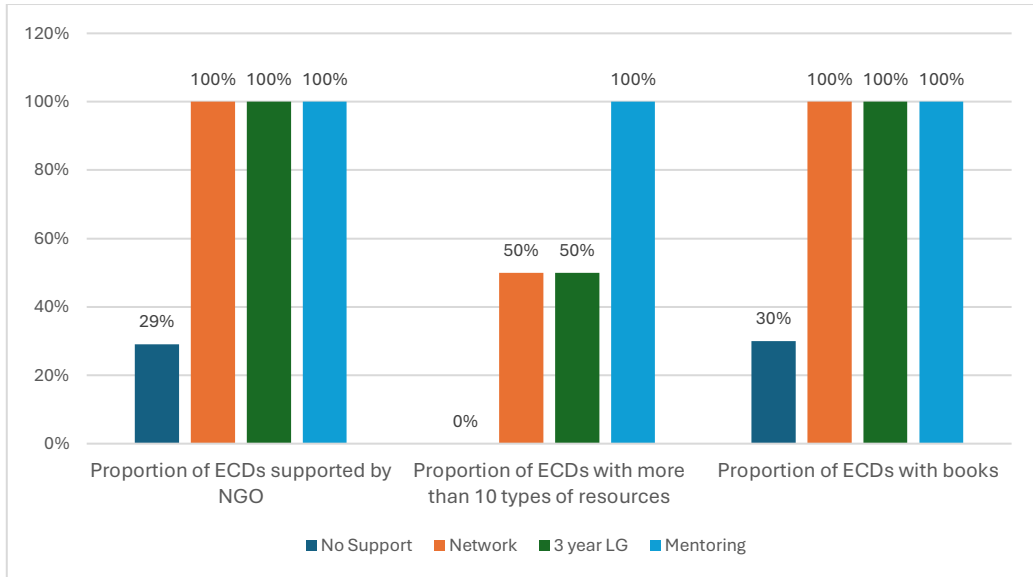


Figure 2: Resourcing of ECD Sites Across Intervention Cohorts

Nutrition Subsidies and Provision Across Intervention Cohorts

Among the ECD sites with no support breakfast and lunch is not served unless the site is receiving the government subsidy. ECDs in the network are however more likely to serve breakfast and lunch as they receive nutritional support. All ECDs sites in the 3 years in learning groups and mentoring cohort are subsidised by government. This means that there is funds for food.

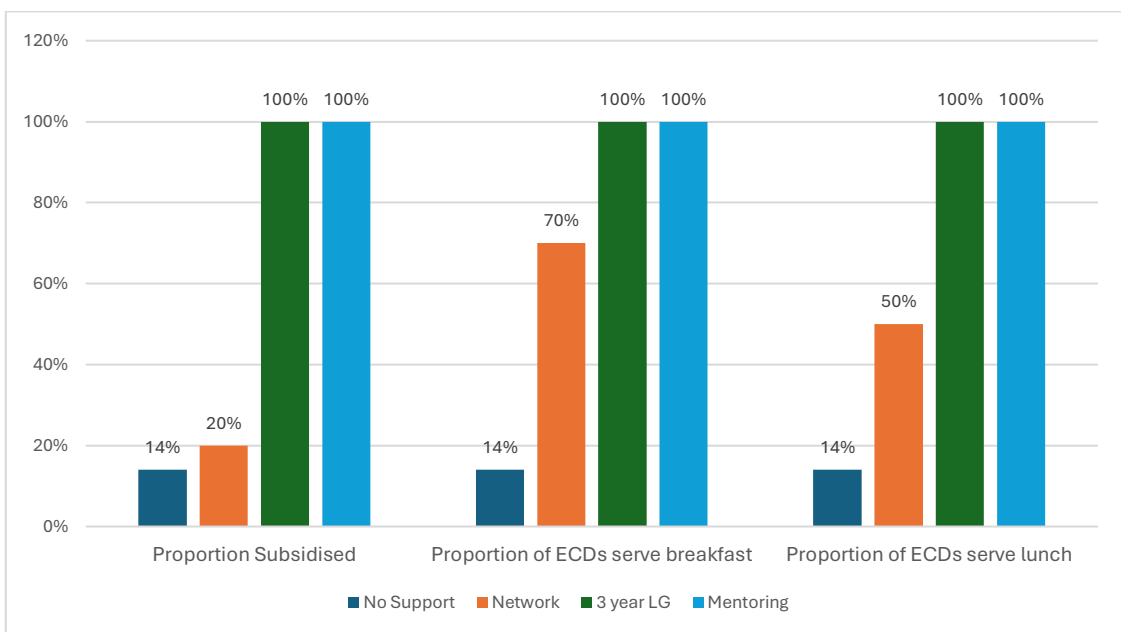


Figure 3: Nutrition Subsidies and Provision Across Intervention Cohorts

Stability and Sustainability Characteristics Across Intervention Cohorts

The elements of NPO certification, Partial Care registration, engagement by the Department of Education, and willingness of caregivers to pay fees all describe the stability and sustainability of the ECD site. The graph below continues the trend seen above where ECD sites upon the continuum of Impande intervention are more likely to present these characteristics the further along the continuum they are.

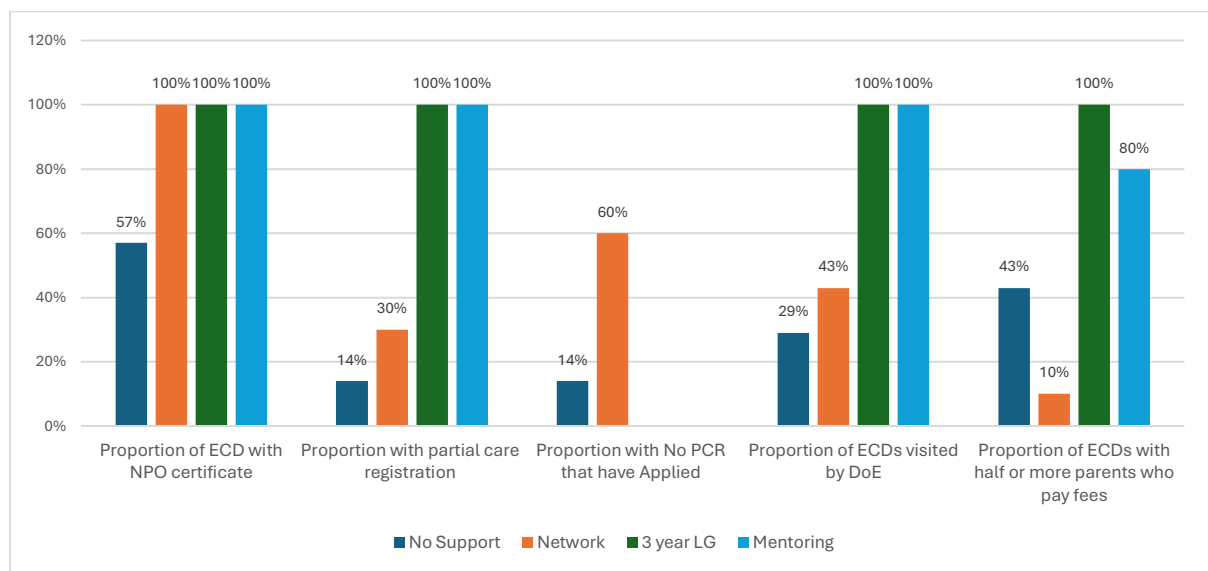


Figure 4: Stability and Sustainability Characteristics Across Intervention Cohorts

Qualified Teachers Across Intervention Cohorts

When the number of teachers with ECD qualifications in the sample sites per intervention cohort is compared to the total number of teachers in the sample sites an average number of qualified teachers per ECD site in each of the intervention cohorts. Interestingly sites receiving no support are nearly or more represented when it comes to proportion of teachers with a Basic ECD qualification when compared to ECD sites along Impande’s intervention continuum. However, when it comes to the proportion of teachers with Level 4 ECD qualifications the sites receiving no support have the smaller proportion of teachers with this qualification.

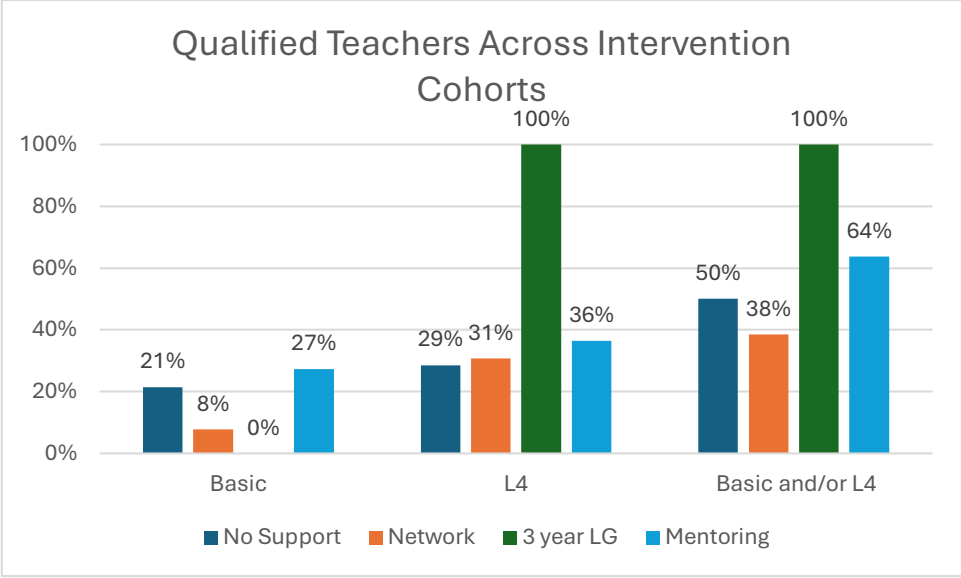


Figure 5: Qualified Teachers Across Intervention Cohorts

Representation of Children Across Different Levels of ECD Programme Attendance

Across the participant children in the ECD sites there is variance in their individual levels of ECD attendance.

Table 5: Children Per Years in Programme

Year in Programme	1st year in programme	2nd year in programme	3rd year in programme
Number of Children Across all Sites	188	97	36

Sample Summary

In total, 322 ELOM assessments were included in this analysis.

Table 6: Sample Overview

	50-59 Months	60-69 Months	Total
Sample Size	183	139	322
% Boys	45%	45%	45%
% Girls	55%	55%	55%
Average Age (Months)	54,93	61,58	57,80
ELP Fee Level			
% R0-110	91%	91%	91%
% R111-290	9%	9%	9%

Presentation of Results

The results of the Impande 2023 ELOM Assessment are presented below. Where appropriate discussion is provided to elucidate the analysis.

Percent of Children On Track, Falling Behind, and Falling Far Behind per Each Developmental Domain

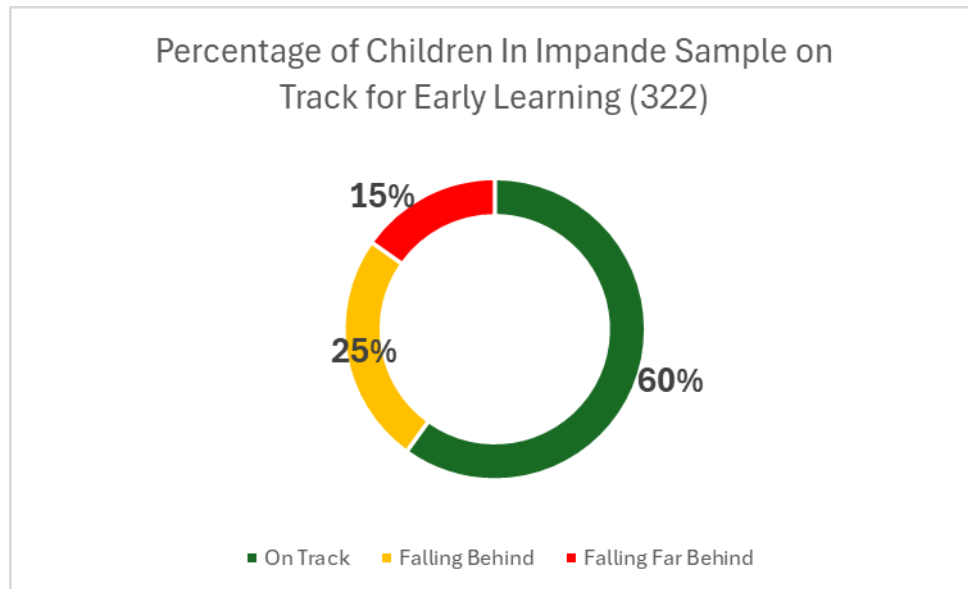


Figure 6: Impande 2023 Sample Total ELOM Performance

The total ELOM score for all children shows 60% of the children in the 2023 Impande assessments are on track for early learning.

