

Comparisons of Adolescents and Adults by ASAM profile using GAIN data from the Drug Outcome Monitoring Study (DOMS): Preliminary Data Tables

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Overview

The Drug Outcome Monitoring Study (DOMS) was conducted from 1995-1997 to develop bench marks for program planning and evaluation. Its goals were to a) design an outcome monitoring system that could be used in an ASAM type continuum of care, b) pilot test the system to demonstrate its feasibility, and c) conduct exploratory analysis of "case mix" to predict outcomes.

This file contains preliminary data and norms from DOMS. Tables 1 and 2 compare the characteristics of adolescents and adults and by level of care. Tables 3 and 4 review their respective norms on the GAIN. Appendix A gives the definition and interpretation of these scales. Table 5 gives a summary of the change between the 3 months prior to intake and the 3 months after discharge (including effect size) for the GAIN functioning and service utilization scales. Appendix B gives a detailed breakdown by level of care and Appendix C has a summary table of effect sizes by detailed level of care.

Figures 1-4 graphically represent the data from Table 1 by adolescent level of care. Figures 5 and 6 shows to pre to post test change in the GAIN functioning and service utilization scales by adolescent level of care and Figure 7 converts these differences into effect sizes. For the latter, negative means less and positive more. For functioning scales negative is good, for functioning scales the interpretation is not always straight forward (i.e., someone who is sick should seek help). Figures 8-14 show the parallel information for adults by level of care.

Method

- * Data collected from 8/96 to 12/97
- * Interviews and locator information collected at intake in person by clinical staff and 90 days after discharge from treatment system via telephone by research staff.
- * Assessments used Global Appraisal of Individual Needs (GAIN)
 - * 271 adolescents from 10 adolescent treatment units
 - * 465 adults from 11 adult treatment units
- * Total columns weighted post hoc to reflect state modality distributions
- * Follow-up conducted with 424 of 454 (93.4%) who had been discharged from the treatment system for 3+ months by the end of the study.

Table 1. Adolescent Characteristics

Treatment Modality	OP	STR	LTR	Total
Clients	N=54	N=119	N=98	N=271
Variable				
Female	25.9%	56.3%	14.3%	35.1%
Non-white	24.1%	29.4%	34.7%	30.3%
Single parent family	44.4%	41.2%	42.9%	42.4%
Employed/In school	61.1%	58.8%	59.2%	59.4%
Married/Living as married	2.0%	0.8%	1.0%	1.1%
Current CJ Involvement	74.1%	63.9%	82.7%	72.7%
Ever Homeless	18.5%	18.5%	17.3%	18.1%
Weekly Alcohol Use in Home	20.4%	26.9%	21.4%	23.6%
Weekly Drug Use in Home	5.6%	16.8%	12.2%	12.9%
Been Victimized	64.8%	77.3%	67.3%	71.2%
Age <15 years	18.5%	15.1%	11.2%	14.4%
15-18 years	81.5%	84.8%	88.8%	85.6%
19-29 years	NA	NA	NA	NA
30+ years	NA	NA	NA	NA
Controlled Environment	46.3%	68.9%	76.5%	67.2%
Prior SA Treatment Episodes				
None	59.3%	25.2%	22.4%	31.0%
One	24.1%	29.4%	35.7%	30.6%
2+ episodes	16.7%	45.4%	41.8%	38.4%
Drug Use: (Past 90 Days)				
Weekly Alcohol Use	3.8%	36.4%	27.8%	26.9%
Weekly Marijuana Use	40.7%	59.7%	68.4%	59.0%
Weekly Crack/Cocaine Use	1.9%	10.9%	12.2%	9.6%
Weekly Heroin/Opioid Use	1.9%	7.6%	3.1%	4.8%
Weekly Other Drug Use	5.6%	16.8%	14.3%	13.7%
Alcohol Severity:				
No use	1.9%	2.5%	0.0%	1.5%
Use	31.5%	18.5%	19.4%	21.4%
Abuse	51.9%	37.0%	33.7%	38.7%
Dependence	0.0%	5.0%	7.1%	4.8%
Physiological Dependence	14.8%	37.0%	39.8%	33.6%

T1 - character_adol

Treatment Modality Clients	OP N=54	STR N=119	LTR N=98	Total N=271
Drug Use Severity:				
No use	0.0%	1.7%	0.0%	0.7%
Use	24.1%	5.0%	2.0%	7.7%
Abuse	33.3%	30.3%	15.3%	25.5%
Dependence	3.7%	8.4%	7.1%	7.0%
Physiological Dependence	38.9%	54.6%	75.5%	59.0%
Biomedical:				
Health Distress ¹	48.1%	58.8%	63.9%	58.6%
Pregnant within Past Year ²	7.1%	16.4%	7.1%	13.7%
Mental Health:				
Acute Mental Distress ³	18.9%	40.0%	37.6%	34.4%
Acute Traumatic Stress ^{4,5}	22.2%	24.1%	50.0%	35.7%
ADHD ^{4,6}	55.1%	48.0%	60.2%	55.6%
Conduct Disorder ^{4,7}	34.7%	48.0%	65.9%	52.9%
HIV Risk: (Past 90 Days)				
Sexually Active	61.1%	73.1%	72.4%	70.5%
Multiple Sexual Partners	25.9%	39.5%	39.8%	36.9%
Had Sex without any type of Protection	40.7%	47.9%	48.0%	46.5%
Any Needle Use	0.0%	4.2%	3.1%	3.0%
Any Needle Sharing	0.0%	2.5%	0.0%	1.1%
Length of Stay:⁸				
Less than 1 month	4.7%	26.9%	36.7%	26.9%
1 to 2 months	14.0%	48.1%	19.4%	30.6%
3+ months	81.4%	25.0%	43.9%	42.4%
Days of Treatment After System Discharge				
None	70.6%	58.3%	48.7%	55.7%
1-6	8.8%	10.4%	12.4%	11.1%
7-12	5.9%	7.8%	12.4%	9.5%
13-44	5.9%	14.8%	15.0%	13.7%
45-90	8.8%	8.7%	11.5%	9.9%

¹ Percents that scored in the Clinical/Acute ranges of the Health Distress Index

² Percent of women only

³ Acute range of GMDI (7+ symptoms on M1a1-4, M1b1-6, M1c2, M1d1-10)

⁴ N=187 for adolescents since these scales are missing from the P90s.

⁵ Acute range of the TSI (5+ symptoms on M2a-p)

⁶ Clinical or acute range of the ADDI (6+ on M3a1-19 and/or 6+ M3b1-16 and past six months)

⁷ Clinical or acute range of the CDI (3+ on M3b1-16 and past 3 months)

⁸ N=245 for adolescents due to missing discharge dates (clients still in treatment, refused to be in study, etc)

Table 2. Adult Characteristics

Treatment Modality	OP	Metha-	STR	TASC	Resid	Total
Clients	N=41	done N=56	N=69	resid N=115	N=184	N=465
Variable						
Female	41.5%	62.5%	31.9%	0.0%	38.0%	31.0%
Non-white	70.7%	89.3%	97.1%	89.6%	87.0%	88.0%
Single parent family	N/A	N/A	N/A	N/A	N/A	N/A
Employed/In school	48.8%	44.6%	34.8%	7.8%	15.2%	22.8%
Married/Living as married	29.3%	25.0%	18.8%	26.1%	16.8%	21.5%
Current CJ Involvement	36.6%	17.9%	14.5%	80.9%	23.4%	36.8%
Ever Homeless	7.3%	28.6%	44.9%	33.9%	47.3%	37.8%
Weekly Alcohol Use in Home	19.5%	10.7%	23.2%	7.0%	27.2%	18.9%
Weekly Drug Use in Home	4.9%	23.2%	23.2%	4.3%	28.8%	19.1%
Been Victimized	61.0%	69.6%	78.3%	82.6%	82.1%	78.3%
Age <15 years	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15-18 years	0.0%	0.0%	1.4%	0.9%	3.3%	1.7%
19-29 years	36.6%	30.4%	11.6%	41.7%	39.7%	34.6%
30+ years	63.4%	69.6%	87.0%	57.4%	57.1%	63.7%
Controlled Environment	19.5%	46.4%	50.7%	85.2%	71.7%	64.3%
Prior SA Treatment Episodes						
None	19.5%	28.6%	11.6%	34.8%	12.0%	20.2%
One	46.3%	23.2%	18.8%	37.4%	29.9%	30.8%
2+ episodes	34.1%	48.2%	69.6%	27.8%	58.2%	49.0%
Drug Use: (Past 90 Days)						
Weekly Alcohol Use	28.9%	25.0%	63.6%	13.4%	58.0%	41.3%
Weekly Marijuana Use	17.1%	21.4%	21.7%	7.8%	35.9%	23.4%
Weekly Crack/Cocaine Use	17.1%	37.5%	66.7%	10.4%	64.1%	43.9%
Weekly Heroin/Opioid Use	0.0%	83.9%	21.7%	10.4%	22.8%	24.9%
Weekly Other Drug Use	0.0%	12.5%	13.0%	1.7%	16.3%	10.3%
Alcohol Severity:						
No use	2.4%	21.4%	7.2%	2.6%	4.9%	6.5%
Use	26.8%	33.9%	17.4%	20.0%	23.4%	23.2%
Abuse	43.9%	17.9%	37.7%	24.3%	25.0%	27.5%
Dependence	4.9%	1.8%	2.9%	0.9%	6.0%	3.7%
Physiological Dependence	22.0%	25.0%	34.8%	52.2%	40.8%	39.1%

T2 - character_adult

Treatment Modality Clients	OP N=41	Metha- done N=56	STR N=69	TASC resid N=115	Resid N=184	Total N=465
Drug Use Severity:						
No use	7.3%	0.0%	0.0%	3.5%	0.5%	1.7%
Use	24.4%	1.8%	2.9%	13.0%	9.2%	9.7%
Abuse	17.1%	3.6%	11.6%	6.1%	8.7%	8.6%
Dependence	9.8%	1.8%	8.7%	3.5%	1.6%	3.9%
Physiological Dependence	41.5%	92.9%	76.8%	73.9%	79.9%	76.1%
Biomedical:						
Health Distress ¹	41.0%	85.5%	84.1%	56.1%	79.7%	71.9%
Pregnant within Past Year ²	47.1%	45.7%	18.2%	0.0%	32.9%	35.4%
Mental Health:						
Acute Mental Distress ³	15.0%	47.3%	43.9%	39.4%	44.1%	40.7%
Acute Traumatic Stress ^{4,5}	10.0%	48.2%	NA	65.6%	NA	50.7%
ADHD ^{4,6}	15.0%	37.5%	NA	44.3%	NA	37.2%
Conduct Disorder ^{4,7}	0.0%	19.6%	NA	42.6%	NA	27.0%
HIV Risk: (Past 90 Days)						
Sexually Active	82.9%	85.7%	78.2%	24.3%	82.1%	67.7%
Multiple Sexual Partners	26.8%	25.0%	33.3%	7.8%	41.3%	28.6%
Had Sex without any type of Protection	56.1%	60.7%	47.8%	17.4%	56.0%	45.8%
Any Needle Use	2.4%	19.6%	15.9%	5.2%	5.4%	8.4%
Any Needle Sharing	0.0%	1.8%	4.3%	0.9%	1.1%	1.5%
Length of Stay:⁸						
Less than 1 month	11.1%	0.0%	97.1%	5.4%	40.2%	35.0%
1 to 2 months	38.4%	3.4%	2.9%	7.1%	48.3%	26.0%
3+ months	50.0%	96.6%	0.0%	87.5%	11.5%	39.0%
Days of Treatment After System Discharge						
None	71.9%	57.7%	64.2%	47.1%	65.7%	60.5%
1-6	15.6%	0.0%	6.0%	2.9%	1.8%	3.8%
7-12	0.0%	0.0%	4.5%	7.7%	3.0%	4.1%
13-44	6.3%	3.8%	14.9%	26.9%	12.0%	15.4%
45-90	6.3%	38.5%	10.4%	15.4%	17.5%	16.2%

¹ Percents that scored in the Clinical/Acute ranges of the Health Distress Index

² Percent of women only

³ Acute range of GMDI (7+ symptoms on M1a1-4, M1b1-6, M1c2, M1d1-10)

⁴ N=137 for adults, since these scales are missing from the P90s.

⁵ Acute range of the TSI (5+ symptoms on M2a-p)

⁶ Clinical or acute range of the ADDI (6+ on M3a1-19 and/or 6+ M3b1-16 and past six months)

⁷ Clinical or acute range of the CDI (3+ on M3b1-16 and past 3 months)

⁸ N=371 for adults, due to missing discharge dates (clients still in treatment, refused to be in study, etc)

Table 3. ASAM Placement Profile for Adolescents/a

ASAM Criteria/Gain Scale	n	K	Alpha	Mean	Std. Dev.	% Clinical	% Acute
A. Diagnosis							
Substance Problem Index (SPI)	269	16	0.88	7.61	4.78	57.4	34.1
B1. Intoxication and Withdrawal							
Substance Frequency Index (SFI6p)	268	6	0.87	0.10	0.14	59.2	25.7
Recency of Use\b	270	1	N/A	3.81	1.07	81.2	7.5
Days of Opioid Use\b	270	1	N/A	0.87	5.97	4.3	0.3
Current (past week) Withdrawal Index (CWI)	270	22	0.94	1.57	3.36	27.1	2.6
B2. Biomedical							
Health Distress Index (HDI8)\c	267	8	0.71	3.02	2.22	39.1	10.4
Health Problem Index (HPI3p)	259	3	0.56	0.13	0.13	43.7	32.0
B3. Psychological							
General Mental Distress Index (GMDI)	260	21	0.95	3.04	5.08	7.6	20.7
Behavior Complexity Index (BCI)	216	32	0.94	9.76	8.70	40.1	24.4
Emotional Problem Index (EPI7p)	265	7	0.80	0.23	0.22	15.2	62.3
B4. Treatment Acceptance and Resistance							
Treatment Resistance Index (TRI)\d	266	4	N/A	0.85	0.96	48.3	2.7
Treatment Motivation Index (TMI)\d	267	5	N/A	1.29	1.35	51.5	42.4
B5. Relapse Potential							
Self Efficacy Index (SEI)	266	5	0.76	3.67	1.65	29.0	1.0
Problem Orientation Index (POI)	267	5	0.73	2.72	1.74	24.9	25.1
B6. Environment							
Environmental Risk Index (ERI6)\e	263	18	0.79	26.30	10.13	81.3	13.0
General Social Support (GSSI)	216	9	0.81	6.35	2.54	17.4	7.1
Recovery Environment Risk Index (RERI7p)	270	7	0.44	0.18	0.08	26.0	72.3
Other							
Illegal Activities Index (IAI3p)	254	3	0.73	0.28	0.20	22.9	71.5
Employment Activity Index (VI4p)	242	4	0.79	0.27	0.26	25.0	49.5
Training Activity Index (TI3p)	198	3	0.87	0.42	0.37	0.1	64.8

^a The differing N sizes are due to clients receiving different versions of the assessment. There was the full assessment and two shorted assessments. In the two shorter assessments, some of the above scales were never given to the clients. Clinical and acute score ranges vary by scale, see definitions table.

^b Single Item, Alpha not applicable or calculable.

