Data Set Integrity Check for EDIC Cognition File

Prepared by

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Revision History

Version	Author/Title	Date	Comments
1.0	Charles F. Turner	1-9-2013	
1.1	Charles F. Turner	1-16-2013	First revision

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1 Standard Disclaimer

The intent of this DSIC is to provide confidence that the data distributed by the NIDDK repository is a true copy of the study data. Our intent is ***not*** to assess the integrity of the statistical analyses reported by study investigators. As with all statistical analyses of complex datasets, complete replication of a set of statistical results should not be expected on a first (or second) exercise in secondary analysis. This occurs for a number of reasons including differences in the handling of missing data, restrictions on cases included in samples for a particular analysis, software coding used to define complex variables, etc. Experience suggests that most discrepancies can ordinarily be resolved by consultation with the study data coordinating center (DCC), however this process is labor-intensive for both DCC and Repository staff. It is thus not our policy to resolve every discrepancy that is observed in an integrity check. Specifically, we do not attempt to resolve minor or inconsequential discrepancies with published results or discrepancies that involve complex analyses, *unless NIDDK Repository staff suspect that the observed discrepancy suggests that the dataset may have been corrupted in storage, transmission, or processing by repository staff*. We do, however, document in footnotes to the integrity check those instances in which our secondary analyses produced results that were not fully consistent with those reported in the target publication.

*Note that study publication is saved as a separate file so that it can be added/excluded as needed for different uses of the DSIC. The SAS/Stata code used to support the finding of the DSIC appears as an appendix and is saved together with the DSIC in one file.

2 Study Background

The DCCT-EDIC cohort is a sample of Type 1 diabetics recruited beginning in 1983 for a randomized control trial of the impact of intensive versus conventional therapy for Type 1 diabetes. In 1993, the trial was terminated and intensive therapy was recommended for all patients with Type 1 diabetes. Members of the original DCCT (Diabetes Control and Complications Trial) cohort have been followed since 1994 in the follow-on EDIC study (Epidemiology of Diabetes Interventions and Complications)

The present DSIC reports on the analysis file for a 2007 publication [1] in NEJM on the "long-term effects of diabetes and its treatment on cognitive function."

3 Archived Datasets

This DSIC reports on the DCC-supplied mscognit member of the dataset edic_ms_cognit_core3rti.xp. This member is reported to be a SAS CPORT file; it was translated into a Stata file using Stat/Transfer version 11. The variables used in this DSIC are listed in Appendix A.

4 Statistical Methods

We attempted to replicate each of the three tables reported in the reference publication [1]. Identification of the appropriate variables to use for this replication relied upon the variable labels included in the analysis file. This was a particular challenge for the variables included in published Table 3, and we noted one instance in which the label of an analysis variable was not consistent with the label used in the published table (see below).

The primary outcome variables used in this paper were scale scores for testing in 8 domains. The article displays results for these domains (published Fig. 1), but it does not provide numeric values; these must be inferred from the figure axes. We calculated values corresponding to the comparisons shown in Figures 1a – 1c of the published paper. These calculated values were visually compared to the published figures, and we note instances in which the results appeared discrepant. To provide a more precise test of the integrity of these data, we also calculated for each domain score: the number of valid cases, the mean, SD, minimum, and maximum for the distributions of each variable. These were then compared to the descriptive statistics for these scores provided by the DCC. .

5 Results

DSIC Table 1 compares the published characteristics of subjects in the EDIC cognition study by treatment condition to characteristics calculated from the archived data for this study. It will be seen that there are only extremely minor discrepancies in results between published results and results calculated from the archived analysis file.

We were unable to replicate the entirety of published Table 2 because we could not locate either an event history file for severe hypoglycemic events or a summary variable that provided counts of the number of hypoglycemic events for the DCCT versus EDIC phase of the study. However, using the variable ***cumcnt***, we were able to closely match the totals (by treatment group) for the number of subjects having 0, 1-5, and 6+ hypoglycemic events. Those results are shown in DSIC Table 2.

DSIC Table 3 compares published means and SDs for 24 (unscaled) cognitive tests to the values calculated from the analysis file. This is done for subjects both at entry to DCCT and at Year 12 of EDIC, and it is done separately for subjects assigned to intensive vs. conventional treatment in DCCT. With one exception, this analysis finds only trivial discrepancies. The exception arises for calculation of scores for the Tactual Performance Test. Published Table 3 indicates that this outcome is measured in ***minutes***; however, our analysis suggests that the reported results belong to analysis variables qv00r72 and rvar72 which are labeled: "tactual performance memory score (***num correct***)". [1]

Figures 1a-1 thru 1c-3 compare published results for changes in the 8 cognitive domains by: (a) Treatment condition, (b) Number of hypoglycemic events, and (c) Extent of metabolic control. [2] With one exception, the discrepancies are minor -- although there are more discrepancies in analyses of cognitive change by metabolic control (HbA1c) than by the other two factors.

[1] "During the DCCT, 24 test variables had been chosen a priori to be of particular diagnostic value when applied to patients with type 1 diabetes. For each of these 24 test variables, a standardized z score was calculated, with the mean and standard deviation from the baseline assessment of the DCCT cohort used as references. These standardized scores provided a unit-free measurement of the relative improvement (positive sign) or deterioration (negative sign) in performance as compared with the total group at baseline. To reduce the number of comparisons, the 24 standardized scores were grouped into eight cognitive domains consistent with standard neuropsychological assessment strategies. For each domain, the simple average of the standardized scores was used to represent the change from baseline, with equal weight assigned to each test. [1, p. 1849]"

[2] In this analysis, we used both available HbA1c measurements in the study dataset: hba: mean change in HbA1c; and xhba: time-weighted HbA1c. The former measurement appears to provide results that more closely mirror published results.

The exception involves Domain 5 (spatial performance). The published figures show a consistent positive change in Domain 5 standardized scores while the calculated values are consistently negative; see Figures 1a-1 thru 1c-2. We suspect that these discrepancies may be due to an unseen error in our own calculations, an undocumented transformation of the D5 variable used in the investigators' published analyses, or an error that occurred during the publication process.

To provide assurance that the dataset was not damaged in storage, transmission, or processing by repository staff, we calculated the number of valid cases, mean, SD, minimum, and maximum for each of the eight cognitive domain variables used in the study. We compared these calculated values to identical values provided by the DCC. These comparisons yielded no discrepancies.

6 Conclusions

The results of these DSIC analyses provide confidence that the EDIC Cognition dataset distributed by the NIDDK repository is a true copy of the study data received from the DCC.

7 References

1. Jacobson A, Ryan CM, Cleary P et al. Long-Term Effect of Diabetes and Its Treatment on Cognitive Function. The New England Journal of Medicine, 2007, 356:1842-1852.

8 Tables

DSIC Table 1. Characteristics of the Patients: Published vs. Calculated.

CHARACTERISTICS	AT DCCT ENTRY				Year 12 of EDIC			
	Intensive		Conventional		Intensive		Conventional	
	Published	*Calculated*	*Published*	*Calculated*	*Published*	*Calculated*	*Published*	*Calculated*
Female sex (%)	49	49	45	45	49	(Note B)	45	(Note B)
White race (%)	97	97	96	96	97	(Note B)	96	(Note B)
Mean age (yr)	27±7	27±7	27±7	27±7	46±7	46±7	45±7	45±7
Adult (%)‡	89	89	88	88	100	100	100	100
College graduate (%)	30	30	27	27	39	39	37	37
Marital status (%)								
Never married	43	43	44	44	10	10	10	10
Married	50	50	52	52	74	74	74	74
Formerly married	7	7	4	4	16	16	16	16

CHARACTERISTICS	AT DCCT ENTRY				Year 12 of EDIC			
	Intensive		Conventional		Intensive		Conventional	
	Published	*Calculated*	*Published*	*Calculated*	*Published*	*Calculated*	*Published*	*Calculated*
Occupation (%) (NOTE A)								
Professional or technical	32	32	33	33	53	53	51	51
Unemployed or retired	1	1	<1	<1	6	6	7	7
Retinopathy, scnd (%)	52	52	50	50	89	89	97	97
Duration of diabetes (yr)	6±4	5.8±4	6±4	5.6±4	24±5	25±5	24±5	24±5
Glycated hemoglobin (%)	9.0±1	9.0±2	9.0±1.6	9.0±1.6	7.8±1.2	7.8±1.2	7.6±1.2	7.6±1.2
Visual acuity =>20/40 (%) ***	NA	NA	NA	NA	4	4	5	5
Peripheral neuropathy (%)**	9	9	14	14	30	30	30	30
Blood pressure (mm Hg)								
Systolic	113±12	113±12	115±12	115±12	121±14	121±14	120±14	120±14
Diastolic	72±9	72±9	73±9	73±9	74±9	74±9	74±9	74±9

CHARACTERISTICS	AT DCCT ENTRY				Year 12 of EDIC			
	Intensive		Conventional		Intensive		Conventional	
	Published	*Calculated*	*Published*	*Calculated*	*Published*	*Calculated*	*Published*	*Calculated*
Treated hypertension (%)	NA	NA	NA	NA	40	40	40	40
Lipids (mg/dl)††								
Total cholesterol	177±33	177±33	174±33	174±33	182±34	182±34	177±34	177±34
LDL cholesterol	110±29	110±29	108±29	108±29	109±29	109±29	106±28	106±28
Lipid-lowering medication (%)	NA	NA	NA	NA	45	45	43	43
Current cigarette smoker (%)	23	23	22	22	14	14	12	12
Symptom Checklist-90-Revised Depression score‡‡	51±10	50±10	51±10	50±10	49±12	49±12	49±11	49±11
Verbal IQ	112±11	112±11	112±10	112±10	NA	NA	NA	NA
Full-scale IQ	114±10	113±10	114±10	114±10	NA	NA	NA	NA

* Plus-minus values are means ±SD. NA denotes not available; LDL = low-density lipoprotein.

† Race was self-assigned. "White" denotes white, non-Hispanic.

‡ Adults are defined as persons 18 years of age or older.

¶ The DCCT baseline value is the eligibility value.

*** Visual acuity was measured with a Snellen chart. At baseline in the DCCT, all patients had visual acuity of 20/32 or better. In the EDIC study, visual acuity of 20/40 or worse in at least one eye was recorded in 44 patients.

** The DCCT baseline definition of peripheral neuropathy is pain or numbness in the hands only, taken from the Neurological History and Examination form. The EDIC study definition is pain or numbness in the hands or feet, taken from the Annual Medical History and Examination form.

††To convert values for cholesterol to millimoles per liter, multiply by 0.02586.

‡‡Scores range from 30 to 80, with higher scores indicating worse performance.

NOTE A. Dataset includes variables for: (1) Professional occupation or not; (2) Unemployed/Retired or not. These are not mutually exclusive categories; we suspect that there may be an error in the published analysis or a typo in the publication.

