

CHAPTER 11 ASDA ANALYSIS EXAMPLES REPLICATION-MPLUS 5.21

GENERAL NOTES ABOUT ANALYSIS EXAMPLES REPLICATION

These examples are intended to provide guidance on how to use the commands/procedures for analysis of complex sample survey data and assume all data management and other preliminary work is done. The relevant syntax for the procedure of interest is shown first along with the associated output for that procedure(s). In some examples, there may be more than one block of syntax and in this case all syntax is first presented followed by the output produced.

In some software packages certain procedures or options are not available but we have made every attempt to demonstrate how to match the output produced by Stata 10+ in the textbook. Check the ASDA website for updates to the various software tools we cover.

NOTES ABOUT ANALYSIS OF IMPUTED DATA IN MPLUS 5.21

The analysis replication examples were all run using Mplus 5.21. Mplus is an advanced modeling tool and offers the ability to correctly account for complex sample survey data for all analytic techniques.

Mplus can perform analysis of previously imputed data sets but not the imputation step. This example uses NHANES imputed data (from SAS) and analyzes the 5 imputed data sets using the TYPE=COMPLEX option for complex sample survey data.

Some of the fine points of this approach are use of a unique cluster variable with a different value for each person in the data set, use of TYPE=COMPLEX and ESTIMATOR=MLR on the ANALYSIS command, and the declaration of TYPE=IMPUTATION on the DATA statement. Prior to use of MPlus, the 5 imputed data sets are saved as text files and a summary file describing the 5 data sets is created in .txt format. This summary file is then used in the Mplus input syntax to refer to the 5 data sets used in the analysis. See Mplus example 12.13 for an example and more information on this process. For general help, see the Mplus User's Guide.

TITLE: ANALYSIS EXAMPLE 11.1 NHANES DATA IMPUTED DATA REGRESSION ANALYSIS

DATA:

FILE IS "F:\brahms\applied_analysis_book\Mplus\c11_1_5.txt";

TYPE = IMPUTATION ;

VARIABLE:

NAMES ARE AGE18P AGE18M AGE18F AGECSQ BMXBMI BPXDI1_1 INDFMPIR MARCAT RIAGENDR

RIDRETH1 SDMVPSU SDMVSTRA WTMEC2YR black

female male married mex

nevermarried numsecu other othhis randval swd white;

USEVARIABLES ARE

AGE18M AGE18F AGECSQ BMXBMI BPXDI1_1 INDFMPIR

SDMVSTRA numsecu WTMEC2YR

female swd nevermarried other othhis black white ;

missing are . ;

WEIGHT IS wtmecl2yr ;

stratification is sdmvstra ;

cluster is numsecu ;

ANALYSIS:

type is complex;

estimator is mlr ;

Model:

bpxdi1_1 on othhis white black other female swd nevermarried age18m age18f

BMXBMI INDFMPIR ;

NOTE: PARTIAL OUTPUT, TECH OUTPUT IS OMITTED!

Mplus VERSION 5

MUTHEN & MUTHEN

05/28/2010 11:47 AM

INPUT INSTRUCTIONS

TITLE: ANALYSIS EXAMPLE 11.1 NHANES DATA IMPUTED DATA REGRESSION ANALYSIS

DATA:

FILE IS "F:\brahms\applied_analysis_book\Mplus\c11_1_5.txt";

TYPE = IMPUTATION ;

VARIABLE:

