

Effects of an early education
programme in Pakistan –

Opening up opportunities for the
most marginalized

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Pakistan

- 66% of primary school aged children are enrolled in primary school (UNESCO, 2009)
 - Of those who enroll, less than half complete primary school
 - Highest drop-out rate in Class 1: one out of six children never makes it to Class 2
- Quality issues, particularly in government schools and in rural areas (Shami & Hussain, 2005)
 - Lack of basic facilities, inadequately trained and often absent teachers, shortage of learning materials and books
- Lack of resources invested in pre-primary and early primary years



Releasing Confidence and Creativity (RCC) Programme

- Project of the Aga Khan Foundation – Pakistan, with multiple local partners
- Funded by USAID, and now Dutch government
- Working since 2002 to improve access to quality early child development (ECD) programming in Pakistan
 - **Access to and quality of teaching/learning in pre-primary, Class 1, and Class 2**
 - Support families and communities
 - Build capacity and commitment of key stakeholders
 - Influence policy and practice, strengthen learning networks



Releasing Confidence and Creativity (RCC) Programme

- Expand access to and improve the quality of teaching/learning in pre-primary, Class 1, and Class 2
 - Raise awareness and commitment – communities and stakeholders
 - Allocate a classroom for pre-primary if necessary
 - Hire teachers for pre-primary
 - Train pre-primary and early primary teachers
 - Provide materials for the classroom
 - Provide ongoing support and monitoring to teachers



Research on impact in Sindh

- Research objective: Examine the impact of the RCC programme on classroom environments and on children's learning outcomes in the province of Sindh
- A sample of programme schools (RCC) was randomly selected
- Comparison schools (non-RCC) were randomly selected from the same districts as the programme schools
- Programme and comparison schools were compared on a number of indicators



Indicators

- Classroom quality – assessed using a locally developed Classroom Observation Tool
 - Classroom environment
 - Teaching/learning activities
 - Interactions
- Aggregate child outcomes
 - Attendance, retention, promotion
- Child learning achievement at the end of Class 1 – assessed using a locally developed Learning Achievement Tool
 - English literacy, Sindhi/Urdu literacy, and numeracy



About the sample

- 18 programme (RCC), 17 comparison (non-RCC)**
- School facilities – similar (toilet, water, services and maintenance)
 - Except for outdoor space (non-RCC scored better)
- Physical environment of early years classrooms – similar



Use of pre-primary curriculum

- 65% of the comparison schools had a pre-primary curriculum or resource present and in use
- 94% of programme schools had a pre-primary curriculum or curriculum-related resource present and in use ($p < .05$) *

* this relates to statistical significance - see “notes” on slide #12 for further information)



Classroom Observations

- Pre-primary observations
 - 15 comparison schools (7 did not have a designated space for pre-primary children)
 - 15 programme schools (all had a designated space for pre-primary children)
- Class 1 observations
 - 14 comparison schools
 - 15 programme schools



Classroom Observations

Classroom Set-up

- Classroom arrangement p < .01
- Classroom display p < .05
- Availability and accessibility of learning materials p < .01

Teaching and Learning

- Type of teaching and learning activities p < .05
- Instructional style p < .05
- Opportunities for peer learning / group work n.s.
- Engagement in learning activities p < .05

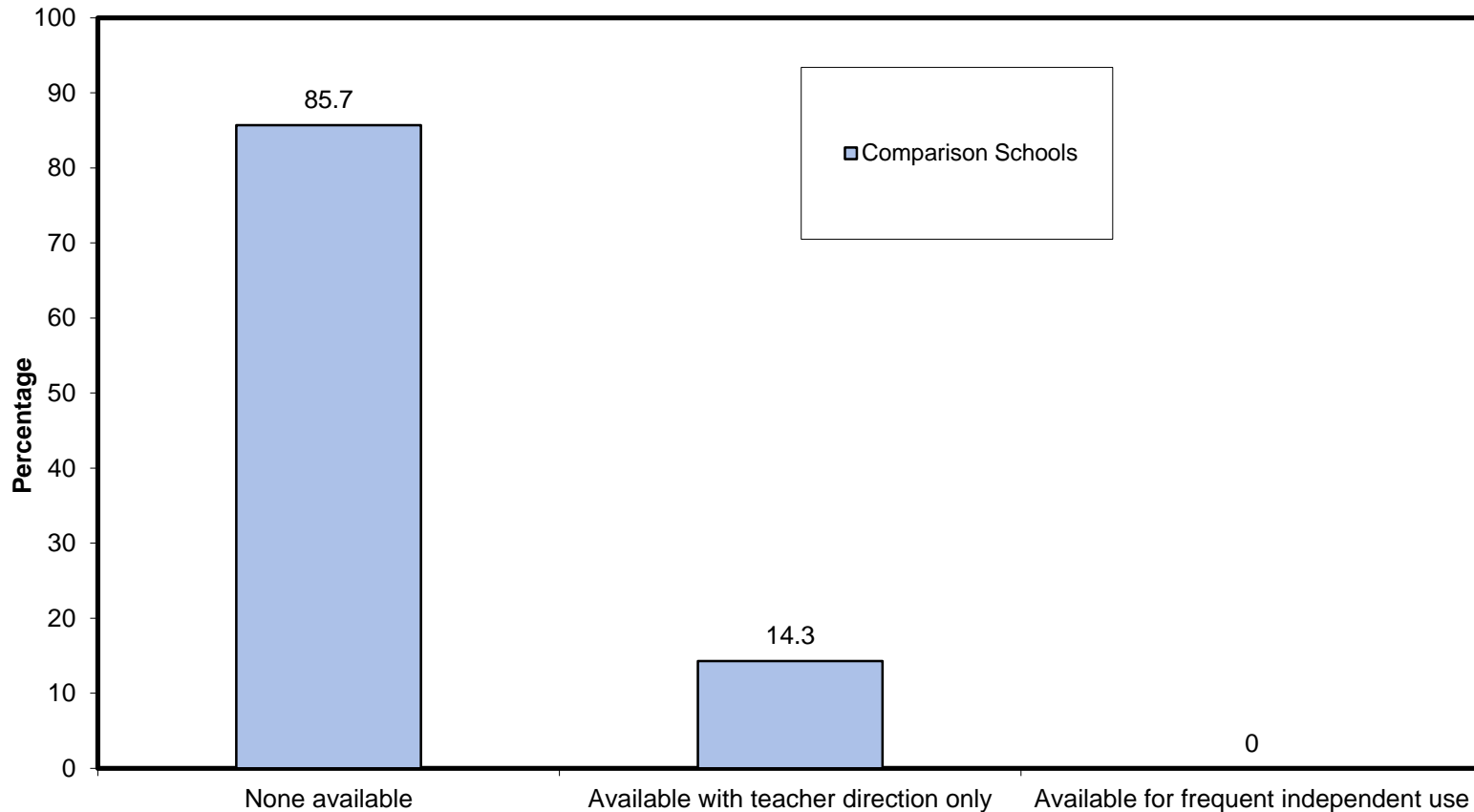
Interactions

- Teacher-child interactions p < .01
- Child-child interactions n.s.
- Discipline p < .05



Pre-Primary Classroom Observations: Availability and Accessibility of Learning Materials

