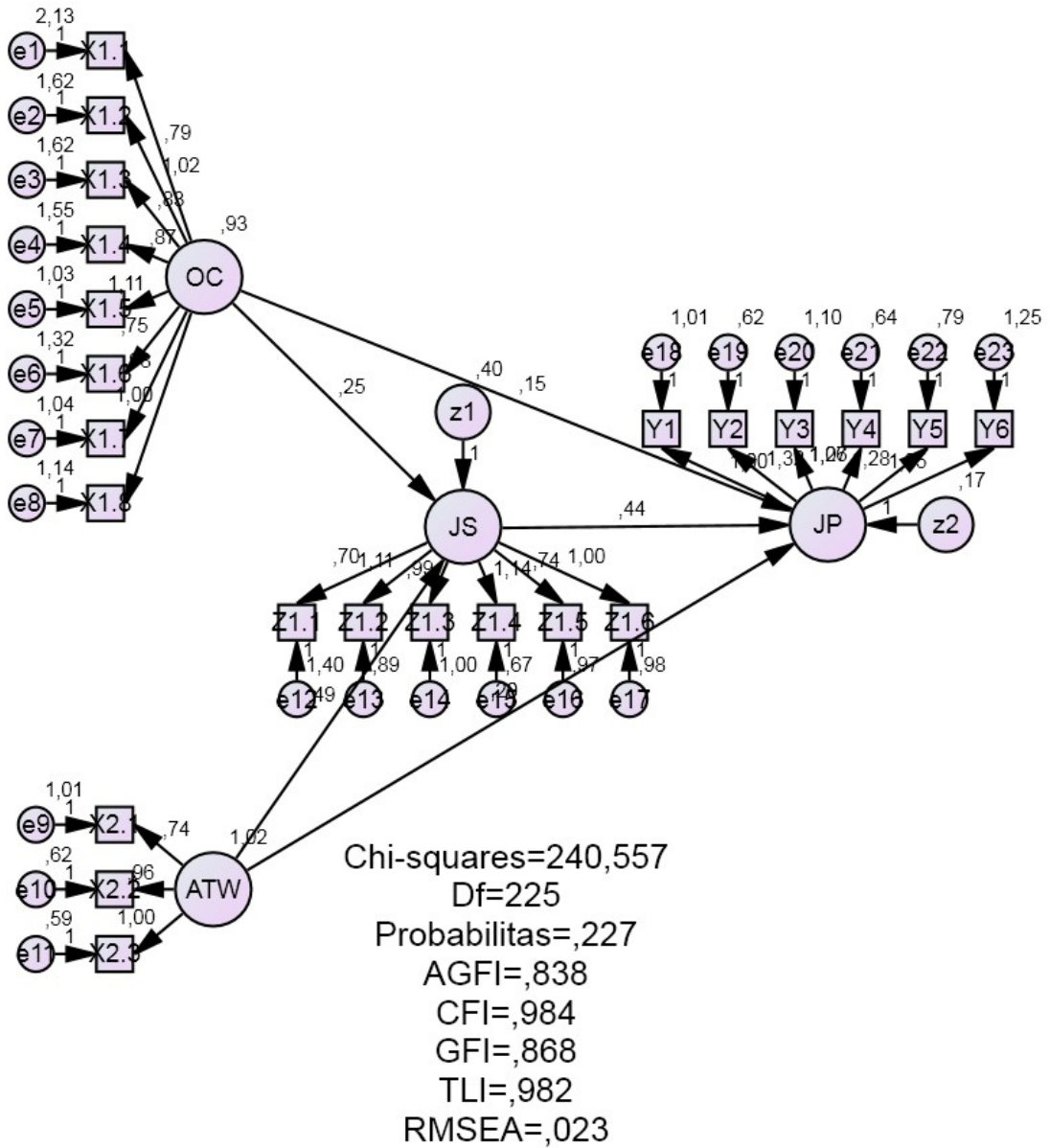


APPENDIX 4

FULL MODEL ANALYSIS TEST OUTPUT



Notes for Group (Group number 1)

The model is recursive.

