```
GET DATA

>Error # 541
>A procedure command has appeared before a file has been defined.  The run
>needs a DATA LIST, GET, END FILE, MATRIX DATA, or some other command which
>defines cases or a matrix.
>Execution of this command stops.
  /TYPE=TXT
  /FILE='D:\cochran_c_test\student_por_spss_clean.csv'
  /ENCODING='UTF8'
  /DELCASE=LINE
  /DELIMITERS=","
  /QUALIFIER='"'
  /ARRANGEMENT=DELIMITED
  /FIRSTCASE=2
  /IMPORTCASE=ALL
  /VARIABLES=
  studytime F1.0
  G3 F2.0
  sex A1
  internet A3
  higher A3
  schoolsup A3
  famsup A3.
CACHE.
EXECUTE.

DATASET NAME CochranClean WINDOW=FRONT.
```

Dataset Name

Warnings

The active dataset will replace the existing dataset named CochranClean.

```
VALUE LABELS studytime
  1 '<2 hours'
  2 '2 to 5 hours'
  3 '5 to 10 hours'
  4 '>10 hours'.

FORMATS studytime G3 (F8.0).
```

```
EXECUTE.

TITLE 'Cochran C Test SPSS Import Check'.
```

```
FREQUENCIES VARIABLES=studytime
  /ORDER=ANALYSIS.
```

Frequencies

Statistics

studytime

N	Valid	649
	Missing	0

studytime

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<2 hours	212	32.7	32.7	32.7
	2 to 5 hours	305	47.0	47.0	79.7
	5 to 10 hours	97	14.9	14.9	94.6
	>10 hours	35	5.4	5.4	100.0
	Total	649	100.0	100.0	

```
DESCRIPTIVES VARIABLES=G3 studytime
  /STATISTICS=MEAN STDDEV MIN MAX.
```

Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
G3	649	0	19	11.91	3.231
studytime	649	1	4	1.93	.830
Valid N (listwise)	649				

```
COMPUTE original_row = $CASENUM.
EXECUTE.

DATASET COPY CochranFullSample.
DATASET COPY CochranBalancedSample.

* ============================================================.
* A. FULL SAMPLE COCHRAN C-STYLE DIAGNOSTIC.
```

```
* Unequal n: 212, 305, 97, 35.
* This is a diagnostic/sensitivity result, not the strict balanced test.
* ============================================================.

DATASET ACTIVATE CochranFullSample.
TITLE 'Full Sample Cochran C Style Diagnostic'.
```

```
AGGREGATE
  /OUTFILE=* MODE=REPLACE
  /BREAK=studytime
  /n_group=N(G3)
  /mean_G3=MEAN(G3)
  /median_G3=MEDIAN(G3)
  /sd_G3=SD(G3)
  /min_G3=MIN(G3)
  /max_G3=MAX(G3).

COMPUTE variance_G3 = sd_G3 ** 2.
EXECUTE.

AGGREGATE
  /OUTFILE=* MODE=ADDVARIABLES
  /BREAK=
  /sum_variances=SUM(variance_G3)
  /largest_variance=MAX(variance_G3).

COMPUTE variance_share = variance_G3 / sum_variances.
COMPUTE is_largest_variance = (variance_G3 = largest_variance).
COMPUTE cochran_c_full = largest_variance / sum_variances.

FORMATS mean_G3 median_G3 sd_G3 variance_G3 variance_share sum_variances large
st_variance cochran_c_full (F10.4).
VARIABLE LABELS
  n_group 'Number of cases in studytime group'
  variance_G3 'Group sample variance of G3'
  variance_share 'Group variance divided by sum of group variances'
  is_largest_variance '1 if group has largest variance'
  cochran_c_full 'Full sample Cochran C style statistic'.

EXECUTE.

LIST VARIABLES=studytime n_group mean_G3 median_G3 sd_G3 variance_G3 variance_
share is_largest_variance sum_variances largest_variance cochran_c_full
  /CASES=FROM 1 TO 4.
```