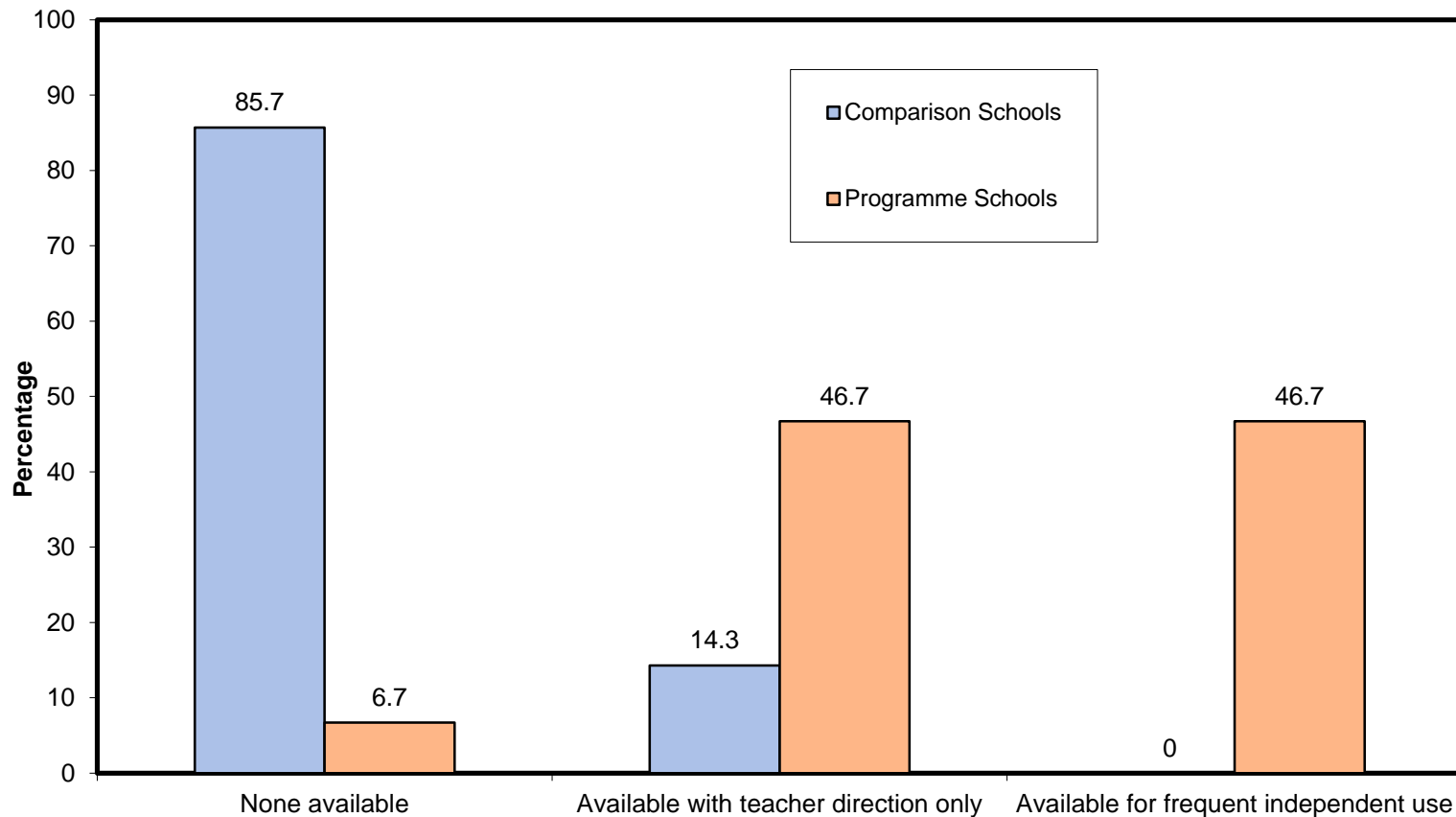
Availability & Accessibility of Learning Materials (Pre-primary)



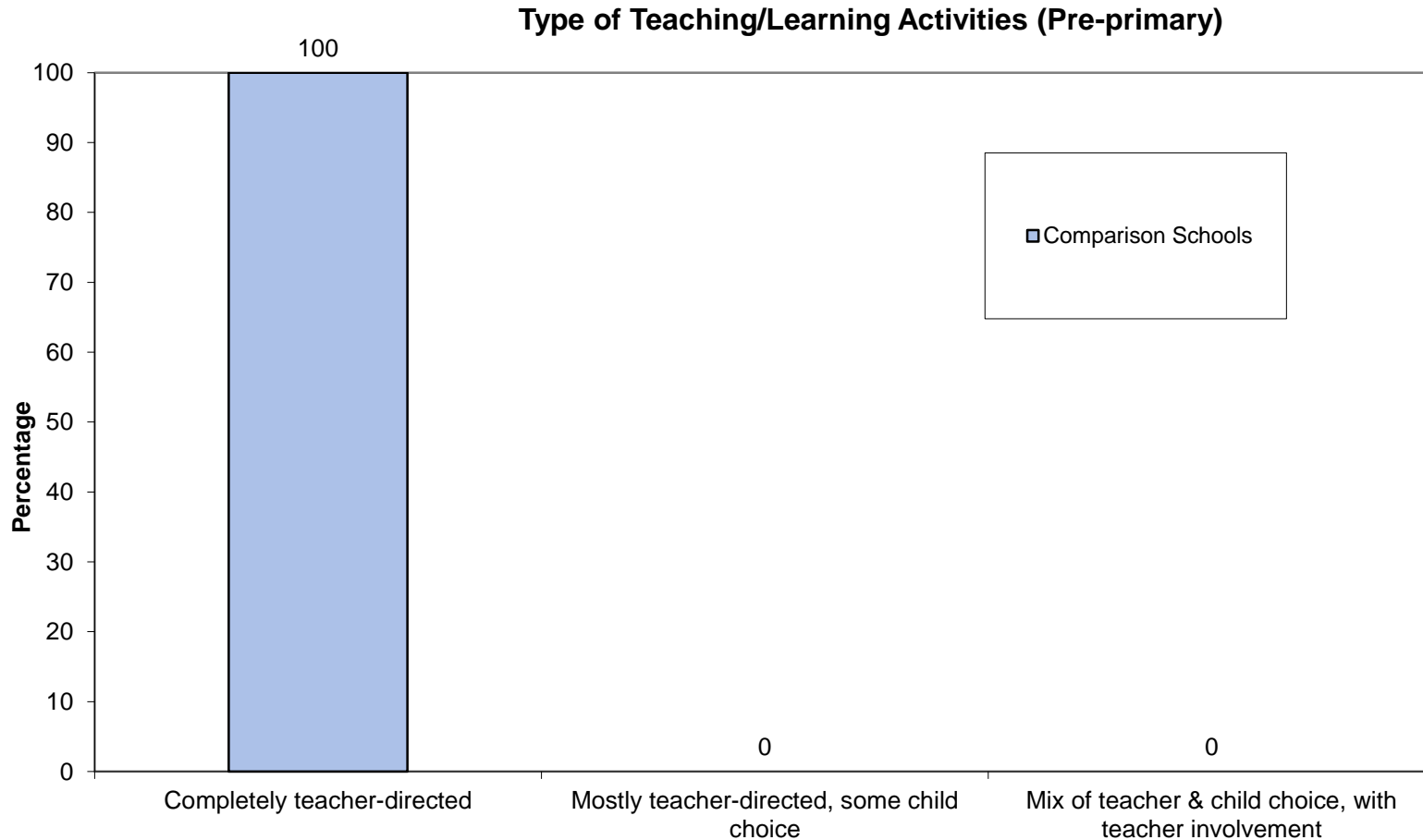
Pre-Primary Classroom Observations: Availability and Accessibility of Learning Materials