NOTE B. There is no variable in the cognition dataset that indicates the gender or race or respondents at year 12. It is reasonable to expect that these will not differ from the distributions at baseline.

DSIC Table 2. Extract from Published Table 2: Published vs. Calculated values for Number of Patients by Number of Severe Hypoglycemic Events they reported by treatment condition.

NUMBER OF EVENTS REPORTED	TOTAL Events thru 18 year followup: DCCT and EDIC			
	Intensive Treatment		Conventional Treatment	
	Published	Calculated	Published	Calculated
0 Events	326	328	365	368
1-5 Events	212	211	175	172
>5 Events	50	49	16	16
Total (no. of patients)	*588*	*588*	*556*	*556*

DSIC Table 3. Analysis of Number of Adverse Events and Serious Adverse Events by Treatment Group.

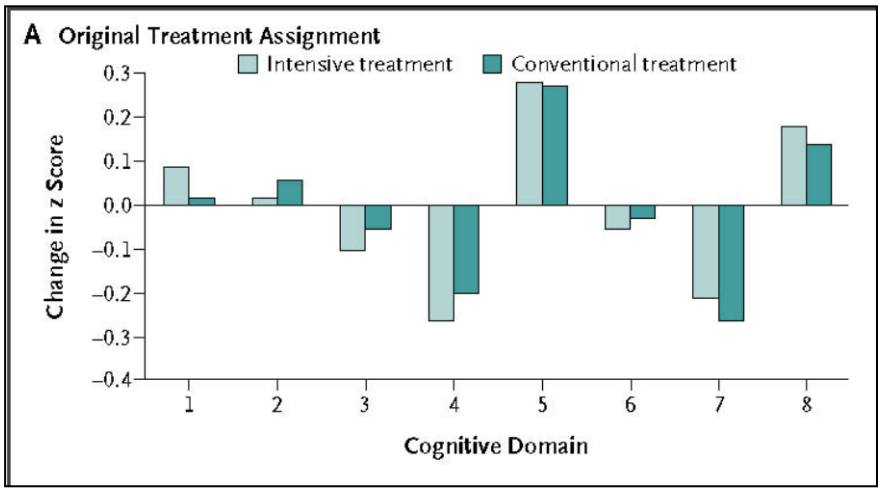
COGNITIVE TESTS	VAR*	At Entry into DCCT (1983-89)				At Year 12 of EDIC (2005)			
		Intensive Treatment		Conventional Treatment		Intensive Treatment		Conventional	
		Published	Calculated	Published	Calculated	Published	Calculated	Published	Calculated
Sample Sizes		588	588	556	556	588	588	556	556
Problem solving									
Similarities	**8**	12.6±2.5	12.6±2.5	12.7±2.4	12.7±2.4	14.0±2.2	14.0±2.2	13.9±2.3	13.9±2.3
Category test (no. of errors)	**71**	37.2±22.6	37.2±22.6	32.7±19.9§	32.7±19.9§	26.3±20.7	26.3±20.7	24.0±19.3	24.0±19.3
Learning (no. correct)									
Symbol-Digit Learning	**25**	24.1±4.5	24.1±4.5	24.3±4.4	24.3±4.4	24.1±4.5	24.1±4.5	24.1±4.5	24.1±4.5
Tactual Performance Memory	**19**	7.4±1.5	7.4±1.5	7.4±1.6	7.4±1.6	7.5±1.5	7.5±1.5	7.6±1.5	7.6±1.5
Immediate memory (no. correct)									
Visual Reproductions	**26**	14.7±2.1	14.7±2.1	14.6±2.3	14.6±2.3	14.3±2.4	14.3±2.4	14.4±2.2	14.4±2.2
Four-Word Short-Term Memory	**30**	40.3±9.1	40.2±9.1	39.6±9.6	39.6±9.6	39.0±10.5	39.0±10.5	39.2±10.4	39.2±10.4
Logical Memory	**73**	20.0±5.8	20.0±5.8	19.6±5.5	19.6±5.5	20.0±6.9	20.0±6.9	19.8±5.5	19.8±5.5
Digit Symbol	**31**	7.7±1.6	7.7±1.6	7.8±1.5	7.8±1.5	7.5±1.8	7.5±1.8	7.7±1.7	7.7±1.7
Delayed Recall									
Visual Reproductions	**35**	15.5±1.8	15.4±1.7	15.4±1.8	15.4±1.8	14.7±2.2	14.7±2.2	15.0±2.0	15.0±2.0
Logical Memory	**74**	16.4±5.5	16.4±5.5	16.2±5.4	16.2±5.4	17.1±6.3	17.0±6.3	17.2±5.8	17.2±5.8
Spatial information									
Embedded Figures (sec.)	**40**	7.4±3.3	7.4±3.3	7.1±3.2	7.1±3.2	6.5±3.1	6.5±3.1	6.4±2.9	6.4±2.9
Object Assembly (scaled scores)	**46**	12.1±2.9	12.1±2.9	12.2±2.9	12.2±2.9	13.9±2.8	13.9±2.8	14.0±2.7	14.0±2.7
Blocked Design	**10**	13.0±2.6	13.0±2.6	13.1±2.6	13.1±2.6	14.3±2.6	14.3±2.6	14.2±2.6	14.2±2.6
Tactual Performance Test (min) **NOTE A**	**72**	10.9±3.8	10.8±3.8	10.8±3.8	10.8±3.8	11.4±4.8	11.4±4.8	11.5±4.6	11.5±4.6

COGNITIVE TESTS	VAR*	At Entry into DCCT (1983-89)				At Year 12 of EDIC (2005)			
		Intensive Treatment		Conventional Treatment		Intensive Treatment		Conventional	
		Published	Calculated	Published	Calculated	Published	Calculated	Published	Calculated
Sample Sizes		588	588	556	556	588	588	556	556
Attention									
Digit Vigilance (sec)§ 0–1000‡	**47**	368.3±72.5	368.3±72.5	378.3±86.4	378.3±86.4	388.1±88.5	388.1±88.5	397.3±87.5	397.3±87.5
Digit Vigilance (errors)	**48**	4.5±5.1	4.5±5.1	4.7±5.3	4.8±5.3	7.7±8.3	7.7±8.3	7.8±8.3	7.8±8.3
Digit Span (scaled scores)	**49**	11.8±2.9	11.8±2.9	11.8±2.8	11.8±2.8	12.4±2.6	12.4±2.6	12.4±2.9	12.4±2.9
Psychomotor and Mental Efficiency									
Verbal Fluency (no. correct)	**4**	42.3±12.4	42.3±12.4	42.9±12.3	42.9±12.3	45.7±13.2	45.7±13.2	45.6±13.1	45.6±13.1
Digit Symbol, 90-sec no. correct	**54**	65.1±11.1	65.1±11.1	65.0±11.0	65.0±11.0	62.3±11.4	62.3±11.4	61.9±11.4	61.9±11.4
Trail Making, part B (sec)	**56**	52.3±16.6	52.3±16.6	52.9±19.9	52.9±19.9	54.4±20.0	54.4±20.0	55.0±18.8	55.0±18.8
Grooved Pegboard, dominant	**63**	65.6±9.8	65.6±9.8	65.9±9.6	65.9±9.6	72.3±17.3	72.3±17.3	73.8±16.1	73.8±16.0
Grooved Pegboard, non-dominant	**65**	70.2±12.3	70.2±12.3	70.0±11.0	70.0±11.0	79.0±18.6	79.0±18.6	80.5±20.0	80.5±20.0
Motor Speed									
Finger Tapping, dominant hand	**60**	48.7±6.5	48.7±6.5	48.7±7.0	48.7±7.0	50.6±7.3	50.6±7.3	50.6±7.7	50.6±7.7
Finger Tapping, non-dominant hand	**62**	44.6±6.0	44.6±6.0	44.7±6.1	44.7±6.1	44.6±6.9	44.6±6.9	45.2±6.0	45.2±6.0

* Variables in analysis file are named using the format: qv00_rXX (DCCT) and rvarXX (EDIC). The number shown under VAR replaces XX to identify the variable used in the DSIC analysis.

NOTE A. The analysis variables qv00_r72 and rvar72 yield means and SDs that are almost exact matches to the published figures. However, these variables are labeled: qv00r72 = "base tactual performance memory score (num correct)", and rvar72 = “tactual performance memory score (num correct)”. The published table, however labels this variable: "Tactual Performance Test (min)".

Figure 1a-1. PUBLISHED effects of DCCT Treatment Group on Changes in Cognition from Entry into DCCT to Year 12 in the EDIC Study.

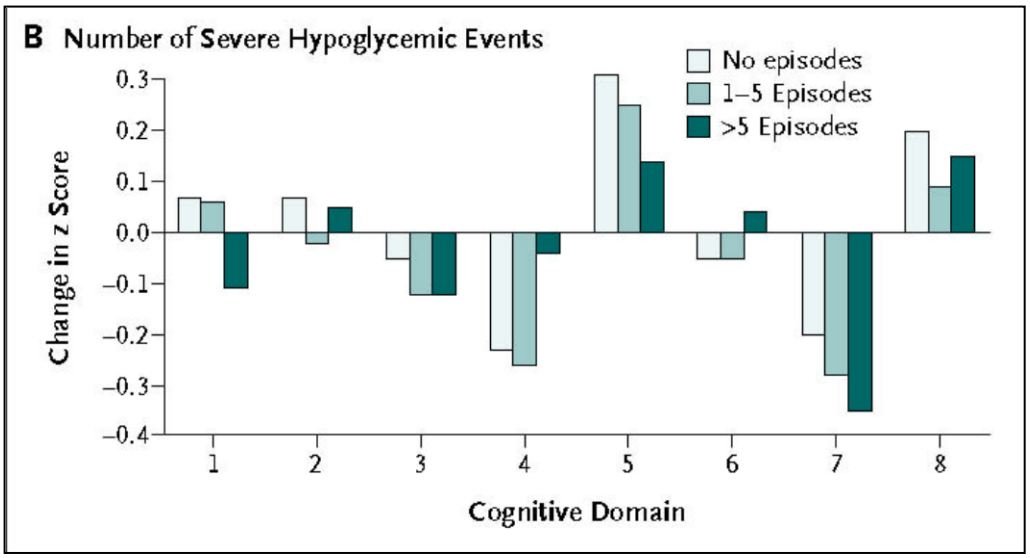


Note: The bars show the changes within cognitive domains between cognitive testing at baseline in DCCT and follow-up testing (a t mean of 18 years after baseline) expressed as changes in z scores.

Figure 1a-2. CALCULATED effects of DCCT Treatment Group on Changes in Cognition from Entry into DCCT to Year 12 in the EDIC Study.

