

# READING IN SINDH AND THE SINDH READING PROGRAM

The Sindh Reading Program (SRP) sought to improve the literacy of children in Pakistan over a five-year period from 2014–2018.

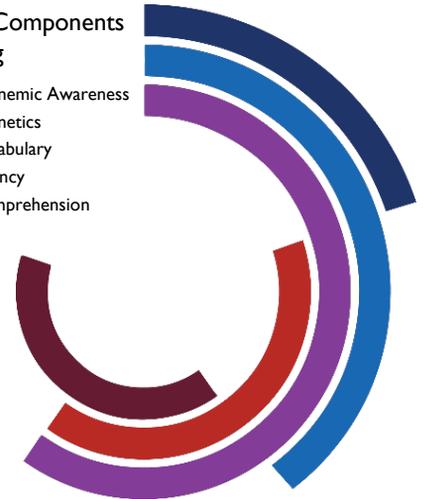
Reading enables students to engage in the classroom and beyond. Comprehension—the purpose for reading—supports student learning throughout their schooling. **The early grades are critical years to build the five skills that lead to reading with comprehension:**

1. **Phonemic awareness:** manipulating & identifying sounds
2. **Phonetics:** connecting written letters to sounds
3. **Vocabulary:** knowing words & their meaning
4. **Fluency:** reading with speed, accuracy, & expression
5. **Comprehension:** understanding what is read

Unfortunately, many students are not taught to develop these skills in the early years of school. In Pakistan’s Sindh province, literacy rates have been low historically. According to the *2012 Annual Status of Education* report, 60% of fifth graders could not comprehend a Grade 2 text, and according to the SRP baseline assessment in 2014, 41% of third-grade students could not read a single word in their local language. Furthermore, quality assessment systems, instructional materials, and teacher training have not been universally available in Sindh.<sup>1</sup> As a result, the Sindh Basic Education Program (SBEP) was launched to increase and sustain student enrollment in seven districts in northern Sindh and in the city of Karachi. The program aimed to improve school environments to be conducive to quality teaching and learning. The Sindh Reading Program supports one core component of SBEP: improving early grade reading teaching and learning.

The Five Components of Reading

- Phonemic Awareness
- Phonetics
- Vocabulary
- Fluency
- Comprehension



## Components of the Sindh Reading Program

SRP’s approach to reading instruction involved four components:



**Component 1:** Teachers utilize improved tools and techniques—including learning manuals — to improve student participation, attendance, and reading outcomes.



**Component 2:** Assess students’ reading abilities so that teachers can address individual student’s needs.



**Component 3.** Provide access to reading material and reading spaces through the support of public and school libraries and the creation of classroom reading corners.



**Component 4.** Engage out-of-school children through a nonformal education program to provide primary-level literacy and mainstreaming opportunities.

SRP worked closely with the Government of Sindh (GoS) to build institutional capacity with local stakeholders and engage them in the intervention. Together, SRP and the GoS defined provincial benchmarks for reading instruction and developed quality reading materials. At the end of the project, the GoS stakeholders were positioned to lead the intervention forward.

<sup>1</sup> Critical Analysis of the Problems of Education in Pakistan: Possible Solutions: International Journal of Evaluation and Research in Education (IJERE) <https://files.eric.ed.gov/fulltext/EJ1091681.pdf> .