Availability & Accessibility of Learning Materials (Pre-primary)

$p < .01$



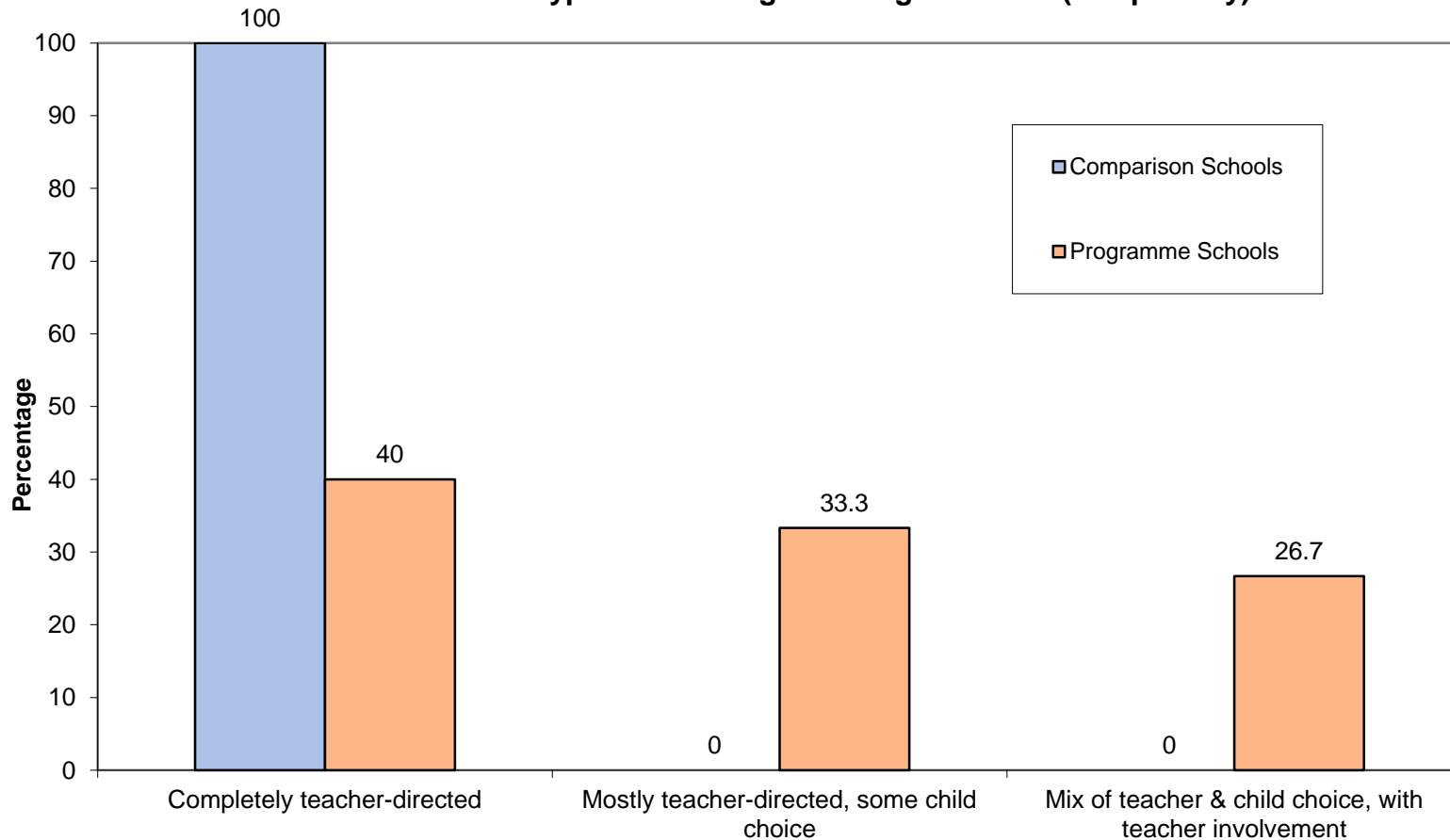
Pre-Primary Classroom Observations: Type of Teaching / Learning Activities



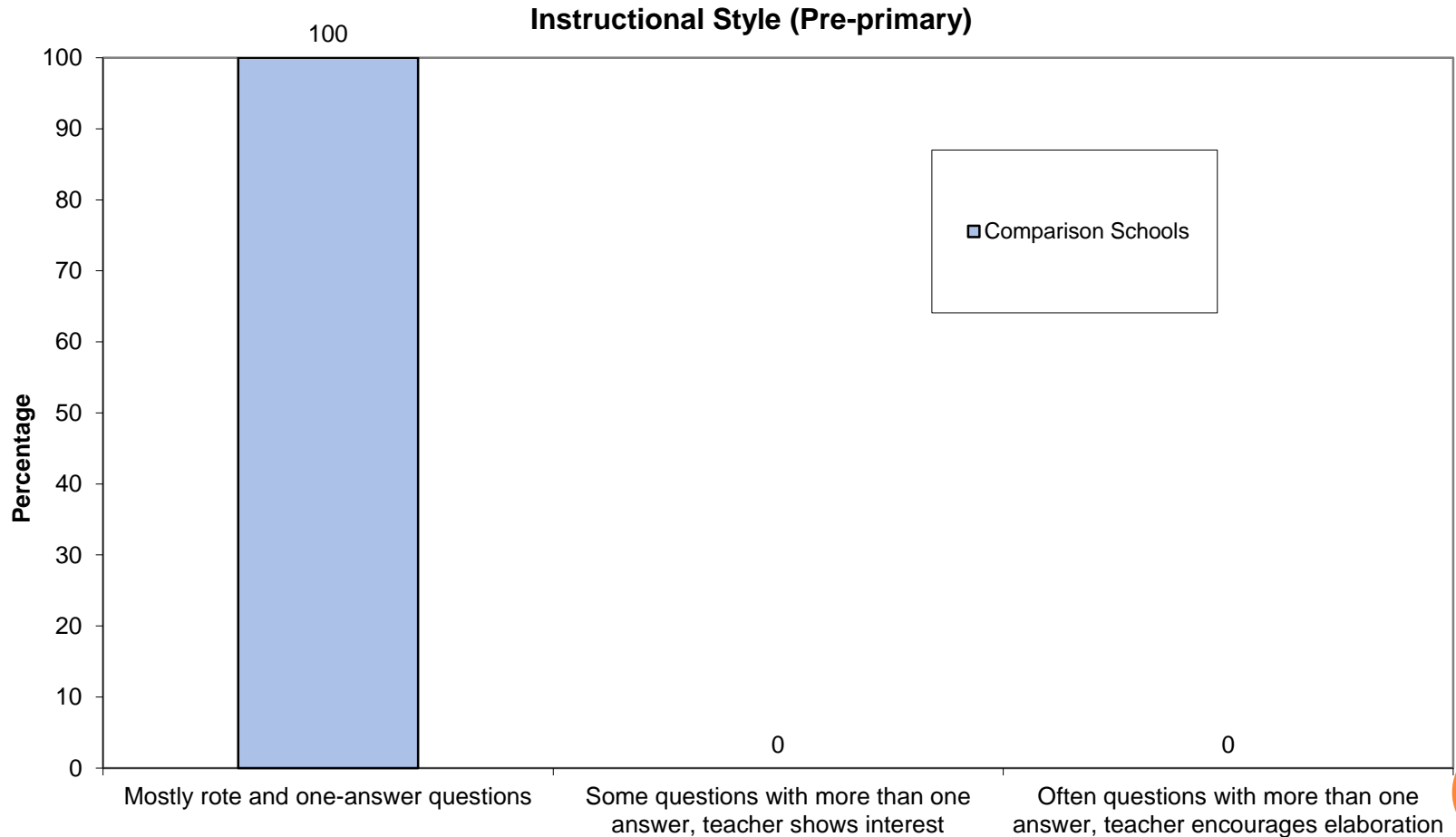
Pre-Primary Classroom Observations: Type of Teaching / Learning Activities

