Appendix 4: Attrition, differences in test scores across strata of schools, and missing values

## Proportion of children who completed the test

| Control schools |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Government | Private | Total | N (\%) of schools |
| Rural | $67.4 \%$ | $61.8 \%$ | $65.8 \%$ | $8(13 \%)$ |
| Semi-urban | $70.2 \%$ | $70.2 \%$ | $70.2 \%$ | $15(25 \%)$ |
| Urban | $73.1 \%$ | $70.5 \%$ | $71.6 \%$ | $37(62 \%)$ |
| Total | $71.2 \%$ | $69.8 \%$ | $70.6 \%$ |  |
|  |  |  |  |  |
| Intervention schools |  |  |  |  |
| Government |  |  |  |  |
| Purivate | Total | N (\%) of schools |  |  |
| Semi-urban | $74.8 \%$ | $77.3 \%$ | $76.3 \%$ | $6(10 \%)$ |
| Urban | $86.3 \%$ | $93.1 \%$ | $88.7 \%$ | $14(23 \%)$ |
| Total | $93.2 \%$ | $92.5 \%$ | $92.8 \%$ | $40(67 \%)$ |

## Test scores

|  | Treatment effect | School ownership effect | School location effect |
| :---: | :---: | :---: | :---: |
| Mean score |  |  |  |
| Without weighting | $\begin{gathered} 20.0 \% \\ (95 \% \text { Cl } 17.3 \text { to } 22.7) \\ \text { P }<0.00001 \end{gathered}$ | $\begin{gathered} 5.86 \% \\ (95 \% \text { CI } 3.11 \% \text { to } 8.61 \%) \\ \mathrm{P}=0.00003 \end{gathered}$ | $\begin{gathered} 1.24 \% \\ (95 \% \text { Cl }-0.63 \text { to } 3.12) \\ P=0.194 \end{gathered}$ |
| Weighted | $\begin{gathered} 20.0 \% \\ (95 \% \mathrm{Cl} 17.3 \text { to 22.7) } \end{gathered}$ | $\begin{gathered} 5.83 \% \\ (95 \% \text { Cl: } 3.08 \% \text { to } 8.57 \%) \\ \text { P }=0.00003 \end{gathered}$ | $\begin{gathered} 1.23 \% \\ (95 \% \mathrm{Cl}-0.64 \text { to 3.10) } \\ \mathrm{P}=0.199 \end{gathered}$ |
| Passing score ( $\geq 13$ out of 24 correct answers) |  |  |  |
| Without weighting | $\begin{gathered} \text { OR 9.34 } \\ (95 \% \mathrm{Cl} 6.62 \text { to 13.18) } \\ (\mathrm{P}<0.00001) \end{gathered}$ | $\begin{gathered} \text { OR1.98 } \\ (95 \% \text { Cl } 1.40 \text { to } 2.81) \\ \mathrm{P}=0.00011 \end{gathered}$ | $\begin{gathered} \text { OR } 1.28 \\ (95 \% \mathrm{Cl} 1.00 \text { to } 1.63) \\ \mathrm{P}=0.04623 \end{gathered}$ |
| Weighted | $\begin{gathered} \text { OR 9.48 } \\ (95 \% \mathrm{Cl} 6.70 \text { to 13.41) } \\ \mathrm{P}<0.00001 \end{gathered}$ | $\begin{gathered} \text { OR } 1.97 \\ (95 \% \text { Cl } 1.39 \text { to } 2.80) \\ \mathrm{P}=0.00015 \end{gathered}$ | $\begin{gathered} \text { OR } 1.28 \\ (95 \% \mathrm{Cl} 1.00 \text { to } 1.63) \\ \mathrm{P}=0.04811 \end{gathered}$ |
| Mastery score ( $\geq 20$ out of 24 correct answers) |  |  |  |
| Without weighting | $\begin{gathered} \text { OR 35.33 } \\ (95 \% \text { Cl } 20.58 \text { to 60.67) } \\ \mathrm{P}<0.00001 \end{gathered}$ | $\begin{gathered} \text { OR 2.45 } \\ (95 \% \mathrm{Cl} 1.57 \text { to } 3.82) \\ \mathrm{P}=0.00008 \end{gathered}$ | $\begin{gathered} \text { OR 1.07 } \\ (95 \% \text { Cl } 0.76 \text { to } 1.51) \\ P=0.692 \end{gathered}$ |
| Weighted | $\begin{gathered} \text { OR } 39.07 \\ (95 \% \mathrm{Cl} 22.92 \text { to } 66.61) \\ \mathrm{P}<0.00001 \end{gathered}$ | $\begin{gathered} \text { OR } 2.55 \\ (95 \% \text { Cl } 1.61 \text { to } 4.03) \\ \mathrm{P}=0.00006 \end{gathered}$ | $\begin{gathered} \text { OR } 1.07 \\ (95 \% \text { Cl } 0.76 \text { to } 1.51) \\ \mathrm{P}=0.706 \end{gathered}$ |

OR: odds ratio

## Number of missing values in each question for students

Number of unanswered questions
(Total number of completed tests: 6383 for intervention and 4430 for control schools)

|  | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Intervention | 41 | 41 | 24 | 46 | 56 | 56 | 54 | 44 | 99 | 90 | 48 |
| Control | 34 | 22 | 25 | 24 | 21 | 23 | 30 | 19 | 36 | 27 | 30 |


|  | Q15 | Q16 | Q17 | Q18 | Q19 | Q20 | Q21 | Q21 | Q21 | Q21 | Q22 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| part2 | part3 | part4 | part1 |  |  |  |  |  |  |  |  |
| Intervention | 54 | 71 | 85 | 56 | 49 | 66 | 105 | 149 | 137 | 146 | 107 |
| Control | 30 | 33 | 52 | 26 | 20 | 38 | 144 | 169 | 224 | 203 | 126 |


|  | Q22 | Q22 | Q23 | Q23 | Q24 | Q24 | Q25 | Q25 | Q25 | Q25 |
| :--- | ---: | :--- | ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | part2 | part3 | part1 | part2 | part1 | part2 | part1 | part2 | part3 | part4 |
| Intervention | 114 | 127 | 81 | 84 | 189 | 211 | 171 | 202 | 212 | 194 |
| Control | 160 | 170 | 133 | 125 | 211 | 216 | 190 | 208 | 221 | 194 |