# THE SINDH READING PROGRAM ENDLINE EVALUATION

## Early Grade Reading Assessments were used to assess students' reading skills at the end of Grade 2.

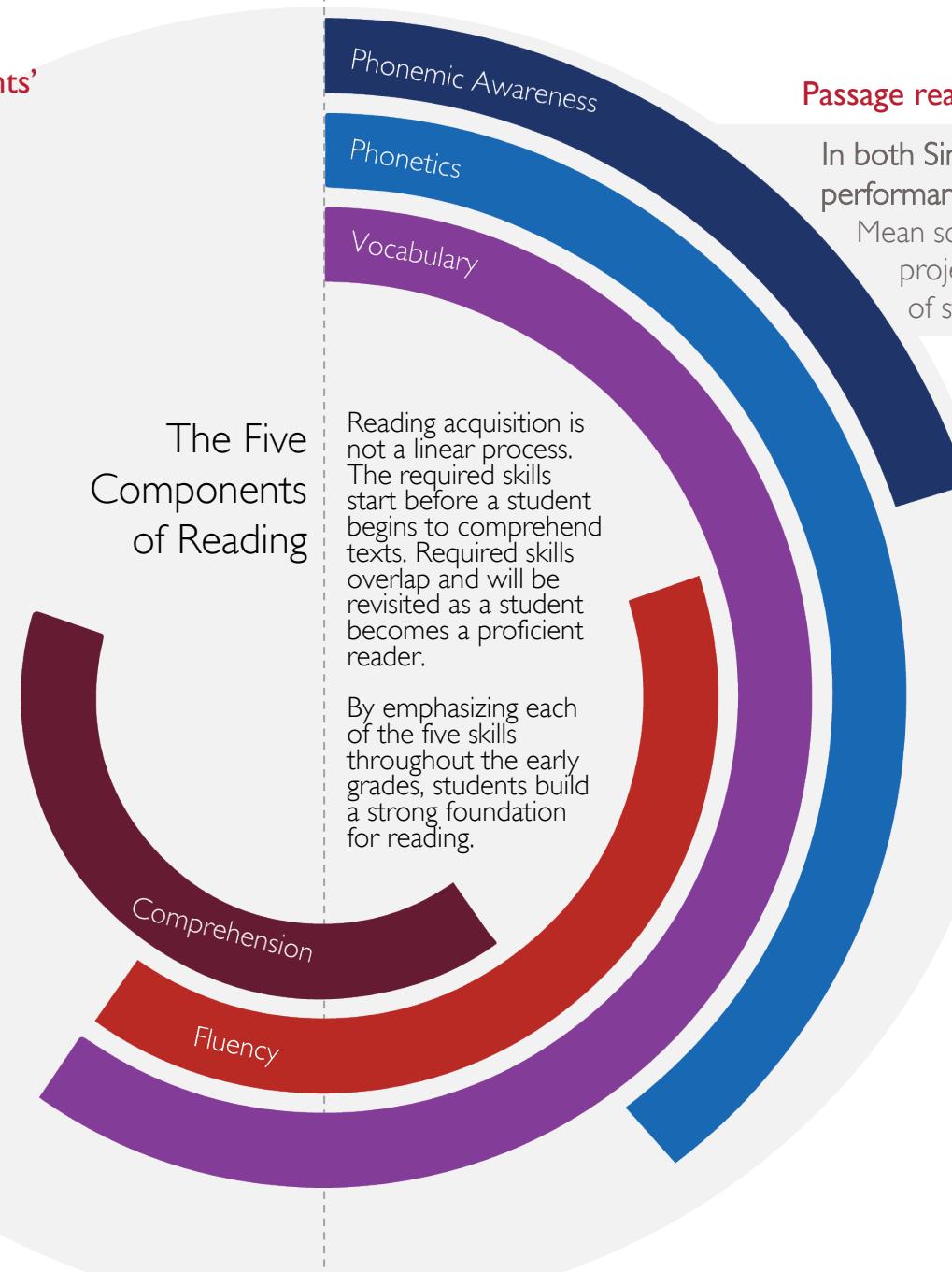
Under the umbrella of the SBEP, SRP supported 15,000 teachers and 432,000 students in Grades 1 and 2. From 2014 to 2018, the project collaborated with the GoS and USAID to implement strategies to improve students' reading skills.

SRP assessed students enrolled in schools that participated in one of the three SRP cohorts. Each cohort received different interventions that modeled varying levels of teacher and reading instruction.

Early Grade Reading Assessments (EGRAs) were administered at the program's baseline in 2014 and endline in 2018 to students at the beginning of Grade 3, to measure learning as of the end of grade 2. The EGRA consisted of subtasks that assess the five components of reading. An EGRA in Sindhi was used in Dadu, Jacobabad, Kambar-Shahdadkot, Kashmore, Khairpur, Larkana, and Sukkur; students in Karachi took an EGRA in Urdu.