Type of Teaching/Learning Activities (Pre-primary)

$p < .05$

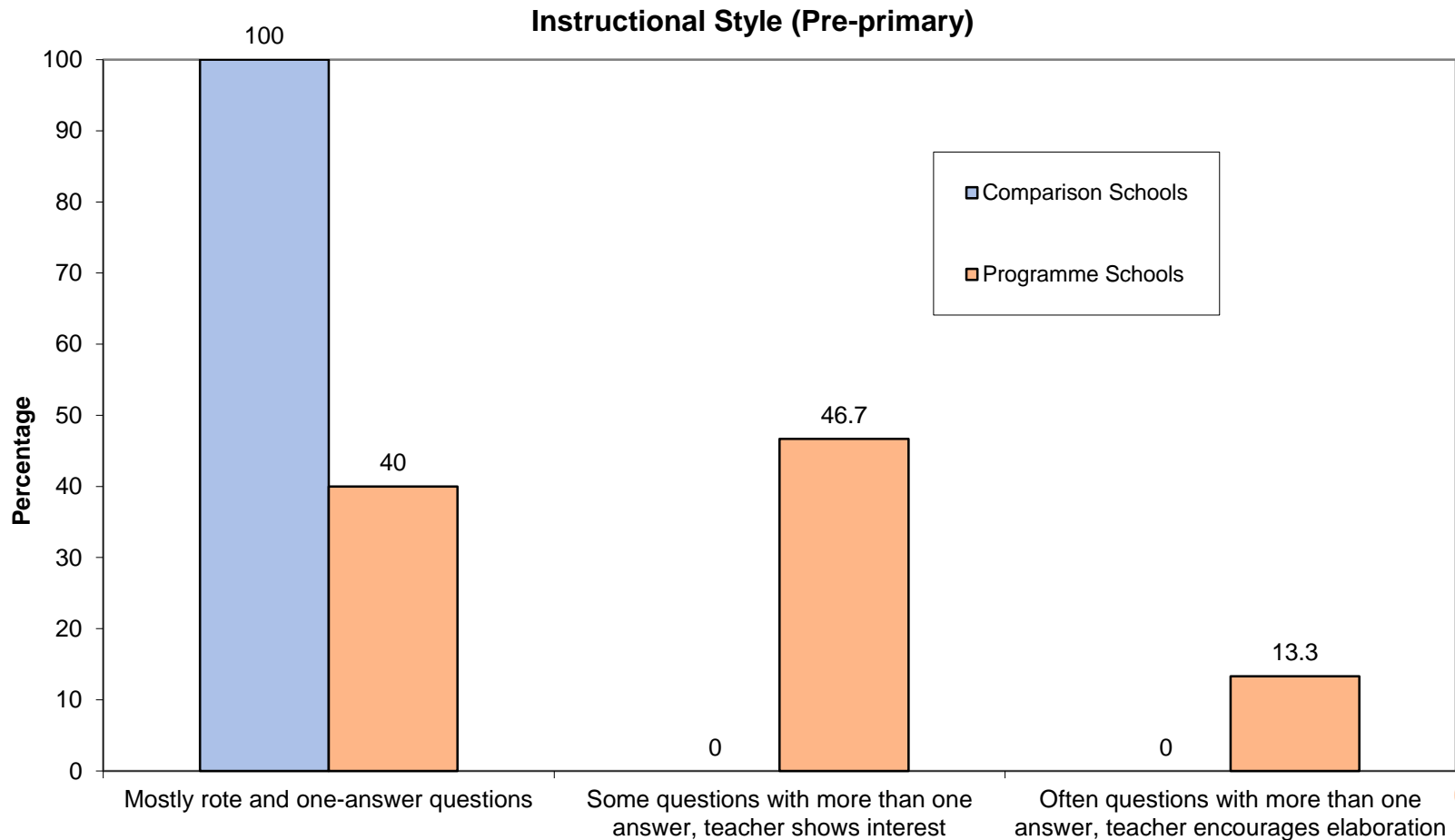


Pre-Primary Classroom Observations: Instructional Style



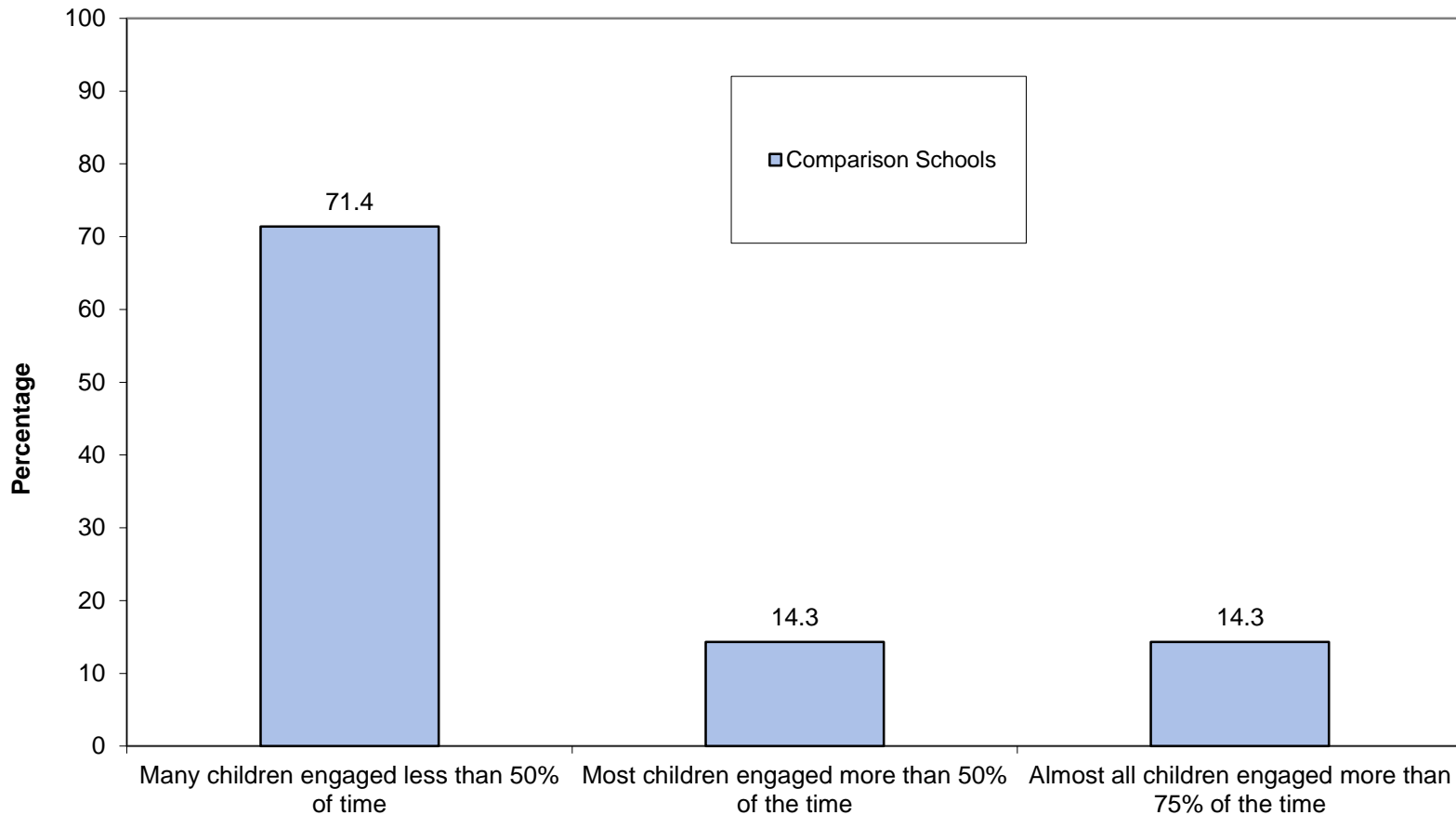
Pre-Primary Classroom Observations: Instructional Style