When unpacking the total scores into their five domains it becomes clear that the total score is not representative of a holistic picture and there are instances where high performance in one domain masks poor performance in another. For example, children in this sample performed relatively well in the gross motor development domain. Studies¹ have shown that rural children demonstrate greater motor coordination, suggesting a correlation between rural environments and the development of motor coordination. These results then may not be a pure outcome of the ECD programme and could be skewed by the environment. Performance in the other domains is weaker with Fine Motor and Visual Motor Integration, Emergent Numeracy and Mathematics, and Cognition and Executive Functioning where a quarter to a third of the children are falling far behind.

¹ Adriyani, R., Iskandar, D., Camelia, L.S. (2021) "Urban-Rural Children Difference in Motor Coordination, Cardiorespiratory Fitness, and Agility", International Joint Conference on Arts and Humanities 2021 (IJCAH 2021). Atlantis Press, 433-437.

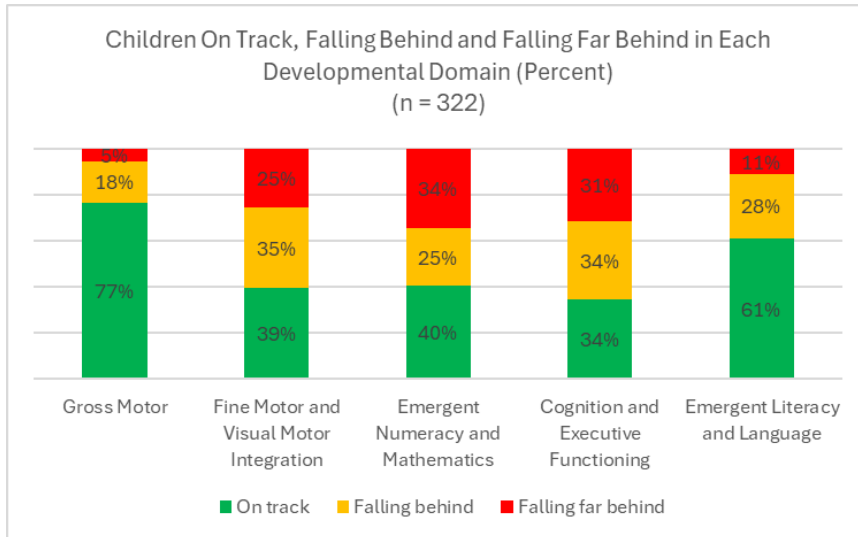


Figure 7: Impande ELOM Results

Percent of Children On Track, Falling Behind, and Falling Far Behind Across Districts

The following graph presents comparative scores for each district and Ugu’s role in skewing these to the positive.

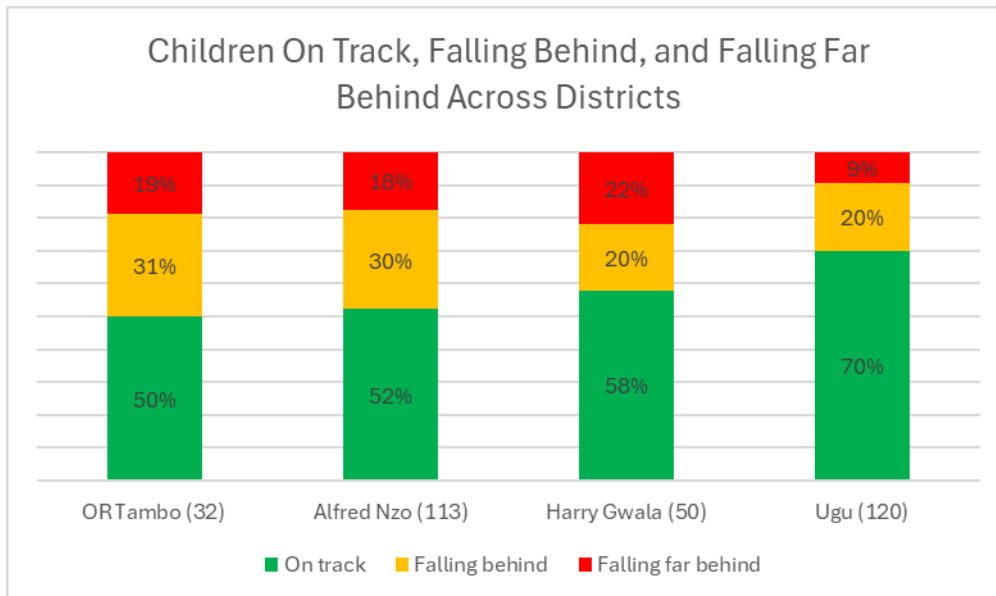


Figure 8: Impande ELOM Results Per District

This graph demonstrates ELOM outcomes across districts where Impande has had differing lengths and depths of intervention. What the trends here begin to show is a relationship between ELOM outcomes and level of support received from Impande. The OR Tambo sample has the lowest percent of children on track and has received no support from Impande. The Alfred Nzo and Harry Gwala sites participate in Impande

networks and have a higher percentage of children on track than OR Tambo. Finally, the sites in the Ugu sample, where Impande has been working the longest, have the highest percentage of children on track, 70% compared to the second highest district with 58%. The sites in Ugu have received the deepest intervention across all the districts, belonging to the “Three Years in Learning Group” and “Mentored” intervention cohorts. When this data is overlaid on a district map it is possible to see the Impande’s graduated expansion strategy in action. The best ELOM outcomes (70% children on track) are visible in Ugu, where Impande began work, with improved ELOM outcomes blossoming outward as they move over time into new districts.

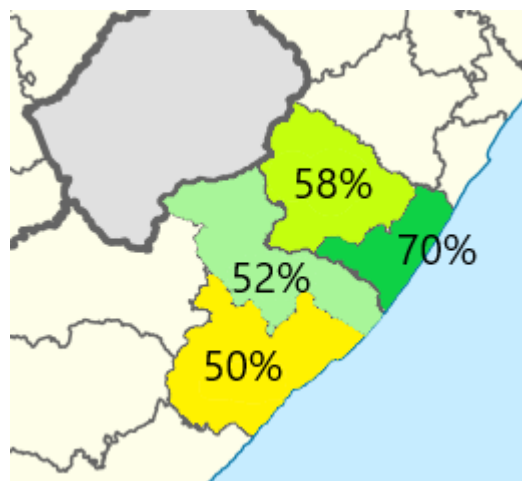


Figure 9: Percent of Children On Track Across Districts

The Impact of Impande’s Different Levels of Support on ELOM Outcomes

This section of the report examines the impact across the different levels of support through analysing outcomes of the different intervention cohorts; comparing them to each other, but also to the two comparison groups introduced above; The ELOM Standardisation Sample, and the Thrive By Five Index.

Impact on Total Scores

Analysis of ELOM outcomes per intervention cohort shows a corresponding increase in performance against the deepening levels of support offered along the Impande journey.

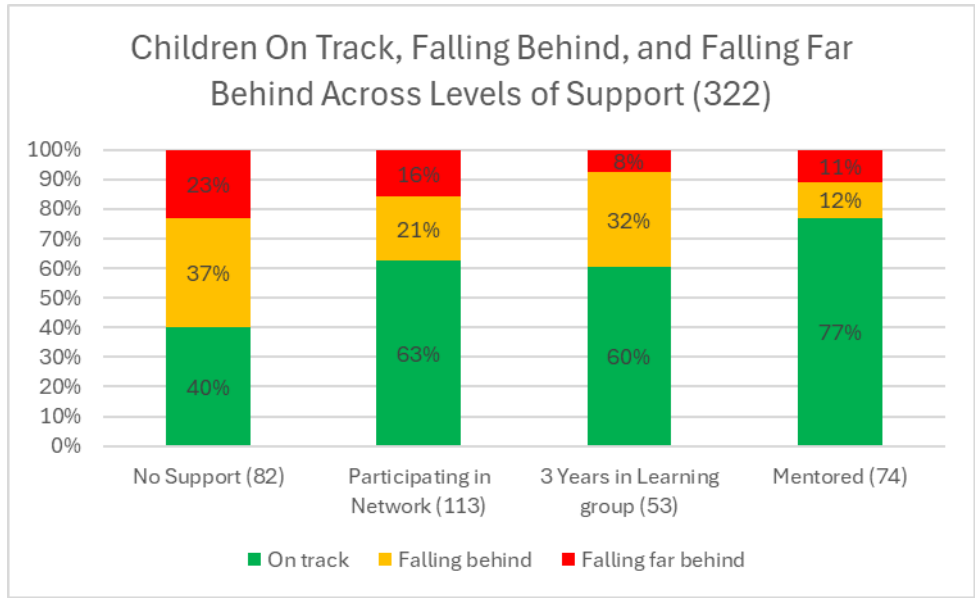


Figure 10: Impande ELOM Results Per Level of Support

These results are translated into average total ELOM scores and presented alongside the comparison groups for both age groups below.

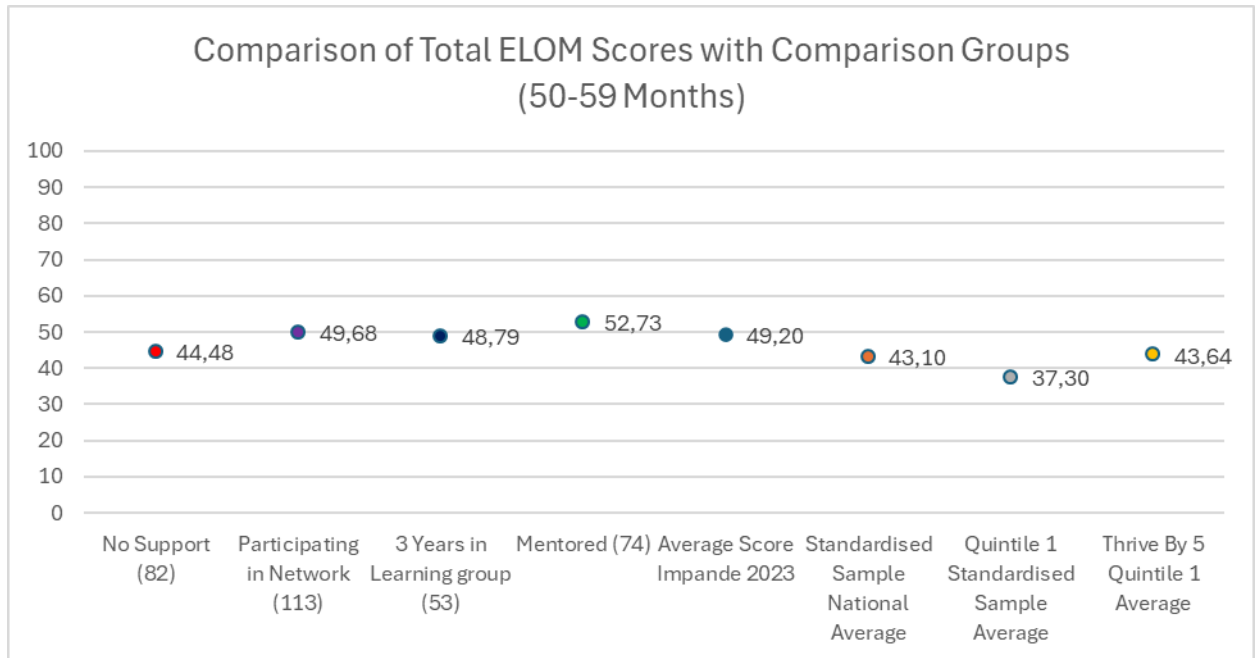


Figure 11: Comparison of Total Scores with Comparison Groups (50-59 Months)