Students, teachers, and head teachers were interviewed to gather information about environmental factors that may have impacted students' EGRA performance. These factors include home language, reading habits, activities at school, and the availability of books.

The EGRAs were administered in a total of 547 schools. The same schools were assessed in 2014 and in 2018. In 2018, 5,876 third grade students were assessed at the beginning of their school year a proxy for reading skills at the end of Grade 2.



## Passage reading as a measure of literacy.

In both Sindhi- and Urdu-medium schools, performance improved significantly on passage reading. Mean scores and the proportion of students reaching project benchmarks increased, and the percentage of students unable to read a single word decreased.

The passage reading subtask asks students to read as much of a 60-word passage as they can in one minute. The subtask is a measure of students' of overall fluency and reading competence. It is the culmination of translating letters into sounds, merging sounds to become words, and linking words to become full sentences, relating the text to meaning, and making inferences to fill in missing information. A student's passage reading score is typically dependent on the skills measured in other subtasks, because children need to have some phonemic awareness, expressive vocabulary, and decoding in order to be able to read a passage.

SRP emphasized instruction that targeted passage reading, including whole group lessons, small group reading practice, and comprehension questions. To support this instruction, classrooms received sets of leveled readers, which were used for small group instruction with students three to four times per week.

## EGRA subtasks by reading skill assessed

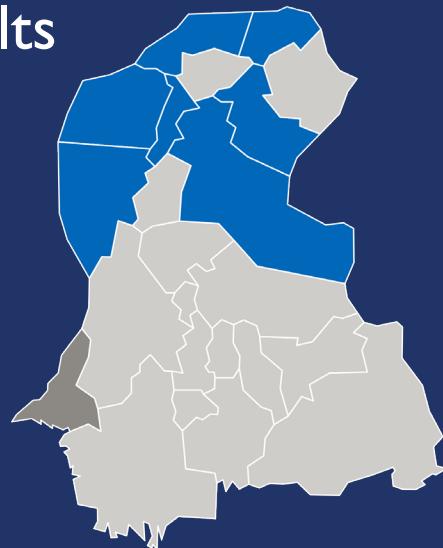
Phonemic Awareness	Phonetics		Vocabulary		Fluency	Comprehension
Phoneme isolation	Nonword reading	Letter name identification	Expressive vocabulary	Listening comprehension	Passage reading	Reading comprehension

# Sindhi-medium Districts Results

In Sindhi-medium districts, student performance improved from the 2014 baseline to the 2018 endline on most EGRA subtasks—passage reading, reading comprehension, nonword reading, and phoneme isolation. The largest gains were made in passage reading and reading comprehension. Additionally, three “performance gaps” were closed or narrowed: by gender, by home-school language match, and by level of support for literacy at home.

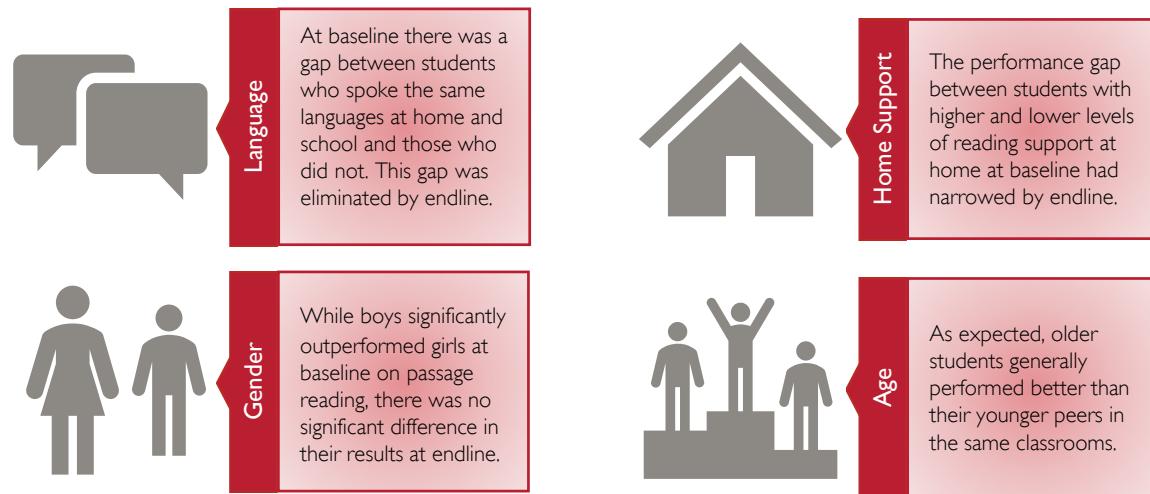
Unfortunately, the proportion of students meeting performance benchmarks set by the project for each subtask was low; the proportion increased only in passage reading.