NAMES ARE AGE18P AGE18M AGE18F AGE18S AGE18O AGE18U AGE18V AGE18W AGE18X AGE18Y AGE18Z
AGE18AA AGE18AB AGE18AC AGE18AD AGE18AE AGE18AF AGE18AG AGE18AH AGE18AI AGE18AJ
AGE18AK AGE18AL AGE18AM AGE18AN AGE18AO AGE18AP AGE18AQ AGE18AR AGE18AS AGE18AT
AGE18AU AGE18AV AGE18AW AGE18AX AGE18AY AGE18AZ AGE18BA AGE18BB AGE18BC AGE18BD
AGE18BE AGE18BF AGE18BG AGE18BH AGE18BI AGE18BJ AGE18BK AGE18BL AGE18BM AGE18BN
AGE18BO AGE18BP AGE18BQ AGE18BR AGE18BS AGE18BT AGE18BU AGE18BV AGE18BW AGE18BX
AGE18BY AGE18BZ AGE18CA AGE18CB AGE18CC AGE18CD AGE18CE AGE18CF AGE18CG AGE18CH
AGE18CI AGE18CJ AGE18CK AGE18CL AGE18CM AGE18CN AGE18CO AGE18CP AGE18CQ AGE18CR
AGE18CS AGE18CT AGE18CU AGE18CV AGE18CW AGE18CX AGE18CY AGE18CZ AGE18DA AGE18DB
AGE18DC AGE18DD AGE18DE AGE18DF AGE18DG AGE18DH AGE18DI AGE18DJ AGE18DK AGE18DL
AGE18DM AGE18DN AGE18DO AGE18DP AGE18DQ AGE18DR AGE18DS AGE18DT AGE18DU AGE18DV
AGE18DW AGE18DX AGE18DY AGE18DZ AGE18EA AGE18EB AGE18EC AGE18ED AGE18EE AGE18EF
AGE18EG AGE18EH AGE18EI AGE18EJ AGE18EK AGE18EL AGE18EM AGE18EN AGE18EO AGE18EP
AGE18EQ AGE18ER AGE18ES AGE18ET AGE18EU AGE18EV AGE18EW AGE18EX AGE18EY AGE18EZ
AGE18FA AGE18FB AGE18FC AGE18FD AGE18FE AGE18FF AGE18FG AGE18FH AGE18FI AGE18FJ
AGE18FK AGE18FL AGE18FM AGE18FN AGE18FO AGE18FP AGE18FQ AGE18FR AGE18FS AGE18FT
AGE18FU AGE18FV AGE18FW AGE18FX AGE18FY AGE18FZ AGE18GA AGE18GB AGE18GC AGE18GD
AGE18GE AGE18GF AGE18GG AGE18GH AGE18GI AGE18GJ AGE18GK AGE18GL AGE18GM AGE18GN
AGE18GO AGE18GP AGE18GQ AGE18GR AGE18GS AGE18GT AGE18GU AGE18GV AGE18GW AGE18GX
AGE18GY AGE18GZ AGE18HA AGE18HB AGE18HC AGE18HD AGE18HE AGE18HF AGE18HG AGE18HH
AGE18HI AGE18HJ AGE18HK AGE18HL AGE18HM AGE18HN AGE18HO AGE18HP AGE18HQ AGE18HR
AGE18HS AGE18HT AGE18HU AGE18HV AGE18HW AGE18HX AGE18HY AGE18HZ AGE18IA AGE18IB
AGE18IC AGE18ID AGE18IE AGE18IF AGE18IG AGE18IH AGE18II AGE18IJ AGE18IK AGE18IL
AGE18IM AGE18IN AGE18IO AGE18IP AGE18IQ AGE18IR AGE18IS AGE18IT AGE18IU AGE18IV
AGE18IW AGE18IX AGE18IY AGE18IZ AGE18JA AGE18JB AGE18JC AGE18JD AGE18JE AGE18JF
AGE18JG AGE18JH AGE18JI AGE18JJ AGE18JK AGE18JL AGE18JM AGE18JN AGE18JO AGE18JP
AGE18JQ AGE18JR AGE18JS AGE18JT AGE18JU AGE18JV AGE18JW AGE18JX AGE18JY AGE18JZ
AGE18KA AGE18KB AGE18KC AGE18KD AGE18KE AGE18KF AGE18KG AGE18KH AGE18KI AGE18KJ
AGE18KK AGE18KL AGE18KM AGE18KN AGE18KO AGE18KP AGE18KQ AGE18KR AGE18KS AGE18KT
AGE18KU AGE18KV AGE18KW AGE18KX AGE18KY AGE18KZ AGE18LA AGE18LB AGE18LC AGE18LD
AGE18LE AGE18LF AGE18LG AGE18LH AGE18LI AGE18LJ AGE18LK AGE18LL AGE18LM AGE18LN
AGE18LO AGE18LP AGE18LQ AGE18LR AGE18LS AGE18LT AGE18LU AGE18LV AGE18LW AGE18LX
AGE18LY AGE18LZ AGE18MA AGE18MB AGE18MC AGE18MD AGE18ME AGE18MF AGE18MG AGE18MH
AGE18MI AGE18MJ AGE18MK AGE18ML AGE18MN AGE18MO AGE18MP AGE18MQ AGE18MR AGE18MS