^c Due to version difference, 153 got all eight items. For the others in the sample, the eighth item was imputed from the average response to the other seven items. The alpha for the 153 was .71.

^d Formative index of risk factors where alpha is not applicable because intercorrelation not expected, if calculated it would have been TRI=.36 and TMI=.67.

^e Due to version difference, only 150 got all 18 items. This scale contains three subscales of six items each. For those with only five items, the sixth item was imputed from the average response to the other 5 items. For the 150 with all 18 items, the alpha was still .79.

Table 4. ASAM Placement Profile for Adults^a

ASAM Criteria/Gain Scale	n	K	Alpha	Mean	Std. Dev.	% Clinical	% Acute
A. Diagnosis							
Substance Problem Index (SPI)	457	16	0.91	8.65	5.55	39.5	49.5
B1. Intoxication and Withdrawal							
Substance Frequency Index (SFI6p)	453	6	0.88	0.15	0.21	42.6	32.4
Recency of Use ^b	465	1	N/A	4.10	1.48	59.8	22.2
Days of Opioid Use ^b	465	1	N/A	12.60	29.41	5.6	14.0
Current (past week) Withdrawal Index (CWI)	449	22	0.94	4.74	5.97	43.1	16.1
B2. Biomedical							
Health Distress Index (HDI8) ^c	460	8	0.76	3.56	2.94	34.0	19.7
Health Problem Index (HPI3p)	410	3	0.75	0.12	0.17	25.7	30.2
B3. Psychological							
General Mental Distress Index (GMDI)	436	21	0.96	3.48	5.73	6.9	24.0
Behavior Complexity Index (BCI)	227	32	0.97	3.17	6.36	18.1	3.0
Emotional Problem Index (EPI7p)	457	7	0.80	0.17	0.20	39.0	42.1
B4. Treatment Acceptance and Resistance							
Treatment Resistance Index (TRI) ^d	458	4	N/A	0.68	0.96	34.2	7.2
Treatment Motivation Index (TMI) ^d	459	5	N/A	2.37	1.52	57.5	17.1
B5. Relapse Potential							
Self Efficacy Index (SEI)	457	5	0.71	3.20	1.80	39.4	5.2
Problem Orientation Index (POI)	457	5	0.48	3.13	1.63	26.2	17.0
B6. Environment							
Environmental Risk Index (ERI6) ^e	449	18	0.81	17.72	9.15	69.7	1.3
General Social Support (GSSI)	446	9	0.83	4.41	2.92	18.3	25.3
Recovery Environment Risk Index (RERI7p)	465	7	0.57	0.18	0.09	19.0	81.0
Other							
Illegal Activities Index (IAI3p)	446	3	0.82	0.15	0.20	52.0	28.1
Employment Activity Index (VI4p)	440	4	0.92	0.35	0.37	39.6	44.0
Training Activity Index (TI3p)	437	3	0.72	0.04	0.12	0.0	9.3

^a The differing N sizes are due to clients receiving different versions of the assessment. There was the full assessment and two shorted assessments. In the two shorter assessments, some of the above scales were never given to the clients. Clinical and acute score ranges vary by scale, see definitions table.

^b Single Item, Alpha not applicable or calculable.

^c Due to version difference, 376 got all eight items. For the others in the sample, the eighth item was imputed from the average response to the other seven items. The alpha for the 376 was .75.

^d Formative index of risk factors where alpha is not applicable because intercorrelation not expected, if calculated it would have been TRI=.43 and TMI=.46.

^e Due to version difference, only 376 got all 18 items. This scale contains three subscales of six items each. For those with only five items, the sixth item was imputed from the average response to the other 5 items. For the 376 with all 18 items, the a

Table 5. Weighted Comparison of GAIN Change Indices for Adolescents and Adults ^a

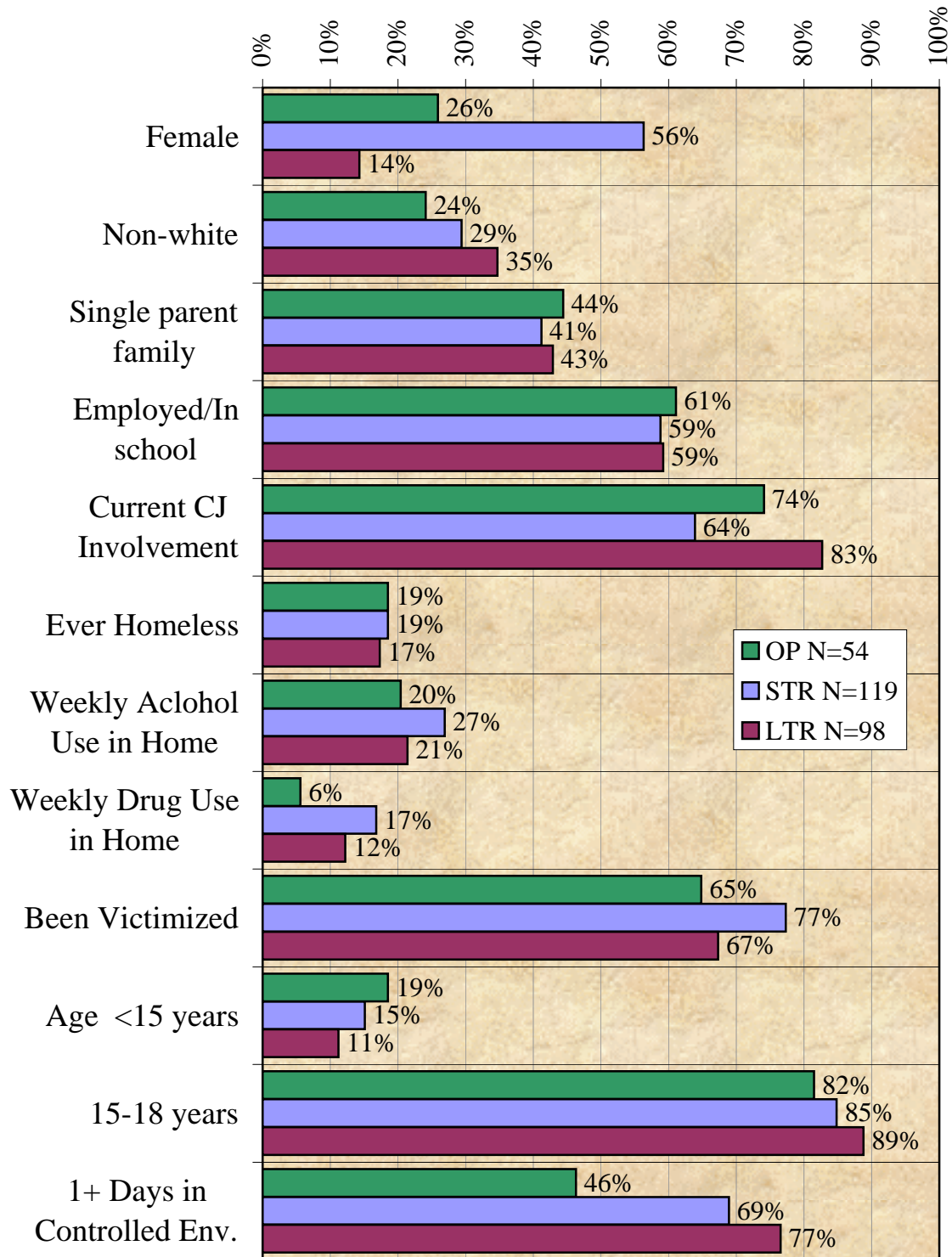
Functioning Indices	Time	Adolescent			Adult		
		Mean	Std. Dev.	Effect Size (d)	Mean	Std. Dev.	Effect Size (d)
Substance Frequency Index	Pre	0.12	0.15		0.12	0.19	
Substance Frequency Index	Post	0.08	0.12	-0.28	0.05	0.11	-0.39
Current Withdrawal Index	Pre	0.09	0.16		0.18	0.25	
Current Withdrawal Index	Post	0.09	0.21	0.00	0.08	0.18	-0.38
Health Problem Index	Pre	0.13	0.14		0.09	0.13	
Health Problem Index	Post	0.12	0.13	-0.08	0.10	0.15	0.06
Emotional Problem Index	Pre	0.27	0.22		0.15	0.19	
Emotional Problem Index	Post	0.24	0.20	-0.14	0.14	0.16	-0.03
Illegal Activity Index	Pre	0.29	0.21		0.13	0.18	
Illegal Activity Index	Post	0.26	0.23	-0.15	0.13	0.17	0.01

Utilization Indices	Time	Adolescent			Adult		
		Mean	Std. Dev.	Effect Size (d)	Mean	Std. Dev.	Effect Size (d)
Substance Abuse Treatment Index	Pre	0.10	0.24		0.05	0.14	
Substance Abuse Treatment Index	Post	0.08	0.17	-0.09	0.12	0.29	0.50
Physical Health Treatment Index	Pre	0.01	0.03		0.02	0.05	
Physical Health Treatment Index	Post	0.03	0.04	0.54	0.01	0.04	-0.11
Mental Health Treatment Index	Pre	0.02	0.04		0.01	0.04	
Mental Health Treatment Index	Post	0.01	0.04	-0.13	0.00	0.01	-0.15
Criminal Justice System Index	Pre	0.39	0.46		0.12	0.32	
Criminal Justice System Index	Post	0.55	0.49	0.34	0.18	0.38	0.19
Controlled Environment Index	Pre	0.19	0.34		0.05	0.17	
Controlled Environment Index	Post	0.37	0.45	0.53	0.04	0.16	-0.09
Employment Activity Index	Pre	0.27	0.25		0.36	0.40	
Employment Activity Index	Post	0.35	0.31	0.29	0.52	0.39	0.38
Training Activity Index	Pre	0.49	0.36		0.04	0.13	
Training Activity Index	Post	0.45	0.30	-0.10	0.11	0.23	0.53

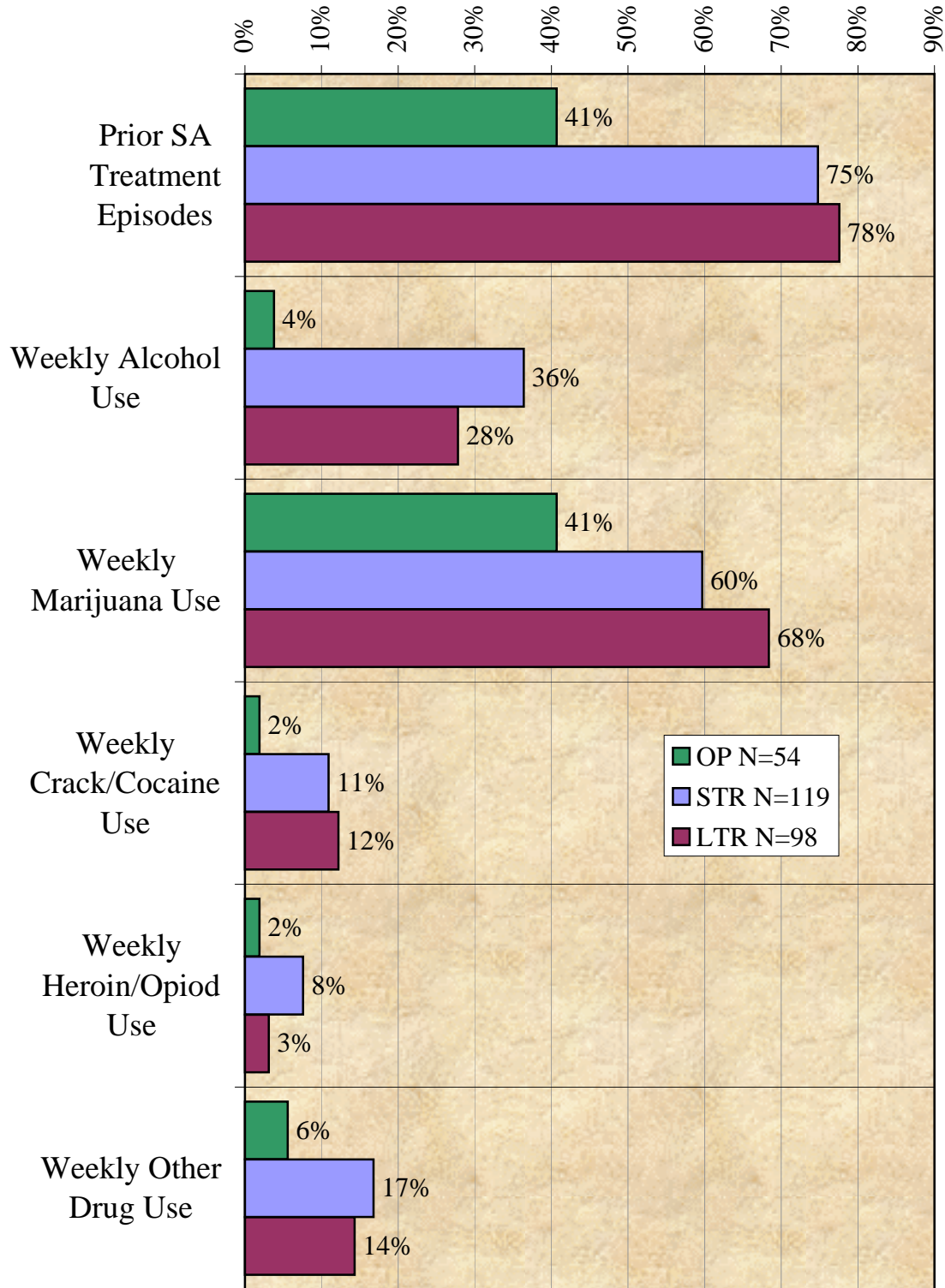
a/ Weighted within age by real distribution of state modalities (defacto giving the most weight to outpatient).