Sample size = 135

Variable Summary (Group number 1)

Your model contains the following variables (Group number 1)

Observed, endogenous variables

X1.8

X1.7

X1.6

X1.5

X1.4

X1.3

X1.2

X1.1

X2.3

X2.2

X2.1

Z1.6

Z1.5

Z1.4

Z1.3

Z1.2

Z1.1

Y1

Y2

Y3

Y4

Y5

Y6

Unobserved, endogenous variables

JS

JP

Unobserved, exogenous variables

OC

e8

e7

e6

e5

e4

e3

e2

e1

ATW

e11

e10

e9
 e17
 e16
 e15
 e14
 e13
 e12
 e18
 e19
 e20
 e21
 e22
 e23
 z1
 z2

Variable counts (Group number 1)

Number of variables in your model: 52
 Number of observed variables: 23
 Number of unobserved variables: 29
 Number of exogenous variables: 27
 Number of endogenous variables: 25

Parameter Summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	29	0	0	0	0	29
Labeled	0	0	0	0	0	0
Unlabeled	24	0	27	0	0	51
Total	53	0	27	0	0	80

Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 276
 Number of distinct parameters to be estimated: 51
 Degrees of freedom (276 - 51): 225

Result (Default model)

Minimum was achieved
 Chi-square = 240,557
 Degrees of freedom = 225
 Probability level = ,227

Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
JS	<---	OC	,252	,086	2,948	,003	
JS	<---	ATW	,489	,100	4,909	***	
JP	<---	OC	,155	,066	2,330	,020	
JP	<---	ATW	,205	,083	2,458	,014	
JP	<---	JS	,442	,122	3,619	***	
X1.8	<---	OC	1,000				
X1.7	<---	OC	,978	,148	6,606	***	
X1.6	<---	OC	,753	,140	5,378	***	
X1.5	<---	OC	1,105	,159	6,939	***	
X1.4	<---	OC	,872	,156	5,599	***	
X1.3	<---	OC	,825	,155	5,336	***	
X1.2	<---	OC	1,018	,168	6,045	***	
X1.1	<---	OC	,790	,167	4,717	***	
X2.3	<---	ATW	1,000				
X2.2	<---	ATW	,959	,125	7,683	***	
X2.1	<---	ATW	,741	,118	6,284	***	
Z1.6	<---	JS	1,000				
Z1.5	<---	JS	,738	,140	5,285	***	
Z1.4	<---	JS	1,139	,163	7,011	***	
Z1.3	<---	JS	,992	,161	6,151	***	
Z1.2	<---	JS	1,114	,168	6,638	***	
Z1.1	<---	JS	,704	,156	4,519	***	
Y1	<---	JP	1,000				
Y2	<---	JP	1,318	,207	6,354	***	
Y3	<---	JP	1,069	,200	5,348	***	
Y4	<---	JP	1,258	,201	6,258	***	
Y5	<---	JP	1,284	,210	6,111	***	
Y6	<---	JP	1,053	,205	5,142	***	

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
JS	<---	OC	,291
JS	<---	ATW	,589
JP	<---	OC	,212
JP	<---	ATW	,293
JP	<---	JS	,526
X1.8	<---	OC	,672

			Estimate
X1.7	<---	OC	,680
X1.6	<---	OC	,535
X1.5	<---	OC	,725
X1.4	<---	OC	,560
X1.3	<---	OC	,531
X1.2	<---	OC	,612
X1.1	<---	OC	,463
X2.3	<---	ATW	,795
X2.2	<---	ATW	,776
X2.1	<---	ATW	,597
Z1.6	<---	JS	,645
Z1.5	<---	JS	,532
Z1.4	<---	JS	,760
Z1.3	<---	JS	,639
Z1.2	<---	JS	,704
Z1.1	<---	JS	,446
Y1	<---	JP	,575
Y2	<---	JP	,762
Y3	<---	JP	,585
Y4	<---	JP	,742
Y5	<---	JP	,713
Y6	<---	JP	,554

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
OC	,935	,230	4,060	***	
ATW	1,019	,210	4,851	***	
z1	,399	,114	3,491	***	
z2	,172	,059	2,935	,003	
e8	1,136	,166	6,847	***	
e7	1,038	,153	6,783	***	
e6	1,319	,175	7,536	***	
e5	1,033	,162	6,385	***	
e4	1,553	,209	7,446	***	
e3	1,624	,215	7,552	***	
e2	1,620	,224	7,216	***	
e1	2,132	,275	7,744	***	
e11	,594	,126	4,719	***	
e10	,620	,122	5,093	***	
e9	1,010	,142	7,127	***	
e17	,984	,138	7,117	***	
e16	,966	,127	7,597	***	
e15	,666	,109	6,119	***	

	Estimate	S.E.	C.R.	P	Label
e14	1,003	,140	7,155	***	
e13	,886	,132	6,706	***	
e12	1,400	,179	7,817	***	
e18	1,009	,134	7,553	***	
e19	,624	,098	6,385	***	
e20	1,095	,146	7,519	***	
e21	,642	,097	6,594	***	
e22	,791	,116	6,843	***	
e23	1,245	,163	7,618	***	

