Analyzing joined younger cohort data

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2022-10-29

Using test scores data from the school survey

```
# Estimation for the AA sample

iv3aa_yc <- felm(
  formula = maths_score_w2 ~ entype_r4 + chsex + zbfa + stunting + caredu_r1 +
    careage_r1 + hhsize + wi_new + hq_new +
    cd_new + elecq_new + ownlandhse_r1 + factor(foodsec_r3) |
    0 | (IMTI ~ E_is),

  data = schsur_yl_aa
  )


iv4aa_yc <- felm(
  formula = literacy_score_w2 ~ entype_r4 + chsex + zbfa + stunting + caredu_r1 +
    careage_r1 + hhsize + wi_new + hq_new +
    cd_new + elecq_new + ownlandhse_r1 + factor(foodsec_r3) |
    0 | (IMTI ~ E_is),

  data = schsur_yl_aa
  )
```

```
stargazer(
  iv3aa_yc, iv4aa_yc,
  keep = c("IMTI"),
  keep.stat = c("n","rsq"),
  type = "text"
)
```

```
##
## ===============================================
##                       Dependent variable:
##                   ----------------------------
##                   maths_score_w2 literacy_score_w2
##                        (1)              (2)
## -----------------------------------------------
## `IMTI(fit)`          -0.093           0.090
##                     (0.230)          (0.218)
##
## -----------------------------------------------
## Observations          63               63
```

```
## R2                0.222            0.232
## ============================================
## Note:              *p<0.1; **p<0.05; ***p<0.01
```

```
stargazer(
  iv3aa_yc$stage1, iv4aa_yc$stage1,
  keep = c("E_is"),
  keep.stat = c("n"),
  type = "text"
)
```

```
##
## ========================================
##                   Dependent variable:
##               ---------------------------
##                             NA
##                    (1)            (2)
## ----------------------------------------
## E_is             8.000***      8.000***
##                  (0.000)        (0.000)
##
## ----------------------------------------
## Observations       63             63
## ========================================
## Note:          *p<0.1; **p<0.05; ***p<0.01
```

using yl cognitive scores:

```
iv5aa_yc <- felm(
  formula = math_score ~ entype_r4 + chsex + zbfa + stunting + caredu_r1 +
    careage_r1 + hhsize + wi_new + hq_new +
    cd_new + elecq_new + ownlandhse_r1 + factor(foodsec_r3) |
    0 | (IMTI ~ E_is),

  data = schsur_yl_aa
)


iv6aa_yc <- felm(
  formula = verbal_score ~ entype_r4 + chsex + zbfa + stunting + caredu_r1 +
    careage_r1 + hhsize + wi_new + hq_new +
    cd_new + elecq_new + ownlandhse_r1 + factor(foodsec_r3) |
    0 | (IMTI ~ E_is),

  data = schsur_yl_aa
)


stargazer(
  iv5aa_yc, iv6aa_yc,
  keep = c("IMTI"),
  keep.stat = c("n","rsq"),
  type = "text"
)
```

```
##
## ========================================
##                   Dependent variable:
##               ---------------------------
##                 math_score   verbal_score
##                    (1)            (2)
## ----------------------------------------
## `IMTI(fit)`      0.187          1.193
##                  (0.218)        (2.173)
##
## ----------------------------------------
## Observations       71             70
## R2                 0.116          0.268
## ========================================
## Note:         *p<0.1; **p<0.05; ***p<0.01
```

```
stargazer(
  iv5aa_yc$stage1, iv6aa_yc$stage1,
  keep = c("E_is"),
  keep.stat = c("n"),
  type = "text"
)
```

```
##
## ========================================
##                   Dependent variable:
##               ---------------------------
##                           NA
##                    (1)            (2)
## ----------------------------------------
## E_is             7.764***       7.764***
##                  (0.160)        (0.163)
##
## ----------------------------------------
## Observations       71             70
## ========================================
## Note:         *p<0.1; **p<0.05; ***p<0.01
```