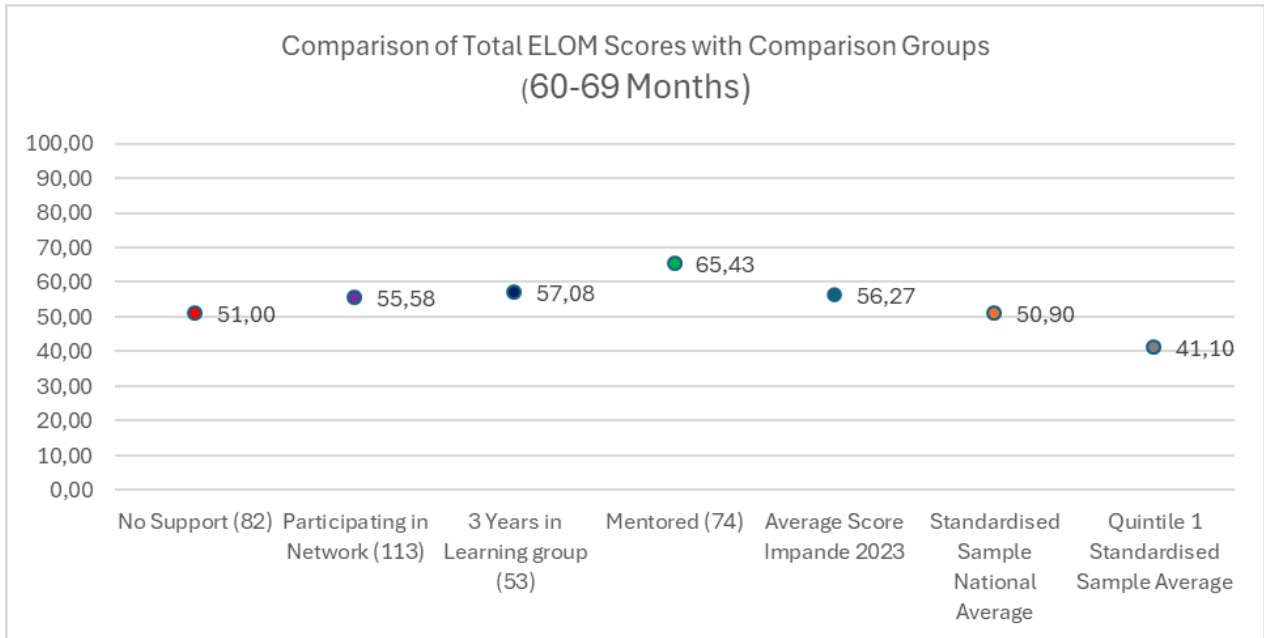


Figure 12: Comparison of Total Scores with Comparison Groups (60-69 Months)

These two graphs unpack the “Average Score Impande 2023” data point into its constituent intervention cohorts. It is clear that the mentored cohort has a higher average score than the national average in both age groups. 9.6% higher for the 50-59 Month sample, and 14.5% higher for the 60-69 Month sample. What is interesting when the data is presented in this way is the relationship between the “No Support” results and the comparison groups. The 50-59 Month sample average score is 7.2% higher than the “Quintile 1 Standardised Sample Average”; and only 0.8% lower than the “Thrive By Five Quintile 1 Average”. The 60-69 Month sample, however, sees the “No Support” result 9.9% higher than the “Quintile 1 Standardised Sample Average”, but almost identical (0.1%) to the “Standardised Sample National Average”.

Analysis of ELOM Domain Outcomes Per Intervention Cohort (50-59 Months)

The following section examines the ELOM outcomes per domain per each of the intervention cohorts: No Support; Participating in Network; 3 Years in Learning Group; Mentored. This will be followed by a comparison of average scores for each domain across the intervention cohorts and the comparison groups.

Domain Outcomes for No Support Cohort (50-59 Months)

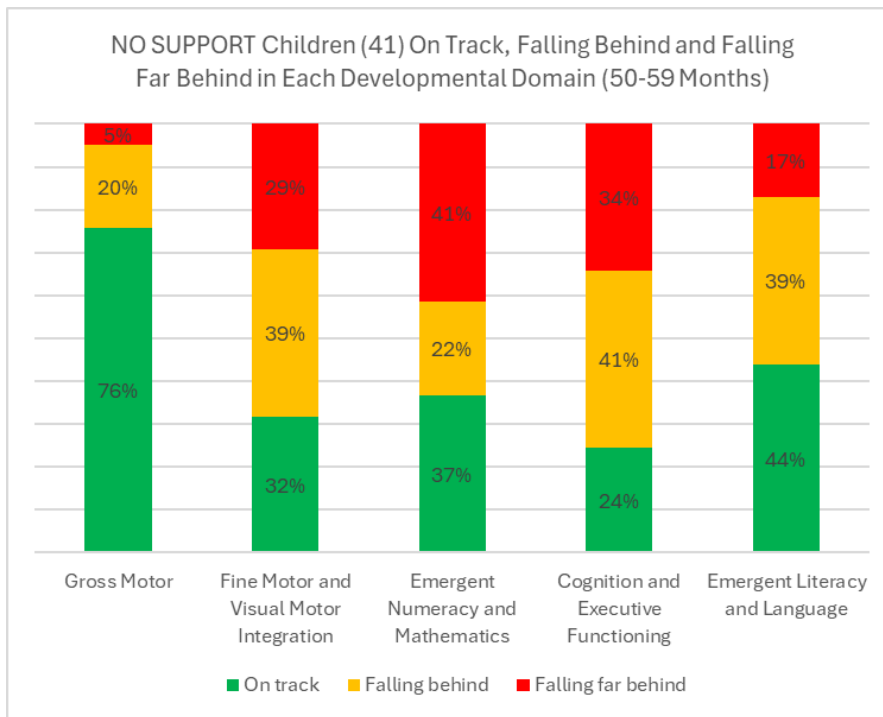


Figure 13: No Support Domain Outcomes (50-59 Months)

Unsurprisingly we see a high Gross Motor domain score, and relatively poor performance across the rest of the domains.

Domain Outcomes for Participating in Network (50-59 Months)

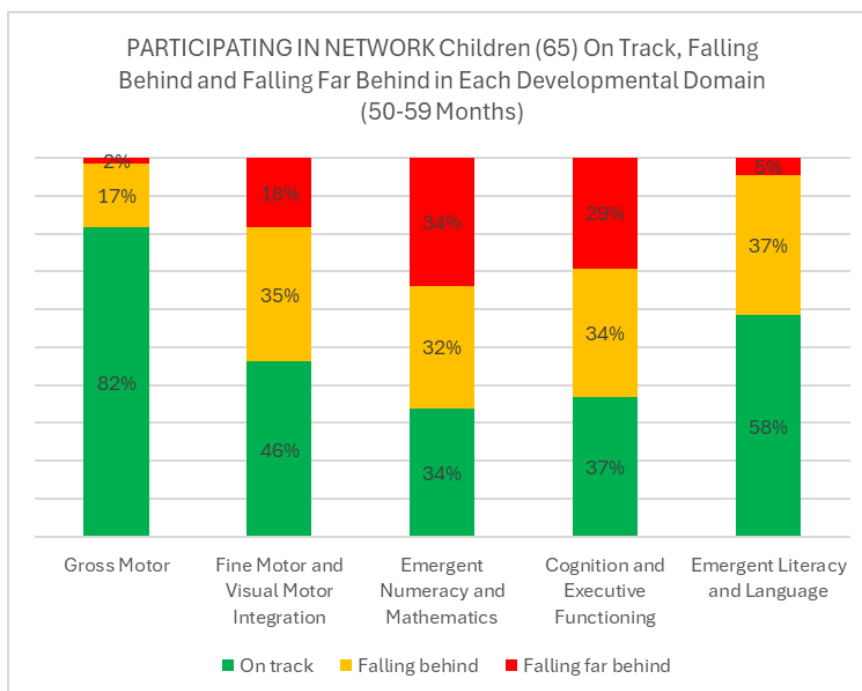


Figure 14: Participating in Network (50-59 Months)

ECD programmes which participate in Impande networks perform better across all domains than the programmes with no support. Notably a 14% increase of children On Track for Fine Motor and Visual Integration; and on track for Emergent Literacy and Language. There is also a 13% increase of children on track for Cognition and Executive Functioning. There is an anomalous 3% decrease in children on track for Emergent Numeracy and Mathematics.

Domain Outcomes for 3 Years in Learning Group (50-59 Months)

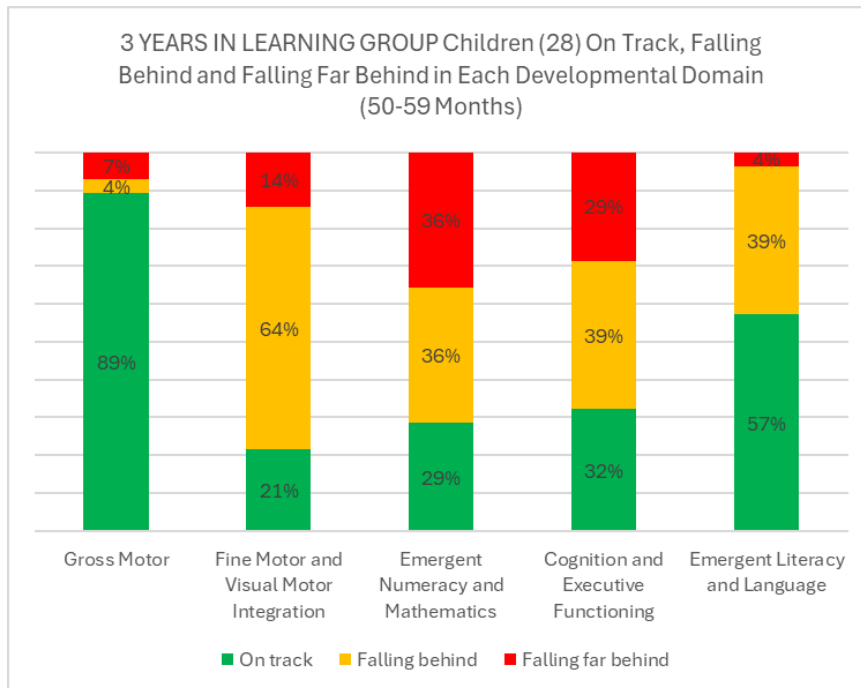


Figure 15: 3 Years in Learning Group Domain Outcomes (50-59 Months)

ECD programmes which have participated in learning groups for three years appear to have plateaued just under the previous cohorts performance. While we see an anomalous decrease in children on track for Fine Motor and Visual Motor Integration compared to the “Participating in Network Cohort”.

Domain Outcomes for Mentored (50-59 Months)

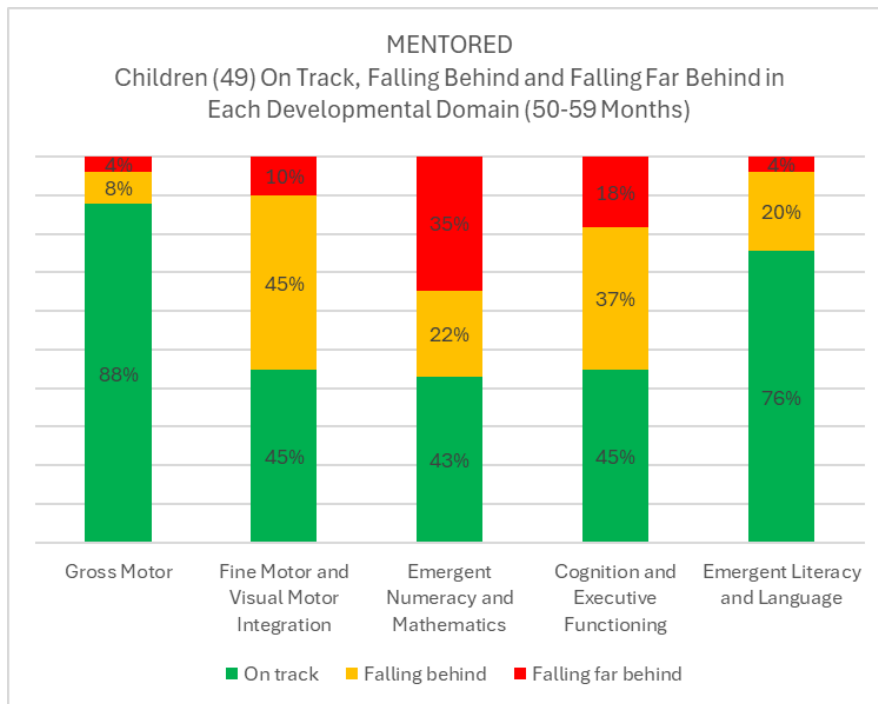


Figure 16: Mentored Domain Outcomes (50-59 Months)

ECD Programmes receiving mentoring have the highest outcomes across the board, except for a 1% decrease in Gross Motor and Fine Motor outcomes compared to their highest outcomes in this age group. Compared to programmes receiving no support, mentored sites see an increased percentage of children across all domains. Gross Motor (+12%); Fine Motor and Visual Motor Integration (+13%); Emergent Numeracy and Mathematics (+6%); Cognitive and Executive Functioning (+21%); Emergent Literacy and Language (+32%).