AGE18MT AGE18MU AGE18MV AGE18MW AGE18MX AGE18MY AGE18MZ AGE18NA AGE18NB AGE18NC
AGE18ND AGE18NE AGE18NF AGE18NG AGE18NH AGE18NI AGE18NJ AGE18NK AGE18NL AGE18NO
AGE18NP AGE18NQ AGE18NR AGE18NS AGE18NT AGE18NU AGE18NV AGE18NW AGE18NX AGE18NY
AGE18NZ AGE18OA AGE18OB AGE18OC AGE18OD AGE18OE AGE18OF AGE18OG AGE18OH AGE18OI
AGE18OJ AGE18OK AGE18OL AGE18OM AGE18ON AGE18OO AGE18OP AGE18OQ AGE18OR AGE18OS
AGE18OT AGE18OU AGE18OV AGE18OW AGE18OX AGE18OY AGE18OZ AGE18PA AGE18PB AGE18PC
AGE18PD AGE18PE AGE18PF AGE18PG AGE18PH AGE18PI AGE18PJ AGE18PK AGE18PL AGE18PM
AGE18PN AGE18PO AGE18PP AGE18PQ AGE18PR AGE18PS AGE18PT AGE18PU AGE18PV AGE18PW
AGE18PX AGE18PY AGE18PZ AGE18QA AGE18QB AGE18QC AGE18QD AGE18QE AGE18QF AGE18QG
AGE18QH AGE18QI AGE18QJ AGE18QK AGE18QL AGE18QM AGE18QN AGE18QO AGE18QP AGE18QQ
AGE18QR AGE18QS AGE18QT AGE18QU AGE18QV AGE18QW AGE18QX AGE18QY AGE18QZ AGE18RA
AGE18RB AGE18RC AGE18RD AGE18RE AGE18RF AGE18RG AGE18RH AGE18RI AGE18RJ AGE18RK
AGE18RL AGE18RM AGE18RN AGE18RO AGE18RP AGE18RQ AGE18RR AGE18RS AGE18RT AGE18RU
AGE18RV AGE18RW AGE18RX AGE18RY AGE18RZ AGE18SA AGE18SB AGE18SC AGE18SD AGE18SE
AGE18SF AGE18SG AGE18SH AGE18SI AGE18SJ AGE18SK AGE18SL AGE18SM AGE18SN AGE18SO
AGE18SP AGE18SQ AGE18SR AGE18SS AGE18ST AGE18SU AGE18SV AGE18SW AGE18SX AGE18SY
AGE18SZ AGE18TA AGE18TB AGE18TC AGE18TD AGE18TE AGE18TF AGE18TG AGE18TH AGE18TI
AGE18TJ AGE18TK AGE18TL AGE18TM AGE18TN AGE18TO AGE18TP AGE18TQ AGE18TR AGE18TS
AGE18TT AGE18TU AGE18TV AGE18TW AGE18TX AGE18TY AGE18TZ AGE18UA AGE18UB AGE18UC
AGE18UD AGE18UE AGE18UF AGE18UG AGE18UH AGE18UI AGE18UJ AGE18UK AGE18UL AGE18UM
AGE18UN AGE18UO AGE18UP AGE18UQ AGE18UR AGE18US AGE18UT AGE18UU AGE18UV AGE18UW
AGE18UX AGE18UY AGE18UZ AGE18VA AGE18VB AGE18VC AGE18VD AGE18VE AGE18VF AGE18VG
AGE18VH AGE18VI AGE18VJ AGE18VK AGE18VL AGE18VM AGE18VN AGE18VO AGE18VP AGE18VQ
AGE18VR AGE18VS AGE18VT AGE18VU AGE18VV AGE18VW AGE18VX AGE18VY AGE18VZ AGE18WA
AGE18WB AGE18WC AGE18WD AGE18WE AGE18WF AGE18WG AGE18WH AGE18WI AGE18WJ AGE18WK
AGE18WL AGE18WM AGE18WN AGE18WO AGE18WP AGE18WQ AGE18WR AGE18WS AGE18WT AGE18WU
AGE18WV AGE18WW AGE18WX AGE18WY AGE18WZ AGE18XA AGE18XB AGE18XC AGE18XD AGE18XE
AGE18XF AGE18XG AGE18XH AGE18XI AGE18XJ AGE18XK AGE18XL AGE18XM AGE18XN AGE18XO
AGE18XP AGE18XQ AGE18XR AGE18XS AGE18XT AGE18XU AGE18XV AGE18XW AGE18XX AGE18XY
AGE18XZ AGE18YA AGE18YB AGE18YC AGE18YD AGE18YE AGE18YF AGE18YG AGE18YH AGE18YI
AGE18YJ AGE18YK AGE18YL AGE18YM AGE18YN AGE18YO AGE18YP AGE18YQ AGE18YR AGE18YS
AGE18YT AGE18YU AGE18YV AGE18YW AGE18YX AGE18YY AGE18YZ AGE18ZA AGE18ZB AGE18ZC
AGE18ZD AGE18ZE AGE18ZF AGE18ZG AGE18ZH AGE18ZI AGE18ZJ AGE18ZK AGE18ZL AGE18ZM
AGE18ZN AGE18ZO AGE18ZP AGE18ZQ AGE18ZR AGE18ZS AGE18ZT AGE18ZU AGE18ZV AGE18ZW
AGE18ZX AGE18ZY AGE18ZZ