DOMAIN	INTENSIVE		CONTROL	
	Mean	SD	Mean	SD
dad1	0.10	0.58	0.02	0.60
dad2	0.01	0.81	0.05	0.80
dad3	-0.10	0.78	-0.05	0.71
dad4	-0.26	0.72	-0.20	0.67
dad5	-0.28	0.77	-0.28	0.75
dad6	-0.07	0.73	-0.03	0.75
dad7	-0.21	0.72	-0.26	0.70
dad8	0.19	1.01	0.14	1.03

Figure 1b-1. PUBLISHED effects of Severe Hypoglycemia, on Changes in Cognition, from Entry into DCCT to Year 12 in the EDIC Study.

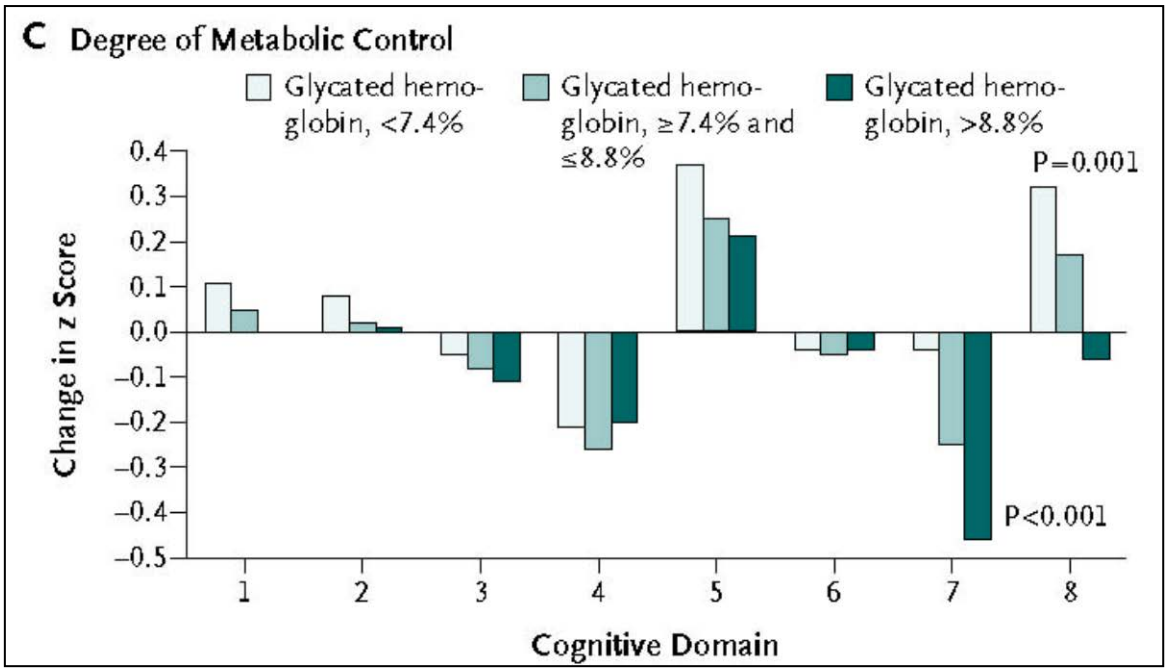


Note: The bars show the changes within cognitive domains between cognitive testing at baseline in DCCT and follow-up testing (a t mean of 18 years after baseline) expressed as changes in z scores.

Figure 1b-2. CALCULATED effects of Severe Hypoglycemia on Changes in Cognition, from Entry into DCCT to Year 12 in the EDIC Study.

DOMAIN	No Episodes		1-5 Episodes		>5 Episodes	
	Mean	SD	Mean	SD	Mean	SD
dad1	0.07	0.60	0.07	0.57	-0.11	0.52
dad2	0.06	0.78	-0.03	0.86	0.04	0.65
dad3	-0.05	0.75	-0.12	0.76	-0.11	0.75
dad4	-0.23	0.69	-0.26	0.72	-0.03	0.60
dad5	-0.31	0.75	-0.25	0.76	-0.16	0.84
dad6	-0.05	0.74	-0.06	0.71	0.04	0.83
dad7	-0.20	0.69	-0.28	0.76	-0.36	0.62
dad8	0.21	1.03	0.10	1.02	0.14	0.95

Figure 1c-1. PUBLISHED effects of Metabolic Control on Changes in Cognition from Entry into DCCT to Year 12 in the EDIC Study.



Note: The bars show the changes within cognitive domains between cognitive testing at baseline in DCCT and follow-up testing (at mean of 18 years after baseline) expressed as changes in z scores.

Figure 1c-2. CALCULATED effects of Metabolic Control on Changes in Cognition from Entry into DCCT to Year 12 in the EDIC Study.

DOMAIN	HbA1c < 7.4%		7.4% ≤ HbA1c ≤ 8.8%		HbA1c ≥ 8.8%	
	Mean	SD	Mean	SD	Mean	SD
Using HbA1c at Year 12						
dad1	0.07	0.60	0.08	0.57	0.01	0.61
dad2	0.07	0.81	0.03	0.77	-0.03	0.84
dad3	-0.02	0.71	-0.10	0.75	-0.18	0.84
dad4	-0.23	0.70	-0.19	0.70	-0.23	0.61
dad5	-0.31	0.79	-0.29	0.73	-0.22	0.72
dad6	0.00	0.71	-0.04	0.72	-0.10	0.75
dad7	-0.12	0.63	-0.27	0.70	-0.39	0.85
dad8	0.39	0.99	0.07	0.97	-0.16	1.08
Using time-weighted HbA1c						
dad1	0.07	0.60	0.07	0.58	0.03	0.58
dad2	0.06	0.82	0.06	0.76	-0.08	0.85
dad3	-0.01	0.70	-0.10	0.76	-0.20	0.81
dad4	-0.23	0.71	-0.20	0.71	-0.26	0.64
dad5	-0.33	0.77	-0.26	0.73	-0.20	0.77
dad6	0.01	0.72	-0.08	0.73	-0.11	0.79
dad7	-0.11	0.65	-0.28	0.70	-0.43	0.84
dad8	0.40	0.99	0.07	0.99	-0.14	1.07

NOTE. Possible discrepant results based on visual review are marked *only* on top panel (Using HbA1c at Year 12).

Note: The bars show the changes within cognitive domains between cognitive testing at baseline in DCCT and follow-up testing (at mean of 18 years after baseline) expressed as changes in z scores

9 Appendixes

9.1 Appendix A: Variables in Dataset used in DSIC.

APPENDIX A - TABLE. Variables used in DSIC analyses.

Characteristic of Condition	Variables Used in DSIC*
Treatment	exp
Female sex (%)	male
White race (%)	white
Mean age (yr)	age00, age12
Adult (%)	adult00, adult12
College graduate (%)	coll00, coll12
Marital status (%)	marry00, marry12
Occupation (%)***	
Professional or technical	prof00, prof12
Unemployed or retired	unemp00, unemp12
Retinopathy, scnd (%)	retbase, ret12
Duration of diabetes (yr)	dur00, dur12
Glycated hemoglobin (%)	hbae1, hba
Visual acuity =>20/40 (%)	(NA), wor12
Peripheral neuropathy (%)	neur00, neur12
Blood pressure (mm Hg)	
Systolic	sbp00, sbp12
Diastolic	dbp00, dbp12
Treated hypertension (%)	(NA), lipmed12
Lipids (mg/dl)	
Total cholesterol	chol00, chol12
LDL cholesterol	ldl00, ldl12
Lipid-lowering medication (%)	(NA), lipmed12
Current cigarette smoker (%)	smoke00, smoke12
Symptom Checklist-90-Revised Depression score	depress00, depress12
Verbal IQ	verbal00,(NA)
Full-scale IQ	perform00, (NA)
Changes in 8 Cognitive Domains from Baseline to EDIC Y12	(NA), dad1 thru dad8
Number of Hypoglycemic Events	
Degree of Hypoglycemic Control**	hba

* If two variables are listed, the first variable is for measurement at entry into DCCT (1983-89) and second is for measurement at Year 12 of EDIC study (2005)

** As shown in Appendix A, we also explored the relationship of glycemic control and cognitive function using the variable *xhba* which is time-weighted HBa1c measurement.

***Dataset includes variables for: (1) Professional occupation or not; (2) Unemployed/Retired or not. These are not mutually exclusive categories; we suspect that there may be an error in the published analysis or a typo in the publication.

9.2 Appendix B: Statistics on Distribution of Cognitive Domain Scores obtained: (1) by analysis of archived dataset and (2) from the DCC's Codebook.

Domain 1 - Problem Solving
Variable: DAD1
Format: (none)
Length: 8

N	1144
NMiss	0
Levels	450
Mean	0.0604893621
Std	0.5884193288
Minimum	-1.7893400364
25th pct	-0.3626718519
Median	0.0115849250
75th pct	0.4298209596
Maximum	2.2813200951

DSINFO for datasets in EDIC library CORE3RTI for release to RTI OCT/2012

Variable attributes	Statistic	All N=1144
Domain 2 - Learning		
Variable: DAD2	N	1143
Format: (none)	NMiss	1
Length: 8	Levels	142
	Mean	0.0316829553
	Std	0.8044561779
	Minimum	-3.3823968408
	25th pct	-0.3734686530
	Median	0.1803774229
	75th pct	0.6208600869
	Maximum	1.2750985908
Domain 3 - Immediate Memory		
Variable: DAD3	N	1144
Format: (none)	NMiss	0
Length: 8	Levels	1120
	Mean	-0.0784453958
	Std	0.7490116205
	Minimum	-3.3370260286
	25th pct	-0.5423810980
	Median	-0.0291725133
	75th pct	0.4479728227
	Maximum	3.1266563016
Domain 4 - Delayed Recall		
Variable: DAD4	N	1143
Format: (none)	NMiss	1
Length: 8	Levels	318
	Mean	-0.2268994260
	Std	0.6960213435
	Minimum	-5.4788823957
	25th pct	-0.5573228383
	Median	-0.1717948180
	75th pct	0.1985688068
	Maximum	1.3351040903
Domain 5 - Spatial Information		
Variable: DAD5	N	1144
Format: (none)	NMiss	0
Length: 8	Levels	1143
	Mean	-0.2795698638
	Std	0.7578907537
	Minimum	-1.9329866240
	25th pct	-0.8121139297
	Median	-0.3854594001
	75th pct	0.1062684443
	Maximum	2.7201497196