Source: Drug Outcome Monitoring Study (DOMS)

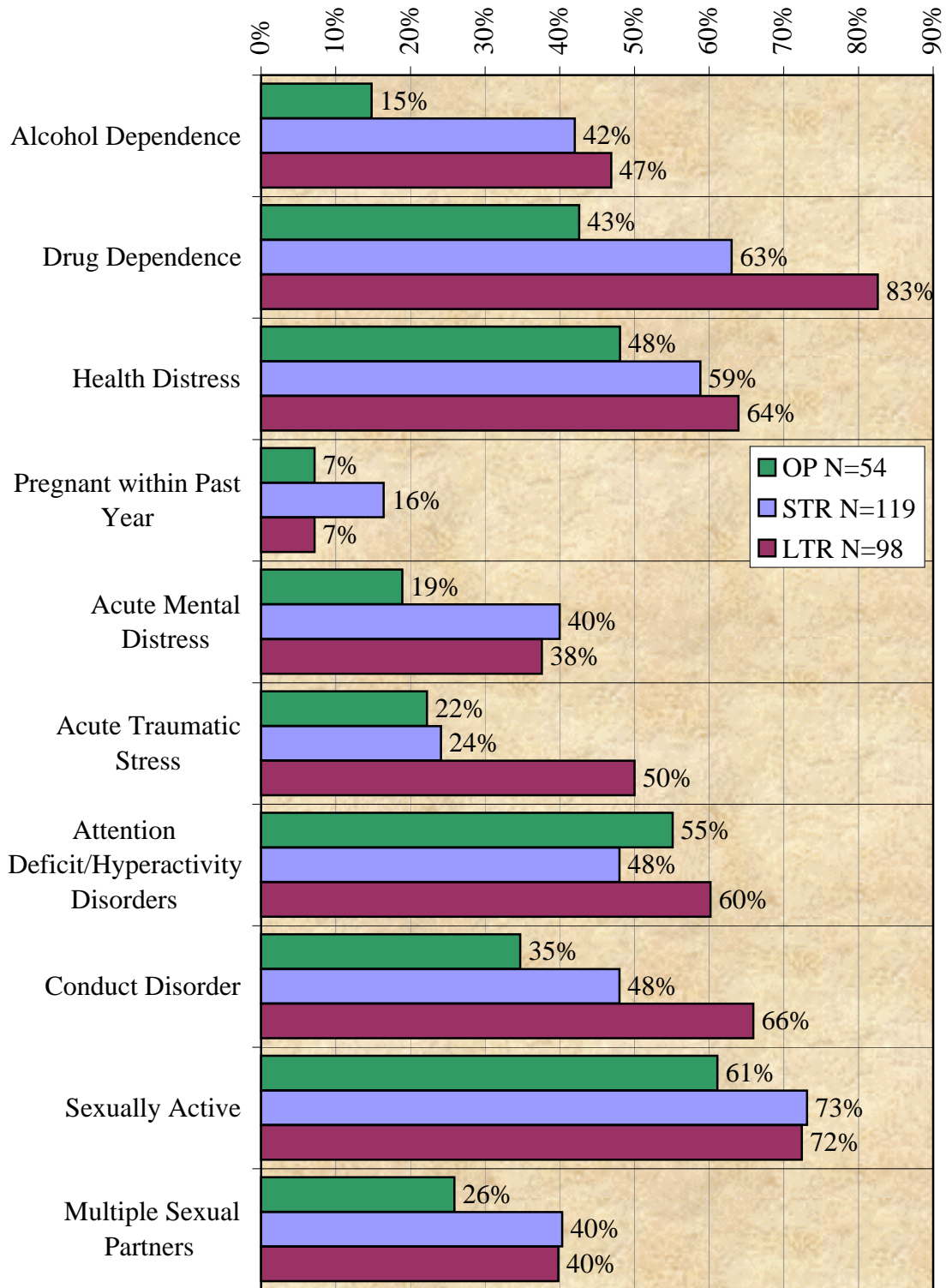
Adolescent Demographic Characteristics



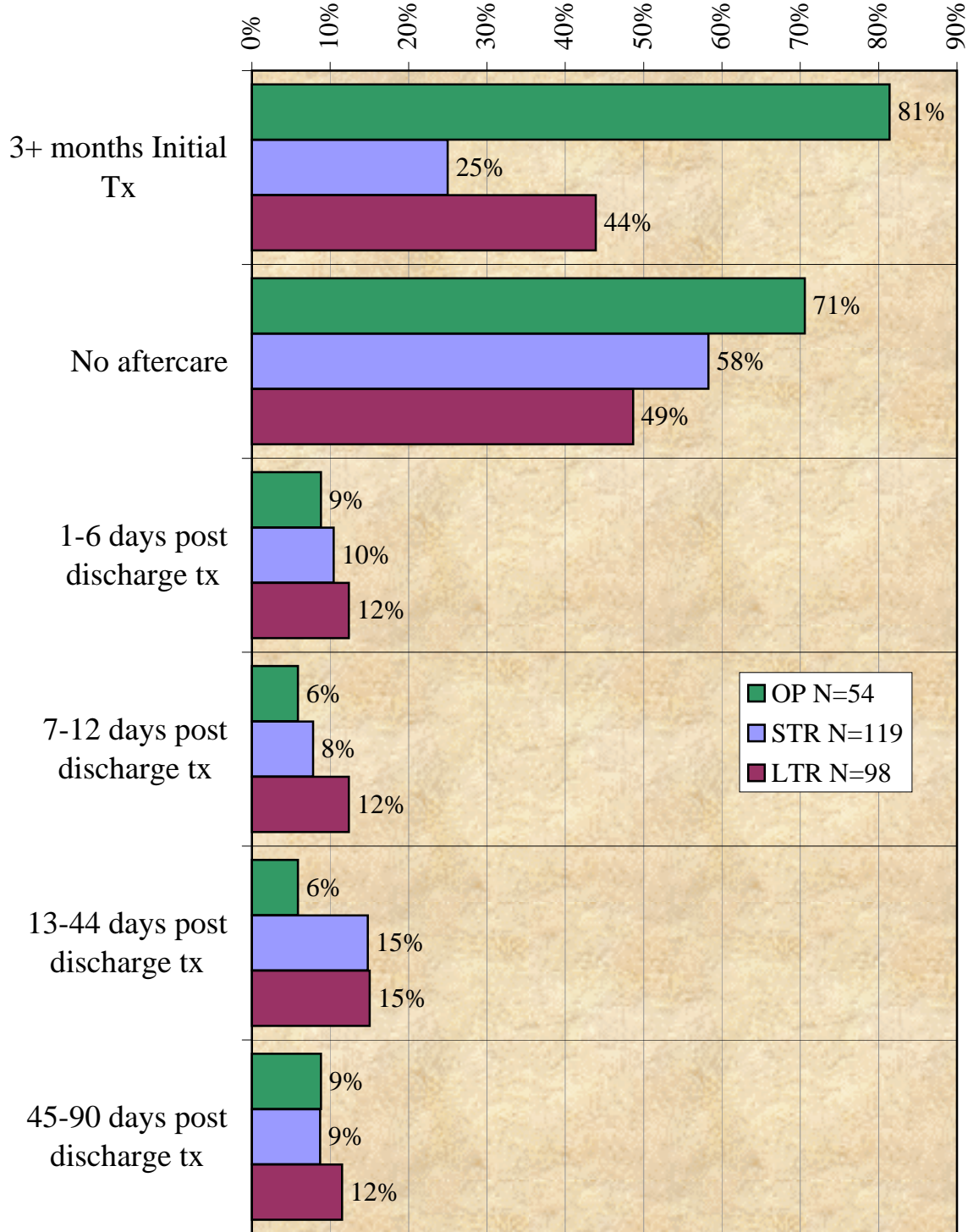
Adolescent Substance Use



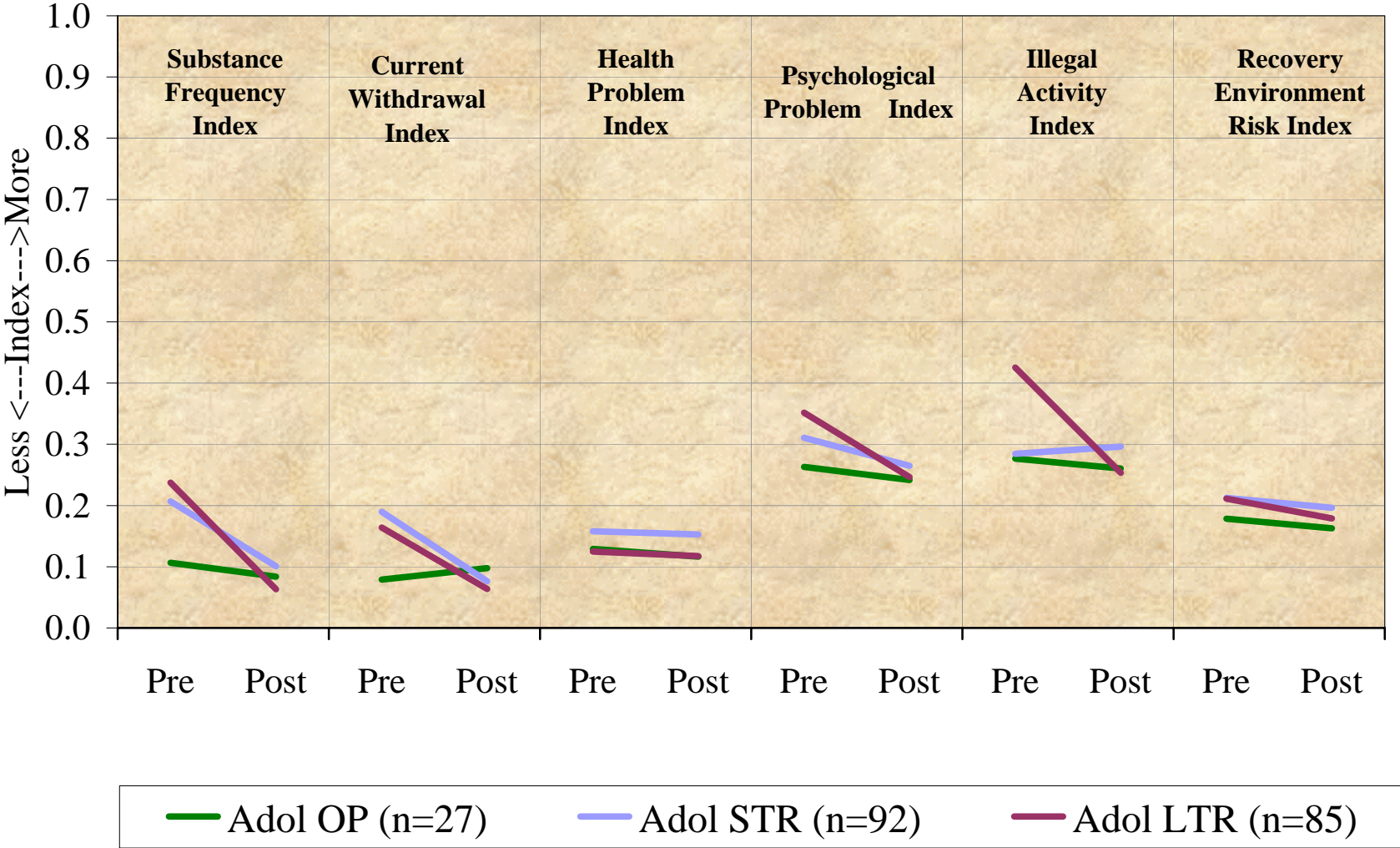
Adolescent GAIN Pathological Scales



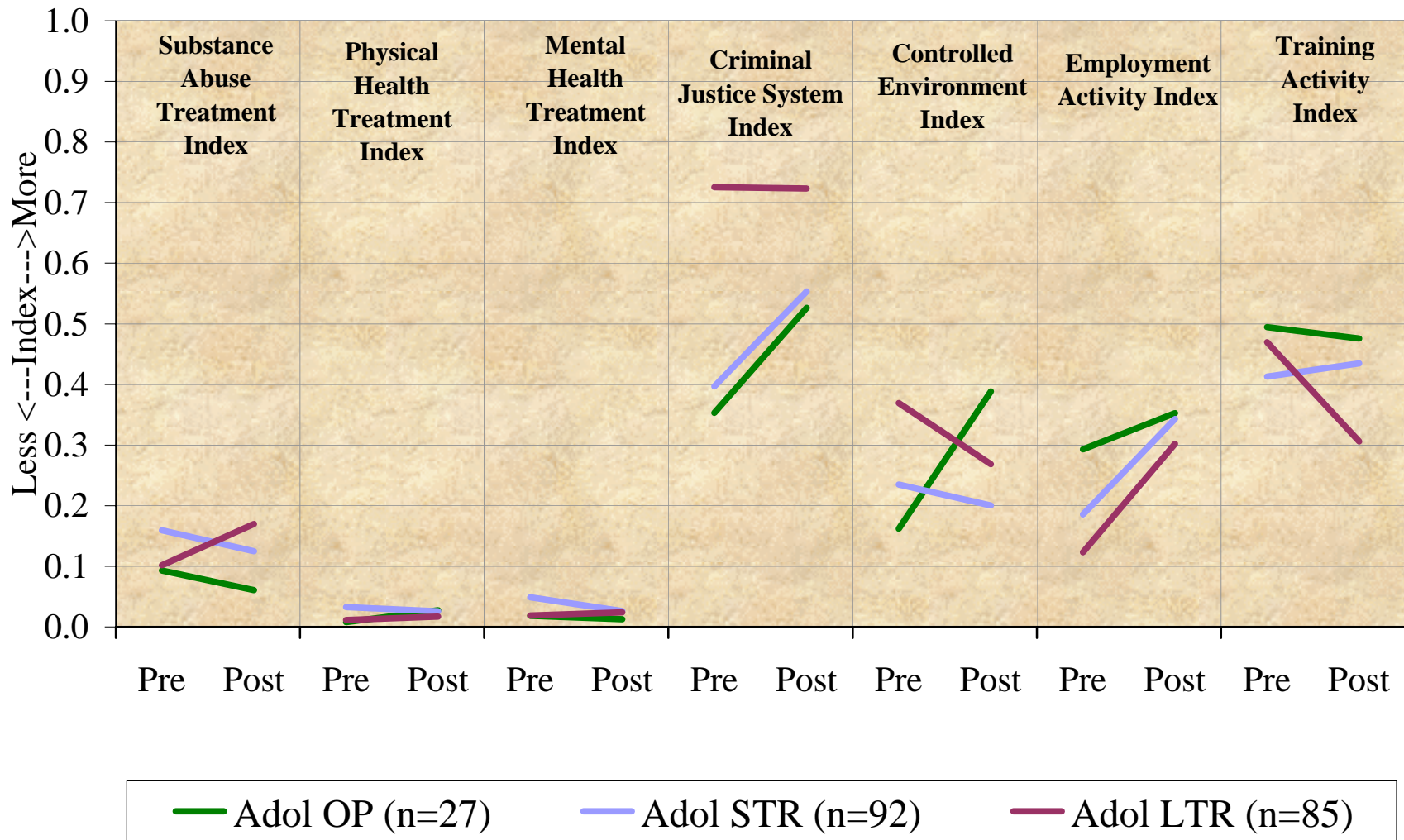
Adolescent Substance Abuse Treatment



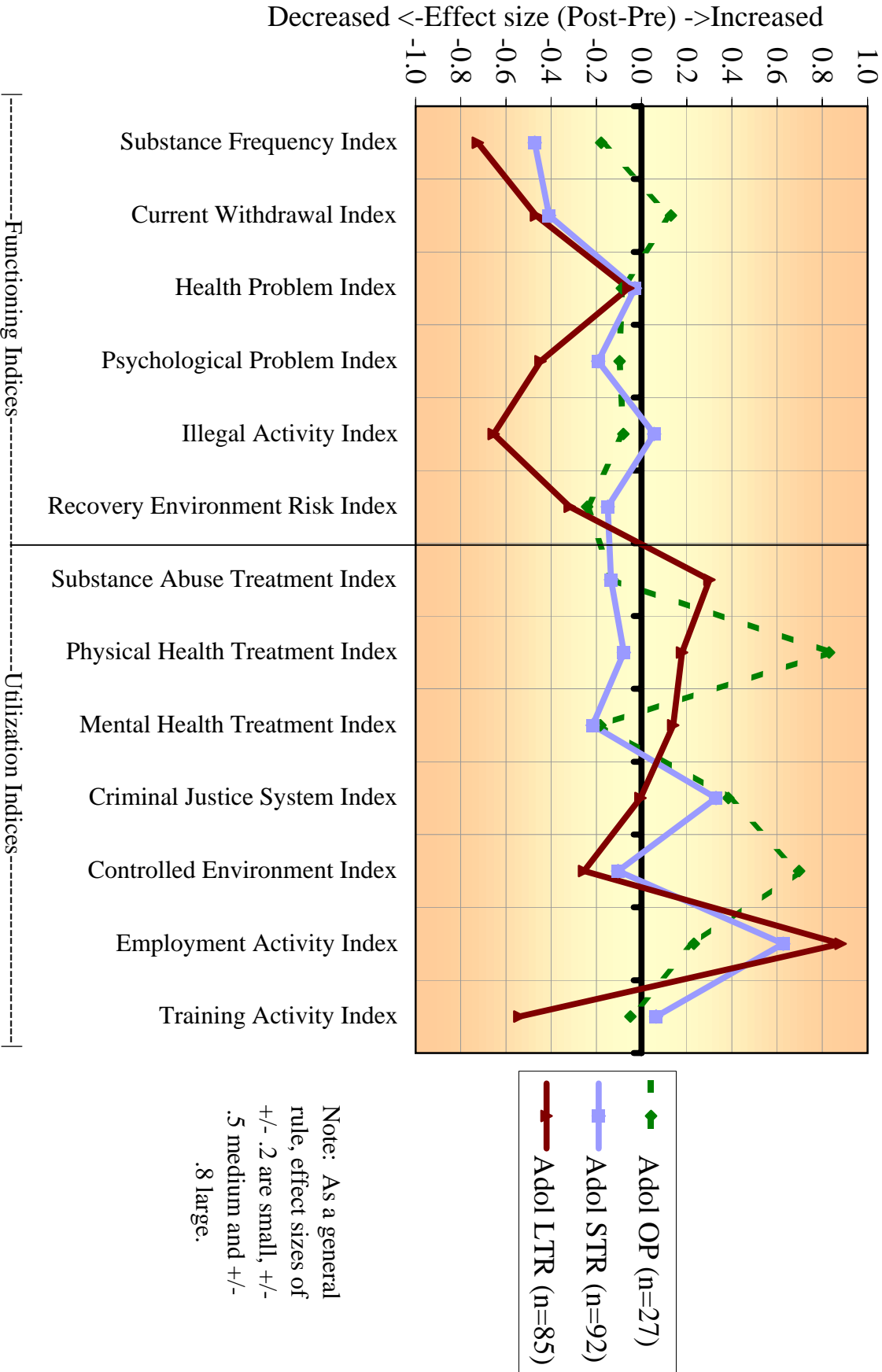
Change in GAIN Functioning Indices by Adolescent Level of Care