Comparison of Average Domain Scores Across Intervention Cohorts and Comparison Groups (50-59 Months)

The following section allows for a comparison of average domain scores across the Impande cohorts and comparison groups.

Comparative Gross Motor Development Scores (50-59 Months)

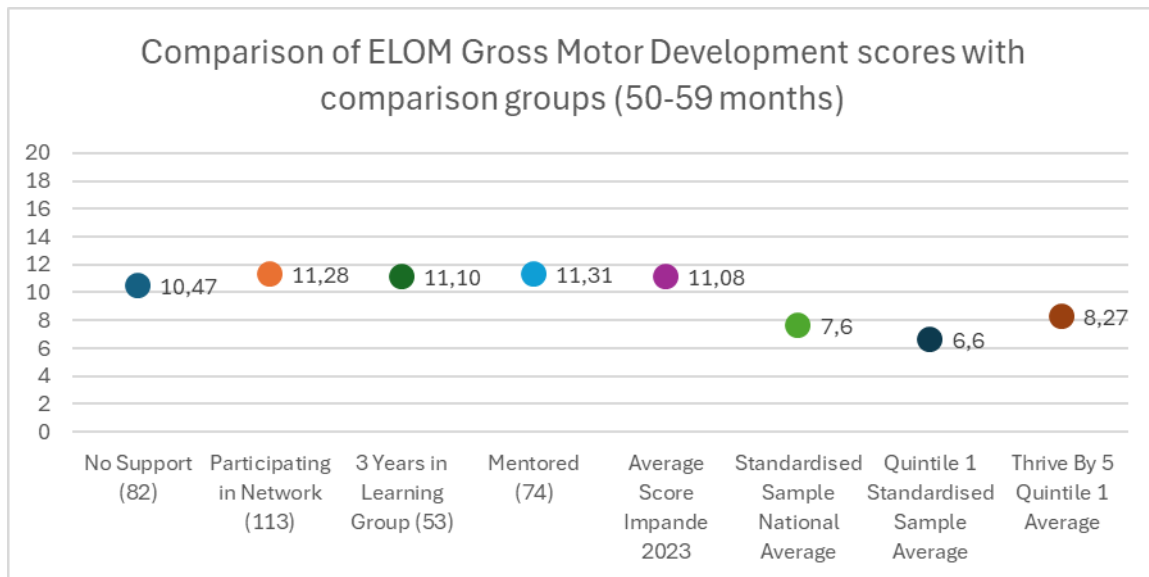


Figure 17: Comparison of ELOM Gross Motor Development Scores (50-59 Months)

This graph displays the average ELOM Gross Motor Development score for the study sample, compared age and quintile appropriate comparison groups. All cohorts within the Impande 2023 Sample score better than the comparison groups. The mentored cohort has the highest average score.

Comparative Fine Motor Coordination and Visual Motor Integration Scores (50-59 Months)

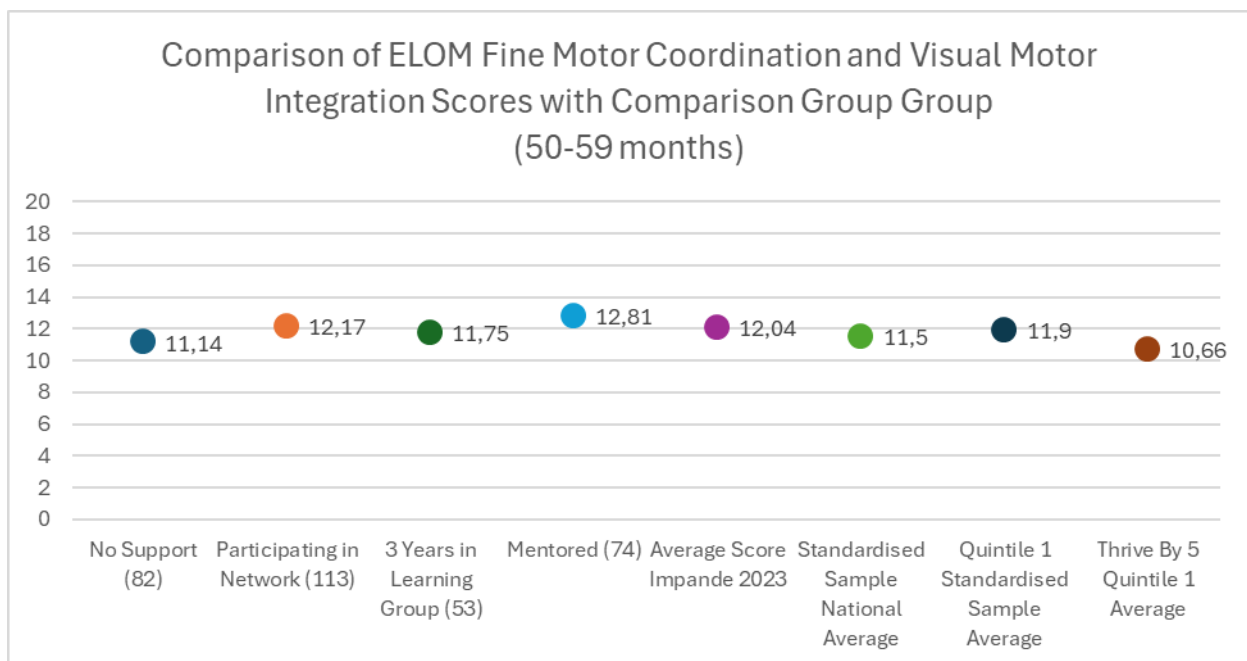


Figure 18: Comparison of ELOM Fine Motor Coordination and Visual Motor Integration (50-59 Months)

This graph displays the average ELOM Fine Motor Coordination and Visual Motor Integration scores for the study sample, compared age and quintile appropriate comparison groups. In the 50-59 Months age band the Impande 2023 Sample scores higher than the comparison groups.

Comparative Emergent Numeracy and Mathematics Scores (50-59 Months)

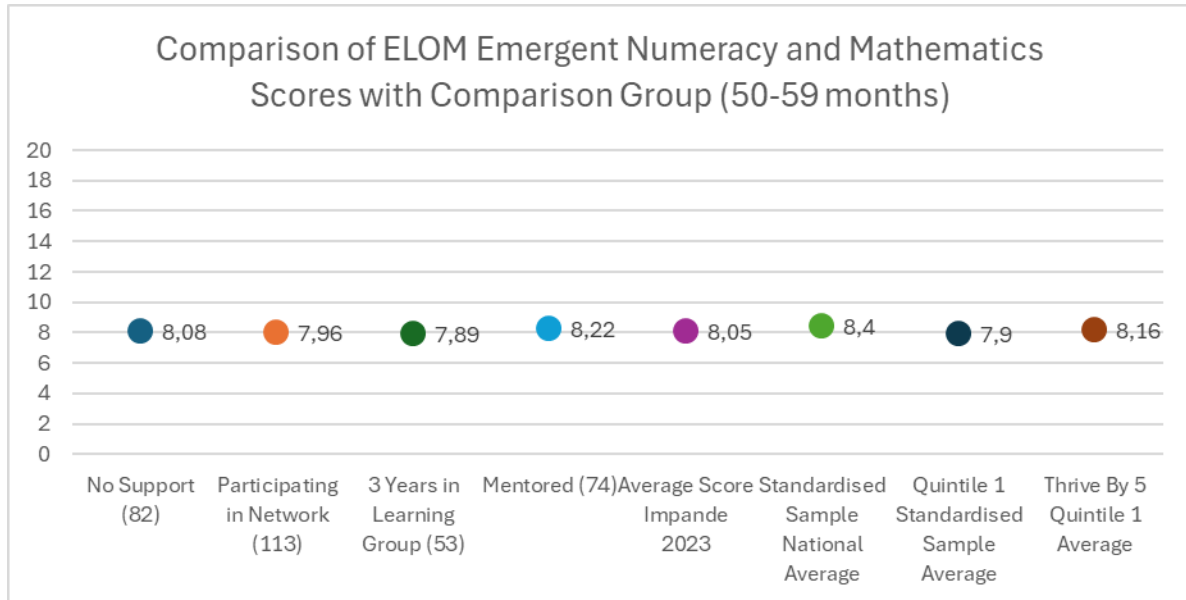


Figure 19: Comparison of ELOM Emergent Numeracy and Mathematics (50-59 Months)

This graph displays the average ELOM Emergent Numeracy and Mathematics score for the study sample, compared age and quintile appropriate comparison groups. In the 50-59 Months age band the Impande cohorts score lower than the Standardised Sample National Average, but the mentored cohort scores highest across the Quintile 1 samples.

Comparative Cognitive and Executive Functioning Scores (50-59 Months)

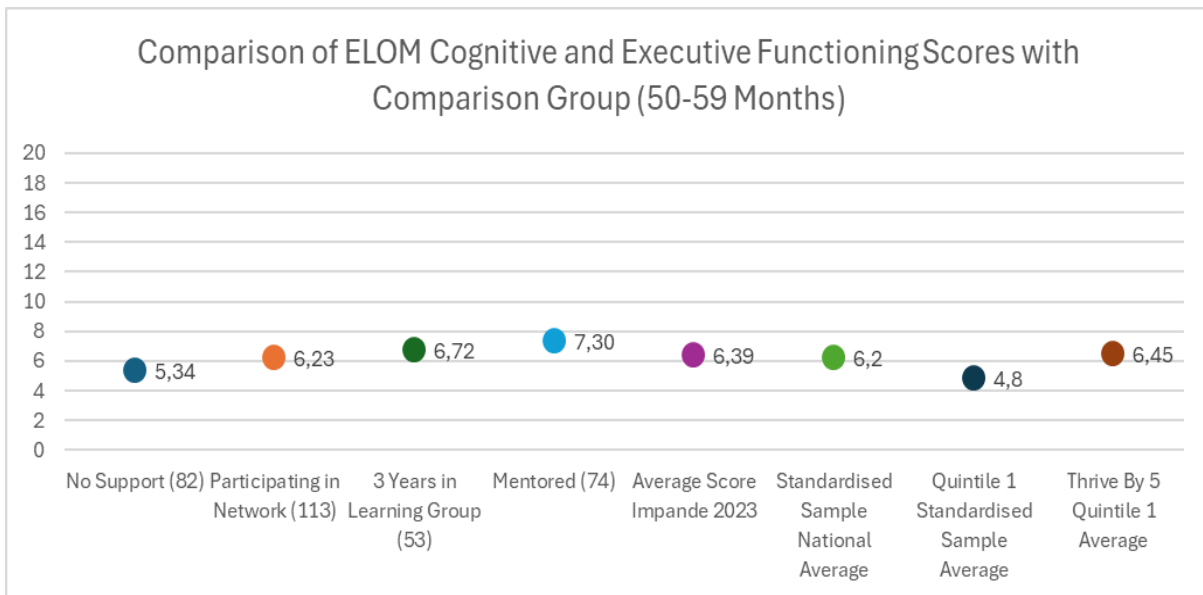


Figure 20: Comparison of Cognitive and Executive Functioning (50-59 Months)

This graph displays the average ELOM Cognitive and Executive Functioning scores for the study sample, compared age and quintile appropriate comparison groups. The average Impande 2023 Sample for 50-59 Months is lower than the Thrive By Five comparison group for the same quintile, but higher than the Standardised Sample for Quintile 1. But on examination of the intervention cohorts, it is revealed that the “3 Years in Learning Group”, and “Mentored” cohorts both score higher than the Thrive By Five comparison group, with the “Mentored” cohort being the highest average score across the board.