5,172 students from 481 Sindhi-medium schools participated in the endline evaluation.



## STUDENT DEMOGRAPHICS REVEALED THREE PERFORMANCE GAPS CLOSED OR NARROWED, ONE REMAINED AT ENDLINE

Based on information gathered from student interviews, three performance gaps between comparative groups—based on gender, home-school language match, and level of support for literacy at home—identified at baseline had narrowed significantly by endline. Unfortunately, the gap between over-age and on-age students present at baseline remained at endline.



## TEACHERS' PRACTICES MATTERED

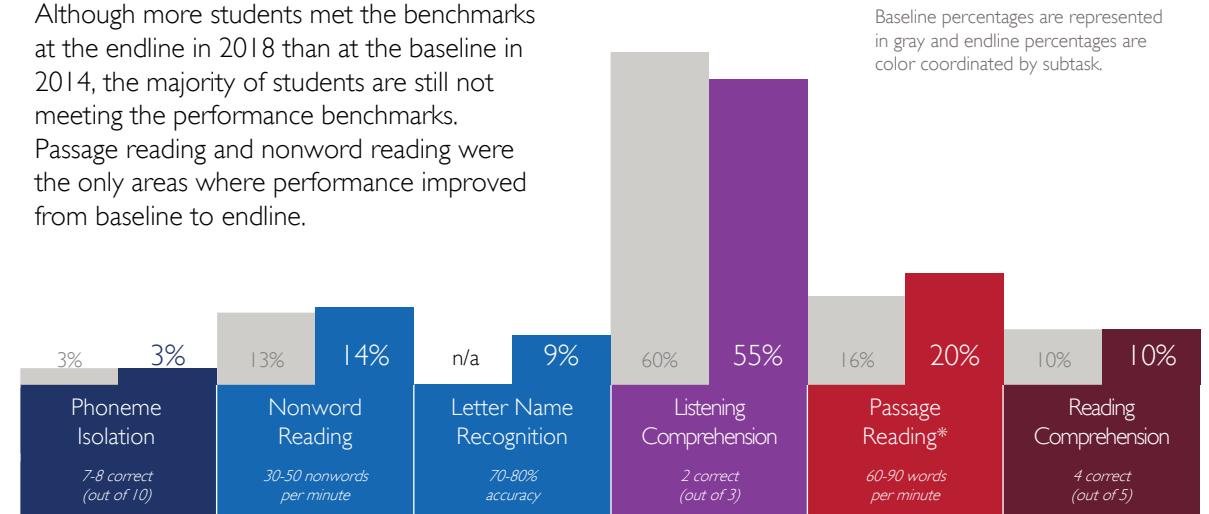


Teachers who reported using specific active strategies for teaching reading—including sounding out unfamiliar words, reading aloud with other students, and answering comprehension questions—more frequently had students with higher passage reading scores. They also had more students who met the performance benchmark for reading comprehension.

## MORE STUDENTS MET THE PASSAGE READING BENCHMARK

Although more students met the benchmarks at the endline in 2018 than at the baseline in 2014, the majority of students are still not meeting the performance benchmarks. Passage reading and nonword reading were the only areas where performance improved from baseline to endline.