RIDRETH1 SDMVPSU SDMVSTRA WTMEC2YR black

female male married mex

nevermarried numsecu other othhis randval swd white;

USEVARIABLES ARE

AGEC AGECSQ BMXBMI BPXDI1_1 INDFMPIR

SDMVSTRA numsecu WTMEC2YR

female swd nevermarried other othhis black white ;

missing are . ;

WEIGHT IS wtmecl2yr ;

stratification is sdmvstra ;

cluster is numsecu ;

ANALYSIS:

type is complex;

estimator is mlr ;

Model:

bpxdi1_1 on othhis white black other female swd nevermarried agec agecsq

BMXBMI INDFMPIR ;

*** WARNING

Variable name contains more than 8 characters.

Only the first 8 characters will be printed in the output.

Variable: NEVERMARRIED

1 WARNING(S) FOUND IN THE INPUT INSTRUCTIONS

ANALYSIS EXAMPLE 11.1 NHANES DATA IMPUTED DATA REGRESSION ANALYSIS

SUMMARY OF ANALYSIS

Number of groups 1

Average number of observations 5334

Number of replications

Requested 5

Completed 5

Number of dependent variables 1

Number of independent variables 11

Number of continuous latent variables 0

Observed dependent variables

Continuous

BPXDI1_1

Observed independent variables

AGEC AGECSQ BMXBMI INDFMPIR FEMALE SWD

NEVERMAR OTHER OTHHIS BLACK WHITE

Variables with special functions

Stratification SDMVSTRA

Cluster variable NUMSECU

Weight variable WTMEC2YR

Estimator MLR

Information matrix OBSERVED

Maximum number of iterations 1000

Convergence criterion 0.500D-04

Maximum number of steepest descent iterations 20
Maximum number of iterations for H1 2000
Convergence criterion for H1 0.100D-03

Input data file(s)

Multiple data files from

F:\brahms\applied_analysis_book\Mplus\c11_1_5.txt

Input data format FREE

SUMMARY OF DATA FOR THE FIRST REPLICATION

Number of missing data patterns	1
Number of strata	15
Number of clusters	30

SUMMARY OF MISSING DATA PATTERNS FOR THE FIRST REPLICATION

MISSING DATA PATTERNS (x = not missing)

1	
BPXDI1_1	x
AGEC	x
AGECSQ	x
BMXBMI	x
INDFMPIR	x
FEMALE	x
SWD	x
NEVERMAR	x
OTHER	x
OTHIS	x
BLACK	x
WHITE	x

MISSING DATA PATTERN FREQUENCIES

Pattern	Frequency
1	5334

COVARIANCE COVERAGE OF DATA FOR THE FIRST REPLICATION

Minimum covariance coverage value 0.100

PROPORTION OF DATA PRESENT

Covariance Coverage

	BPXDI1_1	AGEC	AGECSQ	BMXBMI	INDFMPIR
BPXDI1_1	1.000				
AGEC	1.000	1.000			
AGECSQ	1.000	1.000	1.000		
BMXBMI	1.000	1.000	1.000	1.000	
INDFMPIR	1.000	1.000	1.000	1.000	1.000
FEMALE	1.000	1.000	1.000	1.000	1.000
SWD	1.000	1.000	1.000	1.000	1.000
NEVERMAR	1.000	1.000	1.000	1.000	1.000
OTHER	1.000	1.000	1.000	1.000	1.000
OTHHIS	1.000	1.000	1.000	1.000	1.000
BLACK	1.000	1.000	1.000	1.000	1.000
WHITE	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	FEMALE	SWD	NEVERMAR	OTHER	OTHHIS
FEMALE	1.000				
SWD	1.000	1.000			
NEVERMAR	1.000	1.000	1.000		
OTHER	1.000	1.000	1.000	1.000	
OTHHIS	1.000	1.000	1.000	1.000	1.000
BLACK	1.000	1.000	1.000	1.000	1.000
WHITE	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	BLACK	WHITE
BLACK	1.000	
WHITE	1.000	1.000