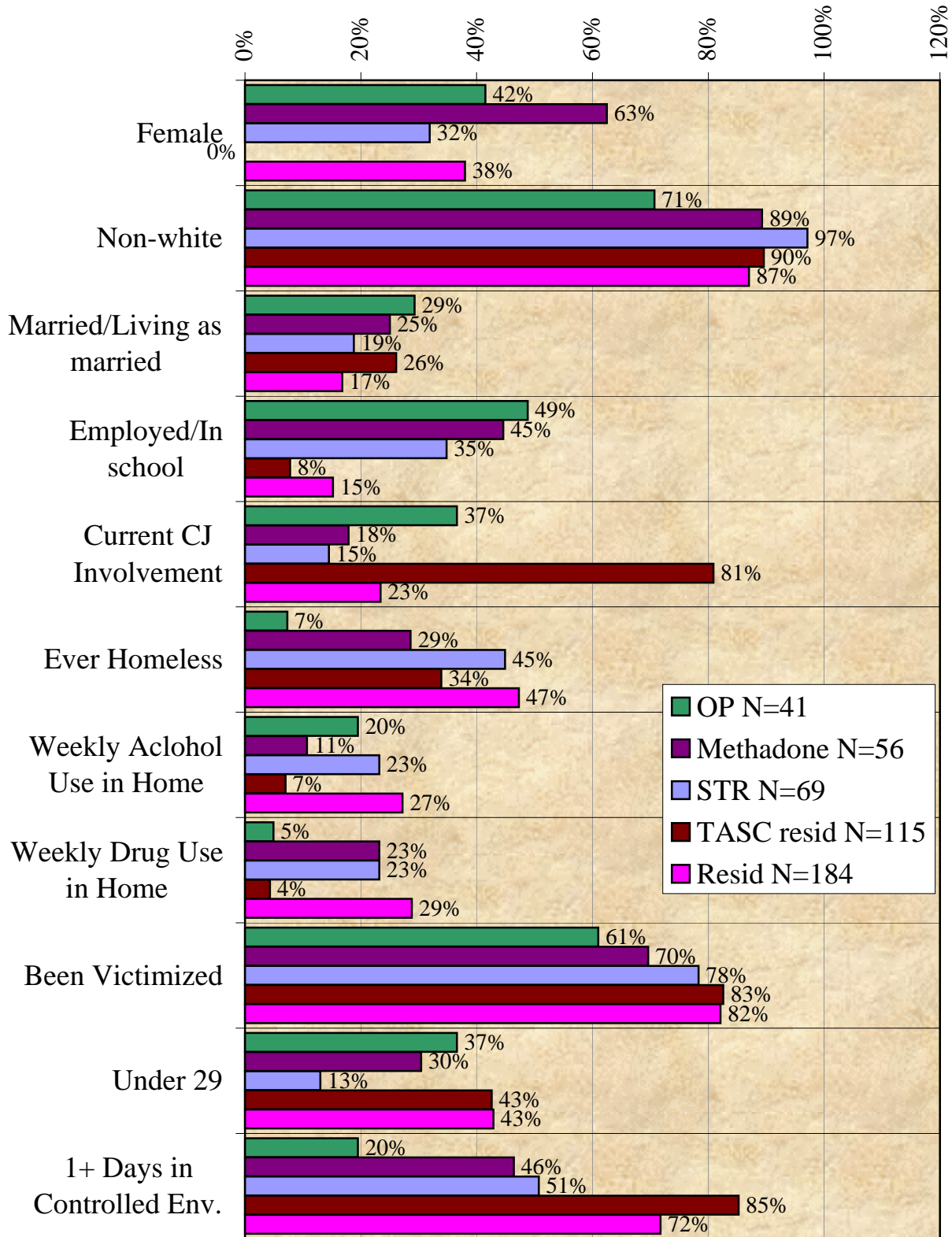
Change in GAIN Functioning Indices by Adolescent Level of Care



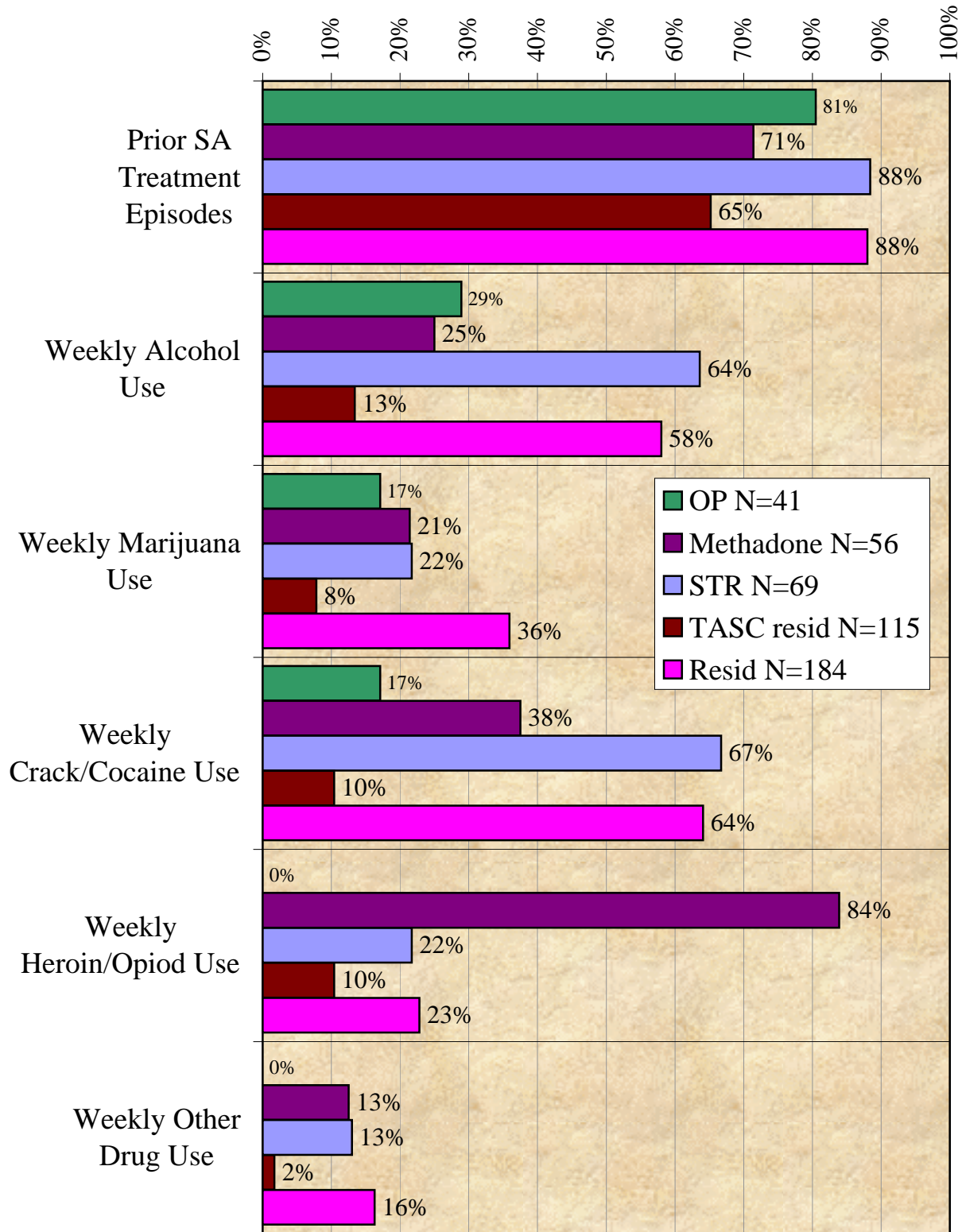
Impact of Adolescent Treatment by Level of Care