Variable attributes	Statistic	All N=1144
Domain 6 - Attention		
Variable: DAD6	N	1144
Format: (none)	NMiss	0
Length: 8	Levels	1125
	Mean	-0.0473231081
	Std	0.7375652837
	Minimum	-4.2702592014
	25th pct	-0.4313217878
	Median	0.0217203584
	75th pct	0.4182495951
	Maximum	2.2545641474
Domain 7 - Psychomotor Efficiency		
Variable: DAD7	N	1144
Format: (none)	NMiss	0
Length: 8	Levels	1144
	Mean	-0.2353164869
	Std	0.7143710520
	Minimum	-5.2440432158
	25th pct	-0.5498022502
	Median	-0.1094504468
	75th pct	0.2171093294
	Maximum	1.2370985917
Domain 8 - Motor Speed		
Variable: DAD8	N	1126
Format: (none)	NMiss	18
Length: 8	Levels	1063
	Mean	0.1661113344
	Std	1.0219968538
	Minimum	-3.3593416809
	25th pct	-0.5098514866
	Median	0.2028691300
	75th pct	0.8340408793
	Maximum	3.5353964777

9.3 Appendix C: Log of Analyses Used in Preparation of DSIC.

```
      name:  <unnamed>
       log:  S:\NIDDK_NoData\EDIC Cognition_NoData\Cognition_Tables_v3.log
  log type:  text
 opened on:   9 Jan 2013, 11:48:30

1 .
2 . ** START TABLE 1 **
3 . tab male exp, col missing

  +-------------------+
  | Key               |
  |-------------------|
  |     frequency     |
  | column percentage |
  +-------------------+

    gender |    treatment group
(1=male/2= |     (1=int/2=con)
   female) |         1          2 |     Total
-----------+----------------------+----------
         1 |       302        306 |       608
           |     51.36      55.04 |     53.15
-----------+----------------------+----------
         2 |       286        250 |       536
           |     48.64      44.96 |     46.85
-----------+----------------------+----------
     Total |       588        556 |     1,144
           |    100.00     100.00 |    100.00


4 . tab white exp, col missing

  +-------------------+
  | Key               |
  |-------------------|
  |     frequency     |
  | column percentage |
  +-------------------+

white race |    treatment group
(1=yes/2=n |     (1=int/2=con)
        o) |         1          2 |     Total
-----------+----------------------+----------
         1 |       570        536 |     1,106
           |     96.94      96.40 |     96.68
-----------+----------------------+----------
         2 |        18         20 |        38
           |      3.06       3.60 |      3.32
-----------+----------------------+----------
     Total |       588        556 |     1,144
           |    100.00     100.00 |    100.00


5 . summarize age00 age12 if exp==1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
       age00 |       588    27.31122    6.859759         13         39
       age12 |       588    46.07993    6.732064         29         62
```

```
 6 . summarize age00 age12 if exp==2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
       age00 |       556    26.67086    6.915027         13         39
       age12 |       556    45.33094    6.843042         30         61

 7 . tab adult exp, col missing

  +-------------------+
  | Key               |
  |-------------------|
  |     frequency     |
  | column percentage |
  +-------------------+

    adult >= |
          18 |    treatment group
  (1=yes/2=n |     (1=int/2=con)
          o) |         1          2 |     Total
-------------+----------------------+----------
           1 |       524        487 |     1,011
             |     89.12      87.59 |     88.37
-------------+----------------------+----------
           2 |        64         69 |       133
             |     10.88      12.41 |     11.63
-------------+----------------------+----------
       Total |       588        556 |     1,144
             |    100.00     100.00 |    100.00


 8 . gen adult12=age12

 9 . recode adult12 (21/70=1)(else=0)
  (adult12: 1144 changes made)

10 . tab adult12 exp, col missing

  +-------------------+
  | Key               |
  |-------------------|
  |     frequency     |
  | column percentage |
  +-------------------+

             |    treatment group
             |     (1=int/2=con)
    adult12 |         1          2 |     Total
-------------+----------------------+----------
           1 |       588        556 |     1,144
             |    100.00     100.00 |    100.00
-------------+----------------------+----------
       Total |       588        556 |     1,144
             |    100.00     100.00 |    100.00
```

```
11 . tab coll00 exp, col missing
```

Key		
frequency		
column percentage		
college graduate (1=yes/2=no)	treatment group (1=int/2=con)	
	1	2	Total
1	174	149	323
	29.59	26.80	28.23
2	414	407	821
	70.41	73.20	71.77
Total	588	556	1,144
	100.00	100.00	100.00

```
12 . tab coll12 exp, col missing
```

Key		
frequency		
column percentage		
college graduate (1=yes/2=no)	treatment group (1=int/2=con)	
	1	2	Total
1	229	204	433
	38.95	36.69	37.85
2	358	352	710
	60.88	63.31	62.06
.	1	0	1
	0.17	0.00	0.09
Total	588	556	1,144
	100.00	100.00	100.00

```
13 .
14 . tab marry00 exp, col missing
```

Key		
frequency		
column percentage		

martial status (1=never/2 =married/3 =sep/4=div)	treatment group (1=int/2=con) 1	2	Total
1	253	245	498
	43.03	44.06	43.53
2	296	288	584
	50.34	51.80	51.05
3	38	22	60
	6.46	3.96	5.24
4	1	1	2
	0.17	0.18	0.17
Total	588	556	1,144
	100.00	100.00	100.00

```
15 . recode marry00 marry12 (3/4=4)
   (marry00: 60 changes made)
   (marry12: 167 changes made)

16 . tab marry00 exp, col missing
```

Key
frequency
column percentage

martial status (1=never/2 =married/3 =sep/4=div)	treatment group (1=int/2=con) 1	2	Total
1	253	245	498
	43.03	44.06	43.53
2	296	288	584
	50.34	51.80	51.05
4	39	23	62
	6.63	4.14	5.42
Total	588	556	1,144
	100.00	100.00	100.00

```
17 . tab marry12 exp, col missing

   +-------------------+
   | Key               |
   |-------------------|
   |     frequency     |
   | column percentage |
   +-------------------+

      martial |
       status |
   (1=never/2 |
   =married/3 |    treatment group
   =sep/4=div |     (1=int/2=con)
            ) |         1          2 |     Total
   -----------+----------------------+----------
            1 |        60         56 |       116
              |     10.20      10.07 |     10.14
   -----------+----------------------+----------
            2 |       434        410 |       844
              |     73.81      73.74 |     73.78
   -----------+----------------------+----------
            4 |        91         89 |       180
              |     15.48      16.01 |     15.73
   -----------+----------------------+----------
            . |         3          1 |         4
              |      0.51       0.18 |      0.35
   -----------+----------------------+----------
        Total |       588        556 |     1,144
              |    100.00     100.00 |    100.00


18 . tab marry00 exp, col

   +-------------------+
   | Key               |
   |-------------------|
   |     frequency     |
   | column percentage |
   +-------------------+

      martial |
       status |
   (1=never/2 |
   =married/3 |    treatment group
   =sep/4=div |     (1=int/2=con)
            ) |         1          2 |     Total
   -----------+----------------------+----------
            1 |       253        245 |       498
              |     43.03      44.06 |     43.53
   -----------+----------------------+----------
            2 |       296        288 |       584
              |     50.34      51.80 |     51.05
   -----------+----------------------+----------
            4 |        39         23 |        62
              |      6.63       4.14 |      5.42
   -----------+----------------------+----------
        Total |       588        556 |     1,144
              |    100.00     100.00 |    100.00
```

```
19 . tab marry12 exp, col
```

Key	
frequency	
column percentage	

martial status (1=never/2 =married/3 =sep/4=div)	treatment group (1=int/2=con) 1	2	Total
1	60	56	116
	10.26	10.09	10.18
2	434	410	844
	74.19	73.87	74.04
4	91	89	180
	15.56	16.04	15.79
Total	585	555	1,140
	100.00	100.00	100.00

```
20 .
21 . *
22 . * FILE has 2 variables: PROF (00 & 12) and UNEMP (00 & 12)
23 . * LOOKS LIKE THIS IS TYPO IN PUBLISHED ARTICLE
24 .
25 . *. tab prof00 unemp00, missing
26 . *
27 . *profession |
28 . *al/technic |
29 . *    al job |  unemployed/retired
30 . *(1=yes/2=n |     (1=yes/2=no)
31 . *        o) |         1          2 |     Total
32 . *-----------+----------------------+----------
33 . *         1 |         1        371 |       372
34 . *         2 |        11        761 |       772
35 . *-----------+----------------------+----------
36 . *     Total |        12      1,132 |     1,144
37 . *
38 . *
39 .
40 . tab prof00 unemp00, missing
```

profession al/technic al job (1=yes/2=n o)	unemployed/retired (1=yes/2=no) 1	2	Total
1	1	371	372
2	11	761	772
Total	12	1,132	1,144

```
41 . tab1 prof00 prof12

   -> tabulation of prof00

   professiona |
   l/technical |
          job |
   (1=yes/2=no |
             ) |      Freq.     Percent        Cum.
   ------------+-----------------------------------
             1 |        372       32.52       32.52
             2 |        772       67.48      100.00
   ------------+-----------------------------------
         Total |      1,144      100.00

   -> tabulation of prof12

   professiona |
   l/technical |
          job |
   (1=yes/2=no |
             ) |      Freq.     Percent        Cum.
   ------------+-----------------------------------
             1 |        594       51.97       51.97
             2 |        549       48.03      100.00
   ------------+-----------------------------------
         Total |      1,143      100.00

42 . tab1 prof00 prof12, missing

   -> tabulation of prof00

   professiona |
   l/technical |
          job |
   (1=yes/2=no |
             ) |      Freq.     Percent        Cum.
   ------------+-----------------------------------
             1 |        372       32.52       32.52
             2 |        772       67.48      100.00
   ------------+-----------------------------------
         Total |      1,144      100.00

   -> tabulation of prof12

   professiona |
   l/technical |
          job |
   (1=yes/2=no |
             ) |      Freq.     Percent        Cum.
   ------------+-----------------------------------
             1 |        594       51.92       51.92
             2 |        549       47.99       99.91
             . |          1        0.09      100.00
   ------------+-----------------------------------
         Total |      1,144      100.00
```

```
43 . tab prof00 exp, col
```

Key			
frequency			
column percentage			
profession al/technic al job (1=yes/2=no)	treatment group (1=int/2=con)		
	1	2	Total
1	189	183	372
	32.14	32.91	32.52
2	399	373	772
	67.86	67.09	67.48
Total	588	556	1,144
	100.00	100.00	100.00

```
44 . tab prof12 exp, col
```

Key			
frequency			
column percentage			
profession al/technic al job (1=yes/2=no)	treatment group (1=int/2=con)		
	1	2	Total
1	313	281	594
	53.32	50.54	51.97
2	274	275	549
	46.68	49.46	48.03
Total	587	556	1,143
	100.00	100.00	100.00

```
45 .
46 . tab unemp00 exp, col
```

Key			
frequency			
column percentage			

unemployed /retired (1=yes/2=no)	treatment group (1=int/2=con)		
	1	2	Total
1	8	4	12
	1.36	0.72	1.05
2	580	552	1,132
	98.64	99.28	98.95
Total	588	556	1,144
	100.00	100.00	100.00

```
47 . tab unemp12 exp, col
```

