TITLE: midterm 2. B;

DATA:

file = "B:\dropbox\class\Spring 2014\PSY533\midterm\_2.txt";

type = correlation;

nobservations = 3956;

VARIABLE:

names are DATVB DATNU EASSV TCHRG INDMA FLWIN;

USEVARIABLES ARE DATVB DATNU EASSV TCHRG INDMA FLWIN;

ANALYSIS: TYPE = GENERAL;

ITERATIONS=3000;

ESTIMATOR=ML;

MODEL: F1 BY DATVB@1 TCHRG INDMA FLWIN;

F2 by DATNU@1 TCHRG INDMA FLWIN;

F3 by EASSV@1 TCHRG INDMA FLWIN;

f1@1 f2@1 f3@1;

OUTPUT: sampstat standardized residual;

SAMPLE STATISTICS

Covariances/Correlations/Residual Correlations

DATVB DATNU EASSV TCHRG INDMA

\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

DATVB 1.000

DATNU 0.660 1.000

EASSV 0.470 0.480 1.000

TCHRG 0.680 0.570 0.420 1.000

INDMA 0.540 0.640 0.440 0.510 1.000

FLWIN 0.690 0.630 0.530 0.630 0.600

Covariances/Correlations/Residual Correlations

FLWIN

\_\_\_\_\_\_\_\_

FLWIN 1.000

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 18

Loglikelihood

H0 Value -27612.317

H1 Value -27515.777

Information Criteria

Akaike (AIC) 55260.633

Bayesian (BIC) 55373.727

Sample-Size Adjusted BIC 55316.531

(n\* = (n + 2) / 24)

Chi-Square Test of Model Fit

Value 193.079

Degrees of Freedom 3

P-Value 0.0000

RMSEA (Root Mean Square Error Of Approximation)

Estimate 0.127

90 Percent C.I. 0.112 0.142

Probability RMSEA <= .05 0.000

CFI/TLI

CFI 0.985

TLI 0.923

Chi-Square Test of Model Fit for the Baseline Model

Value 12322.295

Degrees of Freedom 15

P-Value 0.0000

SRMR (Standardized Root Mean Square Residual)

