Guiding Question – Is Economic Disadvantage Stronger in the Black Belt?

Ok lets think this through. First, open up the data. Next, set up a syntax file.

What do we need?

1. Outcomes measure: Student Achievement – AchvAll, or AchvECD, or GapECD
2. Categorical/Predictor Measures – Black Belt indicator, ECD indicator

First, check through the data – its pretty clean:

```
* Look at variables we have.
DESCRIPTIVES VARIABLES=AchvAll AchvECD GapECD
  /STATISTICS=MEAN STDDEV MIN MAX.

 * Check for co-missingness.
MVA VARIABLES=AchvAll AchvECD GapECD Locale FamSESQ BlkBlt
  /MAXCAT=25
```

Ok, now lets run some tests.

1. Think about what types of variables we have here – categorical (Black Belt) and scale (Achievement, Gaps)
2. Try some boxplot comparisons:

```
EXAMINE VARIABLES=AchvAll BY BlkBlt
  /PLOT=BOXPLOT
  /STATISTICS=NONE
  /NOTOTAL.
```

Lets look a little more closely at ECD and Black Belt Counties

1. First look at them as continuous indicators

```
GRAPH
  /SCATTERPLOT(BIVAR)=FamECD WITH AchvAll BY BlkBlt
  /MISSING=LISTWISE.
  /TITLE='Achievement and ECD by Black Belt County'.
```

2. Next, lets look at them by Terciles-- Generate a tercile variable for Family SES

```
rank FamSES
/ntiles(3).
rename variables NFamSES = FamSESTerc.
variable labels FamSESTerc 'SES Terciles '.
VALUE LABELS
FamSESTerc
1 'Low'
2 'Med'
3 'High'
```

3. Ok lets run some tests

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
```

```
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT AchvAll
  /METHOD=ENTER FamSES BlkBlt.
```

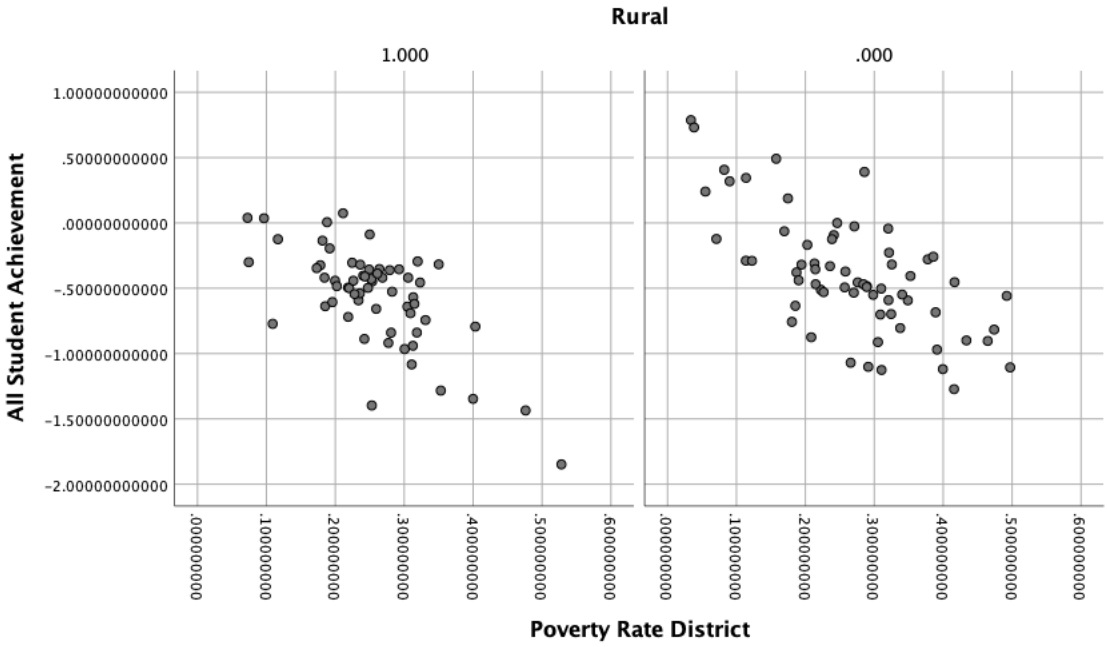
Practice Question – Is Economic Disadvantage Stronger in Rural Schools?

1. Lets look at the relation between Rural Schools and Economic Achievement Gaps
   a. Lets generate a rural variable:

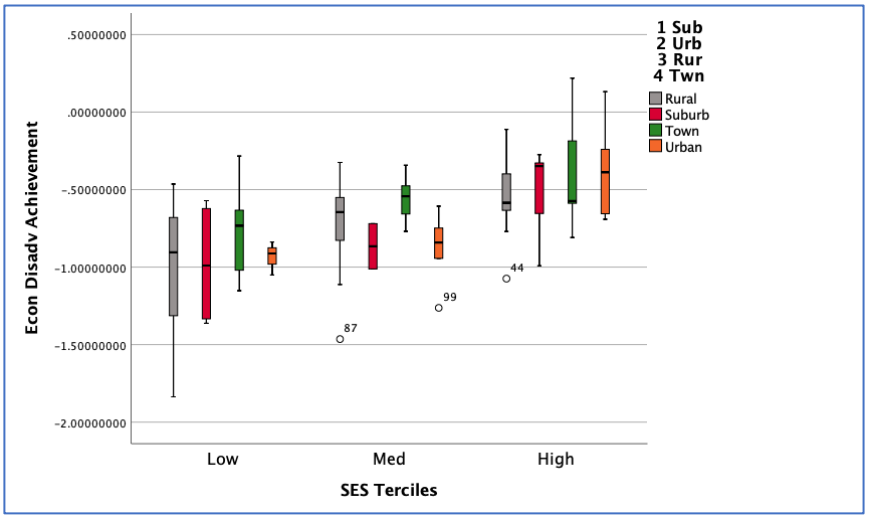
```
* Generate Rural Variable.

IF (Locale = "Rural") Rural=1.
IF (Locale = "Town") Rural=0.
IF (Locale = "Urban") Rural=0.
IF (Locale = "Suburb") Rural=0.
EXECUTE.
```

2. Check for missing values between all variables of interest.
3. Run some boxplots showing Achievement, FamilyECD, and Rural.



4. Run some boxplots showing economic gaps by locale and level of SES, should look like:



5. Run some other tests!