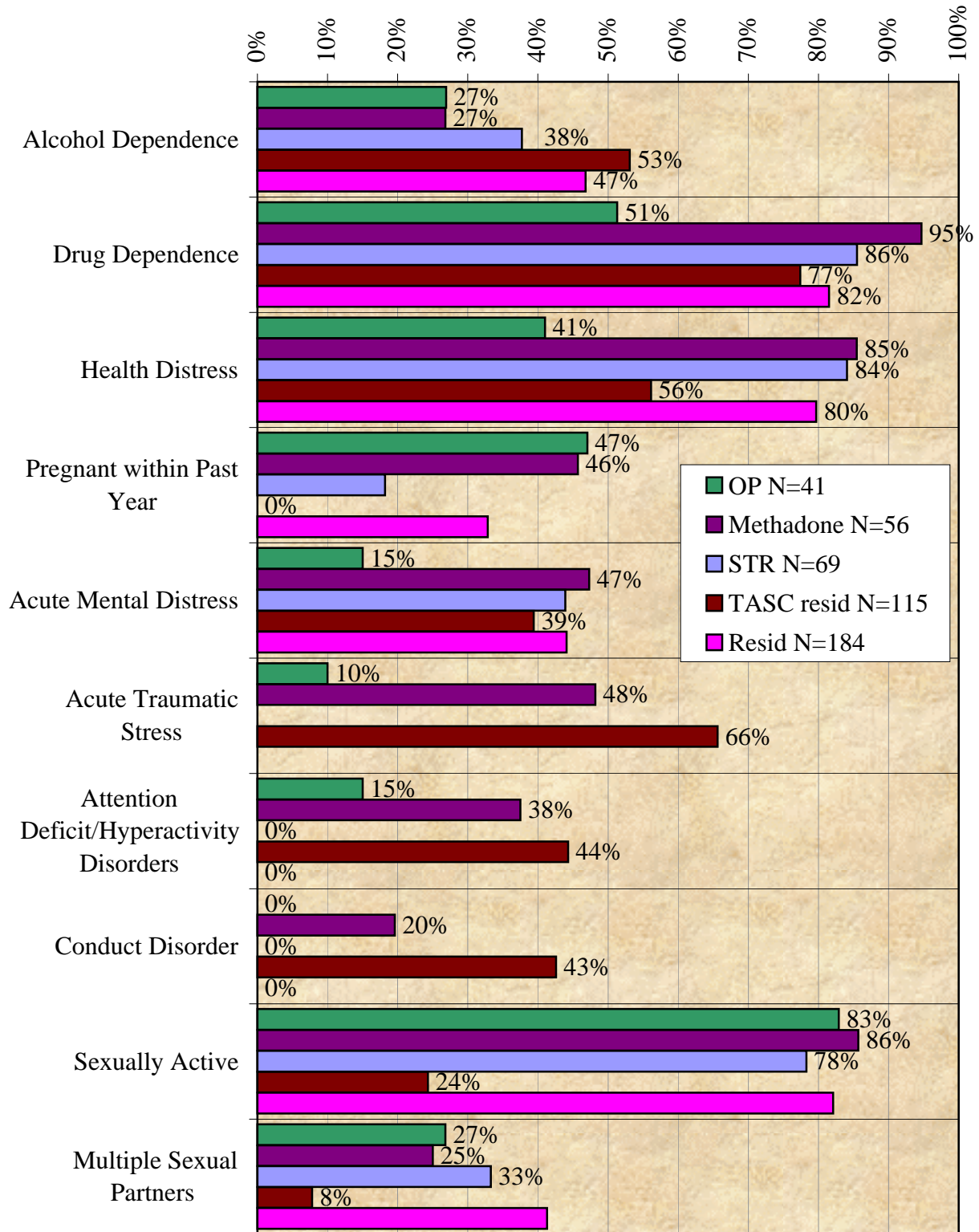
Adult Demographic Characteristics



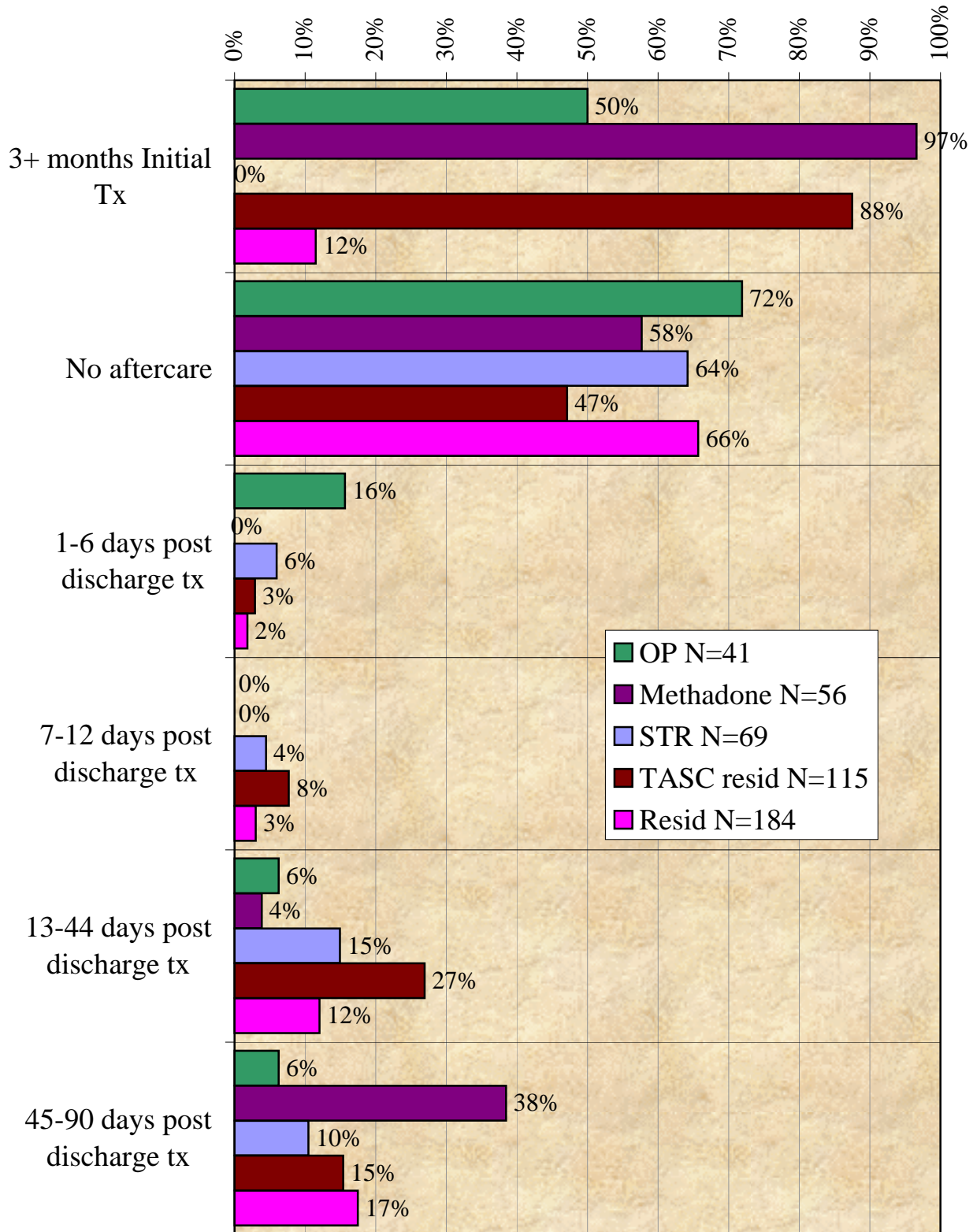
Adult Substance Use



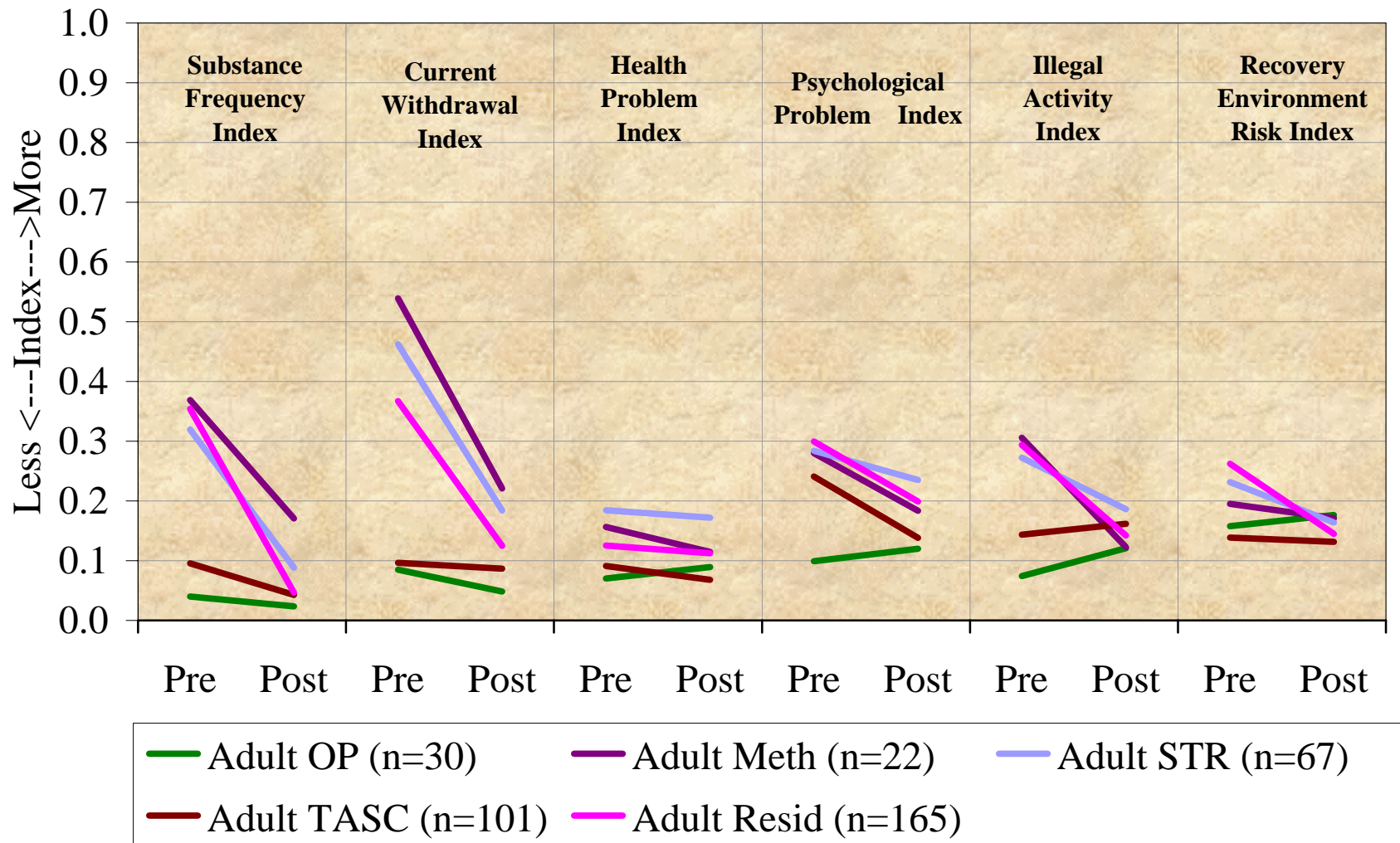
Adult GAIN Pathological Scales



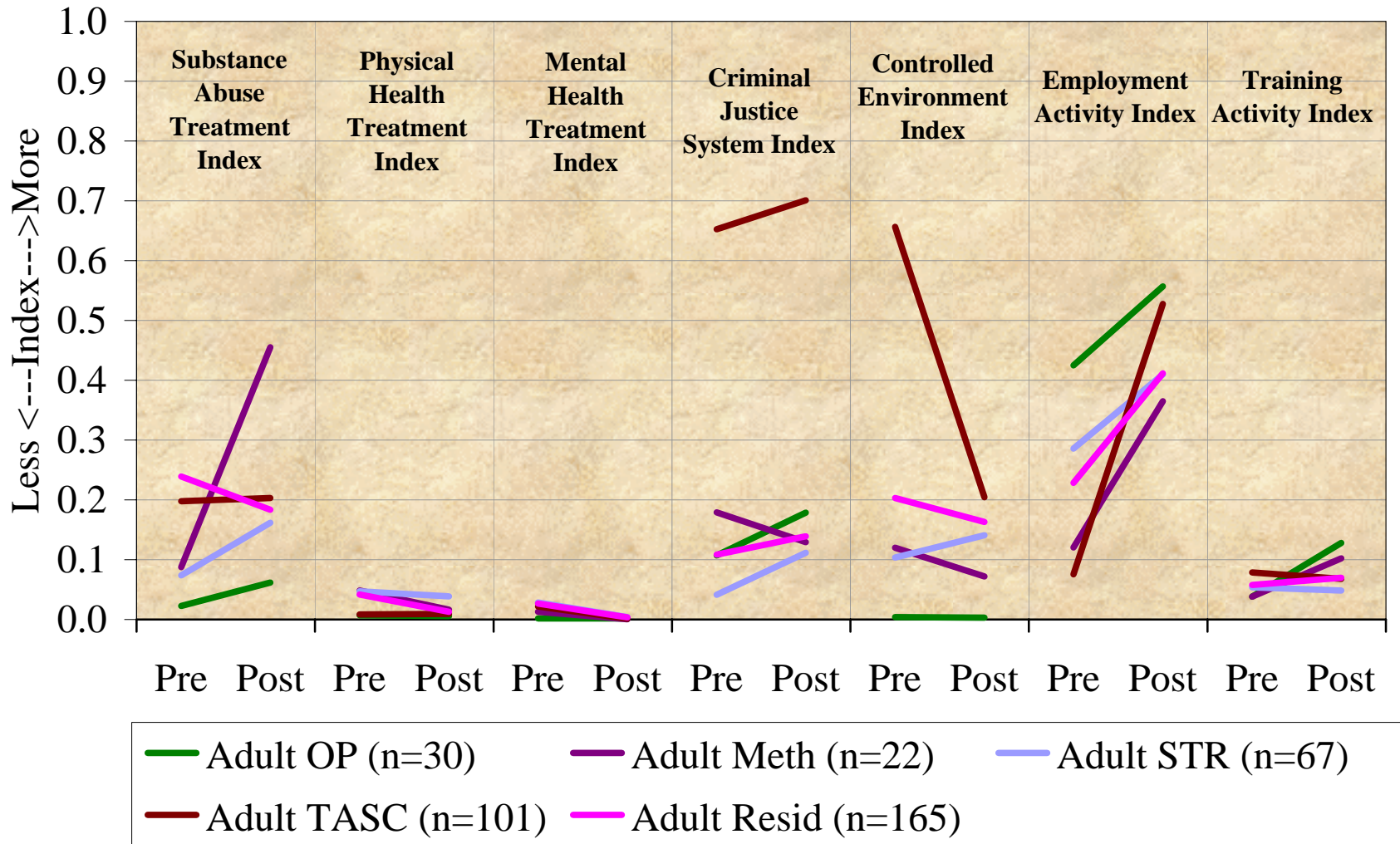
Adult Substance Abuse Treatment



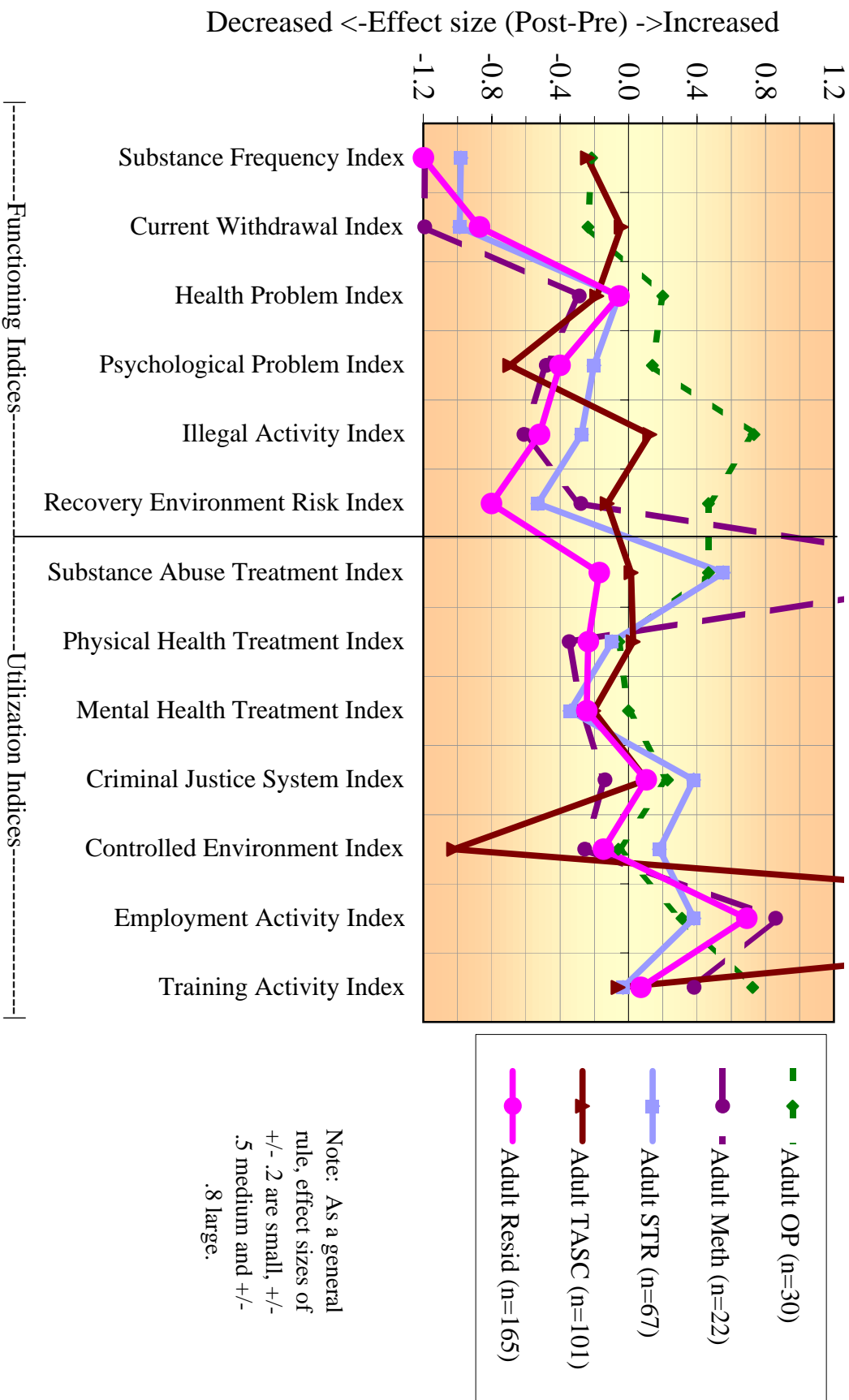
Change in GAIN Functioning Indices by Adult Level of Care



Change in GAIN Functioning Indices by Adult Level of Care



Impact of Adult Treatment by Level of Care



Note: As a general rule, effect sizes of +/- .2 are small, +/- .5 medium and +/- .8 large.