SAMPLE STATISTICS FOR THE FIRST DATA SET

ESTIMATED SAMPLE STATISTICS

Means

	<u>BPXDI1_1</u>	<u>AGEC</u>	<u>AGECSQ</u>	<u>BMXBMI</u>	<u>INDFMPIR</u>
1	70.517	0.000	307.401	28.439	3.058

Means

	<u>FEMALE</u>	<u>SWD</u>	<u>NEVERMAR</u>	<u>OTHER</u>	<u>OTHHIS</u>
1	0.518	0.182	0.178	0.054	0.034

Means

	<u>BLACK</u>	<u>WHITE</u>
1	0.117	0.714

Covariances

	<u>BPXDI1_1</u>	<u>AGEC</u>	<u>AGECSQ</u>	<u>BMXBMI</u>	<u>INDFMPIR</u>
BPXDI1_1	153.726				
AGEC	15.850	307.401			
AGECSQ	-1108.108	2037.754	122894.283		
BMXBMI	12.954	9.032	-304.301	45.296	
INDFMPIR	1.473	1.200	-118.501	-0.316	2.491
FEMALE	-0.802	0.403	7.521	0.003	-0.032
SWD	0.087	2.284	22.927	0.131	-0.080
NEVERMAR	-0.574	-2.854	18.916	-0.182	-0.071
OTHER	-0.037	-0.188	-3.692	-0.087	-0.004
OTHHIS	-0.027	-0.209	-2.451	0.002	-0.022
BLACK	0.082	-0.338	-2.157	0.215	-0.074
WHITE	0.162	1.357	10.866	-0.141	0.191

Covariances

	<u>FEMALE</u>	<u>SWD</u>	<u>NEVERMAR</u>	<u>OTHER</u>	<u>OTHHIS</u>
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FEMALE	0.250				
SWD	0.025	0.149			
NEVERMAR	-0.008	-0.032	0.146		
OTHER	0.003	0.000	0.000	0.051	
OTHHIS	0.001	-0.002	0.001	-0.002	0.033
BLACK	0.004	0.005	0.016	-0.006	-0.004
WHITE	-0.003	0.002	-0.019	-0.039	-0.024

Covariances

	BLACK	WHITE
	_____	_____
BLACK	0.104	
WHITE	-0.084	0.204

Correlations

	BPXDI1_1	AGEC	AGECSQ	BMXBMI	INDFMPIR
	_____	_____	_____	_____	_____
BPXDI1_1	1.000				
AGEC	0.073	1.000			
AGECSQ	-0.255	0.332	1.000		
BMXBMI	0.155	0.077	-0.129	1.000	
INDFMPIR	0.075	0.043	-0.214	-0.030	1.000
FEMALE	-0.129	0.046	0.043	0.001	-0.040
SWD	0.018	0.337	0.169	0.050	-0.131
NEVERMAR	-0.121	-0.426	0.141	-0.071	-0.118
OTHER	-0.013	-0.047	-0.047	-0.057	-0.010
OTHHIS	-0.012	-0.066	-0.039	0.002	-0.077
BLACK	0.020	-0.060	-0.019	0.099	-0.145
WHITE	0.029	0.171	0.069	-0.046	0.268

Correlations

	FEMALE	SWD	NEVERMAR	OTHER	OTHHIS
	_____	_____	_____	_____	_____
FEMALE	1.000				
SWD	0.130	1.000			

NEVERMAR	-0.043	-0.220	1.000		
OTHER	0.023	-0.005	0.002	1.000	
OTHHIS	0.006	-0.031	0.012	-0.045	1.000
BLACK	0.022	0.044	0.130	-0.087	-0.068
WHITE	-0.015	0.009	-0.110	-0.378	-0.296