Comparative Emergent Literacy and Language Scores (50-59 Months)

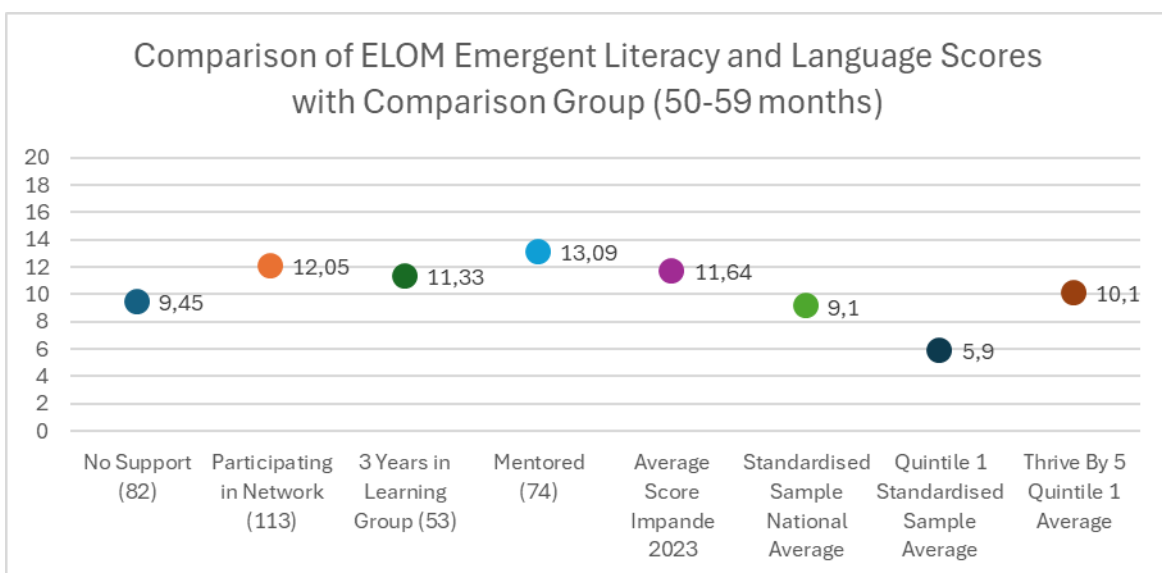


Figure 21: Comparison of ELOM Emergent Literacy and Language (50-59 Months)

For the domain of Emergent Literacy and Language the Impande intervention cohorts that have received any support score higher than all the comparison groups, with mentored sites having the highest score.

ELOM Domain Outcomes Per Level of Impande Intervention (60-69 Months)

The following section examines the ELOM outcomes per domain per each of the intervention cohorts: No Support; Participating in Network; 3 Years in Learning Group; Mentored. This will be followed by a presentation of comparative scores for each domain across the intervention cohorts and the comparison groups.

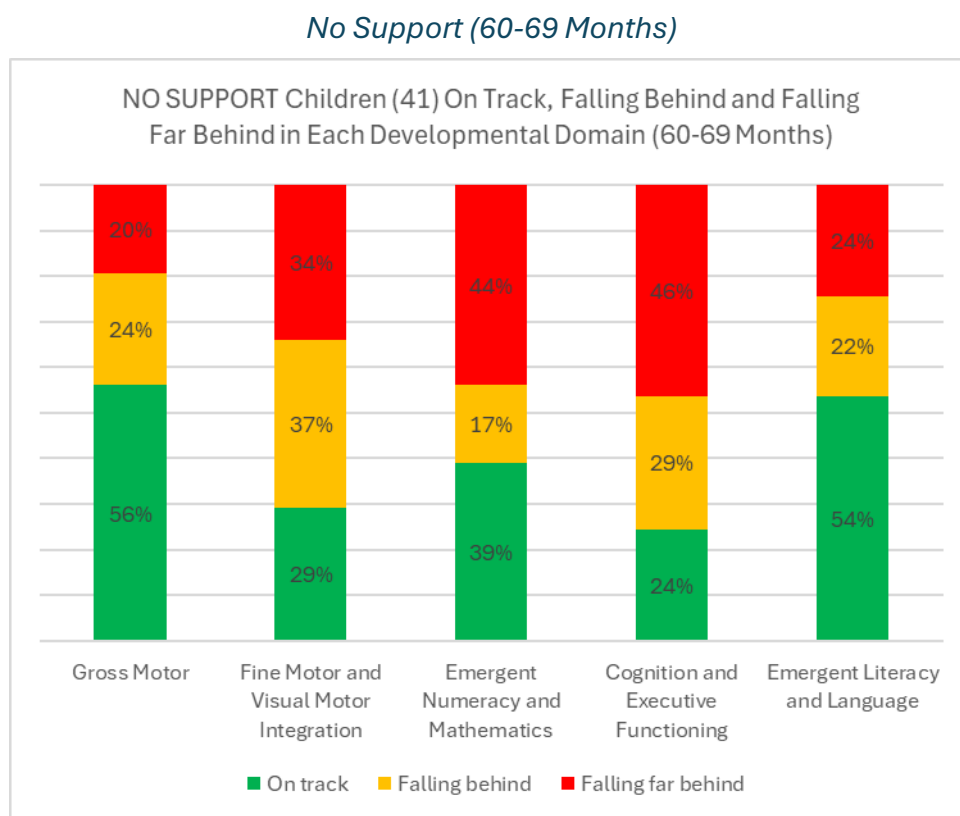


Figure 22: No Support Domain Outcomes (60-69 Months)

Gross Motor development score 20% fewer children on track on this age group for the sample receiving no support than the 50-59 Month age group. The remainder of the domains see a similar percent of children on track as in the 50-59 Month age group. Emergent Literacy and Language, however, scores almost as highly as the 50-59 month sample in the “3 Years in Learning Group Cohort”. But this is a cohort receiving no support, and the following graphs will demonstrate how performance in this domain increases for each subsequent level of support.

Participating in Network (60-69 Months)

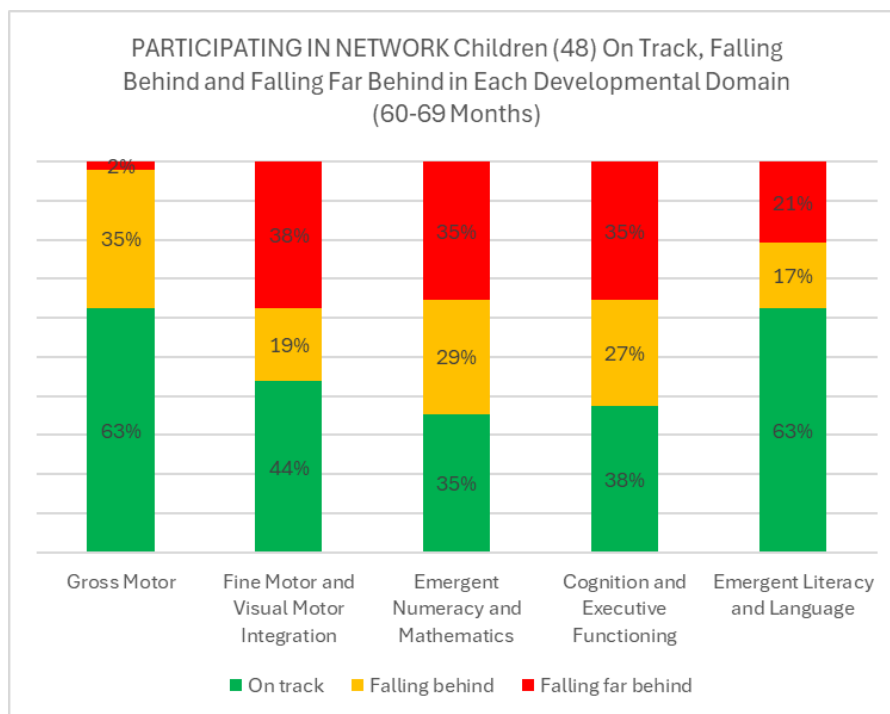


Figure 23: Participating in Network Domain Outcomes (60-69 Months)

There is a general improvement across domains for ECD programmes who are participating in Impande networks. An average increase of 8% more children on track for all Domains besides, for Emergent Numeracy and Mathematics which saw a 4% decrease.

3 Years in Learning Group (60-69 Months)

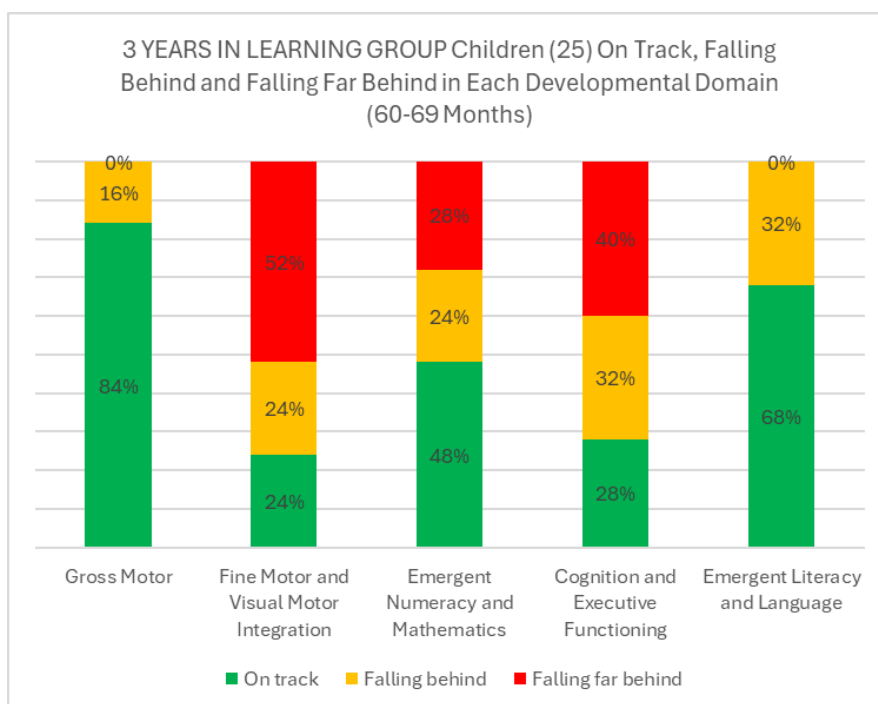


Figure 24: 3 Years in Learning Group Domain Outcomes (60-69 Months)

The ELOM outcome results for the ECD programmes that have been in Learning Groups for 3 years don't show as marked an improvement on the whole, from the Participating in Networks cohort, as that cohort saw in comparison to the No Support Group. With the Fine Motor and Cognition and Executive Functioning domains seeing a decrease in percent of children on track. Two notable exceptions are a 21% increase in the percentage of children on track for Gross Motor Development, and a 13% increase in the percentage of children on track for Emergent Numeracy and Mathematics.