Appendix A. Detailed Source Pages and Question Items of ASAM Placement Profile Indices						
ASAM Criteria/Gain Scale	GAIN Initial 1098 Page	Question Items	Low/ Clinical/ Acute Ranges	Comment	Change Measure	
A. Diagnosis						
Substance Problem Index (SPI) <i>(Based on DSM-IV)</i>	I - 21-22	S9c-u	0/1-9/10-16	Number of symptoms reported (can also calculate subscales using h-m for abuse, n-u for dependence, f-g for substance induced disorders, c-e for under reporting; p23 of gain has h-u by specific substance for detailed diagnosis).	P	
B1. Intoxication and Withdrawal						
Substance Frequency Index (SFI6p)	I-14	S2d1-3, S2e1, S2f1, S2g4, S2g5	0.00/0.01-0.13/0.14-1.00	Average of percent of days reported	P	
Recency of Use	I-13	S2a_1-99, S2b, S2c	0-2/3-5/6	Most Recent Use	P	
Days of Opioid Use	I-14	S2g5	0/1-12/13-90	Days of use	P	
Current (past week) Withdrawal Index (CWI) <i>(Based on DSM-IV)</i>	I-14	S3c1-99	0/1-11/12-22	Number of symptoms reported	P	
B2. Biomedical						
Health Distress Index (HDI8)\a <i>(Based on NHSDA, NHIS and CHS HHQ)</i>	I-25	P3, P3a-g	0-2/3-6/7-11	Rating + number of problems reported	S	
Health Problem Index (HPI3p)	I-28	P9, P9a-b	0.00/0.01-0.13/0.14-1.00	Average of P9/6, P9a/90, and P9b/90	P	
B3. Psychological						
General Mental Distress Index (GMDI) <i>(Based on HSCL90)</i>	I-37-38	M1a1-4, M1b1-6, M1c2, M1d1-10	0-3/4-6/7-21	Number of symptoms reported	S	
Behavior Complexity Index (BCI) <i>(Based on DSM-IV)</i>	I-40-41	M3a1-19, M3b1-16	0-5/6-18/19-32	Number of symptoms reported	S	
Emotional Problem Index (EPI7p)	I-38--40	M1e-g, M2, M2q, M3, M3c	0.00/0.01-0.13/0.14-1.00	Average of M1e/6, M1f/90, M1g/90, M2/6, M2q/90, M3/6 & M3c/90	P	

ASAM Criteria/Gain Scale	GAIN Initial 1098 Page	Question Items	Low/ Clinical/ Acute Ranges	Comment	Change Measure
B4. Treatment Acceptance and Resistance					
Treatment Resistance Index (TRI) <i>(Based on CMRS and DATAR)</i>	I-21	S8a-d	0/1-2/3-4	Number of yes answers	S
Treatment Motivation Index (TMI) <i>(Based on CMRS and DATAR)</i>	I-21	S8e-j	5-4/3-1/0	Number of yes answers	S
B5. Relapse Potential					
Self Efficacy Index (SEI) <i>(Based on ISAC, DATAR and SE Literature)</i>	I-21	s8k-q	5-4/3-1/0	Number of yes answers	S
Problem Orientation Index (POI) <i>(Based on ISAC Manual)</i>	I-21	s8r-reversed, S8s-w	5-4/3-1/0	Number of yes answers	S
B6. Environment					
Environmental Risk Index (ERI6)\c <i>(Based on ISAC Manual)</i>	I-51	E5a-f, E6a-f, E7a-f	0-12/13-39/40-60	Sum of answers (note, 2 per set are reversed already)	S
General Social Support (GSSI) <i>(Based on White's Incest in the Organization)</i>	I-53	E12a-j	9-5/4-2/1-0	Number of sources of support reported	S
Recovery Environment Risk Index (RERI7p) <i>(Based on ISAC manual)</i>	I-17-54	S6a, E1b, E2c-e, E8p, E9u	0.00/0.01-0.13/0.14-1.00	Average of rev. S6a/90 ,rev E1b/6, E2c/90, E2d/90, E2e/90, E8p/90 & E9u/90	P
Other					
Illegal Activities Index (IAI3p)	I-59-60	L3, L3v-w	0.00/0.01-0.13/0.14-1.00	Average of L3/6, L3v/90, & L3w/90	P
Employment Activity Index (VI4p)	I-66	V6, V6k, V6m, V6npr	0.00/0.01-0.13/0.14-1.00	Average of V6/6, V6k/90, V6m/90 and V6npr - where $V6npr = 1 - (v6n / (v6k + v6n))$	P
Training Activity Index (TI3p)	I-69	V3k, V3m, V3npr	0.00/0.01-0.13/0.14-1.00	Average of V3k/90, V3m/90, and V3npr - where $V3npr = 1 - (v3n / (v3k + v3n))$	P

ASAM Criteria/Gain Scale	GAIN Initial 1098 Page	Question Items	Low/ Clinical/ Acute Ranges	Comment	Change Measure
Other scales in Change table					
Substance Abuse Treatment Index	I-18	S7a1-99	0.00/0.01-0.13/0.14- 1.00	Average of answers (maxed at 90)/90	P
Physical Health Treatment Index	I-30	P11f-j	0.00/0.01-0.13/0.14- 1.00	Average of answers (maxed at 90)/90	P
Mental Health Treatment Index	I-44	M5f-g	0.00/0.01-0.13/0.14- 1.00	Average of answers (maxed at 90)/90	P
Criminal Justice System Index	I-62	L6a-d	0.00/0.01-0.13/0.14- 1.00	Average of answers (maxed at 90)/90	P
Controlled Environment Index (Based on DSM-IV)	I-18-62	S7a1, S7a2, P11g, M5g, E2f, L6c	0.00/0.01-0.13/0.14- 1.00	Average of answers (maxed at 90)/90	P
a\ Primary (p) repeated at follow-up, Secondary (S) repeated in some studies at follow-up					

Appendix B. Interpretation of ASAM Placement Profile Indices				
ASAM Criteria/Gain Scale	GAIN Initial 1098 Page	Question Items	Low/ Clinical/ Acute Ranges	Interpretation
A. Diagnosis				
Substance Problem Index (SPI) <i>(Based on DSM-IV)</i>	I - 21-22	S9c-u	0/1-9/10-16	Higher scores on this scale represent greater severity of drug problems. The scale includes physiological, psychological and social criteria, as well as an item on comorbid use with drugs that is likely to exacerbate the other problems. General score of 0 suggests no reported drug problems, 1 or more generally suggests abuse, 4 or more generally suggests dependence. However to make a dependence diagnosis per se requires meeting criteria (from self report or other sources) on S9n-u and abuse requires meeting criteria S9h-m.
B1. Intoxication and Withdrawal				
Substance Frequency Index (SFI6p)	I-14	S2d1-3, S2e1, S2f1, S2g4, S2g5	0.00/0.01-0.13/0.14-1.00	Higher scores represent increasing frequencies of substance use in terms of days, days staying high most of the day (I.e., high risk of problems) and days actually causing problems. People with scores over .14 may have considerable difficulty stopping without significant assistance and/or a controlled environment.
Recency of Use	I-13	S2a_1-99, S2b, S2c	0-2/3-5/6	Use in the past two days (6) suggest the need to evaluate risk of intoxication and/or withdrawal.
Days of Opioid Use	I-14	S2g5	0/1-12/13-90	Higher scores represent increasing frequencies of opioid use. Those with weekly (~13+ days of 90) should be evaluated carefully for withdrawal management and/or considered for methadone
Current (past week) Withdrawal Index (CWI) <i>(Based on DSM-IV)</i>	I-14	S3c1-99	0/1-11/12-22	Higher scores represent broader symptoms of withdrawal. Scores over 12 indicate the presence of increasingly more physiological symptoms and suggest the increasing need for medical evaluation and monitoring.

ASAM Criteria/Gain Scale	GAIN Initial 1098 Page	Question Items	Low/ Clinical/ Acute Ranges	Interpretation
B2. Biomedical				
Health Distress Index (HDI8)a <i>(Based on NHSDA, NHIS and CHS HHQ)</i>	I-25	P3, P3a-g	0-2/3-6/7-11	Higher scores indicate increasing more complaints about health, limited mobility and/or pain and the need for medical review. They should be reviewed in conjunction with the amount of current problems and/or treatment. For scores of four or more it is advisable to review the nature of the problem even if there are no current medical problems as their is a greater potential for reoccurrence of medical problems.
Health Problem Index (HPI3p)	I-28	P9, P9a-b	0.00/0.01-0.13/0.14-1.00	Higher score indicate more recent problems, problems on more days and problems increasingly interfering with the individual's responsibilities. If there are current problems but no current treatment or specific diagnosis, then this suggests a potentially undiagnosed medical condition that may confound treatment and/or harm the individual if left untreated (i.e., a further medical work up is indicated).
B3. Psychological				
General Mental Distress Index (GMDI) <i>(Based on HSCL90)</i>	I-37-38	M1a1-4, M1b1-6, M1c2, M1d1-10	0-3/4-6/7-21	Higher scores indicate greater breadth and severity of internal (e.g., somatic, depression, anxiety) mental distress. Scores over 4 may indicate a risk of self m education (in which case symptoms may worse with detoxification). For scores of 7 or more it is also advisable to review the nature of the problem even if there are no current psychiatric problems as their is a greater potential for reoccurrence of medical problems. Regardless of total score, if M1c has any yes marks, the presence of homicidal/suicidal tendencies should also be evaluated.
Behavior Complexity Index (BCI) <i>(Based on DSM-IV)</i>	I-40-41	M3a1-19, M3b1-16	0-5/6-18/19-32	Higher scores represent increasingly more problems controlling external behavior (e.g., ADHD, CD). Higher scores indicate increasing need for structure and problems if it is not provided (particularly in group situations). If 6+, review whether diagnostic criteria are met (from self report or other sources) for ADHD inattentive type (M3a1-8,19), hyperactive type (M3a9-18, 19), and/or conduct disorder (M3b1-16).
Emotional Problem Index (EPI7p)	I-38--40	M1e-g, M2, M2q, M3, M3c	0.00/0.01-0.13/0.14-1.00	Higher score indicate more recent problems, problems on more days and problems increasingly interfering with the individual's responsibilities. If there are current problems but no current treatment or specific diagnosis, then this suggests a potentially undiagnosed psychiatric condition that may confound treatment and/or harm the individual if left untreated (i.e., a further psychiatric work up is indicated).

ASAM Criteria/Gain Scale	GAIN Initial 1098 Page	Question Items	Low/ Clinical/ Acute Ranges	Interpretation
B4. Treatment Acceptance and Resistance				
Treatment Resistance Index (TRI) <i>(Based on CMRS and DATAR)</i>	I-21	S8a-d	0/1-2/3-4	Higher scores indicated more factors working against people coming to or staying in treatment. Careful review should be made of other activities and people in the clients life to avoid potential subversion by the client's environment. [See environment indices.]
Treatment Motivation Index (TMI) <i>(Based on CMRS and DATAR)</i>	I-21	S8e-j	5-4/3-1/0	Higher scores on this scale suggest more internal and/or external motivators for the individual to be in and continue treatment. This scale interacts with TRI. If there is a moderate amount of motivation but no resistance, things may still work out. But when there is resistance and low or even moderate motivation there are likely to be problems. If there is moderate to high motivation but a lack of problem orientation, the client may also "back lash" against the pressure or may be unable to meet the program's regular expectations. In such cases there may be a need for motivational interviewing to convince the individual of the need for treatment.
B5. Relapse Potential				
Self Efficacy Index (SEI) <i>(Based on ISAC, DATAR and SE Literature)</i>	I-21	s8k-q	5-4/3-1/0	Higher scores on this scale indicate the individuals of confidence about resisting relapse in different situations. Lower scores suggest the need for assistance in daily living and/or a controlled environment.
Problem Orientation Index (POI) <i>(Based on ISAC Manual)</i>	I-21	s8r- reversed, S8s-w	5-4/3-1/0	Lower problem orientation may be related to learned helplessness, severe depression, or weak decision making skills. In each case it suggests that while the client may be capable of following rules, they will have difficulty with full recovery because of an inability to move forward and start a new life. Failure to even recognize the existence of a substance problem (0) is common and indicated "concrete" vs. "abstract" thinking and should alert therapist to avoid labels and loose terms.

ASAM Criteria/Gain Scale	GAIN Initial 1098 Page	Question Items	Low/ Clinical/ Acute Ranges	Interpretation
B6. Environment				
Environmental Risk Index (ERI6)c <i>(Based on ISAC Manual)</i>	I-51	E5a-f, E6a-f, E7a-f	0-12/13-39/40-60	Higher scores indicate more time with people in living, vocational, or social environment with people using alcohol/drugs, involved in illegal activity, who argue, who are not in school or work and who have never been in treatment. Availability of someone who has been in treatment and understands what the individual is going through can be an important source of social support but needs to be reviewed to verify that they are currently in recovery (i.e., a positive influence). Very low score should be reviewed for potential isolation (i.e., no risk because of no contact with others). Moderate scores should be reviewed to see whether one type environment is positive while another is not. High scores (or when moderate scores are high on living situation) suggest increasing needs for a controlled environment or change in living situation.
General Social Support (GSSI) <i>(Based on White's Incest in the Organization)</i>	I-53	E12a-j	9-5/4-2/1-0	Higher scores on this indicate higher levels of social support. Social support is important for dissipating stress. Lower scores suggest the need to review the amount of other sources of traumatic stress (E9), interpersonal stress (E10) and environmental stress (E11). If these scores are low and/or the more other sources of stress, the greater the need to get the individual involved in some kind of support group.
Recovery Environment Risk Index (RERI7p) <i>(Based on ISAC manual)</i>	I-17-54	S6a, E1b, E2c-e, E8p, E9u	0.00/0.01-0.13/0.14-1.00	Higher scores indicate less involvement in support groups (e.g., AA, CA, NA) and more environmental risk from alcohol/drug use in the home, fighting and/or victimization. Scores over .14 should be reviewed very closely for the potential need to change living situation and/or refer to a controlled environment.

ASAM Criteria/Gain Scale	GAIN Initial 1098 Page	Question Items	Low/ Clinical/ Acute Ranges	Interpretation
Other				
Illegal Activities Index (IAI3p)	I-59-60	L3, L3v-w	0.00/0.01-0.13/0.14-1.00	Higher scores indicate more recent illegal activity, more days of illegal activity and increasingly more dependence on illegal activities for financial support. Note that this is common and often required to support substance use. However it may also indicate potential problems with the law and should be dealt with in treatment.
Employment Activity Index (VI4p)	I-66	V6, V6k, V6m, V6npr	0.00/0.01-0.13/0.14-1.00	Higher scores indicate more recent employment, days working, and less days of missing scheduled work. This is important for policy makers, but all jobs are not necessarily good. It is important to review vocational environment scale to see if the particular work environment is healthy or if it is a source of illegal drugs or violence.
Training Activity Index (TI3p)	I-69	V3k, V3m, V3npr	0.00/0.01-0.13/0.14-1.00	Higher scores indicate more recent time in school/training, days in school/training, and less days of missing scheduled class time. This is important for policy makers, but all training situations are not necessarily good. It is important to review vocational environment scale to see if the particular school/training environment is healthy or if it is a source of illegal drugs or violence.
Other scales in Change table				
Substance Abuse Treatment Index	I-18	S7a1-99	0.00/0.01-0.13/0.14-1.00	Higher scores indicate increasing more involvement in substance abuse treatment in the past 90 days.
Physical Health Treatment Index	I-30	P11f-j	0.00/0.01-0.13/0.14-1.00	Higher scores indicate increasing more involvement in physical health treatment in the past 90 days.
Mental Health Treatment Index	I-44	M5f-g	0.00/0.01-0.13/0.14-1.00	Higher scores indicate increasing more involvement in mental health treatment in the past 90 days.
Criminal Justice System Index	I-62	L6a-d	0.00/0.01-0.13/0.14-1.00	Higher scores indicate increasing more involvement in the criminal justice system in the past 90 days.
Controlled Environment Index (Based on DSM-IV)	I-18-62	S7a1, S7a2, P11g, M5g, E2f, L6c	0.00/0.01-0.13/0.14-1.00	Higher scores indicate increasing more time in a controlled environment, including jails and/or inpatient units for substance use, health or mental health problems in the past 90 days.