Correlations

	BLACK	WHITE
BLACK	1.000	
WHITE	-0.576	1.000

MAXIMUM LOG-LIKELIHOOD VALUE FOR THE UNRESTRICTED (H1) MODEL IS -116648.272

TESTS OF MODEL FIT

Number of Free Parameters 13

Chi-Square Test of Model Fit

Degrees of freedom 0

Mean 0.000

Std Dev 0.000

Number of successful computations 5

Proportions		Percentiles	
Expected	Observed	Expected	Observed
0.990	1.000	0.000	0.000
0.980	1.000	0.000	0.000
0.950	1.000	0.000	0.000
0.900	1.000	0.000	0.000
0.800	1.000	0.000	0.000
0.700	1.000	0.000	0.000
0.500	1.000	0.000	0.000
0.300	1.000	0.000	0.000
0.200	1.000	0.000	0.000

0.100	1.000	0.000	0.000
0.050	1.000	0.000	0.000
0.020	1.000	0.000	0.000
0.010	1.000	0.000	0.000

CFI/TLI

CFI

Mean	1.000
Std Dev	0.000
Number of successful computations	5

Proportions		Percentiles	
Expected	Observed	Expected	Observed
0.990	1.000	1.000	1.000
0.980	1.000	1.000	1.000
0.950	0.800	1.000	1.000
0.900	0.800	1.000	1.000
0.800	0.800	1.000	1.000
0.700	0.800	1.000	1.000
0.500	0.800	1.000	1.000
0.300	0.400	1.000	1.000
0.200	0.000	1.000	1.000
0.100	0.000	1.000	1.000
0.050	0.000	1.000	1.000
0.020	0.000	1.000	1.000
0.010	0.000	1.000	1.000

TLI

Mean	1.000
Std Dev	0.000
Number of successful computations	5

Proportions		Percentiles	
Expected	Observed	Expected	Observed
0.990	0.000	1.000	1.000
0.980	0.000	1.000	1.000
0.950	0.000	1.000	1.000
0.900	0.000	1.000	1.000

0.800	0.000	1.000	1.000
0.700	0.000	1.000	1.000
0.500	0.000	1.000	1.000
0.300	0.000	1.000	1.000
0.200	0.000	1.000	1.000
0.100	0.000	1.000	1.000
0.050	0.000	1.000	1.000
0.020	0.000	1.000	1.000
0.010	0.000	1.000	1.000

Loglikelihood

H0 Value

Mean	-116657.848
Std Dev	8.767
Number of successful computations	5

Proportions		Percentiles	
Expected	Observed	Expected	Observed
0.990	1.000	-116678.243	-116668.719
0.980	1.000	-116675.853	-116668.719
0.950	1.000	-116672.269	-116668.719
0.900	1.000	-116669.084	-116668.719
0.800	0.600	-116665.227	-116668.719
0.700	0.600	-116662.446	-116668.719
0.500	0.400	-116657.848	-116665.685
0.300	0.400	-116653.251	-116659.254
0.200	0.400	-116650.470	-116648.272
0.100	0.000	-116646.612	-116648.272
0.050	0.000	-116643.427	-116648.272
0.020	0.000	-116639.843	-116648.272
0.010	0.000	-116637.453	-116648.272

H1 Value

Mean -116657.848

Std Dev 8.767

Number of successful computations 5

Proportions		Percentiles	
Expected	Observed	Expected	Observed
0.990	1.000	-116678.243	-116668.719
0.980	1.000	-116675.853	-116668.719
0.950	1.000	-116672.269	-116668.719
0.900	1.000	-116669.084	-116668.719
0.800	0.600	-116665.227	-116668.719
0.700	0.600	-116662.446	-116668.719
0.500	0.400	-116657.848	-116665.685
0.300	0.400	-116653.251	-116659.254
0.200	0.400	-116650.470	-116648.272
0.100	0.000	-116646.612	-116648.272
0.050	0.000	-116643.427	-116648.272
0.020	0.000	-116639.843	-116648.272
0.010	0.000	-116637.453	-116648.272

Information Criteria

Akaike (AIC)

Mean 233341.696

Std Dev 17.534

Number of successful computations 5

Proportions		Percentiles	
Expected	Observed	Expected	Observed
0.990	1.000	233300.907	233320.621
0.980	1.000	233305.686	233320.621
0.950	1.000	233312.854	233320.621
0.900	1.000	233319.225	233320.621
0.800	0.600	233326.940	233320.621