$p < .05$



Pre-Primary Classroom Observations: Engagement in Learning Activities

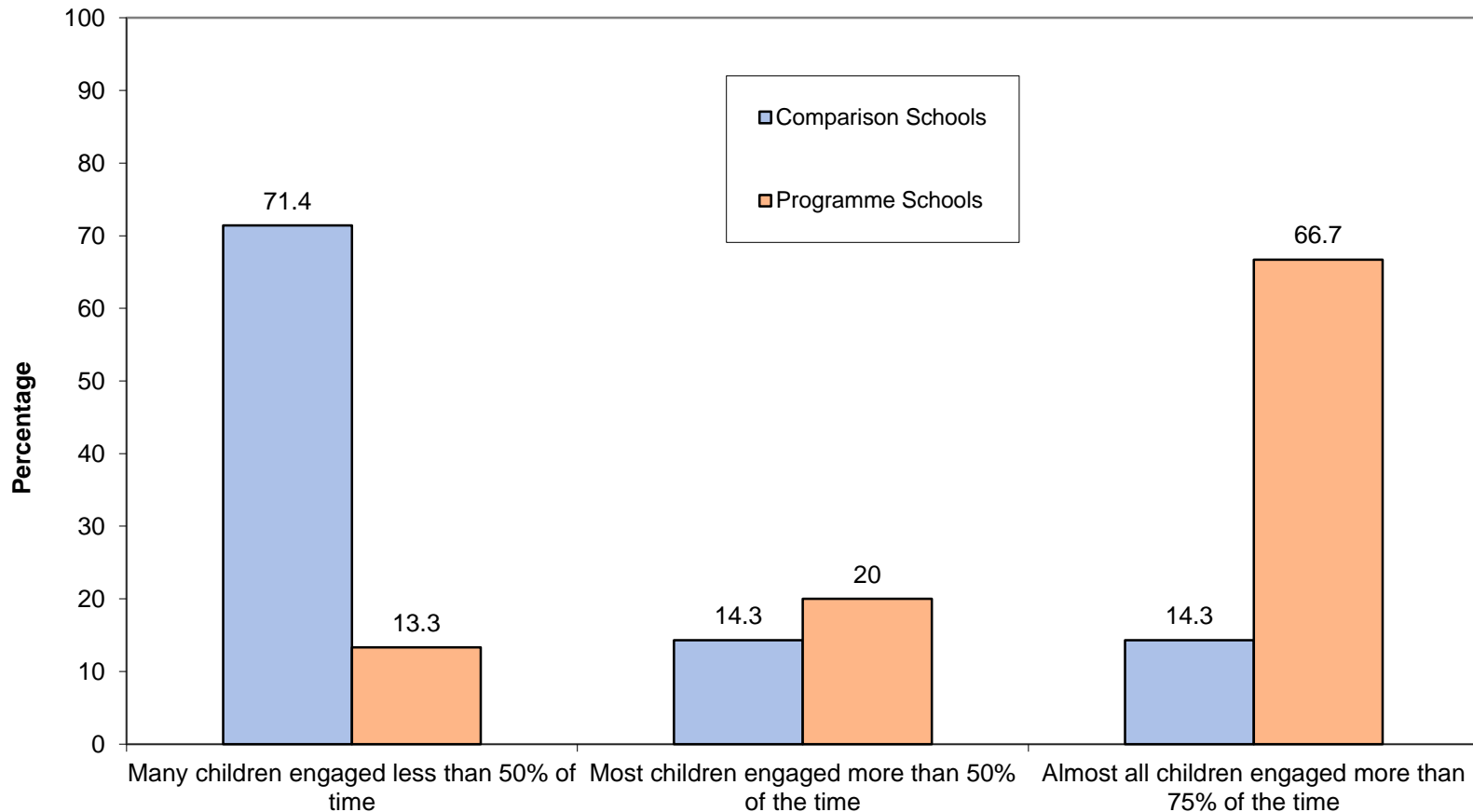
Engagement in Learning Activities (Pre-primary)



Pre-Primary Classroom Observations: Engagement in Learning Activities

$p < .05$

Engagement in Learning Activities (Pre-primary)



Class 1 Classroom Observations

- No significant differences between programme and comparison schools (except availability of Numeracy materials)
- Beginning shifts (but very small)