Key
frequency
column percentage

unemployed /retired (1=yes/2=no)	treatment group (1=int/2=con)		
	1	2	Total
1	37	38	75
	6.30	6.83	6.56
2	550	518	1,068
	93.70	93.17	93.44
Total	587	556	1,143
	100.00	100.00	100.00

```
48 .
49 . tab retbase exp, col missing
```

Key
frequency
column percentage

retinopathy at baseline (prim,scnd)	treatment group (1=int/2=con)		
	1	2	Total
PRIM	283	276	559
	48.13	49.64	48.86
SCND	305	280	585
	51.87	50.36	51.14
Total	588	556	1,144
	100.00	100.00	100.00

```
50 . tab ret12 exp, col missing

+-------------------+
| Key               |
|-------------------|
|     frequency     |
| column percentage |
+-------------------+

       any |
retinopath |
        y? |    treatment group
(1=yes/0=n |     (1=int/2=con)
        o) |         1          2 |     Total
-----------+----------------------+----------
         0 |        57         14 |        71
           |      9.69       2.52 |      6.21
-----------+----------------------+----------
         1 |       474        508 |       982
           |     80.61      91.37 |     85.84
-----------+----------------------+----------
         . |        57         34 |        91
           |      9.69       6.12 |      7.95
-----------+----------------------+----------
     Total |       588        556 |     1,144
           |    100.00     100.00 |    100.00


51 . tab ret12 exp, col

+-------------------+
| Key               |
|-------------------|
|     frequency     |
| column percentage |
+-------------------+

       any |
retinopath |
        y? |    treatment group
(1=yes/0=n |     (1=int/2=con)
        o) |         1          2 |     Total
-----------+----------------------+----------
         0 |        57         14 |        71
           |     10.73       2.68 |      6.74
-----------+----------------------+----------
         1 |       474        508 |       982
           |     89.27      97.32 |     93.26
-----------+----------------------+----------
     Total |       531        522 |     1,053
           |    100.00     100.00 |    100.00


52 .
53 . summarize dur00 dur12 if exp==1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
       dur00 |       588    5.817237    4.205761        .75    14.9165
       dur12 |       562    24.61566    4.927778   16.66667      36.25
```

```
54 . summarize dur00 dur12 if exp==2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
       dur00 |       556    5.616226    4.145075   .6666565    14.9165
       dur12 |       535    24.24688    4.849189   16.58333   36.58333

55 .
56 . summarize hbael hba if exp==1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
       hbael |       588    9.035799    1.587641       6.56      15.42
         hba |       573    7.810646    1.233539        4.5         13

57 . summarize hbael hba if exp==2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
       hbael |       556    8.971745     1.60225       6.58       14.9
         hba |       543     7.64954    1.190644        4.7       13.6

58 .
59 . ** NOTE **  No visual acuity measurement at Year 0
60 . tab wor12 exp, col

   +-------------------+
   | Key               |
   |-------------------|
   |     frequency     |
   | column percentage |
   +-------------------+

       visual |
       acuity |
   worse than |
        20/40 |    treatment group
   (1=yes/2=n |     (1=int/2=con)
           o) |         1          2 |     Total
   -----------+----------------------+----------
            1 |        22         22 |        44
              |      4.39       4.58 |      4.49
   -----------+----------------------+----------
            2 |       479        458 |       937
              |     95.61      95.42 |     95.51
   -----------+----------------------+----------
        Total |       501        480 |       981
              |    100.00     100.00 |    100.00


61 .
62 . tab neur00 exp, col

   +-------------------+
   | Key               |
   |-------------------|
   |     frequency     |
   | column percentage |
   +-------------------+
```

pain or numbness in hands only (1=yes/2=no)	treatment group (1=int/2=con) 1	2	Total
1	55	79	134
	9.35	14.21	11.71
2	533	477	1,010
	90.65	85.79	88.29
Total	588	556	1,144
	100.00	100.00	100.00

```
63 . tab neur12 exp, col
```

Key
frequency
column percentage

pain or numbness in hands or feet (1=yes/2=no)	treatment group (1=int/2=con) 1	2	Total
1	179	169	348
	30.49	30.40	30.45
2	408	387	795
	69.51	69.60	69.55
Total	587	556	1,143
	100.00	100.00	100.00

```
64 .
65 . summarize dbp00 dbp12 sbp00 sbp12 if exp ==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
dbp00	588	72.40646	8.966705	40	100
dbp12	559	74.09481	8.583292	48	105
sbp00	588	113.2126	11.63356	82	160
sbp12	559	121.102	14.33735	80	192

```
66 . summarize dbp00 dbp12 sbp00 sbp12 if exp ==2
```

Variable	Obs	Mean	Std. Dev.	Min	Max
dbp00	556	72.69245	8.757227	40	98
dbp12	533	73.55159	8.996588	45	100
sbp00	556	114.6277	11.81631	82	142
sbp12	533	119.8865	13.71658	78	188

```
67 .
68 . tab hyper12 exp, col

   +-------------------+
   | Key               |
   |-------------------|
   |     frequency     |
   | column percentage |
   +-------------------+

      treated |
   hypertensi |
           on |    treatment group
   (1=yes/0=n |     (1=int/2=con)
           o) |         1          2 |     Total
   -----------+----------------------+----------
            0 |       325        308 |       633
              |     60.07      59.69 |     59.89
   -----------+----------------------+----------
            1 |       216        208 |       424
              |     39.93      40.31 |     40.11
   -----------+----------------------+----------
        Total |       541        516 |     1,057
              |    100.00     100.00 |    100.00


69 .
70 . summarize chol00 chol12 ldl00 ldl12 if exp ==1

       Variable |       Obs        Mean    Std. Dev.       Min        Max
   -------------+--------------------------------------------------------
         chol00 |       588    176.4762    32.46774         86        280
         chol12 |       575    181.6661    33.74499         87        295
          ldl00 |       588    109.8997    28.50688         17        219
          ldl12 |       571    109.1173    29.41265         10        221

71 . summarize chol00 chol12 ldl00 ldl12 if exp ==2

       Variable |       Obs        Mean    Std. Dev.       Min        Max
   -------------+--------------------------------------------------------
         chol00 |       556    173.7824    32.85734         73        290
         chol12 |       547    176.7806    33.91234         89        291
          ldl00 |       555    107.8054    28.91807         28        224
          ldl12 |       544    105.5221    27.56101         41        205

72 .
73 . tab lipmed12 exp, col

   +-------------------+
   | Key               |
   |-------------------|
   |     frequency     |
   | column percentage |
   +-------------------+

        lipid |
        lower |
   medication |
            s |    treatment group
   (1=yes/2=n |     (1=int/2=con)
           o) |         1          2 |     Total
   -----------+----------------------+----------
            1 |       246        218 |       464
              |     45.47      42.50 |     44.02
   -----------+----------------------+----------
            2 |       295        295 |       590
              |     54.53      57.50 |     55.98
```

```
-----------+----------------------+----------
     Total |       541        513 |     1,054
           |    100.00     100.00 |    100.00
```

```
74 . tab lipmed12 exp, col missing
```

```
   +-------------------+
   | Key               |
   |-------------------|
   |     frequency     |
   | column percentage |
   +-------------------+

        lipid |
        lower |
   medication |
            s |    treatment group
   (1=yes/2=n |     (1=int/2=con)
           o) |         1          2 |     Total
   -----------+----------------------+----------
            1 |       246        218 |       464
              |     41.84      39.21 |     40.56
   -----------+----------------------+----------
            2 |       295        295 |       590
              |     50.17      53.06 |     51.57
   -----------+----------------------+----------
            . |        47         43 |        90
              |      7.99       7.73 |      7.87
   -----------+----------------------+----------
        Total |       588        556 |     1,144
              |    100.00     100.00 |    100.00
```

```
75 .
76 . tab smoke00 exp, col
```

```
   +-------------------+
   | Key               |
   |-------------------|
   |     frequency     |
   | column percentage |
   +-------------------+

      current |
    cigarette |
       smoker |    treatment group
   (1=yes/2=n |     (1=int/2=con)
           o) |         1          2 |     Total
   -----------+----------------------+----------
            1 |       136        122 |       258
              |     23.13      21.94 |     22.55
   -----------+----------------------+----------
            2 |       452        434 |       886
              |     76.87      78.06 |     77.45
   -----------+----------------------+----------
        Total |       588        556 |     1,144
              |    100.00     100.00 |    100.00
```

```
77 . tab smoke12 exp, col

   +-------------------+
   | Key               |
   |-------------------|
   |     frequency     |
   | column percentage |
   +-------------------+

      current |
     cigarette |
        smoker |    treatment group
   (1=yes/2=n |     (1=int/2=con)
           o) |         1          2 |     Total
   -----------+----------------------+----------
            0 |       485        469 |       954
              |     86.30      87.66 |     86.96
   -----------+----------------------+----------
            1 |        77         66 |       143
              |     13.70      12.34 |     13.04
   -----------+----------------------+----------
        Total |       562        535 |     1,097
              |    100.00     100.00 |    100.00


78 .
79 . summarize depress00 depress12 verbal00 perform00 if exp ==1

       Variable |       Obs        Mean    Std. Dev.       Min        Max
   -------------+--------------------------------------------------------
      depress00 |       584     50.4769    10.07773    35.2965   108.5197
      depress12 |       564       48.75    11.53185         39        112
       verbal00 |       585    111.7966    10.64084         78        141
      perform00 |       584    113.4932    9.683674         72        140

80 . summarize depress00 depress12 verbal00 perform00 if exp ==2

       Variable |       Obs        Mean    Std. Dev.       Min        Max
   -------------+--------------------------------------------------------
      depress00 |       554    50.46293    9.771526    35.2965   98.52649
      depress12 |       538    48.60781    10.95209         39        107
       verbal00 |       546    112.0751    10.31539         82        144
      perform00 |       546     113.989    9.885392         78        141

81 . ** END TABLE 1 **
82 .
83 .
84 . ** START TABLE 2 **
85 . gen tot_hypocount_c = cumcnt

86 . recode tot_hypocount_c (0=0) (1/5=1)(6/30=6)
   (tot_hypocount_c: 247 changes made)

87 . label var tot_hypocount_c "Total severe hypglycemic events, collapsed"
```

```
88 . label define tot_hypocount_c  0"0" 1"1-5" 6"6+"

89 . label values tot_hypocount_c tot_hypocount_c

90 . tab cumcnt tot_hypocount_c
```

cum coma/seizu res	Total severe hypglycemic events, collapsed 0	1-5	6+	Total
0	696	0	0	696
1	0	189	0	189
2	0	92	0	92
3	0	49	0	49
4	0	32	0	32
5	0	21	0	21
6	0	0	12	12
7	0	0	12	12
8	0	0	13	13
9	0	0	4	4
10	0	0	10	10
11	0	0	4	4
12	0	0	2	2
13	0	0	2	2
14	0	0	2	2
15	0	0	1	1
17	0	0	1	1
18	0	0	1	1
23	0	0	1	1
Total	696	383	65	1,144