An asterisk (\*) indicates a statistically significant change from baseline to endline.



## MEAN SCORES (MOSTLY) IMPROVED BUT ZERO SCORES REMAIN HIGH

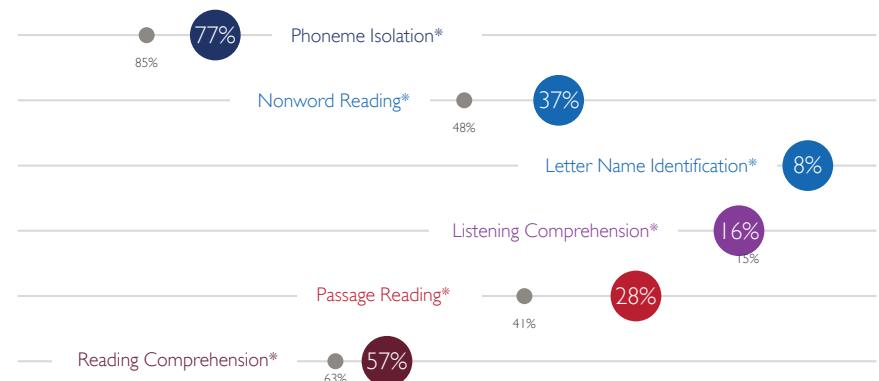
### CHANGES IN MEAN SCORES FROM BASELINE TO ENDLINE

While students made notable gains in passage reading and reading comprehension, performance on the remaining subtasks was mixed.



### PROPORTION OF ZERO SCORES AT ENDLINE

The proportion of students who do not answer any questions correctly on a subtask—also known as zero scores—varied widely by subtask, though generally decreased from baseline to endline.



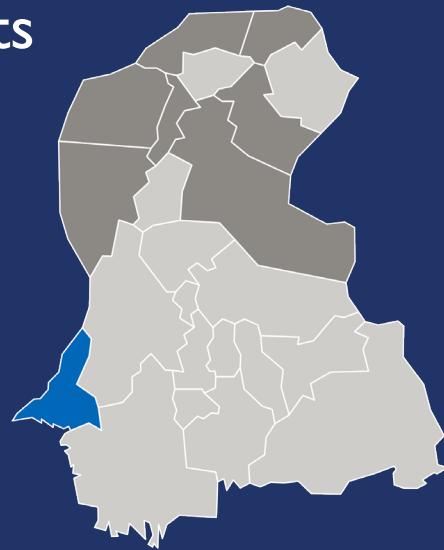
<sup>2</sup> “CNWPM” is a fluency measure of correct nonwords per minute. <sup>3</sup> “CWPM” is a fluency measure of correct words per minute

# Urdu-medium Districts Results

In Urdu-medium schools in Karachi, student performance improved from the 2014 baseline to the 2018 endline on four EGRA subtasks—passage reading, reading comprehension, nonword reading, and phoneme isolation. The largest gain was in passage reading, where students read an average of 33 correct words per minute—10 more than they had at baseline.