Value 0.136

MODEL RESULTS

Two-Tailed

Estimate S.E. Est./S.E. P-Value

F1 BY

DATVB 1.000 0.000 999.000 999.000

TCHRG 0.923 0.041 22.295 0.000

INDMA 0.285 0.038 7.436 0.000

FLWIN 0.745 0.032 23.215 0.000

F2 BY

DATNU 1.000 0.000 999.000 999.000

TCHRG -0.075 0.038 -2.010 0.044

INDMA 0.465 0.043 10.834 0.000

FLWIN 0.062 0.030 2.071 0.038

F3 BY

EASSV 1.000 0.000 999.000 999.000

TCHRG 0.002 0.017 0.107 0.915

INDMA 0.083 0.017 4.979 0.000

FLWIN 0.143 0.016 8.928 0.000

F2 WITH

F1 0.837 0.015 56.598 0.000

F3 WITH

F1 0.598 0.016 36.690 0.000

F2 0.573 0.018 32.336 0.000

Variances

F1 1.000 0.000 999.000 999.000

F2 1.000 0.000 999.000 999.000

F3 1.000 0.000 999.000 999.000

Residual Variances

DATVB 0.248 0.012 21.052 0.000

DATNU 0.131 0.022 5.891 0.000

EASSV 0.069 0.023 2.979 0.003

TCHRG 0.383 0.013 29.833 0.000

INDMA 0.494 0.013 38.240 0.000

FLWIN 0.338 0.010 34.226 0.000

STANDARDIZED MODEL RESULTS

STDYX Standardization

Two-Tailed

Estimate S.E. Est./S.E. P-Value

F1 BY

DATVB 0.895 0.004 212.190 0.000

TCHRG 0.870 0.036 24.042 0.000

INDMA 0.273 0.037 7.342 0.000

FLWIN 0.700 0.029 24.558 0.000

F2 BY

DATNU 0.940 0.009 101.444 0.000

TCHRG -0.071 0.035 -2.016 0.044

INDMA 0.445 0.040 11.257 0.000

FLWIN 0.058 0.028 2.068 0.039

F3 BY

EASSV 0.967 0.010 92.139 0.000

TCHRG 0.002 0.016 0.107 0.915

INDMA 0.079 0.016 4.969 0.000

FLWIN 0.135 0.015 8.959 0.000

F2 WITH

F1 0.837 0.015 56.598 0.000

F3 WITH

F1 0.598 0.016 36.690 0.000

F2 0.573 0.018 32.336 0.000

Variances

F1 1.000 0.000 999.000 999.000

F2 1.000 0.000 999.000 999.000

F3 1.000 0.000 999.000 999.000

Residual Variances

DATVB 0.198 0.008 26.263 0.000

DATNU 0.116 0.017 6.665 0.000

EASSV 0.065 0.020 3.185 0.001

TCHRG 0.340 0.012 27.865 0.000

INDMA 0.452 0.013 35.114 0.000

FLWIN 0.298 0.009 31.626 0.000

R-SQUARE

Observed Two-Tailed

Variable Estimate S.E. Est./S.E. P-Value

DATVB 0.802 0.008 106.095 0.000

DATNU 0.884 0.017 50.722 0.000

EASSV 0.935 0.020 46.070 0.000

TCHRG 0.660 0.012 54.106 0.000

INDMA 0.548 0.013 42.611 0.000

FLWIN 0.702 0.009 74.381 0.000

QUALITY OF NUMERICAL RESULTS

Condition Number for the Information Matrix 0.769E-02

(ratio of smallest to largest eigenvalue)

RESIDUAL OUTPUT

ESTIMATED MODEL AND RESIDUALS (OBSERVED - ESTIMATED)

Model Estimated Covariances/Correlations/Residual Correlations

DATVB DATNU EASSV TCHRG INDMA

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DATVB 1.248

DATNU 0.837 1.131

EASSV 0.598 0.573 1.069

TCHRG 0.861 0.698 0.511 1.125

INDMA 0.724 0.751 0.520 0.612 1.093

FLWIN 0.883 0.768 0.625 0.758 0.661

Model Estimated Covariances/Correlations/Residual Correlations

FLWIN

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FLWIN 1.134

Residuals for Covariances/Correlations/Residual Correlations

DATVB DATNU EASSV TCHRG INDMA

\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

DATVB -0.248

DATNU -0.177 -0.132

EASSV -0.128 -0.093 -0.069

TCHRG -0.181 -0.128 -0.091 -0.126

INDMA -0.184 -0.111 -0.080 -0.103 -0.093

FLWIN -0.193 -0.138 -0.095 -0.128 -0.061

Residuals for Covariances/Correlations/Residual Correlations

FLWIN

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FLWIN -0.134

Standardized Residuals (z-scores) for Covariances/Correlations/Residual Corr

DATVB DATNU EASSV TCHRG INDMA

\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

DATVB -12.934

DATNU -14.725 -47.280

EASSV -19.698 999.000 999.000

TCHRG -13.034 -19.651 -38.434 -25.408

INDMA -17.420 -33.633 999.000 -13.768 999.000

FLWIN -13.465 -21.109 -103.047 -28.152 -8.548

Standardized Residuals (z-scores) for Covariances/Correlations/Residual Corr

FLWIN

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FLWIN -23.668

Normalized Residuals for Covariances/Correlations/Residual Correlations

DATVB DATNU EASSV TCHRG INDMA

\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

DATVB -11.023

DATNU -9.284 -5.856

EASSV -7.314 -5.259 -3.087

TCHRG -9.419 -6.991 -5.276 -5.587

INDMA -10.194 -5.901 -4.609 -5.750 -4.131

FLWIN -10.013 -7.350 -5.283 -6.839 -3.295

Normalized Residuals for Covariances/Correlations/Residual Correlations

FLWIN

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FLWIN -5.971

TITLE: midterm 2 C;

DATA:

file = "B:\dropbox\class\Spring 2014\PSY533\midterm\_2.txt";

type = correlation;

nobservations = 3956;

VARIABLE:

names are DATVB DATNU EASSV TCHRG INDMA FLWIN;

USEVARIABLES ARE DATVB DATNU EASSV TCHRG INDMA FLWIN;

ANALYSIS: TYPE = GENERAL;

ITERATIONS=3000;

ESTIMATOR=ML;

MODEL: F1 BY DATVB TCHRG;

F2 by DATNU INDMA;

F3 by EASSV FLWIN;

OUTPUT: sampstat standardized residual;

SAMPLE STATISTICS

Covariances/Correlations/Residual Correlations

DATVB DATNU EASSV TCHRG INDMA

\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

DATVB 1.000

DATNU 0.660 1.000

EASSV 0.470 0.480 1.000

TCHRG 0.680 0.570 0.420 1.000

INDMA 0.540 0.640 0.440 0.510 1.000

FLWIN 0.690 0.630 0.530 0.630 0.600

Covariances/Correlations/Residual Correlations

FLWIN

\_\_\_\_\_\_\_\_

FLWIN 1.000

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 15

Loglikelihood

H0 Value -27567.832

H1 Value -27515.777

Information Criteria

Akaike (AIC) 55165.663

Bayesian (BIC) 55259.908

Sample-Size Adjusted BIC 55212.245

(n\* = (n + 2) / 24)

Chi-Square Test of Model Fit

Value 104.109

Degrees of Freedom 6

P-Value 0.0000

RMSEA (Root Mean Square Error Of Approximation)

Estimate 0.064

90 Percent C.I. 0.054 0.075

Probability RMSEA <= .05 0.013

CFI/TLI

CFI 0.992

TLI 0.980

Chi-Square Test of Model Fit for the Baseline Model

Value 12322.295

Degrees of Freedom 15

P-Value 0.0000

SRMR (Standardized Root Mean Square Residual)