```
91 .
92 . tab cumcnt exp
```

cum coma/seizu res	treatment group (1=int/2=con) 1	2	Total
0	328	368	696
1	101	88	189
2	50	42	92
3	28	21	49
4	19	13	32
5	13	8	21
6	9	3	12
7	6	6	12
8	9	4	13
9	4	0	4
10	9	1	10
11	3	1	4
12	2	0	2
13	1	1	2
14	2	0	2
15	1	0	1
17	1	0	1
18	1	0	1
23	1	0	1
Total	588	556	1,144

```
93 . summarize cumcnt

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      cumcnt |      1144    1.174825    2.384889          0         23

94 . by exp, sort : summarize cumcnt

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      cumcnt |       588    1.515306     2.86816          0         23

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      cumcnt |       556    .8147482    1.661389          0         13


95 . tab  tot_hypocount_c exp, col

   +-------------------+
   | Key               |
   |-------------------|
   |     frequency     |
   | column percentage |
   +-------------------+

     Total |
    severe |
hypglycemi |    treatment group
 c events, |     (1=int/2=con)
 collapsed |         1          2 |     Total
-----------+----------------------+----------
         0 |       328        368 |       696
           |     55.78      66.19 |     60.84
-----------+----------------------+----------
       1-5 |       211        172 |       383
           |     35.88      30.94 |     33.48
-----------+----------------------+----------
        6+ |        49         16 |        65
           |      8.33       2.88 |      5.68
-----------+----------------------+----------
     Total |       588        556 |     1,144
           |    100.00     100.00 |    100.00


96 . ** END TABLE 2 **
97 .
98 .
99 . ** START TABLE 3 **
```

```
100 . describe qv00_r10

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r10        byte   %8.0g                  base block design (scaled score)

101 . by exp, sort : summarize qv00_r10

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r10 |       581    13.01377    2.594387          4         18

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r10 |       547    13.08227    2.588117          3         18


102 .
103 . describe qv00_r19

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r19        byte   %8.0g                  base tactual performance memory score (num
                                                correct)

104 . by exp, sort : summarize qv00_r19

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r19 |       585    7.388034    1.501664          1         10

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r19 |       548    7.439781    1.557557          1         10


105 .
106 . describe qv00_r25

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r25        byte   %8.0g                  base symbol digit learning total (num
                                                correct)
```

```
107 . by exp, sort : summarize qv00_r25

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r25 |       585    24.12821    4.466654          0         28

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r25 |       549    24.31148    4.352141          7         28


108 .
109 . describe qv00_r26

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
qv00_r26        byte   %8.0g                  base vr, immediate recall total (num
                                                correct)

110 . by exp, sort : summarize qv00_r26

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r26 |       583    14.67753    2.069819          6         17

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r26 |       551    14.61162    2.297384          3         17


111 .
112 . describe qv00_r30

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
qv00_r30        byte   %8.0g                  base short term memory total retention
                                                (num correct)

113 . by exp, sort : summarize qv00_r30

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r30 |       585    40.24786    9.060967         13         60

-------------------------------------------------------------------------------
-> exp = 2
```

```
    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r30 |       549    39.56466    9.580904          7         60


114 .
115 . describe qv00_r31

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r31        byte   %8.0g                  base digit symbol (num correct)

116 . by exp, sort : summarize qv00_r31

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r31 |       585    7.671795    1.557672          1          9

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r31 |       551    7.796733    1.514316          2          9


117 .
118 . describe qv00_r35

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r35        byte   %8.0g                  base vr, delayed recall total (num
                                                correct)

119 . by exp, sort : summarize qv00_r35

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r35 |       582    15.44502    1.747258          7         17

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r35 |       551    15.35935    1.838403          7         18
```

```
120 .
121 . describe qv00_r4

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r4         byte   %8.0g                  base verbal fluency (total num words)

122 . by exp, sort : summarize qv00_r4

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
     qv00_r4 |       585    42.31282    12.36847         17        100

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
     qv00_r4 |       550    42.89818    12.27733         11         85


123 .
124 . describe qv00_r40

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r40        byte   %8.0g                  base embedded figures (time in secs)

125 . by exp, sort : summarize qv00_r40

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r40 |       582    7.367698    3.281228          1         24

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r40 |       551    7.067151    3.202418          2         30


126 .
127 . describe qv00_r46

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r46        byte   %8.0g                  base object assembly (scaled score)
```

```
128 . by exp, sort : summarize qv00_r46

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r46 |       576    12.10417    2.927456          2         19

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r46 |       537    12.23464    2.882796          3         19


129 .
130 . describe qv00_r47

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
qv00_r47        int    %8.0g                  base digit vigilance (time in secs)

131 . by exp, sort : summarize qv00_r47

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r47 |       585    368.2701    72.49494        159        730

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r47 |       550    378.3073    86.43798        209       1051


132 .
133 . describe qv00_r48

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
qv00_r48        byte   %8.0g                  base digit vigilance (num errors)

134 . by exp, sort : summarize qv00_r48

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r48 |       584    4.506849    5.066618          0         32

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r48 |       550    4.745455    5.266031          0         35
```

```
135 .
136 . describe qv00_r49

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r49        byte   %8.0g                  base wais digit span (scaled score)

137 . by exp, sort : summarize qv00_r49

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r49 |       583    11.75643    2.933224          2         18

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r49 |       546    11.78571    2.777342          2         18


138 .
139 . describe qv00_r54

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r54        byte   %8.0g                  base digit symbol - 90 second total (num
                                                correct)

140 . by exp, sort : summarize qv00_r54

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r54 |       584    65.13527    11.05687         33         90

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r54 |       551     65.0127    10.98933         32         90


141 .
142 . describe qv00_r56

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r56        int    %8.0g                  base trail making - part b (time in secs)
```

```
143 . by exp, sort : summarize qv00_r56

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r56 |       585    52.31624    16.57509         14        123

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r56 |       550    52.88727    19.94158         17        244


144 .
145 . describe qv00_r60

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
qv00_r60        double %10.0g                 base finger tapping dom hand (num taps 10
                                                secs)

146 . by exp, sort : summarize qv00_r60

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r60 |       583    48.66947     6.53598       28.6       67.2

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r60 |       548    48.67956    7.015112         25         71


147 .
148 . describe qv00_r62

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
qv00_r62        double %10.0g                 base finger tapping nondom hand (num taps
                                                10 secs)

149 . by exp, sort : summarize qv00_r62

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r62 |       583    44.59623    5.977097       23.2         62

-------------------------------------------------------------------------------
-> exp = 2
```

```
    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r62 |       548    44.70146    6.083171       22.6         64
```

```
150 .
151 . describe qv00_r63

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r63        int    %8.0g                  base grooved pegboard dom hand (time in
                                                secs)
```

```
152 . by exp, sort : summarize qv00_r63

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r63 |       584    65.55822    9.818422         32        120

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r63 |       550    65.86364    9.634559         31        125
```

```
153 .
154 . describe qv00_r65

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r65        int    %8.0g                  base grooved pegboard nondom hand (time in
                                                secs)
```

```
155 . by exp, sort : summarize qv00_r65

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r65 |       585    70.24103    12.28368         38        228

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r65 |       550    69.99455    10.96451         27        132
```

```
156 .
157 . describe qv00_r71

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r71        int    %8.0g                  base category test (num errors)

158 . by exp, sort : summarize qv00_r71

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r71 |       585    37.15556     22.6304          4        132

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r71 |       551    32.67151    19.88547          1        123


159 .
160 . describe qv00_r72

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r72        double %10.0g                 base tactual performance memory score (num
                                                correct)

161 . by exp, sort : summarize qv00_r72

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r72 |       585    10.84869    3.808051   4.116667   26.41667

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r72 |       551    10.75275    3.785213   3.066667         30


162 .
163 . describe qv00_r73

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
qv00_r73        double %10.0g                 base log. immed. mem.s- stories 1&2 (num
                                                correct)
```

```
164 . by exp, sort : summarize qv00_r73

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r73 |       585    20.03248    5.815644        6.5         37

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r73 |       550    19.57382    5.505795        4.5         38


165 .
166 . describe qv00_r74

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
qv00_r74        double %10.0g                 base log. delayed mem - stories 1&2 (num
                                                correct)

167 . by exp, sort : summarize qv00_r74

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r74 |       585    16.39641     5.54374        2.5       34.5

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
    qv00_r74 |       550    16.18909     5.40354        1.5       36.5


168 .
169 . describe qv00_r8

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
qv00_r8         byte   %8.0g                 base similarities (scaled score)

170 . by exp, sort : summarize qv00_r8

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
     qv00_r8 |       578    12.55017    2.455512          5         19

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
     qv00_r8 |       539     12.6846    2.368623          6         19
```

```
171 .
172 . describe rvar10

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar10          byte   %8.0g                  block design (scaled score)

173 . by exp, sort : summarize rvar10

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar10 |       587    14.25043    2.575212          6         19

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar10 |       555    14.17477    2.570327          6         19


174 .
175 . describe rvar19

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar19          byte   %8.0g                  tactual performance memory score (num
                                                correct)

176 . by exp, sort : summarize rvar19

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar19 |       582    7.474227    1.512492          1         10

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar19 |       552       7.625    1.488842          0         10


177 .
178 . describe rvar25

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar25          byte   %8.0g                  symbol digit learning total (num correct)
```

```
179 . by exp, sort : summarize rvar25

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar25 |       586    24.14334     4.45988          5         28

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar25 |       555    24.12252    4.477716          1         28


180 .
181 . describe rvar26

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
rvar26          byte   %8.0g                  vr, immediate recall total (num correct)

182 . by exp, sort : summarize rvar26

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar26 |       587    14.28279    2.430276          5         17

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar26 |       554    14.42419    2.215887          4         17


183 .
184 . describe rvar30

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
rvar30          byte   %8.0g                  short term memory total retention (num
                                                correct)

185 . by exp, sort : summarize rvar30

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar30 |       587    39.00681    10.46169          1         60

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar30 |       554    39.20217    10.41033         12         60
```

```
186 .
187 . describe rvar31

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar31          byte   %8.0g                  digit symbol (num correct)

188 . by exp, sort : summarize rvar31

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar31 |       587    7.459966    1.793908          1          9

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar31 |       555    7.673874    1.672657          0          9


189 .
190 . describe rvar35

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar35          byte   %8.0g                  vr, delayed recall total (num correct)

191 . by exp, sort : summarize rvar35

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar35 |       587    14.72743     2.24079          1         17

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar35 |       554    15.00722    1.965328          5         17