Mentored (60-69 Months)

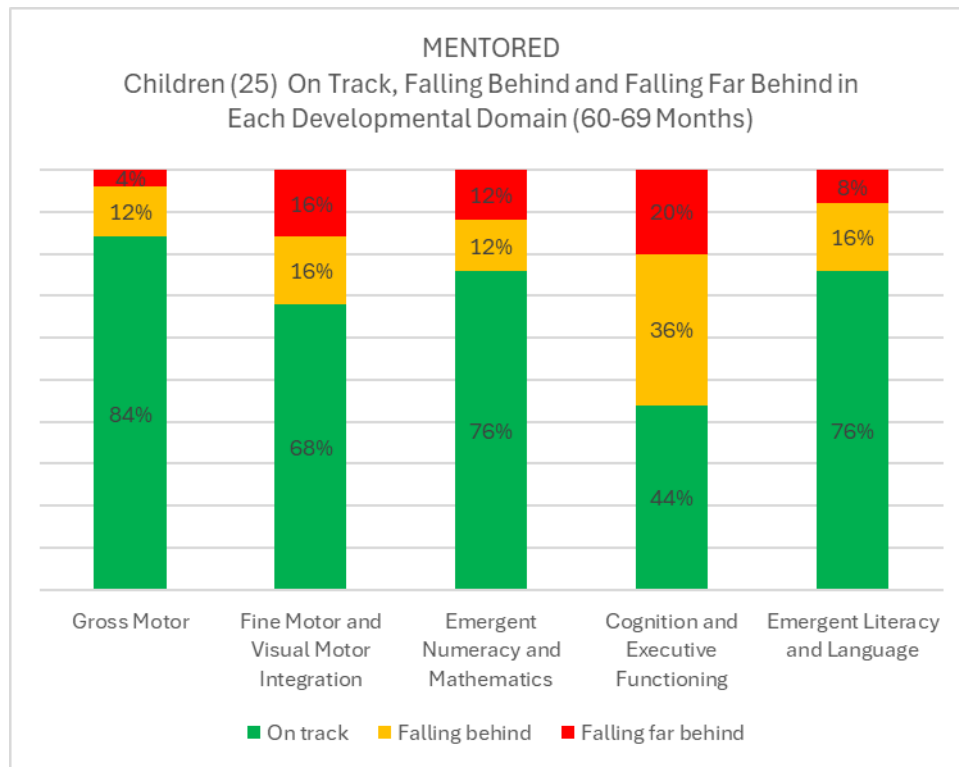


Figure 25: Mentored Domain Outcomes (60-69 Months)

The results across all domains are substantially improved in ECD programmes that receive mentoring. Only the Gross Motor domain has plateaued at the 3 Years in Learning Group level. But all domains have a higher percentage of children on track than programmes in the other intervention cohorts. The difference between the Mentored cohort and the cohort receiving no support is: Gross Motor (+28%); Fine Motor and Visual Motor Integration (+39%); Emergent Numeracy and Mathematics (+37%); Cognitive and Executive Functioning (+20%); Emergent Literacy and Language (+22%).

Comparison of Average Domain Scores Across Intervention Cohorts and Comparison Groups (60-69 Months)

The following section allows for a comparison of average domain scores across the Impande cohorts and comparison groups.

Comparative Gross Motor Development Scores (60-69 Months)

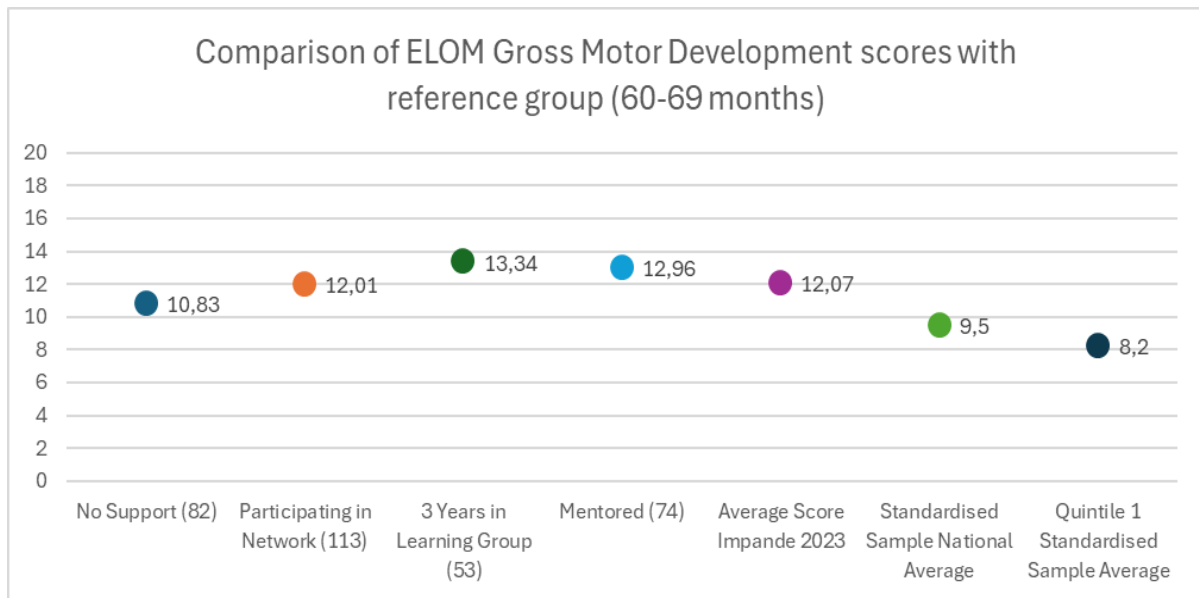


Figure 26: Comparison of ELOM Gross Motor Development (60-69 Months)

This graph displays the average ELOM Gross Motor Development score for the study sample, compared age and quintile appropriate comparison groups. The Impande 2023 Sample, across all cohorts scores better than the comparison groups.

Comparative Fine Motor Coordination and Visual Motor Integration Scores (60-69 Months)

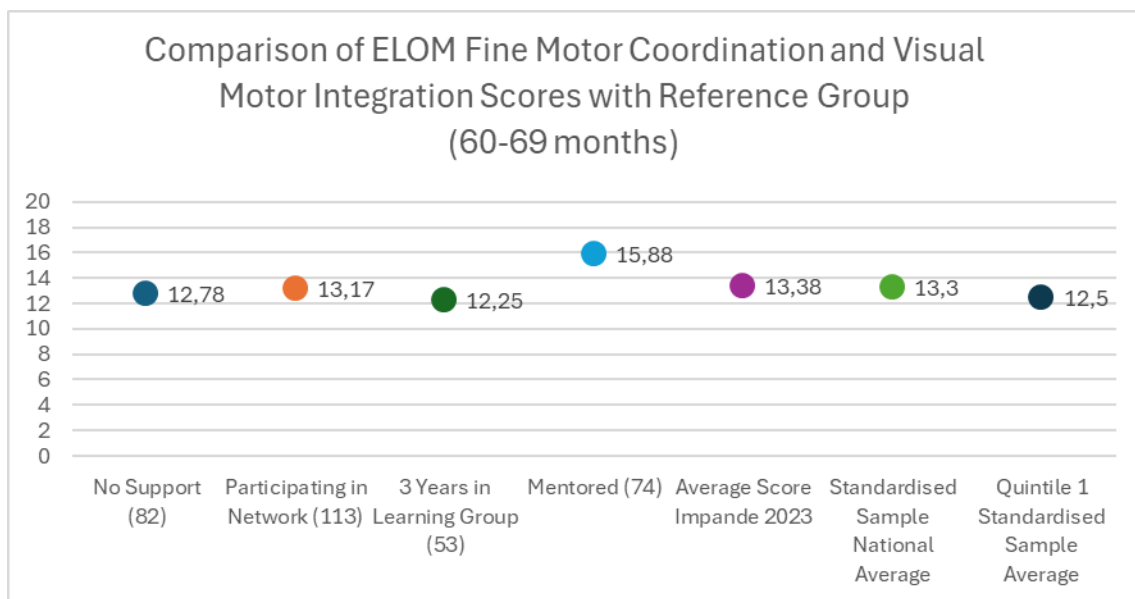


Figure 27: Comparison Fine Motor Coordination and Visual Motor Integration (60-69 Months)

This graph displays the average ELOM Fine Motor Coordination and Visual Motor Integration score for the study sample, compared age and quintile appropriate comparison groups. The mentored cohort is markedly higher than the rest of the Impande cohorts, resulting in an average Impande 2023 score for this domain that is higher than the National and Quintile 1 Standardised Average. Interesting to note here is the alignment between the cohort receiving no support and the Quintile 1 Standardised comparison group.

Comparative Emergent Numeracy and Mathematics Scores (60-69 Months)

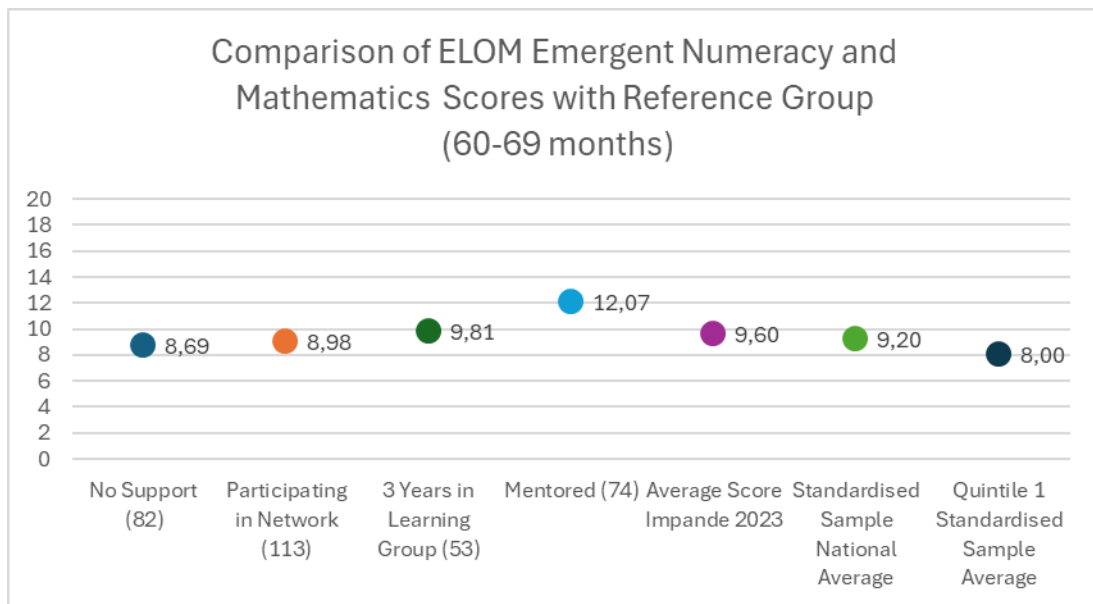


Figure 28: Comparison of ELOM Emergent Numeracy and Mathematics (60-69 Months)

This analysis shows the 60-69 Month cohorts outperforming the Quintile 1 comparison group. The average, the “3 Years in Learning” cohort and “Mentored” cohort score higher than the comparison groups. This is an inverse result compared to the 50-59 Month cohorts where the majority of the Impande cohorts and average were below the comparison groups.

Comparative Cognitive and Executive Functioning Scores (60-69 Months)

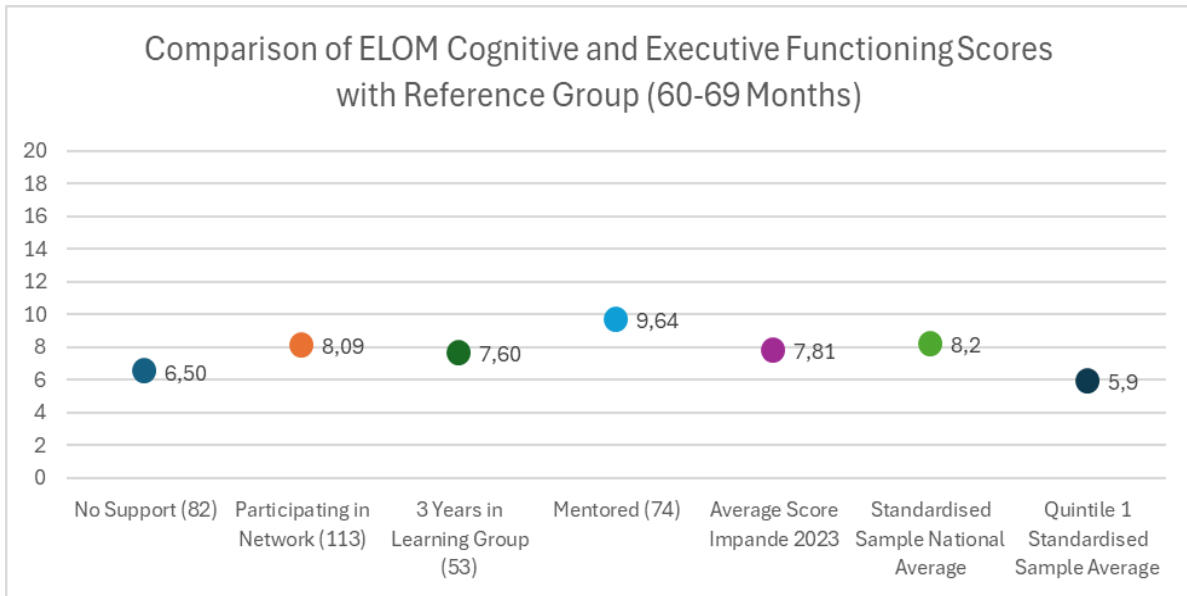


Figure 29: Comparison of ELOM Cognitive and Executive Functioning (60-69 Months)

Sites receiving no support scored an average of half a point more than the Quintile 1 Standardised Average, while mentored sites scored almost a point and a half higher than the Standardised National Sample.