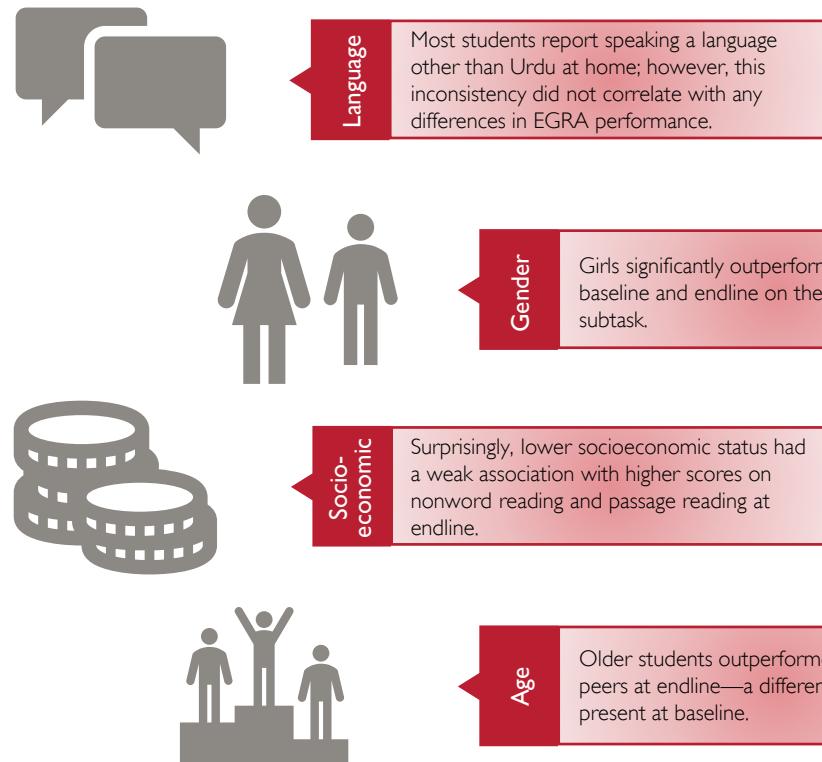
Unfortunately, the proportion of students meeting performance benchmarks was low; the proportion increased on only two subtasks—passage reading and nonword reading.

702 students from 66 Urdu-medium schools participated in the endline evaluation.



## STUDENT DEMOGRAPHICS CORRELATED WITH URDU EGRA PERFORMANCE

Based on information gathered from interviews with students at Urdu-medium schools, several demographic factors emerged as being associated with differences in students' Urdu EGRA scores, including students' home language, gender, socioeconomic status, and age.

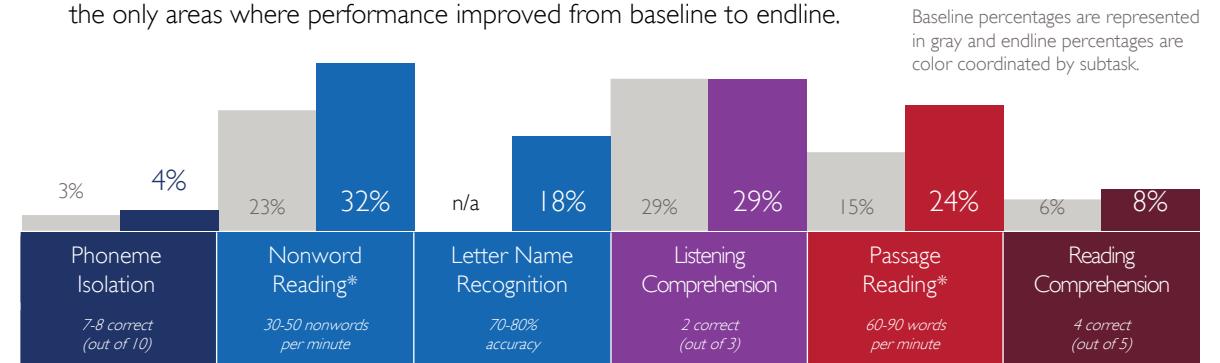


**TEACHERS' PRACTICES** did not correlate to any statistically significant differences in EGRA performance between baseline and endline for students at Urdu-medium schools in Karachi.

## MORE STUDENTS MET BENCHMARKS FOR PASSAGE READING AND NONWORD READING IN 2018

Although more students met the benchmarks at the endline in 2018 than at the baseline in 2014, the majority of students are still not meeting the performance benchmarks. Passage reading and nonword reading were the only areas where performance improved from baseline to endline.

