

Excerpt from the ASI-5 continued

Most responses are coded 0 (less) to 4 (more).

2,142 respondents and 42 questions.

D1MONTH	Number of days used alcohol in the past 30.
D1LIFE	Number of years used alcohol in your lifetime.
D2MONTH	Number of days used alcohol to intoxication/past 30.
D2LIFE	Number of years used alcohol to intoxication/lifetime.
D3MONTH	Number of days used heroin in the past 30.
D3LIFE	Number of years used heroin in your lifetime.
D4MONTH	Number of days used methadone in the past 30.
D4LIFE	Number of years used methadone in your lifetime.
D5MONTH	Number of days used opiates/analgesics in past 30.
D5LIFE	Number of years used opiates/analgesics in lifetime.
D6MONTH	Number of days used barbiturates in the past 30.
D6LIFE	Number of years used barbiturates in lifetime.
D7MONTH	Number of days used sedatives in the past 30.
D7LIFE	Number of years used sedatives in lifetime.
D8MONTH	Number of days used cocaine in the past 30.
D8LIFE	Number of years used cocaine in lifetime.
D9MONTH	Number of days used amphetamines in the past 30.
D9LIFE	Number of years used amphetamines in lifetime.
D10MONTH	Number of days used cannabis in the past 30.
D10LIFE	Number of years used cannabis in lifetime.
D11MONTH	Number of days used hallucinogens in the past 30.
D11LIFE	Number of years used hallucinogens in lifetime.
D12MONTH	Number of days used inhalants in the past 30.
D12LIFE	Number of years used inhalants in lifetime.
D13MONTH	More than 1 substance per day, past 30 days.
D13LIFE	Number of years used more than 1 substance per day in lifetime.
D15.	How long was your last period of voluntary abstinence (months)?
D17.	How many times have you had Alcohol DT's (LIFETIME)?
D18.	How many times have you overdosed on Drugs?
D19.	Number of times in your life treated for Alcohol Abuse
D20.	Number of times in your life treated for Drug Abuse
D21.	How many of these were detox only? - Alcohol Abuse
D22.	How many of these were detox only? - Drug Abuse
D23.	How much money spent on Alcohol, past 30 days
D24.	How much money spent on Drugs, past 30 days
D25.	Number of days treated as outpatient for alcohol or da, past 30 days
D26.	Number of days experienced alcohol problems, past 30
D27.	Number of days experienced drug problems, past 30 days
D28.	Troubled or bothered by alcohol problems, past 30 days
D29.	Troubled or bothered by drug problems, past 30 days
D30.	How important is treatment for these alcohol problems?
D31.	How important is treatment for these drug problems?

PROC CALIS DATA=DITEMS CORR RESIDUAL MODIFICATION;

LINEQS

D1M = LD1MF1 F1 + E1,
D1L = LD1LF2 F2 + E2,
D2M = LD2MF1 F1 + E3,
D2L = LD2LF2 F2 + E4,
D3M = LD3MF3 F3 + E5,
D3L = LD3LF4 F4 + E6,
D4M = LD4MF3 F3 + E7,
D4L = LD4LF4 F4 + E8,
D5M = LD5MF3 F3 + E9,
D5L = LD5LF4 F4 + E10,
D6M = LD6MF3 F3 + E11,
D6L = LD6LF4 F4 + E12,
D7M = LD7MF3 F3 + E13,
D7L = LD7LF4 F4 + E14,
D8M = LD8MF3 F3 + E15,
D8L = LD8LF4 F4 + E16,
D9M = LD9MF3 F3 + E17,
D9L = LD9LF4 F4 + E18,
D10M = LD10MF3 F3 + E19,
D10L = LD10LF4 F4 + E20,
D11M = LD11MF3 F3 + E21,
D11L = LD11LF4 F4 + E22,
D12M = LD12MF3 F3 + E23,
D12L = LD12LF4 F4 + E24,
D13M = LD13MF3 F3 + E25,
D13L = LD13LF4 F4 + E26,
D15 = LD15F1 F1 + LD15F3 F3 + E27,
D17 = LD17F2 F2 + E28,
D18 = LD18F4 F4 + E29,
D19 = LD19F2 F2 + E30,
D20 = LD20F4 F4 + E31,
D21 = LD21F2 F2 + E32,
D22 = LD22F4 F4 + E33,
D23 = LD23F1 F1 + E34,
D24 = LD24F2 F2 + E35,
D25 = LD25F1 F1 + LD25F3 F3 + E36,
D26 = LD26F1 F1 + E37,
D27 = LD27F3 F3 + E38,
D28 = LD28F1 F1 + E39,
D29 = LD29F3 F3 + E40,
D30 = LD30F1 F1 + E41,
D31 = LD31F3 F3 + E42;