Comparative Emergent Literacy and Language Scores (60-69 Months)

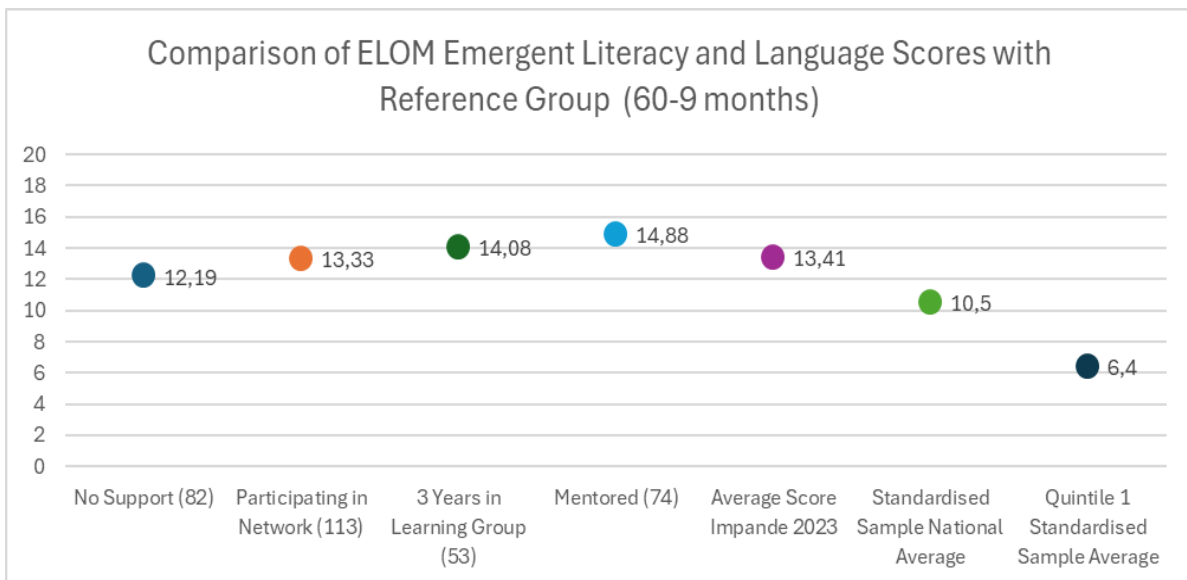


Figure 30: Comparison of ELOM Emergent Literacy and Language (60-69 Months)

All the Impande cohorts score higher than the comparison groups, with the intervention cohorts performing relatively better to each other as the level of support increases.

Summary of the Impact of Impande Levels of Support

It must be noted that these comparisons across the levels of support are not comparing the same ECD programmes longitudinally against a baseline, but distinct ECD Programmes in different stages of their Impande journey.

Table 7: Difference Between Sites Receiving No Support and Mentored Sites in Percentage of Children On Track Per Domain Across Age Groups

Domain	Percentage Increase of Children On Track between ECD Programmes with No Support and Mentored Programmes	
	50-59 Months	60-69 Months
Gross Motor	12%	28%
Fine Motor and Visual Motor Integration	13%	39%
Emergent Numeracy and Mathematics	6%	37%
Cognitive and Executive Functioning	21%	20%
Emergent Literacy and Language	32%	22%

The results from this ELOM assessment reveal different impacts per level of support across the age cohorts. Sites that are mentored see the biggest impact on Emergent Literature and Language for 50-59 month year olds. However, for the 60-69 month cohort, mentored sites saw the biggest improvement in Fine Motor and Visual Motor Integration, and Emergent Numeracy and Mathematics.

Child's Years in ECD Programme and ELOM Outcomes

The child's individual level of exposure to ECD programmes, that is, how many years have they been attending the ECD centre, will have an impact on how we interpret and compare different programmes' ELOM outcomes. This section will present children on track, falling behind, and falling far behind, by the three different levels of: first year in programme, second year in programme, and third year in programme. (One record did not have information recorded for "Duration in Programme", so the sample size for this section is 321.)

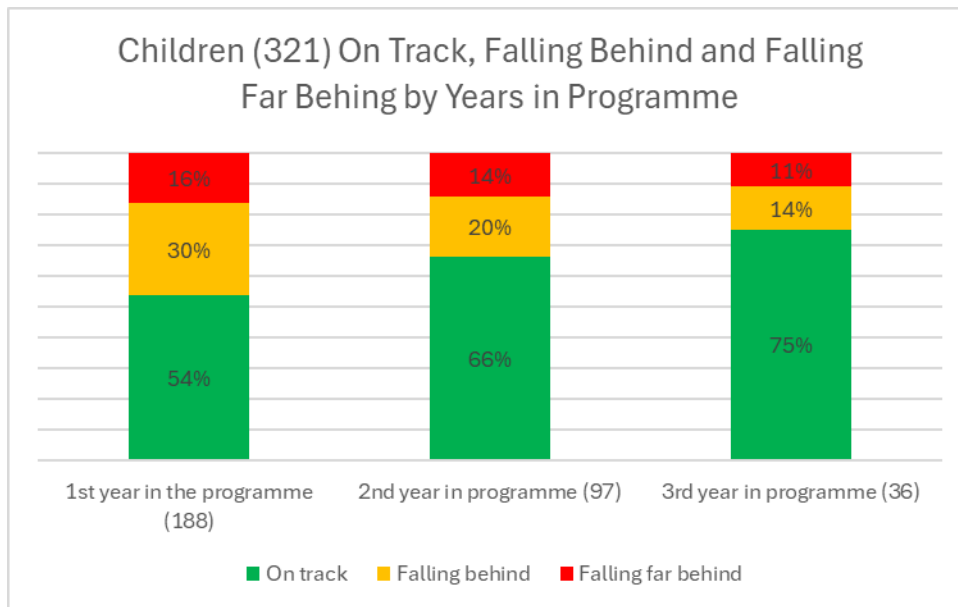


Figure 31: Years in Programme and ELOM Outcomes

Unsurprisingly, perhaps, the percentage of children On Track increases for each year in an ECD programme, while both the percent of children Falling Behind, and Falling Far Behind decreases. Another way to look at this data is to examine the average score per length in programme. The graph below demonstrates how each year in the programme increases the average ELOM score.

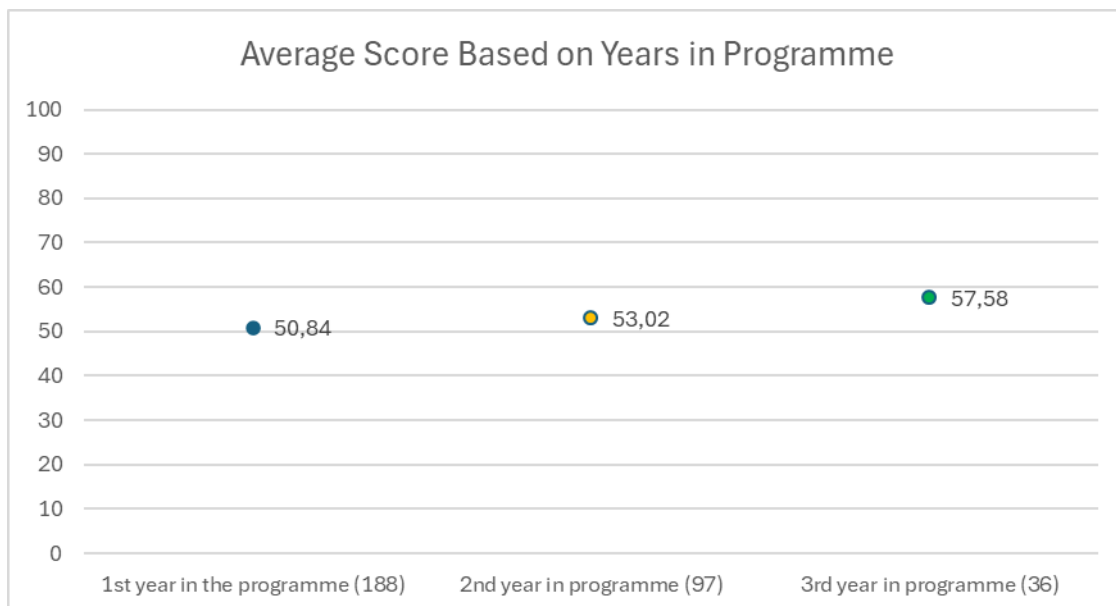


Figure 32: Average ELOM Score per Years in Programme

Following the preceding discussion of the impact of different levels of support across the different intervention cohorts, it is useful to understand the distribution of these different years of exposure across the different intervention cohorts.

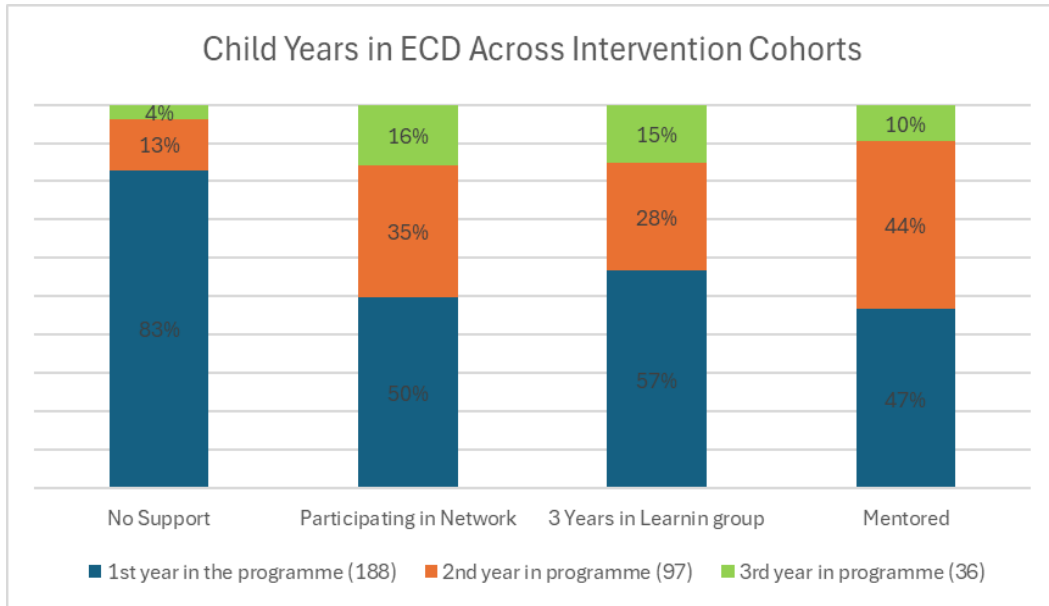


Figure 33: Distribution of Child Years in Programme Across Intervention Cohorts

Noteworthy here, in relation to the preceding analysis on difference in domain scores between programmes receiving no support and mentored programmes, is that 83% of children in the “No Support” intervention cohort are in their first year of the programme. Compared to only 47% in the mentored cohort.

By breaking this data down to allow us to examine the average ELOM scores of each category of “Years in Programme” by intervention cohort, we are able to control for, and compare “Year in Programme” cohorts across intervention cohorts.