192 .
193 . describe rvar4

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar4           byte   %8.0g                  verbal fluency (total num words)
```

```
194 . by exp, sort : summarize rvar4

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
       rvar4 |       584    45.66781     13.1992         16         99

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
       rvar4 |       553    45.57685    13.09836          7         93


195 .
196 . describe rvar40

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
rvar40          double %10.0g                 embedded figures (time in secs)

197 . by exp, sort : summarize rvar40

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar40 |       587    6.531687    3.054564        1.8       23.7

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar40 |       555    6.408468    2.886546        1.3       18.1


198 .
199 . describe rvar46

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
rvar46          byte   %8.0g                 object assembly (scaled score)

200 . by exp, sort : summarize rvar46

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar46 |       586    13.90785    2.773816          1         19

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar46 |       554    13.96209    2.722289          6         19
```

```
201 .
202 . describe rvar47

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar47          int    %8.0g                  digit vigilance (time in secs)

203 . by exp, sort : summarize rvar47

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar47 |       584    388.1421    88.48298        212        805

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar47 |       552    397.2645    87.50887        213        900


204 .
205 . describe rvar48

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar48          byte   %8.0g                  digit vigilance (num errors)

206 . by exp, sort : summarize rvar48

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar48 |       585    7.654701    8.279394          0         77

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar48 |       552    7.771739    8.334351          0         64


207 .
208 . describe rvar49

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar49          byte   %8.0g                  wais digit span (scaled score)
```

```
209 . by exp, sort : summarize rvar49

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar49 |       588    12.34864      2.6427          6         18

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar49 |       555     12.3982    2.895595          1         19


210 .
211 . describe rvar54

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
rvar54          byte   %8.0g                  digit symbol - 90 second total (num
                                                correct)

212 . by exp, sort : summarize rvar54

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar54 |       587    62.26065    11.40872         26         90

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar54 |       554    61.85379    11.36929         30         90


213 .
214 . describe rvar56

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
rvar56          int    %8.0g                  trail making - part b (time in secs)

215 . by exp, sort : summarize rvar56

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar56 |       583    54.40823    20.00691         19        195

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar56 |       556    55.03597    18.78888         24        149
```

```
216 .
217 . describe rvar60

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar60          double %10.0g                 finger tapping dom hand (num taps 10 secs)

218 . by exp, sort : summarize rvar60

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar60 |       575    50.57513    7.332622       25.6       74.8

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar60 |       549    50.58743    7.700117       14.6         73


219 .
220 . describe rvar62

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar62          double %10.0g                 finger tapping nondom hand (num taps 10
                                                secs)

221 . by exp, sort : summarize rvar62

------------------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar62 |       575     45.2767    6.693906       24.7       64.6

------------------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar62 |       548    44.63631    6.878107       14.2       63.8


222 .
223 . describe rvar63

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
rvar63          int    %8.0g                 grooved pegboard dom hand (time in secs)
```

```
224 . by exp, sort : summarize rvar63

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar63 |       585    72.25299    17.28243         46        242

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar63 |       554    73.75993     16.0478         45        169


225 .
226 . describe rvar65

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
rvar65          int    %8.0g                  grooved pegboard nondom hand (time in
                                                secs)

227 . by exp, sort : summarize rvar65

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar65 |       586    78.98294    18.56004         49        217

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar65 |       552    80.45833    20.01465         33        192


228 .
229 . describe rvar71

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
rvar71          int    %8.0g                  category test (num errors)

230 . by exp, sort : summarize rvar71

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar71 |       584    26.33733    20.70832          2        109

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar71 |       546    24.02198    19.32426          1        130
```

```
231 .
232 . describe rvar72

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
rvar72          double %10.0g                 tactual performance memory score (num
                                                correct)

233 . by exp, sort : summarize rvar72

------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar72 |       581    11.39122    4.760149        .64         30

------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar72 |       551    11.46276    4.593038       2.91         30


234 .
235 . describe rvar73

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
rvar73          double %10.0g                 log. immed. mem.s- stories 1&2 (num
                                                correct)

236 . by exp, sort : summarize rvar73

------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar73 |       587    20.03066    6.915624        4.5         77

------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar73 |       555     19.8391    5.489837          3         72


237 .
238 . describe rvar74

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------
rvar74          double %10.0g                 log. delayed mem - stories 1&2 (num
                                                correct)
```

```
239 . by exp, sort : summarize rvar74

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar74 |       587     17.0494    6.296237          0       77.5

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      rvar74 |       555    17.24396    5.758909        1.5         72


240 .
241 . describe rvar8

              storage  display     value
variable name   type   format      label      variable label
-------------------------------------------------------------------------------
rvar8           byte   %8.0g                  similarities (scaled score)

242 . by exp, sort : summarize rvar8

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
       rvar8 |       588    14.03231    2.187305          8         19

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
       rvar8 |       555    13.93153     2.26231          6         19


243 . ** END TABLE 3 **
244 .
245 . ** START FIGURE 1 **
246 . by exp, sort : summarize dad1

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad1 |       588    .0950795     .579878  -1.170559    2.28132

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad1 |       556    .0239084    .5956569   -1.78934   2.162139
```

```
247 . by exp, sort : summarize dad2

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad2 |       587    .0122067    .8058897  -2.715187   1.275099

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad2 |       556    .0522451    .8031523  -3.382397   1.275099


248 . by exp, sort : summarize dad3

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad3 |       588   -.1010007     .780821  -3.337026   3.126656

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad3 |       556   -.0545919    .7137587  -3.190766   2.859758


249 . by exp, sort : summarize dad4

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad4 |       588   -.2554011     .717121  -5.423109    1.28944

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad4 |       555    -.196703    .6722735  -5.478882   1.335104


250 . by exp, sort : summarize dad5

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad5 |       588   -.2790527    .7657779  -1.932987    2.72015

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad5 |       556   -.2801168    .7501483   -1.72213   2.707521
```

```
251 . by exp, sort : summarize dad6

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad6 |       588   -.0651473    .7303294  -4.270259   2.254564

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad6 |       556   -.0284731    .7453349  -3.458809   1.984865


252 . by exp, sort : summarize dad7

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad7 |       588   -.2100347    .7243087  -5.244043   1.237099

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad7 |       556   -.2620534    .7033709  -3.489689   1.142835


253 . by exp, sort : summarize dad8

-------------------------------------------------------------------------------
-> exp = 1

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad8 |       576    .1919907    1.010718  -3.359342   3.535396

-------------------------------------------------------------------------------
-> exp = 2

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad8 |       550    .1390086    1.033903  -3.127636   2.795754


254 .
255 . by tot_hypocount_c, sort : summarize dad1

-------------------------------------------------------------------------------
-> tot_hypocount_c = 0

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad1 |       696    .0701289    .6010544   -1.78934    2.28132

-------------------------------------------------------------------------------
-> tot_hypocount_c = 1-5
```

```
    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad1 |       383    .0725008    .5731094  -1.331082   2.237341

-------------------------------------------------------------------------------
-> tot_hypocount_c = 6+

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad1 |        65   -.1135029    .5170807  -1.170559   1.263655


256 . by tot_hypocount_c, sort : summarize dad2

-------------------------------------------------------------------------------
-> tot_hypocount_c = 0

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad2 |       696    .0634846    .7827258  -3.382397   1.275099

-------------------------------------------------------------------------------
-> tot_hypocount_c = 1-5

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad2 |       382   -.0278449    .8641876  -2.689245   1.275099

-------------------------------------------------------------------------------
-> tot_hypocount_c = 6+

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad2 |        65     .041001    .6452333  -1.834222   1.275099


257 . by tot_hypocount_c, sort : summarize dad3

-------------------------------------------------------------------------------
-> tot_hypocount_c = 0

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad3 |       696   -.0514451    .7450255  -3.190766   2.955647

-------------------------------------------------------------------------------
-> tot_hypocount_c = 1-5

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad3 |       383   -.1227895    .7556356  -3.337026   3.126656

-------------------------------------------------------------------------------
-> tot_hypocount_c = 6+

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad3 |        65   -.1062669    .7505007  -2.301963    2.36283
```

```
258 . by tot_hypocount_c, sort : summarize dad4

-------------------------------------------------------------------------------
-> tot_hypocount_c = 0

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad4 |       695   -.2260194    .6910173  -5.423109   1.335104

-------------------------------------------------------------------------------
-> tot_hypocount_c = 1-5

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad4 |       383   -.2617094    .7154697  -5.478882   1.157504

-------------------------------------------------------------------------------
-> tot_hypocount_c = 6+

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad4 |        65   -.0311979    .6040213  -1.501094   1.203168


259 . by tot_hypocount_c, sort : summarize dad5

-------------------------------------------------------------------------------
-> tot_hypocount_c = 0

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad5 |       696   -.3066252    .7460142  -1.932987   2.713984

-------------------------------------------------------------------------------
-> tot_hypocount_c = 1-5

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad5 |       383    -.251524    .7641458  -1.816085   2.169942

-------------------------------------------------------------------------------
-> tot_hypocount_c = 6+

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad5 |        65   -.1551245    .8373103  -1.348799    2.72015


260 . by tot_hypocount_c, sort : summarize dad6

-------------------------------------------------------------------------------
-> tot_hypocount_c = 0

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad6 |       696   -.0507914    .7429742  -4.270259   2.254564

-------------------------------------------------------------------------------
-> tot_hypocount_c = 1-5

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad6 |       383   -.0557688    .7108987  -3.332982   2.179887

-------------------------------------------------------------------------------
-> tot_hypocount_c = 6+
```

```
    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad6 |        65    .0395787     .834481  -2.428111   1.699487
```

```
261 . by tot_hypocount_c, sort : summarize dad7

-------------------------------------------------------------------------------------------
-> tot_hypocount_c = 0

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad7 |       696   -.1970411    .6935152  -4.310784   1.237099

-------------------------------------------------------------------------------------------
-> tot_hypocount_c = 1-5

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad7 |       383   -.2836609    .7610675  -5.244043   1.182988

-------------------------------------------------------------------------------------------
-> tot_hypocount_c = 6+

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad7 |        65   -.3602977     .622991  -1.916955   1.058292
```

```
262 . by tot_hypocount_c, sort : summarize dad8

-------------------------------------------------------------------------------------------
-> tot_hypocount_c = 0

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad8 |       682    .2064759    1.026986  -3.359342   3.079472

-------------------------------------------------------------------------------------------
-> tot_hypocount_c = 1-5

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad8 |       379     .098236    1.023236  -2.827143   3.535396

-------------------------------------------------------------------------------------------
-> tot_hypocount_c = 6+

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad8 |        65    .1383591    .9528659  -2.836431   2.071503
```