B1. adol OP

Pre-Post Comparison for Adolescent Outpatient (Unweighted)

		N	% High				Mean	St. Dev.	d
			% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)			
Functioning Indices									
Substance Frequency Index	Pre	27	18.5%	51.9%	25.9%	3.7%	0.11	0.13	
Substance Frequency Index	Post	27	0.0%	70.4%	25.9%	3.7%	0.08	0.12	-0.18
Current Withdrawal Index	Pre	27	66.7%	14.8%	14.8%	3.7%	0.08	0.14	
Current Withdrawal Index	Post	27	77.8%	3.7%	11.1%	7.4%	0.10	0.22	0.13
Health Problem Index	Pre	27	29.6%	37.0%	29.6%	3.7%	0.13	0.14	
Health Problem Index	Post	27	29.6%	44.4%	25.9%	0.0%	0.12	0.13	-0.09
Psychological Problem Index	Pre	27	11.1%	14.8%	55.6%	18.5%	0.26	0.22	
Psychological Problem Index	Post	27	0.0%	37.0%	44.4%	18.5%	0.24	0.20	-0.10
Illegal Activity Index	Pre	27	7.4%	22.2%	63.0%	7.4%	0.28	0.20	
Illegal Activity Index	Post	27	3.7%	44.4%	33.3%	18.5%	0.26	0.24	-0.08
Recovery Environment Risk Index	Pre	27	0.0%	25.9%	74.1%	0.0%	0.18	0.07	
Recovery Environment Risk Index	Post	27	0.0%	22.2%	77.8%	0.0%	0.16	0.05	-0.24
Utilization Indices									
		N	% none (0%)	% Low (1-13%)	Medium (14-49%)	% High (50-100%)	Mean	St. Dev.	d
Substance Abuse Treatment Index	Pre	21	81.0%	4.8%	4.8%	9.5%	0.09	0.25	
Substance Abuse Treatment Index	Post	21	66.7%	19.0%	9.5%	4.8%	0.06	0.13	-0.13
Physical Health Treatment Index	Pre	21	85.7%	14.3%	0.0%	0.0%	0.01	0.02	
Physical Health Treatment Index	Post	21	42.9%	52.4%	4.8%	0.0%	0.03	0.04	0.83
Mental Health Treatment Index	Pre	22	54.5%	45.5%	0.0%	0.0%	0.02	0.03	
Mental Health Treatment Index	Post	22	81.8%	13.6%	4.5%	0.0%	0.01	0.04	-0.18
Criminal Justice System Index	Pre	26	50.0%	7.7%	7.7%	34.6%	0.35	0.45	
Criminal Justice System Index	Post	26	38.5%	7.7%	0.0%	53.8%	0.53	0.50	0.38
Controlled Environment Index	Pre	27	59.3%	22.2%	3.7%	14.8%	0.16	0.33	
Controlled Environment Index	Post	27	44.4%	11.1%	7.4%	37.0%	0.39	0.47	0.70
Employment Activity Index	Pre	27	22.2%	22.2%	25.9%	29.6%	0.29	0.26	
Employment Activity Index	Post	27	22.2%	22.2%	11.1%	44.4%	0.35	0.31	0.23
Training Activity Index	Pre	17	23.5%	0.0%	29.4%	47.1%	0.49	0.38	
Training Activity Index	Post	17	23.5%	0.0%	17.6%	58.8%	0.48	0.30	-0.05

B2. adol ST

Pre-Post Comparison for Adolescent ST Residential (Unweighted)

Functioning Indices		N	% High				Mean	St. Dev.	d
			% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)			
Substance Frequency Index	Pre	92	8.7%	43.5%	34.8%	13.0%	0.21	0.22	
Substance Frequency Index	Post	92	6.5%	68.5%	22.8%	2.2%	0.10	0.14	-0.47
Current Withdrawal Index	Pre	88	46.6%	19.3%	17.0%	17.0%	0.19	0.28	
Current Withdrawal Index	Post	88	68.2%	11.4%	17.0%	3.4%	0.08	0.15	-0.41
Health Problem Index	Pre	87	29.9%	29.9%	34.5%	5.7%	0.16	0.17	
Health Problem Index	Post	87	23.0%	35.6%	39.1%	2.3%	0.15	0.15	-0.03
Psychological Problem Index	Pre	92	6.5%	18.5%	55.4%	19.6%	0.31	0.24	
Psychological Problem Index	Post	92	4.3%	27.2%	56.5%	12.0%	0.26	0.20	-0.19
Illegal Activity Index	Pre	87	11.5%	17.2%	56.3%	14.9%	0.28	0.22	
Illegal Activity Index	Post	87	1.1%	29.9%	48.3%	20.7%	0.30	0.21	0.05
Recovery Environment Risk Index	Pre	92	0.0%	16.3%	79.3%	4.3%	0.21	0.11	
Recovery Environment Risk Index	Post	92	0.0%	31.5%	67.4%	1.1%	0.20	0.11	-0.15

Utilization Indices		N	% High				Mean	St. Dev.	d
			% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)			
Substance Abuse Treatment Index	Pre	83	39.8%	30.1%	16.9%	13.3%	0.16	0.25	
Substance Abuse Treatment Index	Post	83	53.0%	25.3%	13.3%	8.4%	0.13	0.24	-0.14
Physical Health Treatment Index	Pre	85	62.4%	30.6%	5.9%	1.2%	0.03	0.08	
Physical Health Treatment Index	Post	85	50.6%	47.1%	2.4%	0.0%	0.03	0.04	-0.08
Mental Health Treatment Index	Pre	83	56.6%	31.3%	12.0%	0.0%	0.05	0.10	
Mental Health Treatment Index	Post	83	56.6%	39.8%	3.6%	0.0%	0.03	0.06	-0.22
Criminal Justice System Index	Pre	86	45.3%	12.8%	2.3%	39.5%	0.40	0.48	
Criminal Justice System Index	Post	86	40.7%	2.3%	1.2%	55.8%	0.55	0.49	0.33
Controlled Environment Index	Pre	92	34.8%	25.0%	23.9%	16.3%	0.23	0.33	
Controlled Environment Index	Post	92	42.4%	30.4%	9.8%	17.4%	0.20	0.35	-0.10
Employment Activity Index	Pre	82	47.6%	17.1%	19.5%	15.9%	0.19	0.25	
Employment Activity Index	Post	82	25.6%	22.0%	13.4%	39.0%	0.34	0.32	0.63
Training Activity Index	Pre	74	32.4%	2.7%	17.6%	47.3%	0.41	0.34	
Training Activity Index	Post	74	28.4%	0.0%	21.6%	50.0%	0.43	0.31	0.06

B3. adol LT

Pre-Post Comparison for Adolescent LT Residential (Unweighted)

Functioning Indices		N	% High				Mean	St. Dev.	d
			% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)			
Substance Frequency Index	Pre	84	16.7%	29.8%	39.3%	14.3%	0.24	0.24	
Substance Frequency Index	Post	84	3.6%	81.0%	14.3%	1.2%	0.06	0.11	-0.73
Current Withdrawal Index	Pre	85	44.7%	20.0%	25.9%	9.4%	0.16	0.21	
Current Withdrawal Index	Post	85	76.5%	8.2%	11.8%	3.5%	0.06	0.15	-0.47
Health Problem Index	Pre	83	28.9%	37.3%	31.3%	2.4%	0.12	0.13	
Health Problem Index	Post	83	31.3%	38.6%	28.9%	1.2%	0.12	0.13	-0.06
Psychological Problem Index	Pre	82	2.4%	14.6%	58.5%	24.4%	0.35	0.24	
Psychological Problem Index	Post	82	8.5%	25.6%	57.3%	8.5%	0.25	0.19	-0.45
Illegal Activity Index	Pre	79	0.0%	13.9%	45.6%	40.5%	0.43	0.26	
Illegal Activity Index	Post	79	2.5%	46.8%	38.0%	12.7%	0.25	0.23	-0.65
Recovery Environment Risk Index	Pre	85	0.0%	5.9%	91.8%	2.4%	0.21	0.10	
Recovery Environment Risk Index	Post	85	0.0%	31.8%	68.2%	0.0%	0.18	0.09	-0.32

Utilization Indices		N	% High				Mean	St. Dev.	d
			% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)			
Substance Abuse Treatment Index	Pre	67	55.2%	26.9%	10.4%	7.5%	0.10	0.23	
Substance Abuse Treatment Index	Post	67	52.2%	25.4%	9.0%	13.4%	0.17	0.32	0.30
Physical Health Treatment Index	Pre	78	74.4%	23.1%	2.6%	0.0%	0.01	0.03	
Physical Health Treatment Index	Post	78	61.5%	35.9%	2.6%	0.0%	0.02	0.04	0.18
Mental Health Treatment Index	Pre	75	68.0%	29.3%	2.7%	0.0%	0.02	0.04	
Mental Health Treatment Index	Post	75	73.3%	18.7%	8.0%	0.0%	0.02	0.06	0.14
Criminal Justice System Index	Pre	77	19.5%	5.2%	3.9%	71.4%	0.73	0.43	
Criminal Justice System Index	Post	77	22.1%	2.6%	2.6%	72.7%	0.72	0.43	-0.01
Controlled Environment Index	Pre	85	23.5%	21.2%	21.2%	34.1%	0.37	0.40	
Controlled Environment Index	Post	85	48.2%	11.8%	15.3%	24.7%	0.27	0.38	-0.25
Employment Activity Index	Pre	72	0.0%	1.4%	2.8%	95.8%	0.12	0.20	
Employment Activity Index	Post	72	0.0%	2.8%	33.3%	63.9%	0.30	0.32	0.88
Training Activity Index	Pre	61	21.3%	0.0%	29.5%	49.2%	0.47	0.30	
Training Activity Index	Post	61	45.9%	0.0%	18.0%	36.1%	0.31	0.30	-0.54

B4. adult OP

Pre-Post Comparison for Adult Outpatient (Unweighted)

Functioning Indices		N	% High				Mean	St. Dev.	d
			% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)			
Substance Frequency Index	Pre	27	40.7%	51.9%	7.4%	0.0%	0.04	0.08	
Substance Frequency Index	Post	27	7.4%	88.9%	3.7%	0.0%	0.02	0.04	-0.22
Current Withdrawal Index	Pre	30	60.0%	16.7%	20.0%	3.3%	0.08	0.15	
Current Withdrawal Index	Post	30	86.7%	3.3%	6.7%	3.3%	0.05	0.14	-0.24
Health Problem Index	Pre	28	57.1%	25.0%	17.9%	0.0%	0.07	0.10	
Health Problem Index	Post	28	42.9%	39.3%	14.3%	3.6%	0.09	0.14	0.20
Psychological Problem Index	Pre	29	24.1%	55.2%	17.2%	3.4%	0.10	0.15	
Psychological Problem Index	Post	29	24.1%	41.4%	31.0%	3.4%	0.12	0.15	0.14
Illegal Activity Index	Pre	29	24.1%	65.5%	10.3%	0.0%	0.07	0.06	
Illegal Activity Index	Post	29	13.8%	65.5%	17.2%	3.4%	0.12	0.15	0.73
Recovery Environment Risk Index	Pre	30	0.0%	16.7%	83.3%	0.0%	0.16	0.04	
Recovery Environment Risk Index	Post	30	0.0%	30.0%	70.0%	0.0%	0.18	0.09	0.47

Utilization Indices		N	% High				Mean	St. Dev.	d
			% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)			
Substance Abuse Treatment Index	Pre	23	82.6%	13.0%	4.3%	0.0%	0.02	0.08	
Substance Abuse Treatment Index	Post	23	69.6%	21.7%	4.3%	4.3%	0.06	0.21	0.47
Physical Health Treatment Index	Pre	27	81.5%	18.5%	0.0%	0.0%	0.01	0.02	
Physical Health Treatment Index	Post	27	77.8%	22.2%	0.0%	0.0%	0.01	0.01	-0.06
Mental Health Treatment Index	Pre	24	91.7%	8.3%	0.0%	0.0%	0.00	0.01	
Mental Health Treatment Index	Post	24	95.8%	4.2%	0.0%	0.0%	0.00	0.01	0.00
Criminal Justice System Index	Pre	28	89.3%	0.0%	0.0%	10.7%	0.11	0.31	
Criminal Justice System Index	Post	28	82.1%	0.0%	0.0%	17.9%	0.18	0.39	0.23
Controlled Environment Index	Pre	30	93.3%	6.7%	0.0%	0.0%	0.00	0.02	
Controlled Environment Index	Post	30	93.3%	6.7%	0.0%	0.0%	0.00	0.01	-0.06
Employment Activity Index	Pre	28	14.3%	39.3%	0.0%	46.4%	0.42	0.42	
Employment Activity Index	Post	28	7.1%	28.6%	0.0%	64.3%	0.56	0.41	0.31
Training Activity Index	Pre	29	89.7%	0.0%	6.9%	3.4%	0.04	0.12	
Training Activity Index	Post	29	75.9%	0.0%	13.8%	10.3%	0.13	0.25	0.73

B5. adult meth

Pre-Post Comparison for Adult Methadone (Unweighted)

Functioning Indices		N	% none (0%)	% Low (1-13%)	% Medium (14-49%)	% High (50-100%)	Mean	St. Dev.	d
Substance Frequency Index	Pre	22	4.5%	4.5%	54.5%	36.4%	0.37	0.17	
Substance Frequency Index	Post	22	9.1%	59.1%	13.6%	18.2%	0.17	0.22	-1.19
Current Withdrawal Index	Pre	22	0.0%	9.1%	18.2%	72.7%	0.54	0.27	
Current Withdrawal Index	Post	22	40.9%	18.2%	18.2%	22.7%	0.22	0.28	-1.19
Health Problem Index	Pre	22	18.2%	36.4%	36.4%	9.1%	0.16	0.14	
Health Problem Index	Post	22	27.3%	45.5%	18.2%	9.1%	0.11	0.15	-0.29
Psychological Problem Index	Pre	22	13.6%	13.6%	59.1%	13.6%	0.28	0.20	
Psychological Problem Index	Post	22	9.1%	45.5%	36.4%	9.1%	0.18	0.16	-0.48
Illegal Activity Index	Pre	22	18.2%	31.8%	13.6%	36.4%	0.31	0.30	
Illegal Activity Index	Post	22	13.6%	63.6%	18.2%	4.5%	0.12	0.16	-0.61
Recovery Environment Risk Index	Pre	22	0.0%	18.2%	81.8%	0.0%	0.20	0.09	
Recovery Environment Risk Index	Post	22	4.5%	31.8%	59.1%	4.5%	0.17	0.12	-0.28

Utilization Indices		N	% none (0%)	% Low (1-13%)	% Medium (14-49%)	% High (50-100%)	Mean	St. Dev.	d
Substance Abuse Treatment Index	Pre	17	52.9%	35.3%	5.9%	5.9%	0.09	0.16	
Substance Abuse Treatment Index	Post	17	41.2%	11.8%	0.0%	47.1%	0.45	0.49	2.25
Physical Health Treatment Index	Pre	22	54.5%	31.8%	13.6%	0.0%	0.05	0.09	
Physical Health Treatment Index	Post	22	68.2%	31.8%	0.0%	0.0%	0.02	0.04	-0.35
Mental Health Treatment Index	Pre	21	85.7%	9.5%	4.8%	0.0%	0.01	0.04	
Mental Health Treatment Index	Post	21	95.2%	4.8%	0.0%	0.0%	0.00	0.00	-0.28
Criminal Justice System Index	Pre	16	68.8%	6.3%	6.3%	18.8%	0.18	0.36	
Criminal Justice System Index	Post	16	75.0%	12.5%	0.0%	12.5%	0.13	0.34	-0.14
Controlled Environment Index	Pre	22	45.5%	27.3%	22.7%	4.5%	0.12	0.19	
Controlled Environment Index	Post	22	68.2%	18.2%	9.1%	4.5%	0.07	0.22	-0.26
Employment Activity Index	Pre	21	38.1%	52.4%	0.0%	9.5%	0.12	0.28	
Employment Activity Index	Post	21	4.8%	47.6%	9.5%	38.1%	0.36	0.36	0.86
Training Activity Index	Pre	19	94.7%	0.0%	0.0%	5.3%	0.04	0.17	
Training Activity Index	Post	19	84.2%	0.0%	0.0%	15.8%	0.10	0.24	0.38

