





Did the ICCAMS intervention work?

Robert Coe & Jeremy Hodgen
Durham University / King's College London


E.S.R.C.
ECONOMIC & SOCIAL
RESEARCH
COUNCIL


TISME
Economic Studies &
Mathematics Institute


ICCAMS
x x

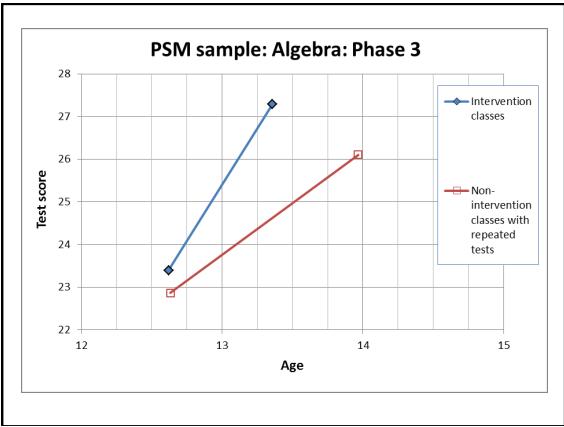

KING'S
College
LONDON

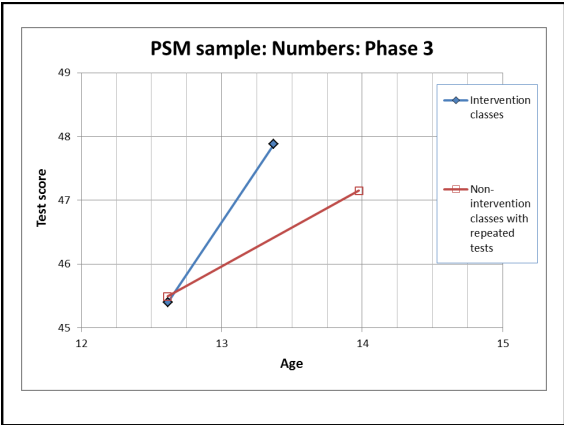
Multiple comparisons

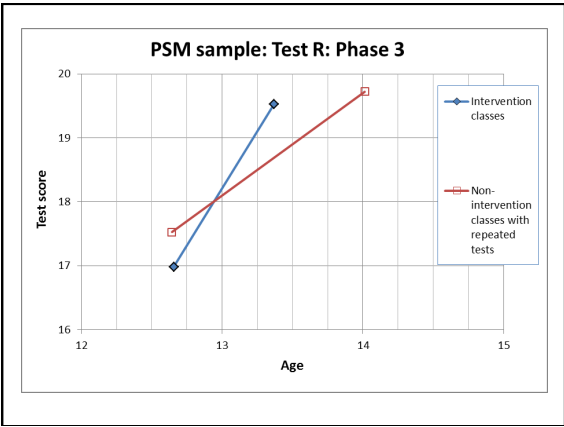
- Total scores on the three ICCAMS tests (Algebra, Number and Test R);
- Two intervention groups (Phase 2 and Phase 3), each with a comparison group;
- Three different comparison methods (overall changes in mean score and age; rates of score gain per year; regression of post-test scores on pre-test and other covariates);
- Two ways of selecting comparison groups (using all non-intervention pupils with repeat tests; using propensity score matching)

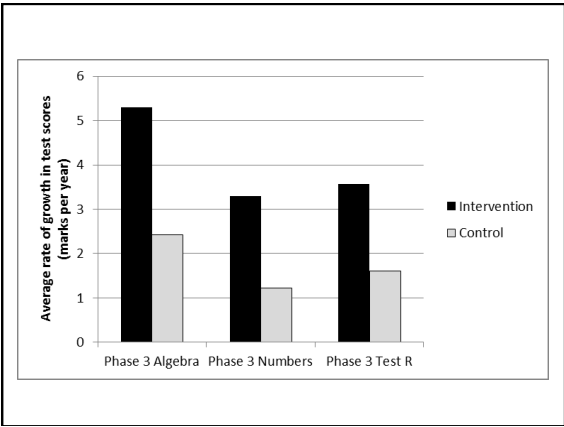
Caveats

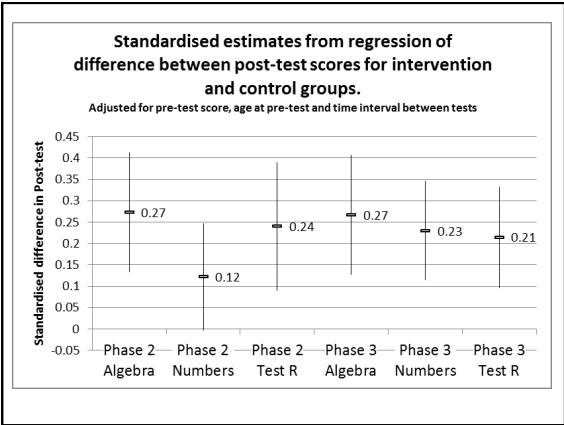
- No matched control or comparison group as part of the design
 - Likely to be unobserved differences
- Schools and/or teachers involved in both interventions were self-selected volunteers
- Different times of testing
 - Phase 3 classes were tested twice in the same year (at the start and end of the year)
 - Longitudinal sample June/July of each year
- Phase 3 pupils did not have MidYIS scores, or any other strong predictor of their likely performance in the absence of any intervention
- Intervention groups scored significantly higher than the control group on their first test, before any of the intervention was received











Implications

- Intervention schools made large gains
 - Similar to gains for formative assessment generally
 - Large gains possible because annual rate of growth is small
 - Tackling the attainment gap is more problematic
- BUT ...
 - Schools and some teachers volunteers
 - Intervention undertaken by the research team
 - Can the intervention be scaled up?
 - Implementing the intervention “at distance”?
 - Sustaining the effects?

Next steps

- Trial with random allocation
 - Investigate effects of implementation by others

- Investigate comparative effects of interventions
 - “Competitions” between interventions

- Investigate effects on participation
 - What do students do post-16?