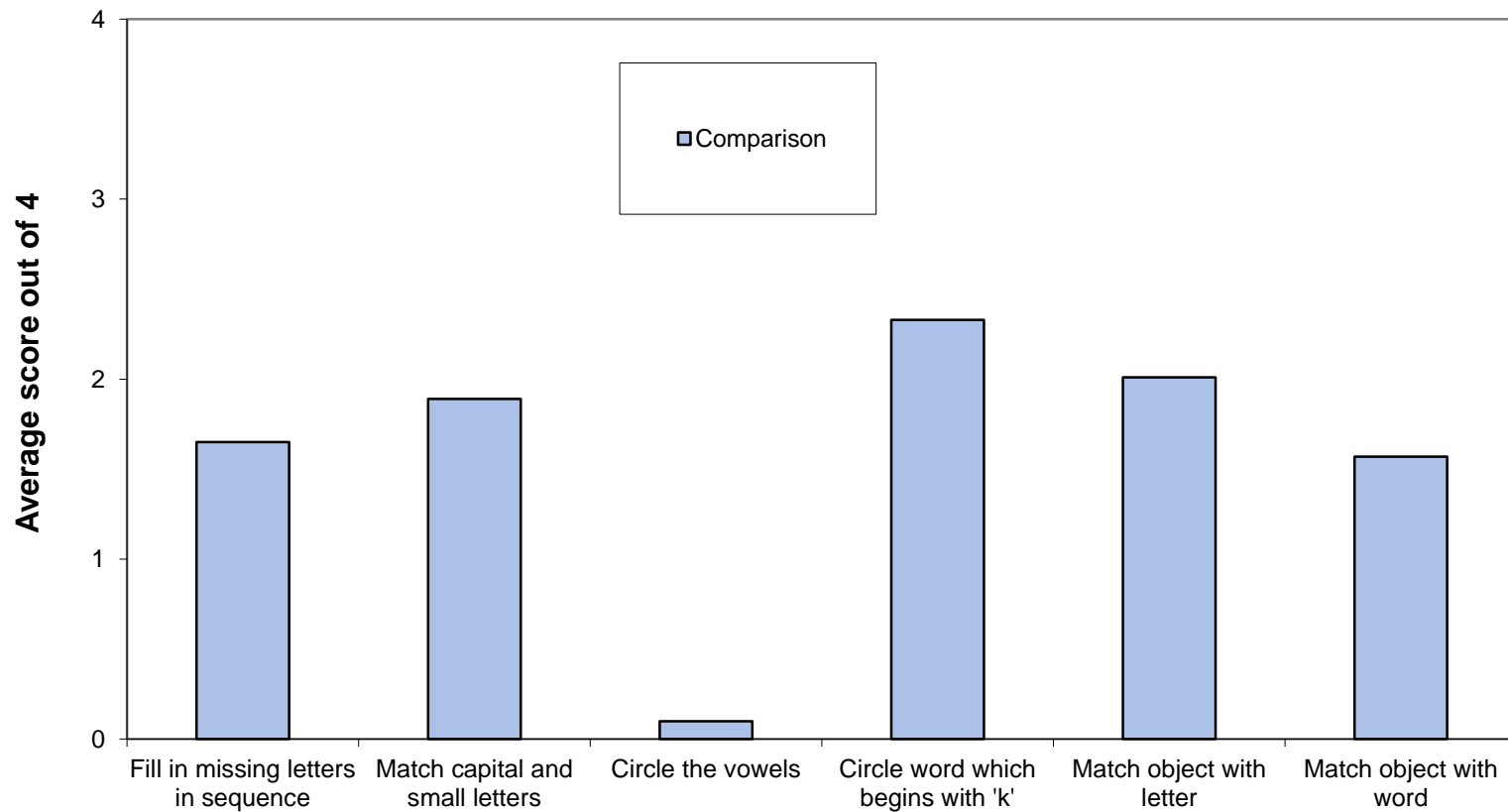
Aggregate Child Outcomes

- Pre-primary attendance ($p < .001$)
 - Comparison schools: 29%, Programme schools: 69%
- Class 1 attendance ($p < .05$)
 - Comparison schools: 48%, Programme schools: 63%
- Retention and promotion – not significantly different



Class 1 Learning Achievement Tests English Literacy

English literacy



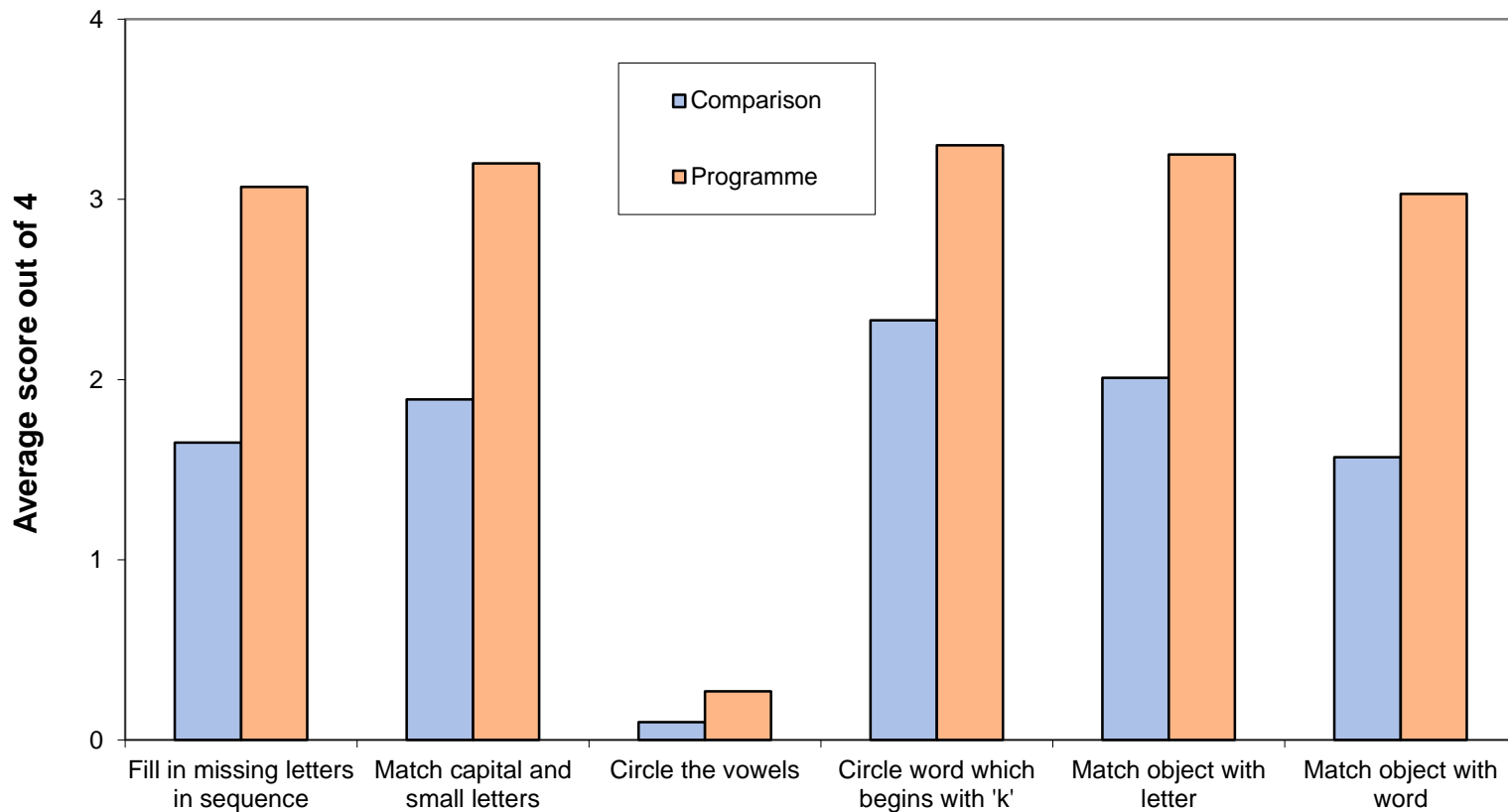
Class 1 Learning Achievement Tests

English Literacy

$p < .001$

(except vowels: $p < .05$)