Matrices (Group number 1 - Default model)

Total Effects (Group number 1 - Default model)

	ATW	OC	JS	JP
JS	,489	,252	,000	,000
JP	,421	,266	,442	,000
Y6	,443	,281	,466	1,053
Y5	,540	,342	,568	1,284
Y4	,529	,335	,557	1,258
Y3	,450	,285	,473	1,069
Y2	,554	,351	,583	1,318
Y1	,421	,266	,442	1,000
Z1.1	,344	,178	,704	,000
Z1.2	,544	,281	1,114	,000
Z1.3	,485	,250	,992	,000
Z1.4	,557	,287	1,139	,000
Z1.5	,360	,186	,738	,000
Z1.6	,489	,252	1,000	,000
X2.1	,741	,000	,000	,000
X2.2	,959	,000	,000	,000
X2.3	1,000	,000	,000	,000
X1.1	,000	,790	,000	,000
X1.2	,000	1,018	,000	,000
X1.3	,000	,825	,000	,000
X1.4	,000	,872	,000	,000
X1.5	,000	1,105	,000	,000
X1.6	,000	,753	,000	,000
X1.7	,000	,978	,000	,000
X1.8	,000	1,000	,000	,000

Standardized Total Effects (Group number 1 - Default model)

	ATW	OC	JS	JP
JS	,589	,291	,000	,000

	ATW	OC	JS	JP
JP	,602	,365	,526	,000
Y6	,334	,202	,291	,554
Y5	,430	,261	,375	,713
Y4	,447	,271	,390	,742
Y3	,352	,214	,307	,585
Y2	,459	,278	,401	,762
Y1	,346	,210	,302	,575
Z1.1	,263	,130	,446	,000
Z1.2	,414	,205	,704	,000
Z1.3	,376	,186	,639	,000
Z1.4	,447	,221	,760	,000
Z1.5	,313	,155	,532	,000
Z1.6	,380	,188	,645	,000
X2.1	,597	,000	,000	,000
X2.2	,776	,000	,000	,000
X2.3	,795	,000	,000	,000
X1.1	,000	,463	,000	,000
X1.2	,000	,612	,000	,000
X1.3	,000	,531	,000	,000
X1.4	,000	,560	,000	,000
X1.5	,000	,725	,000	,000
X1.6	,000	,535	,000	,000
X1.7	,000	,680	,000	,000
X1.8	,000	,672	,000	,000

Direct Effects (Group number 1 - Default model)

	ATW	OC	JS	JP
JS	,489	,252	,000	,000
JP	,205	,155	,442	,000
Y6	,000	,000	,000	1,053
Y5	,000	,000	,000	1,284
Y4	,000	,000	,000	1,258
Y3	,000	,000	,000	1,069
Y2	,000	,000	,000	1,318
Y1	,000	,000	,000	1,000
Z1.1	,000	,000	,704	,000
Z1.2	,000	,000	1,114	,000
Z1.3	,000	,000	,992	,000
Z1.4	,000	,000	1,139	,000
Z1.5	,000	,000	,738	,000
Z1.6	,000	,000	1,000	,000
X2.1	,741	,000	,000	,000
X2.2	,959	,000	,000	,000

	ATW	OC	JS	JP
X2.3	1,000	,000	,000	,000
X1.1	,000	,790	,000	,000
X1.2	,000	1,018	,000	,000
X1.3	,000	,825	,000	,000
X1.4	,000	,872	,000	,000
X1.5	,000	1,105	,000	,000
X1.6	,000	,753	,000	,000
X1.7	,000	,978	,000	,000
X1.8	,000	1,000	,000	,000

Standardized Direct Effects (Group number 1 - Default model)

	ATW	OC	JS	JP
JS	,589	,291	,000	,000
JP	,293	,212	,526	,000
Y6	,000	,000	,000	,554
Y5	,000	,000	,000	,713
Y4	,000	,000	,000	,742
Y3	,000	,000	,000	,585
Y2	,000	,000	,000	,762
Y1	,000	,000	,000	,575
Z1.1	,000	,000	,446	,000
Z1.2	,000	,000	,704	,000
Z1.3	,000	,000	,639	,000
Z1.4	,000	,000	,760	,000
Z1.5	,000	,000	,532	,000
Z1.6	,000	,000	,645	,000
X2.1	,597	,000	,000	,000
X2.2	,776	,000	,000	,000
X2.3	,795	,000	,000	,000
X1.1	,000	,463	,000	,000
X1.2	,000	,612	,000	,000
X1.3	,000	,531	,000	,000
X1.4	,000	,560	,000	,000
X1.5	,000	,725	,000	,000
X1.6	,000	,535	,000	,000
X1.7	,000	,680	,000	,000
X1.8	,000	,672	,000	,000