B6. adult ST

Pre-Post Comparison for Adult ST Residential (Unweighted)

Functioning Indices		N	% High				Mean	St. Dev.	d
			% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)			
Substance Frequency Index	Pre	65	4.6%	23.1%	50.8%	21.5%	0.32	0.24	
Substance Frequency Index	Post	65	52.3%	32.3%	4.6%	10.8%	0.09	0.19	-0.98
Current Withdrawal Index	Pre	64	10.9%	10.9%	23.4%	54.7%	0.46	0.28	
Current Withdrawal Index	Post	64	50.0%	12.5%	21.9%	15.6%	0.18	0.24	-0.99
Health Problem Index	Pre	56	35.7%	19.6%	35.7%	8.9%	0.18	0.22	
Health Problem Index	Post	56	21.4%	46.4%	19.6%	12.5%	0.17	0.22	-0.06
Psychological Problem Index	Pre	66	10.6%	22.7%	43.9%	22.7%	0.28	0.24	
Psychological Problem Index	Post	66	4.5%	37.9%	43.9%	13.6%	0.24	0.20	-0.20
Illegal Activity Index	Pre	64	28.1%	26.6%	21.9%	23.4%	0.27	0.31	
Illegal Activity Index	Post	64	9.4%	60.9%	18.8%	10.9%	0.19	0.24	-0.28
Recovery Environment Risk Index	Pre	67	0.0%	25.4%	70.1%	4.5%	0.23	0.13	
Recovery Environment Risk Index	Post	67	3.0%	55.2%	37.3%	4.5%	0.16	0.15	-0.53

Utilization Indices		N	% High				Mean	St. Dev.	d
			% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)			
Substance Abuse Treatment Index	Pre	61	44.3%	41.0%	11.5%	3.3%	0.07	0.16	
Substance Abuse Treatment Index	Post	61	60.7%	13.1%	14.8%	11.5%	0.16	0.32	0.55
Physical Health Treatment Index	Pre	59	49.2%	42.4%	6.8%	1.7%	0.05	0.09	
Physical Health Treatment Index	Post	59	49.2%	45.8%	3.4%	1.7%	0.04	0.10	-0.10
Mental Health Treatment Index	Pre	60	71.7%	23.3%	5.0%	0.0%	0.03	0.07	
Mental Health Treatment Index	Post	60	93.3%	6.7%	0.0%	0.0%	0.00	0.02	-0.34
Criminal Justice System Index	Pre	60	90.0%	5.0%	1.7%	3.3%	0.04	0.19	
Criminal Justice System Index	Post	60	85.0%	3.3%	0.0%	11.7%	0.11	0.31	0.38
Controlled Environment Index	Pre	67	47.8%	32.8%	10.4%	9.0%	0.10	0.21	
Controlled Environment Index	Post	67	65.7%	13.4%	7.5%	13.4%	0.14	0.31	0.18
Employment Activity Index	Pre	63	20.6%	38.1%	11.1%	30.2%	0.29	0.32	
Employment Activity Index	Post	63	3.2%	42.9%	9.5%	44.4%	0.41	0.36	0.38
Training Activity Index	Pre	62	88.7%	0.0%	6.5%	4.8%	0.05	0.16	
Training Activity Index	Post	62	90.3%	0.0%	6.5%	3.2%	0.05	0.16	-0.03

B7. adult TASC

Pre-Post Comparison for Adult TASC Residential (Unweighted)

			% High						
		N	% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)	Mean	St. Dev.	d
Functioning Indices									
Substance Frequency Index	Pre	98	62.2%	20.4%	9.2%	8.2%	0.10	0.22	
Substance Frequency Index	Post	98	29.6%	59.2%	10.2%	1.0%	0.04	0.10	-0.24
Current Withdrawal Index	Pre	94	72.3%	8.5%	10.6%	8.5%	0.10	0.22	
Current Withdrawal Index	Post	94	60.6%	19.1%	14.9%	5.3%	0.09	0.15	-0.04
Health Problem Index	Pre	76	42.1%	39.5%	17.1%	1.3%	0.09	0.13	
Health Problem Index	Post	76	28.9%	57.9%	11.8%	1.3%	0.07	0.08	-0.19
Psychological Problem Index	Pre	96	0.0%	30.2%	67.7%	2.1%	0.24	0.15	
Psychological Problem Index	Post	96	6.3%	57.3%	35.4%	1.0%	0.14	0.13	-0.69
Illegal Activity Index	Pre	92	3.3%	78.3%	14.1%	4.3%	0.14	0.15	
Illegal Activity Index	Post	92	2.2%	70.7%	17.4%	9.8%	0.16	0.19	0.12
Recovery Environment Risk Index	Pre	101	3.0%	42.6%	54.5%	0.0%	0.14	0.06	
Recovery Environment Risk Index	Post	101	3.0%	68.3%	28.7%	0.0%	0.13	0.09	-0.13
Utilization Indices									
		N	% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)	Mean	St. Dev.	d
Substance Abuse Treatment Index	Pre	80	60.0%	13.8%	7.5%	18.8%	0.20	0.35	
Substance Abuse Treatment Index	Post	80	48.8%	10.0%	28.8%	12.5%	0.20	0.30	0.01
Physical Health Treatment Index	Pre	84	83.3%	14.3%	2.4%	0.0%	0.01	0.04	
Physical Health Treatment Index	Post	84	71.4%	28.6%	0.0%	0.0%	0.01	0.02	0.03
Mental Health Treatment Index	Pre	96	81.3%	14.6%	2.1%	2.1%	0.02	0.10	
Mental Health Treatment Index	Post	96	96.9%	3.1%	0.0%	0.0%	0.00	0.01	-0.20
Criminal Justice System Index	Pre	85	25.9%	7.1%	2.4%	64.7%	0.65	0.47	
Criminal Justice System Index	Post	85	25.9%	0.0%	4.7%	69.4%	0.70	0.45	0.10
Controlled Environment Index	Pre	101	15.8%	12.9%	5.9%	65.3%	0.66	0.44	
Controlled Environment Index	Post	101	60.4%	7.9%	12.9%	18.8%	0.20	0.35	-1.02
Employment Activity Index	Pre	90	11.1%	82.2%	3.3%	3.3%	0.08	0.11	
Employment Activity Index	Post	90	3.3%	26.7%	6.7%	63.3%	0.53	0.35	4.13
Training Activity Index	Pre	91	82.4%	0.0%	12.1%	5.5%	0.08	0.18	
Training Activity Index	Post	91	87.9%	0.0%	6.6%	5.5%	0.07	0.20	-0.06

B8. adult resid

Pre-Post Comparison for Adult Residential (Unweighted)

		N	% High				Mean	St. Dev.	d
			% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)			
Functioning Indices									
Substance Frequency Index	Pre	162	2.5%	19.8%	51.2%	26.5%	0.35	0.26	
Substance Frequency Index	Post	162	42.0%	49.4%	4.9%	3.7%	0.05	0.11	-1.20
Current Withdrawal Index	Pre	160	16.9%	11.3%	35.0%	36.9%	0.37	0.28	
Current Withdrawal Index	Post	160	55.6%	16.3%	20.0%	8.1%	0.13	0.19	-0.87
Health Problem Index	Pre	153	49.7%	25.5%	15.7%	9.2%	0.13	0.22	
Health Problem Index	Post	153	30.7%	45.8%	19.6%	3.9%	0.11	0.15	-0.06
Psychological Problem Index	Pre	164	9.8%	23.2%	46.3%	20.7%	0.30	0.25	
Psychological Problem Index	Post	164	14.0%	36.0%	42.1%	7.9%	0.20	0.20	-0.40
Illegal Activity Index	Pre	159	15.7%	33.3%	25.2%	25.8%	0.29	0.29	
Illegal Activity Index	Post	159	11.9%	68.6%	13.2%	6.3%	0.14	0.18	-0.52
Recovery Environment Risk Index	Pre	165	0.0%	16.4%	75.8%	7.9%	0.26	0.15	
Recovery Environment Risk Index	Post	165	3.0%	55.8%	40.0%	1.2%	0.14	0.11	-0.80
Utilization Indices									
		N	% none (0%)	% Low (1-13%)	Medium (14-49%)	(50-100%)	Mean	St. Dev.	d
Substance Abuse Treatment Index	Pre	152	38.2%	20.4%	21.7%	19.7%	0.24	0.32	
Substance Abuse Treatment Index	Post	152	61.8%	6.6%	13.8%	17.8%	0.18	0.30	-0.17
Physical Health Treatment Index	Pre	159	56.6%	37.1%	3.1%	3.1%	0.04	0.12	
Physical Health Treatment Index	Post	159	64.2%	34.6%	1.3%	0.0%	0.01	0.03	-0.24
Mental Health Treatment Index	Pre	156	78.8%	15.4%	4.5%	1.3%	0.03	0.09	
Mental Health Treatment Index	Post	156	92.3%	7.7%	0.0%	0.0%	0.00	0.02	-0.25
Criminal Justice System Index	Pre	156	79.5%	8.3%	1.3%	10.9%	0.11	0.30	
Criminal Justice System Index	Post	156	82.1%	2.6%	1.9%	13.5%	0.14	0.34	0.10
Controlled Environment Index	Pre	165	29.7%	27.9%	31.5%	10.9%	0.20	0.27	
Controlled Environment Index	Post	165	66.7%	10.3%	7.9%	15.2%	0.16	0.33	-0.15
Employment Activity Index	Pre	159	15.1%	50.3%	15.1%	19.5%	0.23	0.27	
Employment Activity Index	Post	159	6.9%	39.0%	3.8%	50.3%	0.41	0.36	0.69
Training Activity Index	Pre	159	88.7%	0.0%	6.3%	5.0%	0.06	0.17	
Training Activity Index	Post	159	86.8%	0.0%	6.9%	6.3%	0.07	0.19	0.07

B9 Means

Pre Post Mean Changes by age and level of care

Indices (Means)		Adolescent			Adult				
		Adol OP (n=27)	STR (n=92)	Adol LTR (n=85)	Adult OP (n=30)	Adult	Adult	Adult	Adult
						Meth (n=22)	STR (n=67)	TASC (n=101)	Resid (n=165)
Substance Frequency Index	Pre	11%	21%	24%	4%	37%	32%	10%	35%
Substance Frequency Index	Post	8%	10%	6%	2%	17%	9%	4%	5%
Current Withdrawal Index	Pre	8%	19%	16%	8%	54%	46%	10%	37%
Current Withdrawal Index	Post	10%	8%	6%	5%	22%	18%	9%	13%
Health Problem Index	Pre	13%	16%	12%	7%	16%	18%	9%	13%
Health Problem Index	Post	12%	15%	12%	9%	11%	17%	7%	11%
Psychological Problem Index	Pre	26%	31%	35%	10%	28%	28%	24%	30%
Psychological Problem Index	Post	24%	26%	25%	12%	18%	24%	14%	20%
Illegal Activity Index	Pre	28%	28%	43%	7%	31%	27%	14%	29%
Illegal Activity Index	Post	26%	30%	25%	12%	12%	19%	16%	14%
Recovery Environment Risk Index	Pre	18%	21%	21%	16%	20%	23%	14%	26%
Recovery Environment Risk Index	Post	16%	20%	18%	18%	17%	16%	13%	14%
Substance Abuse Treatment Index	Pre	9%	16%	10%	2%	9%	7%	20%	24%
Substance Abuse Treatment Index	Post	6%	13%	17%	6%	45%	16%	20%	18%
Physical Health Treatment Index	Pre	1%	3%	1%	1%	5%	5%	1%	4%
Physical Health Treatment Index	Post	3%	3%	2%	1%	2%	4%	1%	1%
Mental Health Treatment Index	Pre	2%	5%	2%	0%	1%	3%	2%	3%
Mental Health Treatment Index	Post	1%	3%	2%	0%	0%	0%	0%	0%
Criminal Justice System Index	Pre	35%	40%	73%	11%	18%	4%	65%	11%
Criminal Justice System Index	Post	53%	55%	72%	18%	13%	11%	70%	14%
Controlled Environment Index	Pre	16%	23%	37%	0%	12%	10%	66%	20%
Controlled Environment Index	Post	39%	20%	27%	0%	7%	14%	20%	16%
Employment Activity Index	Pre	29%	19%	12%	42%	12%	29%	8%	23%
Employment Activity Index	Post	35%	34%	30%	56%	36%	41%	53%	41%
Training Activity Index	Pre	49%	41%	47%	4%	4%	5%	8%	6%
Training Activity Index	Post	48%	43%	31%	13%	10%	5%	7%	7%

C1. ES

C1. Comparisons of Pre to Post Treatment Effect Sizes by Initial Level of Care^{\a}

Indices (Effect Sizes)	Adolescent			Adult				
	Adol OP (n=27)	Adol STR (n=92)	Adol LTR (n=85)	Adult OP (n=30)	Adult Meth (n=22)	Adult STR (n=67)	Adult TASC (n=101)	Adult Resid (n=165)
Substance Frequency Index	-0.18	-0.47	-0.73	-0.22	-1.19	-0.98	-0.24	-1.20
Current Withdrawal Index	0.13	-0.41	-0.47	-0.24	-1.19	-0.99	-0.04	-0.87
Health Problem Index	-0.09	-0.03	-0.06	0.20	-0.29	-0.06	-0.19	-0.06
Psychological Problem Index	-0.10	-0.19	-0.45	0.14	-0.48	-0.20	-0.69	-0.40
Illegal Activity Index	-0.08	0.05	-0.65	0.73	-0.61	-0.28	0.12	-0.52
Recovery Environment Risk Index	-0.24	-0.15	-0.32	0.47	-0.28	-0.53	-0.13	-0.80
Substance Abuse Treatment Index	-0.13	-0.14	0.30	0.47	2.25	0.55	0.01	-0.17
Physical Health Treatment Index	0.83	-0.08	0.18	-0.06	-0.35	-0.10	0.03	-0.24
Mental Health Treatment Index	-0.18	-0.22	0.14	0.00	-0.28	-0.34	-0.20	-0.25
Criminal Justice System Index	0.38	0.33	-0.01	0.23	-0.14	0.38	0.10	0.10
Controlled Environment Index	0.70	-0.10	-0.25	-0.06	-0.26	0.18	-1.02	-0.15
Employment Activity Index	0.23	0.63	0.88	0.31	0.86	0.38	4.13	0.69
Training Activity Index	-0.05	0.06	-0.54	0.73	0.38	-0.03	-0.06	0.07

^{\a} (Mean Post - Mean Pre)/(Std. Dev. Pre). An effect size of 1 would be the equivalent of 1 standard deviation or 10 points on a t-score.