```
263 .
264 . * gen hba12_collapsed = hba
```

```
265 . gen hba12_collapsed = xhba
    (8 missing values generated)

266 . recode hba12_collapsed (0/7.3=1) (7.4/8.8=2) (8.9/20=3)
    (hba12_collapsed: 1136 changes made)

267 . tab hba hba12_collapsed
```

hemoglobin a1c at edic year 12 (%)	hba12_collapsed 1	2	3	Total
4.5	1	0	0	1
4.7	1	0	0	1
4.8	4	0	0	4
4.9	1	0	0	1
5	1	0	0	1
5.2	1	0	0	1
5.4	3	0	0	3
5.5	1	0	0	1
5.6	3	0	0	3
5.7	11	0	0	11
5.8	9	0	0	9
5.9	6	0	0	6
6	6	0	0	6
6.1	17	0	0	17
6.2	17	0	0	17
6.3	16	1	0	17
6.4	34	0	0	34
6.5	26	1	0	27
6.6	28	2	0	30
6.7	41	1	0	42
6.8	27	3	0	30
6.9	34	4	0	38
7	29	2	0	31
7.1	27	8	0	35
7.2	43	9	0	52
7.3	32	10	1	43
7.4	5	29	1	35
7.5	6	44	1	51
7.6	5	33	0	38
7.7	5	40	1	46
7.8	4	22	3	29
7.9	2	32	3	37
8	1	35	2	38
8.1	4	29	2	35
8.2	0	23	1	24
8.3	2	20	3	25
8.4	1	18	1	20
8.5	0	26	2	28
8.6	0	16	4	20
8.7	0	13	2	15
8.8	0	20	4	24
8.9	0	5	16	21
9	0	2	16	18
9.1	0	3	8	11
9.2	0	1	15	16
9.3	0	2	12	14
9.4	0	2	12	14
9.5	0	1	10	11
9.6	0	2	6	8
9.7	0	0	4	4
9.8	0	1	6	7
9.9	0	0	5	5
10	0	1	11	12
10.1	0	0	3	3

```
      10.2 |         0          0          4 |         4
      10.3 |         0          0          3 |         3
      10.4 |         0          0          1 |         1
      10.5 |         0          1          7 |         8
      10.6 |         0          0          1 |         1
      10.8 |         0          0          1 |         1
      10.9 |         0          0          2 |         2
        11 |         0          0          3 |         3
      11.2 |         0          0          2 |         2
      11.3 |         0          0          1 |         1
      11.4 |         0          0          1 |         1
      11.5 |         0          0          1 |         1
      11.6 |         0          0          2 |         2
      11.7 |         0          0          2 |         2
        12 |         0          0          1 |         1
      12.1 |         0          0          3 |         3
      12.6 |         0          0          1 |         1
      12.7 |         0          0          1 |         1
        13 |         0          0          1 |         1
      13.6 |         0          0          1 |         1
-----------+---------------------------------+----------
     Total |       454        462        194 |     1,110
```

```
268 . label define hba_c  1"<7.4%"  2"7.4 - 8.8%"  3">8.8%"

269 . label values hba12_collapsed hba_c

270 . tab hba12_collapsed

hba12_colla |
       psed |      Freq.     Percent        Cum.
------------+-----------------------------------
      <7.4% |        460       40.49       40.49
 7.4 - 8.8% |        470       41.37       81.87
      >8.8% |        206       18.13      100.00
------------+-----------------------------------
      Total |      1,136      100.00

271 . by hba12_collapsed, sort : summarize dad1

-------------------------------------------------------------------------------------------
-> hba12_collapsed = <7.4%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad1 |       460    .0656339    .5984424   -1.19123   2.162139

-------------------------------------------------------------------------------------------
-> hba12_collapsed = 7.4 - 8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad1 |       470    .0703843    .5824269   -1.78934    2.28132

-------------------------------------------------------------------------------------------
-> hba12_collapsed = >8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad1 |       206    .0288673    .5839955  -1.331082   1.916296

-------------------------------------------------------------------------------------------
-> hba12_collapsed = .
```

```
    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad1 |         8   -.0023776     .542506  -.7562803   .5538448
```

```
272 . by hba12_collapsed, sort : summarize dad2
```

```
-------------------------------------------------------------------------------
-> hba12_collapsed = <7.4%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad2 |       460    .0562888    .8227025  -2.996633   1.275099

-------------------------------------------------------------------------------
-> hba12_collapsed = 7.4 - 8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad2 |       470    .0567269    .7614346  -2.562911   1.275099

-------------------------------------------------------------------------------
-> hba12_collapsed = >8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad2 |       205   -.0839059    .8524452  -3.382397   1.275099

-------------------------------------------------------------------------------
-> hba12_collapsed = .

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad2 |         8     .107482    .8332557  -1.192955   .9479793
```

```
273 . by hba12_collapsed, sort : summarize dad3
```

```
-------------------------------------------------------------------------------
-> hba12_collapsed = <7.4%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad3 |       460   -.0105553    .7038152  -2.301963   2.859758

-------------------------------------------------------------------------------
-> hba12_collapsed = 7.4 - 8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad3 |       470   -.1006283    .7595592  -3.337026   3.126656

-------------------------------------------------------------------------------
-> hba12_collapsed = >8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad3 |       206   -.1967996    .8067631  -3.190766   1.828377

-------------------------------------------------------------------------------
-> hba12_collapsed = .

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad3 |         8    .3687412    .6580141  -.5705239   1.063822
```

```
274 . by hba12_collapsed, sort : summarize dad4

-------------------------------------------------------------------------------
-> hba12_collapsed = <7.4%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad4 |       460   -.2288442    .7071585  -5.478882   1.335104

-------------------------------------------------------------------------------
-> hba12_collapsed = 7.4 - 8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad4 |       469   -.2048631    .7121767  -5.423109    1.28944

-------------------------------------------------------------------------------
-> hba12_collapsed = >8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad4 |       206   -.2622571    .6372224  -2.434415   1.111841

-------------------------------------------------------------------------------
-> hba12_collapsed = .

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad4 |         8   -.4964948     .538079  -1.262666   .1985688


275 . by hba12_collapsed, sort : summarize dad5

-------------------------------------------------------------------------------
-> hba12_collapsed = <7.4%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad5 |       460   -.3252436    .7747227  -1.932987    2.72015

-------------------------------------------------------------------------------
-> hba12_collapsed = 7.4 - 8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad5 |       470   -.2583666    .7340141  -1.720217   2.542752

-------------------------------------------------------------------------------
-> hba12_collapsed = >8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad5 |       206   -.2041548     .773323   -1.72213   2.234983

-------------------------------------------------------------------------------
-> hba12_collapsed = .

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad5 |         8   -.8409619    .3589313  -1.291063  -.2326455
```

```
276 . by hba12_collapsed, sort : summarize dad6

-------------------------------------------------------------------------------
-> hba12_collapsed = <7.4%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad6 |       460    .0098895    .7175267  -3.458809   2.254564

-------------------------------------------------------------------------------
-> hba12_collapsed = 7.4 - 8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad6 |       470   -.0771537     .732821  -4.270259   1.811205

-------------------------------------------------------------------------------
-> hba12_collapsed = >8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad6 |       206   -.1087351    .7879651  -3.332982   2.179887

-------------------------------------------------------------------------------
-> hba12_collapsed = .

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad6 |         8   -.0031415    .7188385  -1.139601   1.232833


277 . by hba12_collapsed, sort : summarize dad7

-------------------------------------------------------------------------------
-> hba12_collapsed = <7.4%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad7 |       460   -.1101162    .6478497  -3.489689   1.237099

-------------------------------------------------------------------------------
-> hba12_collapsed = 7.4 - 8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad7 |       470   -.2779926    .6964558  -3.786646   1.049697

-------------------------------------------------------------------------------
-> hba12_collapsed = >8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad7 |       206   -.4250667    .8374492  -5.244043   1.142835

-------------------------------------------------------------------------------
-> hba12_collapsed = .

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad7 |         8    -.041041    .7182245  -1.419097   .7812727
```

```
278 . by hba12_collapsed, sort : summarize dad8

-------------------------------------------------------------------------------
-> hba12_collapsed = <7.4%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad8 |       453    .3983474    .9924595  -2.449305   3.068143

-------------------------------------------------------------------------------
-> hba12_collapsed = 7.4 - 8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad8 |       465    .0689646    .9873008  -3.359342   3.079472

-------------------------------------------------------------------------------
-> hba12_collapsed = >8.8%

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad8 |       201   -.1353311    1.069857  -2.836431   3.535396

-------------------------------------------------------------------------------
-> hba12_collapsed = .

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad8 |         7    .2461456    .4983122  -.4096869   1.075464


279 .
280 .
281 .
282 .
283 .
284 .
285 .
    end of do-file

286 . describe qv00_r72

                storage  display     value
    variable name   type   format      label      variable label
    ------------------------------------------------------------------------------
    qv00_r72        double %10.0g                 base tactual performance memory score (num
                                                    correct)

287 . rvar72
    unrecognized command:  rvar72
    r(199);

288 . describe rvar72

                storage  display     value
    variable name   type   format      label      variable label
    ------------------------------------------------------------------------------
    rvar72          double %10.0g                 tactual performance memory score (num
                                                    correct)
```

```
289 . summarize dad1-dad8

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
        dad1 |      1144    .0604894    .5884193   -1.78934    2.28132
        dad2 |      1143     .031683    .8044562  -3.382397   1.275099
        dad3 |      1144   -.0784454    .7490116  -3.337026   3.126656
        dad4 |      1143   -.2268994    .6960213  -5.478882   1.335104
        dad5 |      1144   -.2795699    .7578908  -1.932987    2.72015
-------------+--------------------------------------------------------
        dad6 |      1144   -.0473231    .7375653  -4.270259   2.254564
        dad7 |      1144   -.2353165    .7143711  -5.244043   1.237099
        dad8 |      1126    .1661113    1.021997  -3.359342   3.535396

290 . describe dad1-dad8

              storage  display     value
variable name   type   format      label      variable label
------------------------------------------------------------------------------------------
dad1            double %10.0g                 domain 1 - problem solving
dad2            double %10.0g                 domain 2 - learning
dad3            double %10.0g                 domain 3 - immediate memory
dad4            double %10.0g                 domain 4 - delayed recall
dad5            double %10.0g                 domain 5 - spatial information
dad6            double %10.0g                 domain 6 - attention
dad7            double %10.0g                 domain 7 - psychomotor efficiency
dad8            double %10.0g                 domain 8 - motor speed

291 . log
          name:  <unnamed>
           log:  S:\NIDDK_NoData\EDIC Cognition_NoData\Cognition_Tables_v3.log, on
      log type:  text
```