STD

F1=1,
F2=1,
F3=1,
F4=1,
E1-E42=VARE1-VARE42;

COV

F1 F2 = CF1F2,
F3 F4 = CF3F4,
F1 F3 = CF1F3,
F2 F4 = CF2F4;

VAR D1M D1L D2M D2L D3M D3L D4M D4L D5M D5L D6M D6L D7M D7L D8M D8L D9M D9L
D10M D10L D11M D11L D12M D12L D13M D13L D15 D17 D18 D19 D20 D21 D22 D23
D24 D25 D26 D27 D28 D29 D30 D31;

RUN;

From the first page of output in SAS:

The 42 Endogenous Variables

Manifest	D1M	D1L	D2M	D2L	D3M	D3L	D4M	D4L	D5M
	D5L	D6M	D6L	D7M	D7L	D8M	D8L	D9M	D9L
	D10M	D10L	D11M	D11L	D12M	D12L	D13M	D13L	D15
	D17	D18	D19	D20	D21	D22	D23	D24	D25
Latent	D26	D27	D28	D29	D30	D31			

The 46 Exogenous Variables

Manifest									
Latent	F1	F2	F3	F4					
Error	E1	E2	E3	E4	E5	E6	E7	E8	E9
	E10	E11	E12	E13	E14	E15	E16	E17	E18
	E19	E20	E21	E22	E23	E24	E25	E26	E27
	E28	E29	E30	E31	E32	E33	E34	E35	E36
	E37	E38	E39	E40	E41	E42			

Squared Multiple Correlations

	Variable	Error Variance	Total Variance	R-Square
1	D1M	0.10102	1.00989	0.9000
2	D1L	0.14036	1.03697	0.8646
3	D2M	0.07091	1.01022	0.9298
4	D2L	0.12738	1.03751	0.8772
5	D3M	0.90793	1.00113	0.0931
6	D3L	0.75449	1.02842	0.2664
7	D4M	0.93786	1.00075	0.0628
8	D4L	0.85384	1.01686	0.1603
9	D5M	0.98044	1.00024	0.0198
10	D5L	0.80228	1.02284	0.2156
11	D6M	0.99914	1.00001	0.000865
12	D6L	0.89447	1.01215	0.1163
13	D7M	0.97229	1.00035	0.0280
14	D7L	0.81446	1.02143	0.2026
15	D8M	0.63321	1.00445	0.3696
16	D8L	0.75831	1.02794	0.2623
17	D9M	0.99864	1.00002	0.00138
18	D9L	0.84855	1.01750	0.1660
19	D10M	0.93324	1.00085	0.0676
20	D10L	0.80288	1.02279	0.2150
21	D11M	0.99520	1.00006	0.00486
22	D11L	0.92123	1.00907	0.0870
23	D12M	0.99995	1.00000	0.000049
24	D12L	0.97201	1.00322	0.0311
25	D13M	0.69313	1.00368	0.3094
26	D13L	0.54786	1.05224	0.4793
27	D15	0.99569	1.00079	0.00509
28	D17	0.95222	1.00204	0.0497
29	D18	0.82389	1.02036	0.1926
30	D19	0.81864	1.00777	0.1877
31	D20	0.51233	1.05647	0.5151
32	D21	0.91146	1.00379	0.0920
33	D22	0.68763	1.03611	0.3363
34	D23	0.34016	1.00725	0.6623
35	D24	0.86547	1.00571	0.1394
36	D25	0.69756	1.05852	0.3410
37	D26	0.64750	1.00389	0.3550
38	D27	0.28242	1.00875	0.7200
39	D28	0.65843	1.00377	0.3440
40	D29	0.15058	1.01034	0.8510
41	D30	0.64561	1.00391	0.3569
42	D31	0.18214	1.00994	0.8196

Page 27 contains various statistics for checking the fit of your model:

Covariance Structure Analysis: Maximum Likelihood Estimation

Fit Function	12.4606	
Goodness of Fit Index (GFI)	0.5734	
GFI Adjusted for Degrees of Freedom (AGFI)	0.5262	
Root Mean Square Residual (RMR)	0.1452	
Parsimonious GFI (Mulaik, 1989)	0.5415	
Chi-Square	26678.1713	
Chi-Square DF	813	<- tests H0: model fits
Pr > Chi-Square	<.0001	(often see if chi/df < 2)
Independence Model Chi-Square	52093	
Independence Model Chi-Square DF	861	
RMSEA Estimate	0.1219	
RMSEA 90% Lower Confidence Limit	.	
RMSEA 90% Upper Confidence Limit	.	
ECVI Estimate	12.5464	
ECVI 90% Lower Confidence Limit	.	
ECVI 90% Upper Confidence Limit	.	
Probability of Close Fit	.	
Bentler's Comparative Fit Index	0.4951	<- want the two fit indices
Normal Theory Reweighted LS Chi-Square	33447.4162	greater than 0.9
Akaike's Information Criterion	25052.1713	
Bozdogan's (1987) CAIC	19629.8717	
Schwarz's Bayesian Criterion	20442.8717	
McDonald's (1989) Centrality	0.0024	
Bentler & Bonett's (1980) Non-normed Index	0.4653	
Bentler & Bonett's (1980) NFI	0.4879	
James, Mulaik, & Brett (1982) Parsimonious NFI	0.4607	
Z-Test of Wilson & Hilferty (1931)	133.1762	
Bollen (1986) Normed Index Rho1	0.4576	
Bollen (1988) Non-normed Index Delta2	0.4956	
Hoelter's (1983) Critical N	72	

Manifest Variable Equations with Estimates

D1M	=	0.9533*F1	+	1.0000	E1	D10L	=	0.4689*F4	+	1.0000	E20
Std Err		0.0163				Std Err		0.0222			LD10LF4
t Value		58.5769				t Value		21.1230			
D1L	=	0.9469*F2	+	1.0000	E2	D11M	=	0.0697*F3	+	1.0000	E21
Std Err		0.0176				Std Err		0.0223			LD11MF3
t Value		53.8997				t Value		3.1247			
D2M	=	0.9692*F1	+	1.0000	E3	D11L	=	0.2964*F4	+	1.0000	E22
Std Err		0.0161				Std Err		0.0229			LD11LF4
t Value		60.3438				t Value		12.9286			
D2L	=	0.9540*F2	+	1.0000	E4	D12M	=	0.00697*F3	+	1.0000	E23
Std Err		0.0175				Std Err		0.0223			LD12MF3
t Value		54.5208				t Value		0.3123			
D3M	=	0.3053*F3	+	1.0000	E5	D12L	=	0.1767*F4	+	1.0000	E24
Std Err		0.0218				Std Err		0.0232			LD12LF4
t Value		14.0109				t Value		7.6054			
D3L	=	0.5234*F4	+	1.0000	E6	D13M	=	0.5573*F3	+	1.0000	E25
Std Err		0.0219				Std Err		0.0205			LD13MF3
t Value		23.8977				t Value		27.2188			
D4M	=	0.2508*F3	+	1.0000	E7	D13L	=	0.7102*F4	+	1.0000	E26
Std Err		0.0220				Std Err		0.0206			LD13LF4
t Value		11.4175				t Value		34.4674			
D4L	=	0.4038*F4	+	1.0000	E8	D15	=	0.0236*F1	+	0.0663*F3	
Std Err		0.0225				Std Err		0.0220			LD15F1
t Value		17.9336				t Value		1.0709			0.0223 LD15F3
D5M	=	0.1407*F3	+	1.0000	E9	D17	=	0.2232*F2	+	1.0000	E28
Std Err		0.0222				Std Err		0.0221			LD17F2
t Value		6.3332				t Value		10.1119			
D5L	=	0.4696*F4	+	1.0000	E10	D18	=	0.4433*F4	+	1.0000	E29
Std Err		0.0222				Std Err		0.0223			LD18F4
t Value		21.1577				t Value		19.8498			
D6M	=	0.0294*F3	+	1.0000	E11	D19	=	0.4349*F2	+	1.0000	E30
Std Err		0.0223				Std Err		0.0213			LD19F2
t Value		1.3177				t Value		20.4310			
D6L	=	0.3430*F4	+	1.0000	E12	D20	=	0.7377*F4	+	1.0000	E31
Std Err		0.0228				Std Err		0.0204			LD20F4
t Value		15.0709				t Value		36.1875			
D7M	=	0.1675*F3	+	1.0000	E13	D21	=	0.3039*F2	+	1.0000	E32
Std Err		0.0222				Std Err		0.0218			LD21F2
t Value		7.5565				t Value		13.9156			
D7L	=	0.4549*F4	+	1.0000	E14	D22	=	0.5903*F4	+	1.0000	E33
Std Err		0.0223				Std Err		0.0215			LD22F4
t Value		20.4263				t Value		27.4786			
D8M	=	0.6093*F3	+	1.0000	E15	D23	=	0.8168*F1	+	1.0000	E34
Std Err		0.0201				Std Err		0.0179			LD23F1
t Value		30.3244				t Value		45.5433			
D8L	=	0.5193*F4	+	1.0000	E16	D24	=	-0.3745*F2	+	1.0000	E35
Std Err		0.0219				Std Err		0.0216			LD24F2
t Value		23.6842				t Value		-17.3656			
D9M	=	0.0371*F3	+	1.0000	E17	D25	=	-0.5514*F1	+	-0.2129*F3	
Std Err		0.0223				Std Err		0.0203			LD25F1
t Value		1.6641				t Value		-27.1670			0.0191 LD25F3
D9L	=	0.4110*F4	+	1.0000	E18	D26	=	0.5970*F1	+	1.0000	E37
Std Err		0.0225				Std Err		0.0199			LD26F1
t Value		18.2831				t Value		29.9420			
D10M	=	0.2600*F3	+	1.0000	E19	D27	=	0.8522*F3	+	1.0000	E38
Std Err		0.0219				Std Err		0.0177			LD27F3
t Value		11.8524				t Value		48.1006			