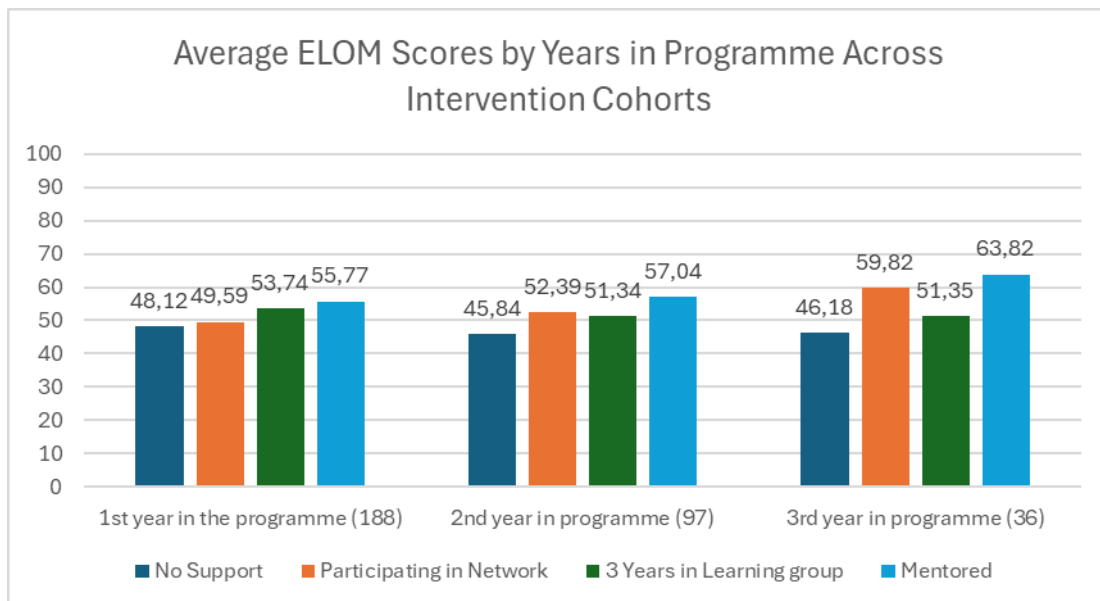


Figure 34: Average ELOM Scores by Years in Programme Across Intervention Cohorts

The data presented in this way reveals interesting trends. Besides for an anomalous decrease and plateauing in the “3 Year in Learning Group” intervention cohort average

ELOM score, the results show that when the data is analysed by child's years in an ECD programme, the average ELOM score increases consistently in line with the increasing levels of support per intervention cohort. Children in mentored sites have better ELOM outcomes than children with the equivalent "Years in Programme" in sites receiving lower levels of support.

The second observable trend this data reveals is that children in sites with no support see an overall decrease in ELOM outcome. Decreasing from 1st Year to 2nd Year of programme, and then a small recovery in 3rd Year of programme, which is still lower than the 1st Year. This is sharply contrasted by the results of children in mentored sites who have an exponential increase in average ELOM score as their years of programme exposure increase. Following this line of examination, children in the "Participating in Networks" see a greater year-on-year increase in their average ELOM score as their years of attendance increase than their "3 Years in Learning Groups" counterparts. Surprisingly we see a decrease and then levelling out of scores for children in the "3 Years in Learning Groups" sites.

While we see an anomalous performance of children in the "3 Years in Learning Groups" sites the rest of the data points towards improved ELOM outcomes as sites receive deepening layers of support.

Key Findings of the Impande 2023 ELOM Assessment

- i. The average ELOM score for children in this sample is higher than the Standardised Sample National Average for children of the same age attending ECD Programmes in the same fee range. (50-59 Months: 49.2 compared to 37.3 ; 56.3 to 41.1)
- ii. The results reveal that Ugu had the highest percentage of children on track, 70%. This is 12 percent higher than the next district (Harry Gwala) and 20 percent above the poorest performing district (OR Tambo). These results track to Impande's depth of work across the districts and would support its theory of change.
- iii. When the results are disaggregated by intervention cohorts and the different levels of support received from Impande ("No Support", "Participating in Networks", "Three Years in Learning Group", and "Mentored") we see evidence of an increased percentage of children On Track as the level of support increases. ECD centres that have received no support have 40% of the assessed children on track. This increases to 63%, then to 60%, and finally 77% of children on track respectively across the "Participating in Networks", "3 Years in Learning Groups", and "Mentored" intervention cohorts.
- iv. The Elom outcomes for the mentored programmes are not only higher than the other Impande intervention cohorts but are higher than the comparison group outcomes.
- v. When presenting the ELOM results across the different intervention cohorts according to children's years' spent in the ECD programme, we see, on average, higher scores according to level of support. There is no improvement in ELOM outcomes for children in programmes with no support as years of attendance increases. While children in mentored programmes see exponential improvement for each additional year in attendance. Further children in mentored programmes have better ELOM outcomes per each level of years of attendance than children with equivalent exposure across the other intervention cohort.
- vi. The impact of the different levels of support per domain is examined by looking at the percentage increase of children on track between sites without support and mentored sites. The results here differ between the 50-59 Month and 60-69 Month samples. For the 50-59 Month sample "Emergent Literacy and Language" sees the biggest impact, with "Mentored" sites having 32% more children on track than sites with no support. The least impacted domain for this age group is "Emergent Numeracy and Mathematics" with only a 6% increase. Conversely, the 60-69 Month sample sees an inversion of this trend. "Emergent Numeracy and Mathematics" and "Fine Motor and Visual Motor Integration" see a 37% and 39% increase in percent for children on track, respectively. "Cognitive and Executive

Functioning” sees the least impact, with mentored sites only have 20% more children on track than sites with no support. All domains, taken as a whole, the biggest difference be mentored programmes and unsupported programmes is in the 60-69 Month age group.

Linking Results to the Impande Theory of Change

Impande does not create New ECD centres, or drive ECD outcomes from the outside-in. Rather, Impande works with existing organisations and actors to empower, harmonise, and amplify the ECD outcomes in the communities they work with. Impande recognises that Community Based Organisations provide the bulk of social services in rural communities. These organic organisations possess great potential as they not only actively care for and are accessible to the most vulnerable members of the community but are infused with immense passion and deep understanding of the community needs. These organisations are more sustainable than anything an outside NGO may attempt to initiate as they are free from the dependencies which jeopardise sustainability when the donor-funded project cycle comes to an end.

Against this context Impande's theory of change (TOC) can be summarised as follows.

If Impande leverages local ECD network knowledge and insights, along with data driven resource allocation.

Then Impande will contribute to:

- Increased investment in marginalised communities.
- Improved provincial and national budgeting and service delivery.
- Government ECD subsidies reaching the poorest children.

If Impande can provide holistic support to existing ECDs that target institutional capacity, the ECD workforce and child and family interventions.

Then Impande can contribute to:

- An increase in ECDs that meet norms and standards.
- An increase in children accessing ECD programmes.
- An increase in sustainable ECD centres.
- An increase in quality ECD programmes.
- An increase in children achieving physical development milestones.

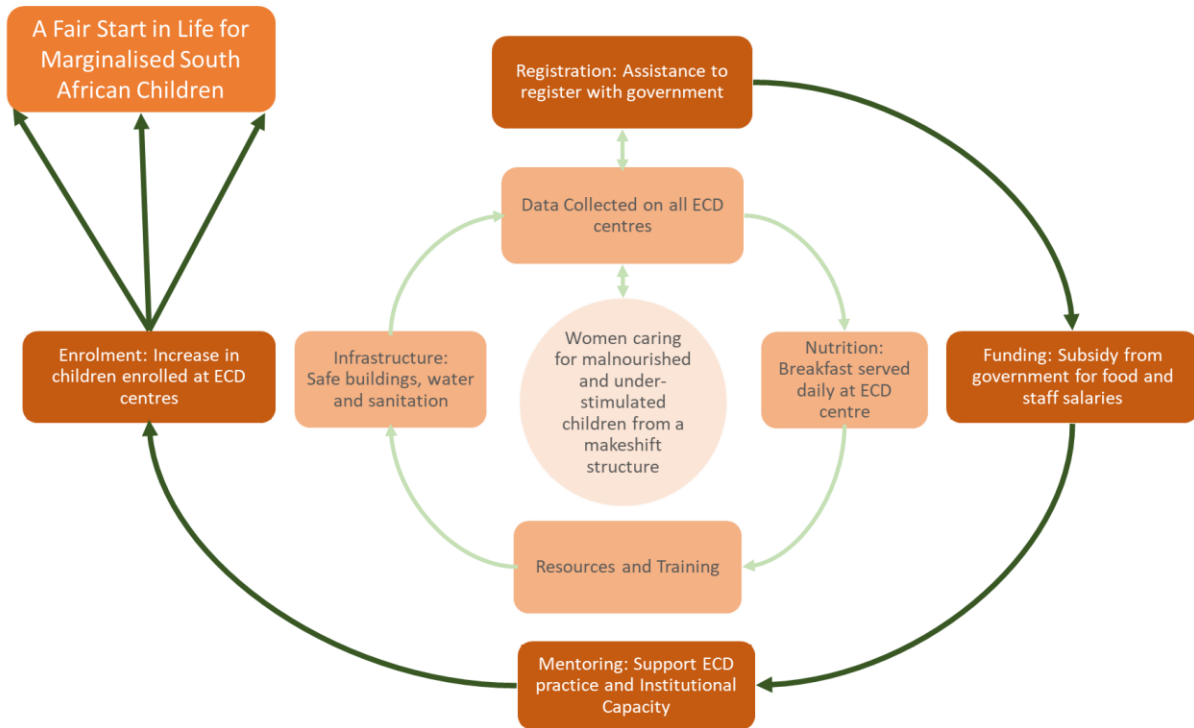


Figure 35: Impande Theory of Change

The preceding analysis demonstrates that deepening levels of support, and participation along an ECD programme’s Impande Journey drive improved ELOM outcomes. This begins to provide evidence that supports Impande’s theory of change. The table below summarises the inputs to sites as they undertake the Impande Journey, through participating in deepening levels of support, and the corresponding impact these inputs have on ELOM outcomes.

Table 8: Evidence Supporting Theory of Change

Item	Positive Impact on ELOM	Item	Positive Impact on ELOM
Nutrition	✓	Registration	✓
Resources	✓	Subsidy	✓
Infrastructure	✓	Teacher Qualification	✓

Further, what this analysis shows is that positive child outcomes are not only delivered at the end of the process, but are delivered with increasing impact throughout the Impande Journey, starting in the foundational stages of ECD programme participation in Impande networks, and increasing as the progress to become mentored ECD sites.

Recommendations and Next Steps

The purpose of the ELOM evaluation is to identify strengths and weaknesses in the sample children's specific benchmarks to inform ECD programming, and track changes in ECD programming impact over time. Impande has a wealth of data that can be analysed in conjunction with ELOM results to help identify and measure which characteristics of an ECD centre play a role in positively impacting ELOM outcome measures.

Impande's data collection activities cover all domains of an ECD Centre, including but not limited to: GPS location, centre identification, enrolment numbers, registration status, infrastructure, environment, resources, staff profile and qualifications, and administration. Impande's database currently has 2,047 ECD Centres 70,951 Children enrolled across 11 Municipalities in UGU, Alfred Nzo. OR Tambo and Harry Gwala District. In the development of this report an attempt was made to make a statistical analysis of the relationships between this data and ELOM results, but limitations around sample size prohibited the generation of any results with statistical significance. A larger scale ELOM assessment in conjunction with an analysis of ECD profile data, while requiring a more rigorous research design, would allow for statistical analysis and understanding of the interplay between ECD profile characteristics and ELOM outcomes.

Impande plan to continue to conduct yearly ELOM assessments to increase the sample size across interventions cohorts. Going forward data collection will include onsite observations using the ELOM learning programme quality assessments tool to allow for comparison and contribution to larger standardised datasets. The aim is to continue to contribute to the broader ECD community of practice through identifying and understanding the interplay of different levels, and their dosages, on driving positive ECD outcomes.