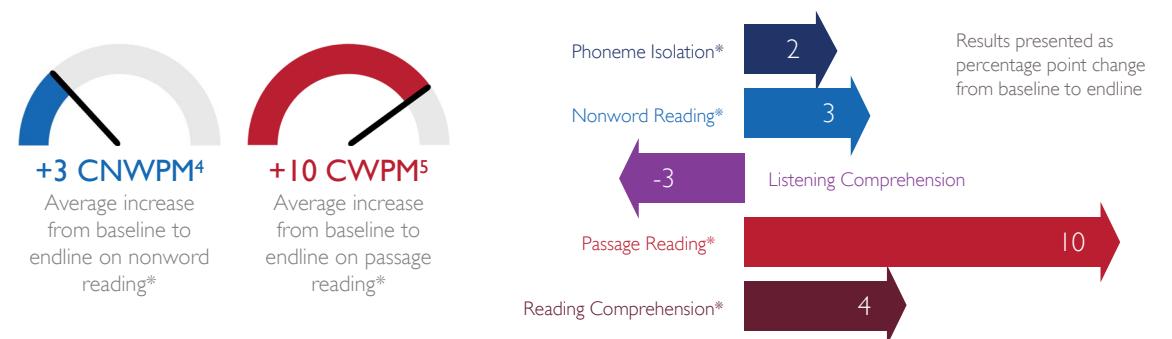
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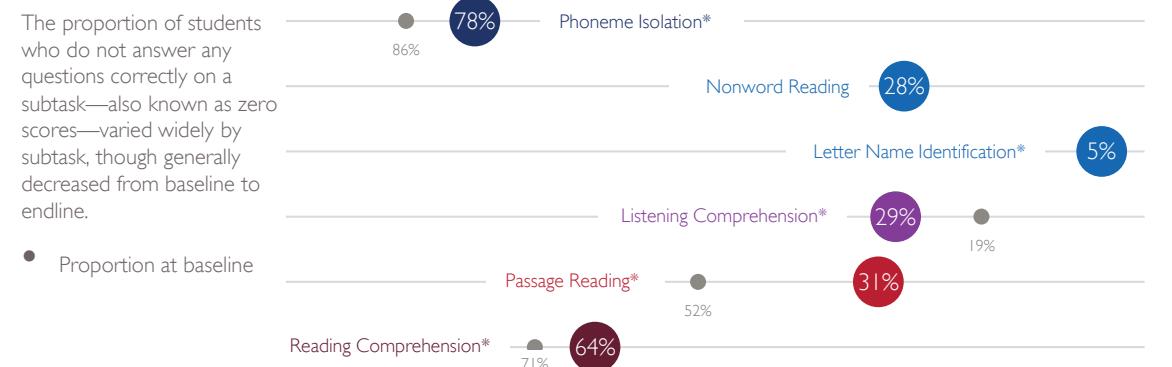
## MEAN SCORES (MOSTLY) IMPROVED BUT MANY STUDENTS STILL NOT ABLE TO ANSWER QUESTIONS

### CHANGES IN MEAN SCORES FROM BASELINE TO ENDLINE

While there were significant gains in most subtasks, mean score performance was mixed.



### PROPORTION OF ZERO SCORES AT ENDLINE



<sup>4</sup> "CNWPM" is a fluency measure of correct nonwords per minute. <sup>5</sup> "CWPM" is a fluency measures of correct words per minute

# READING IN SINDH RECOMMENDATIONS

Similar projects may benefit from implementing changes based on lessons learned from SRP. Here are four recommendations to consider:



## Recommendation 1.

Continue to emphasize nonword reading and decoding skills in classroom practice in order to sustain improvements in students' passage reading and fluency skills. Results for nonword reading and passage reading were correlated at endline.



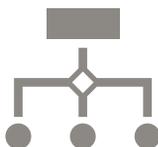
## Recommendation 2.

Review how skills other than passage reading and nonword reading are taught in classrooms. The progression of these skills is important to developing fluency, and there may be a mismatch between how they are currently taught and how they are assessed on the EGRA.



## Recommendation 3.

Consider reviewing the reading benchmarks to determine the relative appropriateness per skill, grade level, and target population. Review should include a comparison of performances on other assessments of this population.



## Recommendation 4.

Examine the relationship between passage reading and other subtasks. If relationships are weak, investigate whether there are linguistic features that make these subtasks less linked to the reading progression found in western languages.

More information about the endline assessment of the Sindh Reading Project is available in the summative report.