D28 = 0.5877*F1 + 1.0000 E39
 Std Err 0.0200 LD28F1
 t Value 29.3745
 D29 = 0.9272*F3 + 1.0000 E40
 Std Err 0.0168 LD29F3
 t Value 55.1692
 D30 = 0.5986*F1 + 1.0000 E41
 Std Err 0.0199 LD30F1
 t Value 30.0400
 D31 = 0.9098*F3 + 1.0000 E42
 Std Err 0.0170 LD31F3
 t Value 53.4410

Covariances Among Exogenous Variables

Var1	Var2	Parameter	Estimate	Standard Error	t Value
F1	F2	CF1F2	0.38406	0.01900	20.21
F1	F3	CF1F3	0.04922	0.01789	2.75
F2	F4	CF2F4	0.28161	0.01801	15.63
F3	F4	CF3F4	0.64211	0.01532	41.91

Distribution of Asymptotically Standardized Residuals

Each * Represents 5 Residuals

-----Range-----	Freq	Percent	
-21.22411 -20.10705	2	0.22	
-20.10705 -18.98999	1	0.11	
-18.98999 -17.87294	2	0.22	
-17.87294 -16.75588	7	0.78	*
-16.75588 -15.63882	11	1.22	**
-15.63882 -14.52176	6	0.66	*
-14.52176 -13.40470	30	3.32	*****
-13.40470 -12.28764	18	1.99	***
-12.28764 -11.17058	23	2.55	****
-11.17058 -10.05353	23	2.55	****
-10.05353 -8.93647	29	3.21	*****
-8.93647 -7.81941	26	2.88	*****
-7.81941 -6.70235	33	3.65	*****
-6.70235 -5.58529	32	3.54	*****
-5.58529 -4.46823	35	3.88	*****
-4.46823 -3.35118	48	5.32	*****
-3.35118 -2.23412	59	6.53	*****
-2.23412 -1.11706	70	7.75	*****
-1.11706 0	116	12.85	*****
0 1.11706	73	8.08	*****
1.11706 2.23412	42	4.65	*****
2.23412 3.35118	30	3.32	*****
3.35118 4.46823	27	2.99	*****
4.46823 5.58529	19	2.10	***
5.58529 6.70235	17	1.88	***
6.70235 7.81941	18	1.99	***
7.81941 8.93647	13	1.44	**
8.93647 10.05353	24	2.66	****
10.05353 11.17058	9	1.00	*
11.17058 12.28764	4	0.44	
12.28764 13.40470	8	0.89	*
13.40470 14.52176	9	1.00	*
14.52176 15.63882	9	1.00	*
15.63882 16.75588	4	0.44	
16.75588 17.87294	5	0.55	*
17.87294 18.98999	1	0.11	
18.98999 20.10705	0	0.00	
20.10705 21.22411	2	0.22	
21.22411 22.34117	5	0.55	*
22.34117 23.45823	0	0.00	
23.45823 24.57529	1	0.11	
24.57529 25.69234	0	0.00	
25.69234 26.80940	3	0.33	
26.80940 27.92646	1	0.11	
27.92646 29.04352	0	0.00	
29.04352 30.16058	2	0.22	
30.16058 31.27764	2	0.22	
31.27764 32.39470	1	0.11	
32.39470 33.51175	1	0.11	
33.51175 34.62881	1	0.11	
34.62881 35.74587	1	0.11	