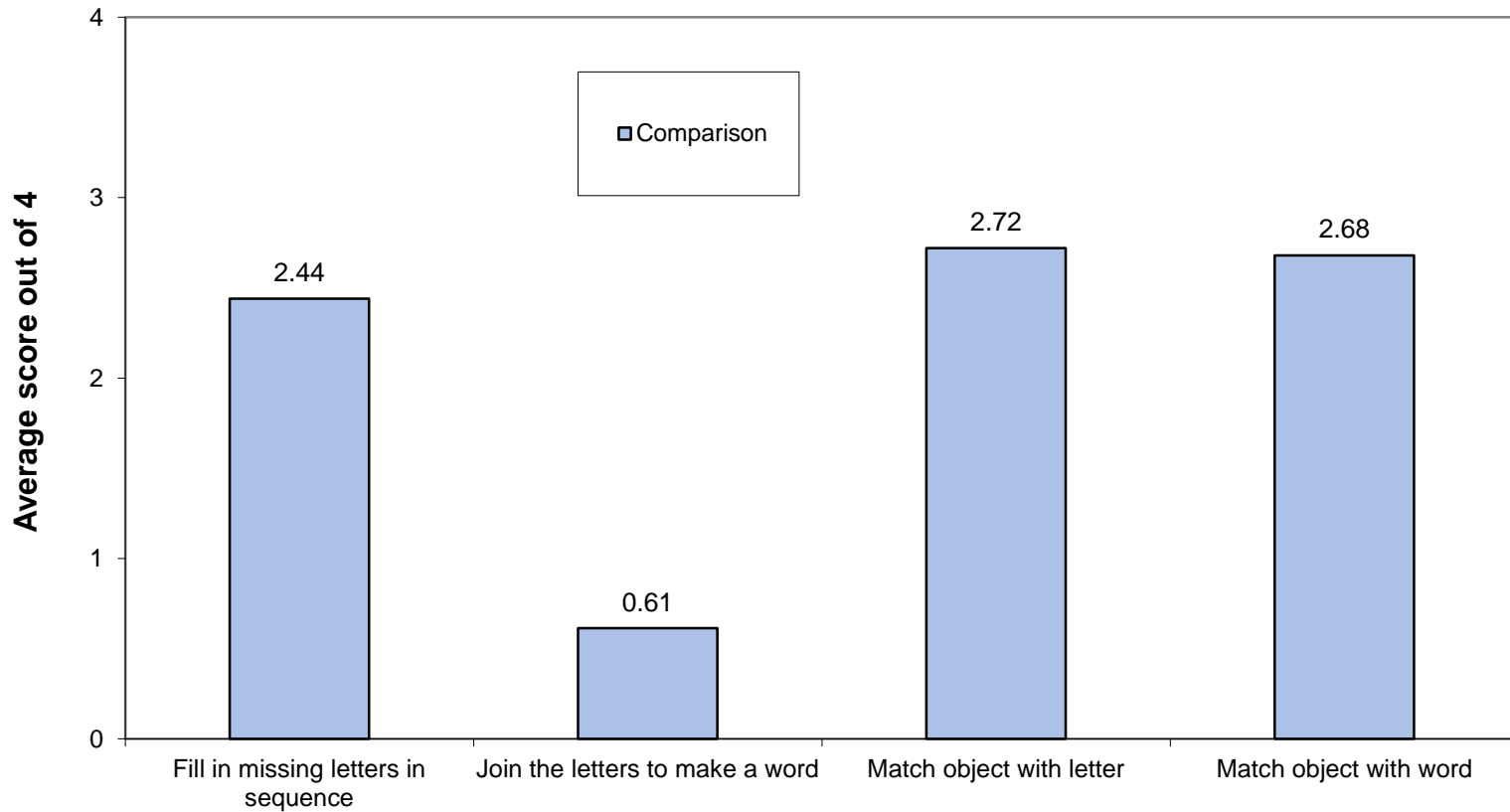
English literacy



Class 1 Learning Achievement Tests

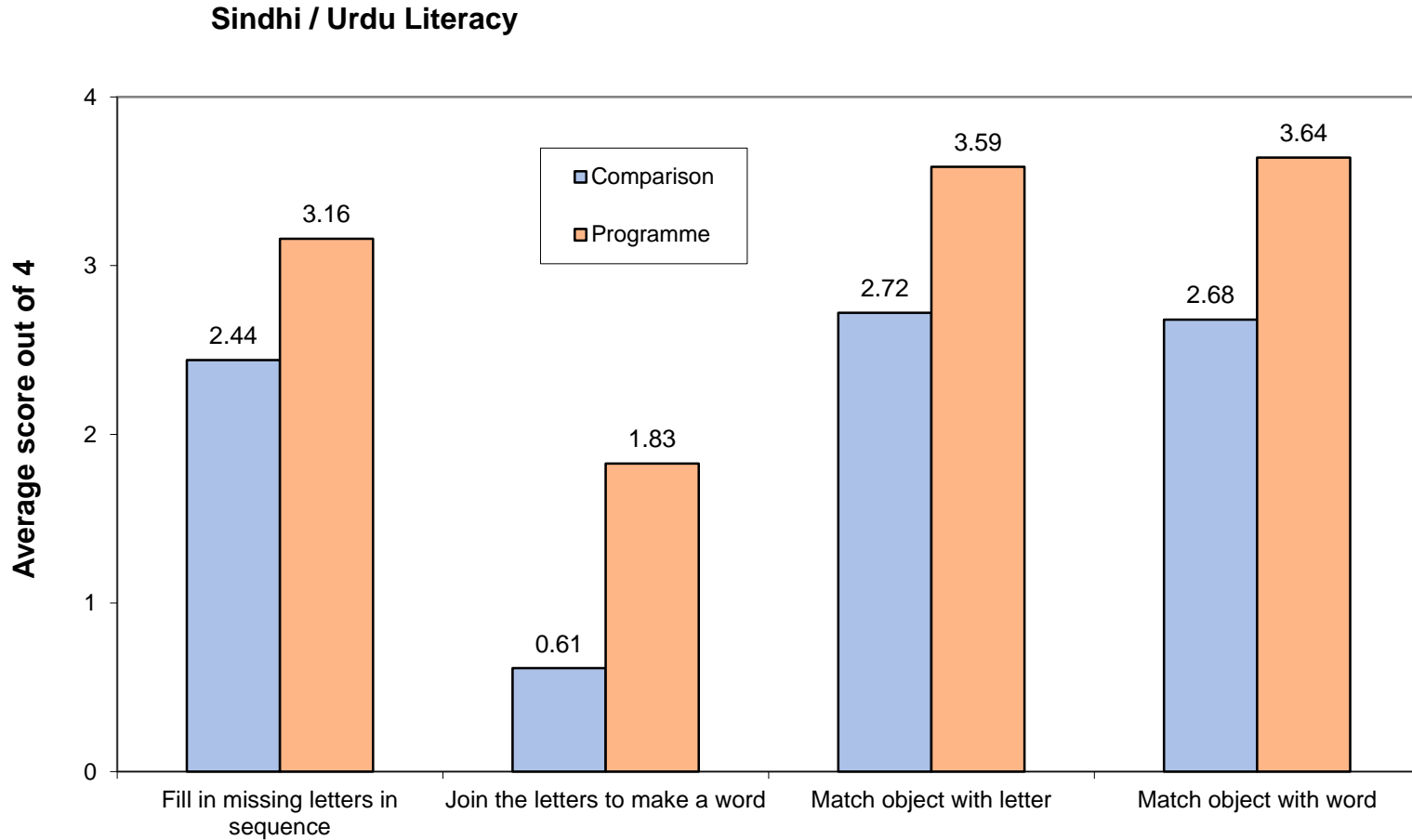
Sindhi / Urdu Literacy

Sindhi / Urdu Literacy



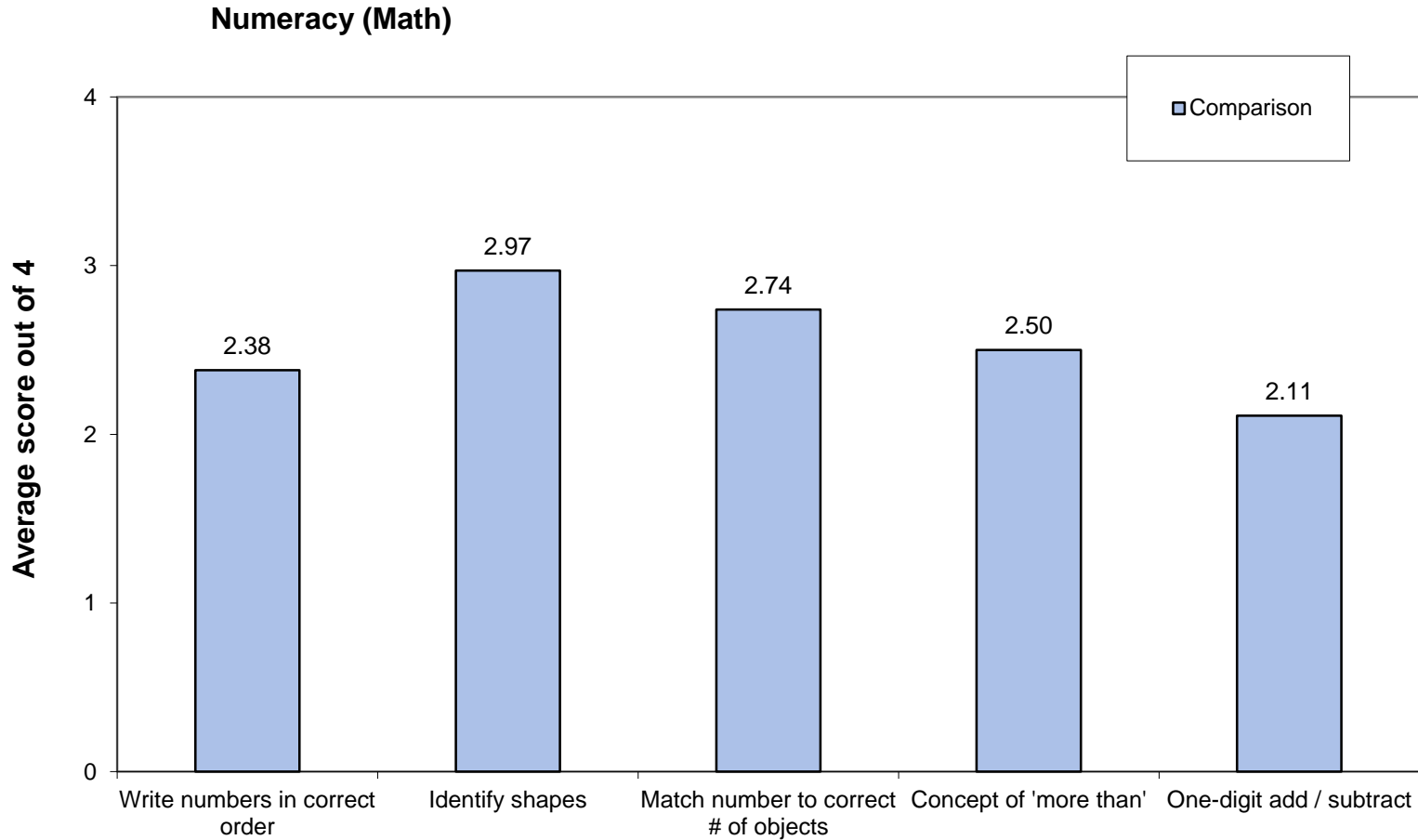
Class 1 Learning Achievement Tests Sindhi / Urdu Literacy

$p < .001$



Class 1 Learning Achievement Tests

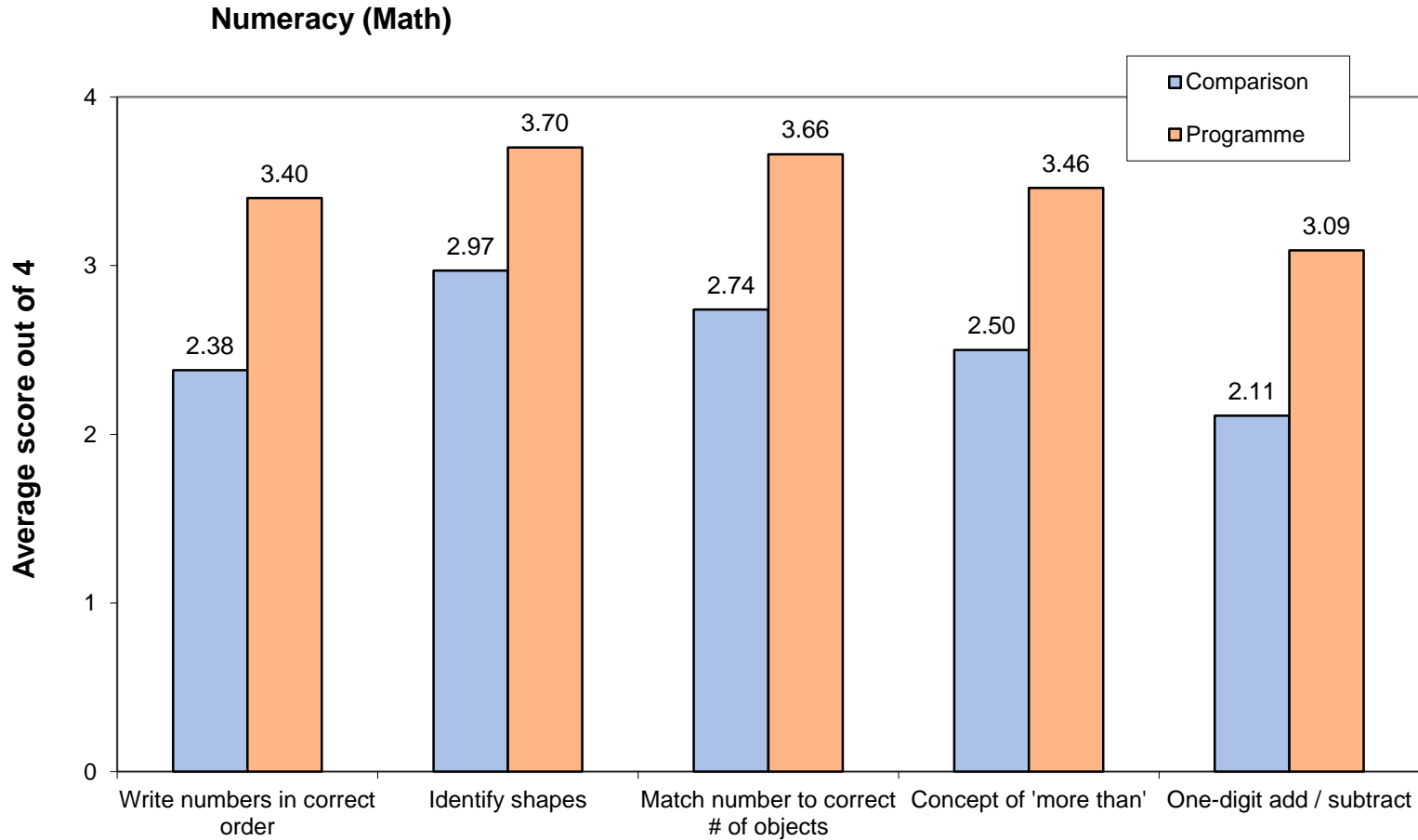
Numeracy



Class 1 Learning Achievement Tests

Numeracy

$p < .001$



Class 1 Learning Achievement Tests Scores (out of 10)

	Comparison (Non-RCC)	Programme (RCC)
English literacy	4.1	6.7
Sindhi / Urdu literacy	5.4	7.7
Numeracy (math)	6.2	8.4

$p < .001$



Limitations

- Bias in data collection?
- Measures – reliability and validity assessments needed
- Gender and age disaggregation would strengthen learning achievement analyses

- Children at non-RCC schools were more likely to be coming from home to Class 1 (no pre-primary experience) – difficult to tease out effects of exposure to pre-primary education in general vs exposure to RCC programme in particular



Discussion and implications

- Consistent, clear, and meaningful differences in classroom quality at the pre-primary level (where RCC intervention is most intense)
- Aggregate outcomes – drop-out, retention – not seeing effects of RCC at least in the short-term (yet)
- Clear differences in learning achievement in Class 1
- Long-term effects – Class 2 and onwards

Policy and practice

- Advocacy
 - Areas for RCC to increase focus
 - Risks of effects disappearing if quality is not sustained in early primary and later primary
 - Data suggest that attendance effects are gone by Class 2
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