List

Full Sample Cochran C Style Diagnostic

```
studytim                                          variance_G variance_s is_lar
gest
e        n_group    mean_G3  median_G3      sd_G3 3          hare       _varia
nce  sum_variances largest_variance cochran_c_full

       1     212    10.8443    11.0000     3.2186    10.3595      .2848
.00       36.3699        10.5179           .2892
       2     305    12.0918    12.0000     3.2431    10.5179      .2892      1
.00       36.3699        10.5179           .2892
       3      97    13.2268    13.0000     2.5021     6.2605      .1721
.00       36.3699        10.5179           .2892
       4      35    13.0571    13.0000     3.0384     9.2319      .2538
.00       36.3699        10.5179           .2892


Number of cases read:  4    Number of cases listed:  4

SAVE TRANSLATE
  /TYPE=CSV
  /OUTFILE='D:\cochran_c_test\cochran_c_spss_full_group_stats.csv'
  /REPLACE
  /FIELDNAMES
  /CELLS=VALUES.



* ============================================================.
* B. CLASSIC BALANCED COCHRAN C TEST.
* Takes first 35 records from each studytime group.
* This matches the deterministic R/Python balanced sample.
* ============================================================.

DATASET ACTIVATE CochranBalancedSample.
TITLE 'Classic Balanced Cochran C Test'.
```

```
SORT CASES BY studytime original_row.

DO IF ($CASENUM = 1 OR studytime <> LAG(studytime)).
  COMPUTE group_order = 1.
ELSE.
  COMPUTE group_order = LAG(group_order) + 1.
END IF.
EXECUTE.

SELECT IF group_order <= 35.
EXECUTE.

TITLE 'Balanced Sample Check Each Group n 35'.
```

```
FREQUENCIES VARIABLES=studytime
  /ORDER=ANALYSIS.
```

Frequencies

[CochranBalancedSample]

Statistics

studytime

N	Valid	140
	Missing	0

studytime

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<2 hours	35	25.0	25.0	25.0
	2 to 5 hours	35	25.0	25.0	50.0
	5 to 10 hours	35	25.0	25.0	75.0
	>10 hours	35	25.0	25.0	100.0
	Total	140	100.0	100.0	

```
AGGREGATE
  /OUTFILE=* MODE=REPLACE
  /BREAK=studytime
  /n_group=N(G3)
  /mean_G3=MEAN(G3)
  /median_G3=MEDIAN(G3)
  /sd_G3=SD(G3)
  /min_G3=MIN(G3)
  /max_G3=MAX(G3).

COMPUTE variance_G3 = sd_G3 ** 2.
EXECUTE.

AGGREGATE
  /OUTFILE=* MODE=ADDVARIABLES
  /BREAK=
  /sum_variances=SUM(variance_G3)
  /largest_variance=MAX(variance_G3).
```

```
COMPUTE variance_share = variance_G3 / sum_variances.
COMPUTE is_largest_variance = (variance_G3 = largest_variance).
COMPUTE cochran_c_balanced = largest_variance / sum_variances.

FORMATS mean_G3 median_G3 sd_G3 variance_G3 variance_share sum_variances large
st_variance cochran_c_balanced (F10.4).
VARIABLE LABELS
  n_group 'Number of cases in balanced studytime group'
  variance_G3 'Balanced group sample variance of G3'
  variance_share 'Group variance divided by sum of group variances'
  is_largest_variance '1 if group has largest variance'
  cochran_c_balanced 'Classic balanced Cochran C statistic'.

EXECUTE.

LIST VARIABLES=studytime n_group mean_G3 median_G3 sd_G3 variance_G3 variance_
share is_largest_variance sum_variances largest_variance cochran_c_balanced
  /CASES=FROM 1 TO 4.
```

List

```
studytim                                          variance_G variance_s is_lar
gest
e        n_group    mean_G3  median_G3      sd_G3 3          hare       _varia
nce  sum_variances largest_variance cochran_c_balanced

       1      35    12.2286    12.0000     2.3147     5.3580      .2482
.00       21.5849         9.2319             .4277
       2      35    13.1429    13.0000     1.7681     3.1261      .1448
.00       21.5849         9.2319             .4277
       3      35    12.8857    13.0000     1.9670     3.8689      .1792
.00       21.5849         9.2319             .4277
       4      35    13.0571    13.0000     3.0384     9.2319      .4277      1
.00       21.5849         9.2319             .4277


Number of cases read:  4    Number of cases listed:  4

SAVE TRANSLATE
```

```
  /TYPE=CSV
  /OUTFILE='D:\cochran_c_test\cochran_c_spss_balanced_group_stats.csv'
  /REPLACE
  /FIELDNAMES
  /CELLS=VALUES.



* ============================================================.
* C. EXPORT.
* ============================================================.

OUTPUT EXPORT
  /CONTENTS EXPORT=VISIBLE
  /PDF DOCUMENTFILE='D:\cochran_c_test\cochran_c_test_SPSS_output_ONLY.pdf'
  /NOTESCAPTIONS=YES.
```

Output Export

Warnings

The name NOTESCAPTIONS is not a recognized subcommand.
Execution of this command stops.