Value 0.014

MODEL RESULTS

Two-Tailed

Estimate S.E. Est./S.E. P-Value

F1 BY

DATVB 1.000 0.000 999.000 999.000

TCHRG 0.901 0.016 55.256 0.000

F2 BY

DATNU 1.000 0.000 999.000 999.000

INDMA 0.893 0.018 49.662 0.000

F3 BY

EASSV 1.000 0.000 999.000 999.000

FLWIN 1.413 0.036 39.160 0.000

F2 WITH

F1 0.638 0.019 34.251 0.000

F3 WITH

F1 0.487 0.017 28.728 0.000

F2 0.461 0.016 28.078 0.000

Variances

F1 0.754 0.024 32.069 0.000

F2 0.716 0.024 30.194 0.000

F3 0.375 0.019 20.089 0.000

Residual Variances

DATVB 0.246 0.010 23.549 0.000

DATNU 0.284 0.012 24.082 0.000

EASSV 0.625 0.015 40.521 0.000

TCHRG 0.387 0.011 34.288 0.000

INDMA 0.428 0.012 34.380 0.000

FLWIN 0.251 0.014 18.067 0.000

STANDARDIZED MODEL RESULTS

STDYX Standardization

Two-Tailed

Estimate S.E. Est./S.E. P-Value

F1 BY

DATVB 0.869 0.006 135.324 0.000

TCHRG 0.783 0.008 101.971 0.000

F2 BY

DATNU 0.846 0.007 114.607 0.000

INDMA 0.756 0.009 88.102 0.000

F3 BY

EASSV 0.612 0.011 54.629 0.000

FLWIN 0.865 0.008 103.637 0.000

F2 WITH

F1 0.868 0.009 93.246 0.000

F3 WITH

F1 0.915 0.010 92.475 0.000

F2 0.889 0.011 82.672 0.000

Variances

F1 1.000 0.000 999.000 999.000

F2 1.000 0.000 999.000 999.000

F3 1.000 0.000 999.000 999.000

Residual Variances

DATVB 0.246 0.011 22.030 0.000

DATNU 0.284 0.013 22.686 0.000

EASSV 0.625 0.014 45.516 0.000

TCHRG 0.387 0.012 32.195 0.000

INDMA 0.428 0.013 32.994 0.000

FLWIN 0.251 0.014 17.367 0.000

QUALITY OF NUMERICAL RESULTS

Condition Number for the Information Matrix 0.432E-02

(ratio of smallest to largest eigenvalue)

RESIDUAL OUTPUT

ESTIMATED MODEL AND RESIDUALS (OBSERVED - ESTIMATED)

Model Estimated Covariances/Correlations/Residual Correlations

DATVB DATNU EASSV TCHRG INDMA

\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

DATVB 1.000

DATNU 0.638 1.000

EASSV 0.487 0.461 1.000

TCHRG 0.680 0.575 0.439 1.000

INDMA 0.570 0.640 0.412 0.514 1.000

FLWIN 0.688 0.651 0.530 0.620 0.582

Model Estimated Covariances/Correlations/Residual Correlations

FLWIN

\_\_\_\_\_\_\_\_

FLWIN 1.000

Residuals for Covariances/Correlations/Residual Correlations

DATVB DATNU EASSV TCHRG INDMA

\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

DATVB 0.000

DATNU 0.022 0.000

EASSV -0.017 0.019 0.000

TCHRG 0.000 -0.005 -0.019 0.000

INDMA -0.030 0.000 0.028 -0.004 0.000

FLWIN 0.002 -0.021 0.000 0.010 0.018

Residuals for Covariances/Correlations/Residual Correlations

FLWIN

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FLWIN 0.000

Standardized Residuals (z-scores) for Covariances/Correlations/Residual Corr

DATVB DATNU EASSV TCHRG INDMA

\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

DATVB 0.000

DATNU 5.512 0.040

EASSV -3.613 2.981 0.038

TCHRG 0.000 -1.197 -2.831 0.000

INDMA -10.049 0.035 3.505 -0.662 0.000

FLWIN 0.949 999.000 0.045 2.682 4.201

Standardized Residuals (z-scores) for Covariances/Correlations/Residual Corr

FLWIN

\_\_\_\_\_\_\_\_

FLWIN 0.000

Normalized Residuals for Covariances/Correlations/Residual Correlations

DATVB DATNU EASSV TCHRG INDMA

\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

DATVB 0.000

DATNU 1.153 0.000

EASSV -0.954 1.092 0.000

TCHRG 0.000 -0.280 -1.088 0.000

INDMA -1.660 0.000 1.635 -0.213 0.000

FLWIN 0.110 -1.123 0.000 0.529 0.989

Normalized Residuals for Covariances/Correlations/Residual Correlations

FLWIN

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FLWIN 0.000