Item Analysis

Item analysis is the process of assessing items either qualitatively (based on the criterion above) or quantitatively. In quantitative analysis the individual item is related to some criterion. The criterion may be people known to possess the psychological characteristic being measured, it may be to total score of the test, or the change as a result of some treatment (change score).
Sample data generated for this example (fake data) using the following instrument is used in this example.

Diagnostic Assessment

Name:_____ Diagnosis _____Pretest/Postest_____

Rate how much the statements below apply to you by using the following scale:

never	hardly ever	once in a while	little of the time	some of the time	a lot of the time	fre-quent-ly	most of the time	all of the time
0	1	2	3	4	5	6	7	8

IN THE PAST WEEK HOW OFTEN HAVE YOU ...

1. ____ felt jumpy?
2. ____ felt fearful or afraid?
3. ____ sad?
4. ____ felt like hurting yourself?
5. ____ felt angry?
6. ____ felt confused?
7. ____ had hallucinations?
8. ____ tense?
9. ____ felt useless?
10. ____ felt shy?
11. ____ spent a worthwhile day?
12. ____ felt approved of?
13. ____ felt suspicious?
14. ____ been in trouble?
15. ____ felt worried?
16. ____ felt calm?
17. ____ been productive?
18. ____ been outgoing?
19. ____ enjoyed your leisure hours?
20. ____ been inappropriate?

File Name = pascor1.sps

```
get file = '\proeval\pashrt.sav'.
missing values jumpy to leisure (9).
compute worthr=8-worth.
compute calmr=8-calm.
compute outgor=8-outgoing.
compute sdepress= mean(sad, hurtself, useless, worthr).
compute sanxious= mean(jumpy, fear, tense, shy, worried, calmr).
compute sborderl= mean(hurtself, angry, trouble).
compute sschiz=  mean(halluci, confuse, outgor).
compute stotal=  mean(sdepress, sanxious, sborderl, sschiz).
cor var=sad hurtself useless worthr with sdepress.
cor var=jumpy fear tense shy worried calmr with sanxious.
cor var=halluci confuse outgor with sschiz.
cor var=hurtself angry trouble with sborderl.
```

[Now you really are going to need syntax files. Computing the mean using the "click procedure" just doesn't work very well.]

Click to review the procedure for creating syntax files. Use the "back arrow" to return to here.

The results follow:

Correlations

		SDEPRESS
SAD	Pearson Correlation	.837
	Sig. (2-tailed)	.000
	N	48
HURTSELF	Pearson Correlation	.811
	Sig. (2-tailed)	.000
	N	48
USELESS	Pearson Correlation	.826
	Sig. (2-tailed)	.000
	N	48
WORTHR	Pearson Correlation	.804
	Sig. (2-tailed)	.000
	N	48

This is the first set of correlations of each item with the overall score of all of the items of the subtest (SDPRESS). The the higher the correlation the better the item.

Correlations

		SANXIOUS
JUMPY	Pearson Correlation	.823
	Sig. (2-tailed)	.000
	N	48
FEAR	Pearson Correlation	.815
	Sig. (2-tailed)	.000
	N	48
TENSE	Pearson Correlation	.818
	Sig. (2-tailed)	.000
	N	48
SHY	Pearson Correlation	.740
	Sig. (2-tailed)	.000
	N	48
WORRIED	Pearson Correlation	.880
	Sig. (2-tailed)	.000
	N	48
CALMR	Pearson Correlation	.828
	Sig. (2-tailed)	.000
	N	48

The next subtest results are for the items of the (SANXIOUS) subtest.

Correlations

		SSCHIZ
HALLUCI	Pearson Correlation	.797
	Sig. (2-tailed)	.000
	N	48
CONFUSE	Pearson Correlation	.875
	Sig. (2-tailed)	.000
	N	48
OUTGOR	Pearson Correlation	.618
	Sig. (2-tailed)	.000
	N	48

Then the schizophrenia subtest (SSCHIZ).

Correlations

		SBORDERL
HURTSELF	Pearson Correlation	.925
	Sig. (2-tailed)	.000
	N	48
ANGRY	Pearson Correlation	.871
	Sig. (2-tailed)	.000
	N	48
TROUBLE	Pearson Correlation	.882
	Sig. (2-tailed)	.000
	N	48

Finally the borderline subtest (SBORDERL).