0.700	0.600	233332.502	233320.621
0.500	0.600	233341.696	233322.545
0.300	0.400	233350.891	233344.508
0.200	0.400	233356.453	233357.370
0.100	0.000	233364.168	233357.370
0.050	0.000	233370.539	233357.370
0.020	0.000	233377.707	233357.370
0.010	0.000	233382.486	233357.370

Bayesian (BIC)

Mean	233427.261
Std Dev	17.534
Number of successful computations	5

Proportions		Percentiles	
Expected	Observed	Expected	Observed
0.990	1.000	233386.471	233406.185
0.980	1.000	233391.251	233406.185
0.950	1.000	233398.419	233406.185
0.900	1.000	233404.789	233406.185
0.800	0.600	233412.504	233406.185
0.700	0.600	233418.066	233406.185
0.500	0.600	233427.261	233408.109
0.300	0.400	233436.456	233430.072
0.200	0.400	233442.017	233442.934
0.100	0.000	233449.733	233442.934
0.050	0.000	233456.103	233442.934
0.020	0.000	233463.271	233442.934
0.010	0.000	233468.051	233442.934

Sample-Size Adjusted BIC ($n^* = (n + 2) / 24$)

Mean	233385.951
Std Dev	17.534
Number of successful computations	5

Proportions		Percentiles	
Expected	Observed	Expected	Observed
0.990	1.000	233345.161	233364.876
0.980	1.000	233349.941	233364.876
0.950	1.000	233357.109	233364.876
0.900	1.000	233363.479	233364.876
0.800	0.600	233371.194	233364.876
0.700	0.600	233376.756	233364.876
0.500	0.600	233385.951	233366.799
0.300	0.400	233395.146	233388.762
0.200	0.400	233400.708	233401.625
0.100	0.000	233408.423	233401.625
0.050	0.000	233414.793	233401.625
0.020	0.000	233421.961	233401.625
0.010	0.000	233426.741	233401.625

RMSEA (Root Mean Square Error Of Approximation)

Mean	0.000
Std Dev	0.000
Number of successful computations	5

Proportions		Percentiles	
Expected	Observed	Expected	Observed
0.990	0.000	0.000	0.000
0.980	0.000	0.000	0.000
0.950	0.000	0.000	0.000
0.900	0.000	0.000	0.000

0.800	0.000	0.000	0.000
0.700	0.000	0.000	0.000
0.500	0.000	0.000	0.000
0.300	0.000	0.000	0.000
0.200	0.000	0.000	0.000
0.100	0.000	0.000	0.000
0.050	0.000	0.000	0.000
0.020	0.000	0.000	0.000
0.010	0.000	0.000	0.000

SRMR (Standardized Root Mean Square Residual)

Mean	0.000
Std Dev	0.000
Number of successful computations	5

Proportions		Percentiles	
Expected	Observed	Expected	Observed
0.990	1.000	0.000	0.000
0.980	1.000	0.000	0.000
0.950	1.000	0.000	0.000
0.900	1.000	0.000	0.000
0.800	1.000	0.000	0.000
0.700	0.600	0.000	0.000
0.500	0.200	0.000	0.000
0.300	0.200	0.000	0.000
0.200	0.200	0.000	0.000
0.100	0.200	0.000	0.000
0.050	0.200	0.000	0.000
0.020	0.000	0.000	0.000
0.010	0.000	0.000	0.000

MODEL RESULTS

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
BPXDI1_1 ON				
OTHHS	1.397	1.120	1.247	0.212
WHITE	2.205	0.581	3.792	0.000
BLACK	3.209	0.857	3.744	0.000
OTHER	2.142	1.086	1.972	0.049
FEMALE	-2.865	0.418	-6.850	0.000
SWD	0.624	0.637	0.979	0.328
NEVERMARRI	-0.651	0.773	-0.842	0.400
AGEC	0.108	0.015	6.952	0.000
AGECSQ	-0.010	0.001	-11.447	0.000
BMXBMI	0.196	0.036	5.430	0.000
INDFMPIR	-0.021	0.145	-0.142	0.887
Intercepts				
BPXDI1_1	67.434	1.325	50.907	0.000
Residual Variances				
BPXDI1_1	134.131	3.710	36.158	0.000

QUALITY OF NUMERICAL RESULTS

Average Condition Number for the Information Matrix 0.928E-07
 (ratio of smallest to largest eigenvalue)