Indirect Effects (Group number 1 - Default model)

	ATW	OC	JS	JP
JS	,000	,000	,000	,000
JP	,216	,112	,000	,000
Y6	,443	,281	,466	,000

	ATW	OC	JS	JP
Y5	,540	,342	,568	,000
Y4	,529	,335	,557	,000
Y3	,450	,285	,473	,000
Y2	,554	,351	,583	,000
Y1	,421	,266	,442	,000
Z1.1	,344	,178	,000	,000
Z1.2	,544	,281	,000	,000
Z1.3	,485	,250	,000	,000
Z1.4	,557	,287	,000	,000
Z1.5	,360	,186	,000	,000
Z1.6	,489	,252	,000	,000
X2.1	,000	,000	,000	,000
X2.2	,000	,000	,000	,000
X2.3	,000	,000	,000	,000
X1.1	,000	,000	,000	,000
X1.2	,000	,000	,000	,000
X1.3	,000	,000	,000	,000
X1.4	,000	,000	,000	,000
X1.5	,000	,000	,000	,000
X1.6	,000	,000	,000	,000
X1.7	,000	,000	,000	,000
X1.8	,000	,000	,000	,000

Standardized Indirect Effects (Group number 1 - Default model)

	ATW	OC	JS	JP
JS	,000	,000	,000	,000
JP	,309	,153	,000	,000
Y6	,334	,202	,291	,000
Y5	,430	,261	,375	,000
Y4	,447	,271	,390	,000
Y3	,352	,214	,307	,000
Y2	,459	,278	,401	,000
Y1	,346	,210	,302	,000
Z1.1	,263	,130	,000	,000
Z1.2	,414	,205	,000	,000
Z1.3	,376	,186	,000	,000
Z1.4	,447	,221	,000	,000
Z1.5	,313	,155	,000	,000
Z1.6	,380	,188	,000	,000
X2.1	,000	,000	,000	,000
X2.2	,000	,000	,000	,000
X2.3	,000	,000	,000	,000
X1.1	,000	,000	,000	,000

	ATW	OC	JS	JP
X1.2	,000	,000	,000	,000
X1.3	,000	,000	,000	,000
X1.4	,000	,000	,000	,000
X1.5	,000	,000	,000	,000
X1.6	,000	,000	,000	,000
X1.7	,000	,000	,000	,000
X1.8	,000	,000	,000	,000

Minimization History (Default model)

Iteration	Negative eigenvalues	Condition #	Smallest eigenvalue	Diameter	F	NTris	Ratio
0	e	8	-,648	9999,000	1197,703	0	9999,000
1	e	3	-,125	2,320	612,339	19	,504
2	e	0	117,115	1,732	335,245	5	,724
3	e	0	907,823	1,151	317,976	2	,000
4	e	0	192,523	,936	303,417	3	,000
5	e	0	60,898	,886	262,120	2	,000
6	e	0	125,466	,451	242,018	1	1,115
7	e	0	192,807	,184	240,584	1	1,073
8	e	0	221,875	,039	240,557	1	1,021
9	e	0	228,033	,002	240,557	1	1,002
10	e	0	228,213	,000	240,557	1	1,000

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	51	240,557	225	,227	1,069
Saturated model	276	,000	0		
Independence model	23	1227,526	253	,000	4,852

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	,159	,868	,838	,708
Saturated model	,000	1,000		
Independence model	,518	,332	,272	,305

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	,804	,780	,984	,982	,984
Saturated model	1,000		1,000		1,000
Independence model	,000	,000	,000	,000	,000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	,889	,715	,875
Saturated model	,000	,000	,000
Independence model	1,000	,000	,000

NCP

Model	NCP	LO 90	HI 90
Default model	15,557	,000	57,020
Saturated model	,000	,000	,000
Independence model	974,526	869,087	1087,476

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	1,795	,116	,000	,426
Saturated model	,000	,000	,000	,000
Independence model	9,161	7,273	6,486	8,115

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	,023	,000	,043	,990
Independence model	,170	,160	,179	,000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	342,557	364,811	490,726	541,726
Saturated model	552,000	672,436	1353,856	1629,856
Independence model	1273,526	1283,563	1340,348	1363,348

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	2,556	2,440	2,866	2,722
Saturated model	4,119	4,119	4,119	5,018
Independence model	9,504	8,717	10,347	9,579

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	146	155
Independence model	32	34