

labnoteforLavaan

2023-12-21

Loading graph from Tetrad and come out with the graph without standlized

```
library(lavaan)
```

```
## This is lavaan 0.6-16
```

```
## lavaan is FREE software! Please report any bugs.
```

```
setwd('/Users/jonah/Downloads/lab_data/')
# load graph file (txt) saved from Tetrad
con = file('12_19_graph.txt', "r")
while ( TRUE ) {
  line = readLines(con, n = 1)
  if ( length(line) == 0 | line == 'Graph Edges:' ) {
    break
  }
}
el<-data.frame()
while ( TRUE ) {
  line = readLines(con, n = 1)
  if ( line == "" ) {
    break
  }
  el<-rbind(el,t(as.data.frame(strsplit(line,split=' ')[[1]][2:4])))
}

close(con)
rownames(el) <- NULL
names(el)<-c('source','edgetype','target')

# now make model string for lavaan
mdstr<-''
for (i in 1:nrow(el)){
  e<-el[i,, drop=FALSE]
  if (e$edgetype=='-->'){
    # estimating o-> as as '-->' here
    mdstr<-paste0(mdstr,e$target, '~', e$source, '\n')
  }
  if(e$edgetype=='<->' | e$edgetype=='o-o' | e$edgetype=='o->'){
    mdstr<-paste0(mdstr,e$source, '~', e$target, '\n')
  }
}
```

```

# fit lavaan model
library(lavaan)
data<-read.table("Jonah_Y0_Y1_Model_3.csv1_final_copy.txt",header= TRUE)
fit<-sem(mdstr,data=data)

summary(fit,fit.measures=TRUE)

```

```

## lavaan 0.6.16 ended normally after 182 iterations
##
##      Estimator                      ML
##      Optimization method          NLMINB
##      Number of model parameters    305
##
##      Number of observations        601
##
## Model Test User Model:
##
##      Test statistic                3519.588
##      Degrees of freedom            1648
##      P-value (Chi-square)          0.000
##
## Model Test Baseline Model:
##
##      Test statistic                15799.229
##      Degrees of freedom            1891
##      P-value                       0.000
##
## User Model versus Baseline Model:
##
##      Comparative Fit Index (CFI)    0.865
##      Tucker-Lewis Index (TLI)      0.846
##
## Loglikelihood and Information Criteria:
##
##      Loglikelihood user model (H0)   -55507.991
##      Loglikelihood unrestricted model (H1) -53748.196
##
##      Akaike (AIC)                  111625.981
##      Bayesian (BIC)                 112967.553
##      Sample-size adjusted Bayesian (SABIC) 111999.260
##
## Root Mean Square Error of Approximation:
##
##      RMSEA                          0.043
##      90 Percent confidence interval - lower 0.041
##      90 Percent confidence interval - upper 0.045
##      P-value H_0: RMSEA <= 0.050        1.000
##      P-value H_0: RMSEA >= 0.080        0.000
##
## Standardized Root Mean Square Residual:
##
##      SRMR                          0.097
##

```

Parameter Estimates:

##

## Standard errors	Standard
## Information	Expected
## Information saturated (h1) model	Structured

##

Regressions:

##	Estimate	Std.Err	z-value	P(> z)
## Y1_IMP_Depr_Anxiety ~				
## Y0_AGOR	0.579	0.124	4.681	0.000
## Y0_AU_Freq ~				
## Y0_ARREST	0.691	0.130	5.325	0.000
## Y0_CD ~				
## Y0_ARREST	1.467	0.204	7.178	0.000
## Y0_DB_Gen_Del ~				
## Y0_ARREST	0.993	0.150	6.607	0.000
## Y1_ARREST ~				
## Y0_ARREST	0.363	0.056	6.525	0.000
## Y1_IMP_Depr_Anxiety ~				
## Y0_ARREST	-1.252	0.353	-3.541	0.000
## Y0_AU_Drunk ~				
## Y0_AU_4Drinks	0.282	0.038	7.404	0.000
## Y0_AU_Drinks	0.370	0.030	12.399	0.000
## Y0_PD_Depres ~				
## Y0_AU_Drinks	0.193	0.045	4.323	0.000
## Y0_AU_4Drinks ~				
## Y0_AU_Freq	0.701	0.030	23.403	0.000
## Y0_AU_Drinks ~				
## Y0_AU_Freq	1.023	0.032	31.537	0.000
## Y0_IMP_Depr_Anxiety ~				
## Y0_Age	-0.149	0.039	-3.807	0.000
## Y0_PD_Cog_Perc_Dys ~				
## Y0_Age	-0.198	0.043	-4.652	0.000
## Y0_SAD ~				
## Y0_Age	-0.209	0.037	-5.616	0.000
## Y1_PD_Perc_Dys_Sep_Ins ~				
## Y0_Age	-0.141	0.037	-3.859	0.000
## Y0_IMP_Behavior ~				
## Y0_CD	0.282	0.063	4.508	0.000
## Y0_IMP_Parents ~				
## Y0_CD	0.201	0.055	3.649	0.000
## Y0_MDD ~				
## Y0_CD	0.554	0.094	5.914	0.000
## Y1_ARREST ~				
## Y0_CD	0.081	0.009	8.744	0.000
## Y1_CD ~				
## Y0_CD	0.442	0.036	12.412	0.000
## Y1_ND ~				
## Y0_CD	0.090	0.011	8.440	0.000
## Y1_DB_Alone ~				
## Y0_DB_Gen_Del	0.154	0.021	7.427	0.000
## Y1_DB_Alone_Group ~				
## Y0_DB_Gen_Del	0.101	0.014	7.314	0.000
## Y0_CD ~				

##	Y0_DB_SnJ	0.443	0.031	14.500	0.000
##	Y0_DB_Gen_Del ~				
##	Y0_DB_SnJ	0.538	0.022	23.954	0.000
##	Y0_IMP_Home ~				
##	Y0_DB_SnJ	0.685	0.101	6.758	0.000
##	Y0_PD_Suspicious ~				
##	Y0_DB_SnJ	0.872	0.106	8.192	0.000
##	Y1_DB_Group ~				
##	Y0_DB_SnJ	0.088	0.016	5.372	0.000
##	Y1_GAD ~				
##	Y0_GAD	0.280	0.030	9.198	0.000
##	Y0_IMP_Parents ~				
##	Y0_IMP_Activts	0.194	0.033	5.951	0.000
##	Y0_PD_Depres ~				
##	Y0_IMP_Activts	0.099	0.018	5.594	0.000
##	Y0_PD-Withdr ~				
##	Y0_IMP_Activts	0.155	0.027	5.829	0.000
##	Y1_IMP_Behavior ~				
##	Y0_IMP_Behavir	0.222	0.034	6.426	0.000
##	Y0_IMP_Activities ~				
##	Y0_IMP_Dpr-Anx	0.247	0.040	6.149	0.000
##	Y0_IMP_Behavior ~				
##	Y0_IMP_Dpr-Anx	0.174	0.038	4.593	0.000
##	Y0_IMP_Help ~				
##	Y0_IMP_Dpr-Anx	0.147	0.023	6.448	0.000
##	Y0_IMP_Activities ~				
##	Y0_IMP_Home	0.292	0.025	11.885	0.000
##	Y0_IMP_Behavior ~				
##	Y0_IMP_Home	0.134	0.023	5.817	0.000
##	Y0_IMP_Depr-Anx ~				
##	Y0_IMP_Home	0.200	0.022	9.118	0.000
##	Y0_IMP_Parents ~				
##	Y0_IMP_Home	0.234	0.022	10.525	0.000
##	Y1_IMP_Activities ~				
##	Y0_IMP_Home	0.331	0.042	7.868	0.000
##	Y1_IMP_Home ~				
##	Y0_IMP_Parents	0.387	0.058	6.670	0.000
##	Y0_GAD ~				
##	Y0_MDD	0.235	0.018	13.152	0.000
##	Y0_PD ~				
##	Y0_MDD	0.035	0.005	6.863	0.000
##	Y1_MDD ~				
##	Y0_MDD	0.322	0.029	11.053	0.000
##	Y1_SAD ~				
##	Y0_Male	-0.464	0.106	-4.366	0.000
##	Y0_PD_Eccentr ~				
##	Y0_PD_Cg_Prc_D	0.378	0.045	8.488	0.000
##	Y0_PD_Odd_Bel_Exp ~				
##	Y0_PD_Cg_Prc_D	0.225	0.035	6.448	0.000
##	Y0_PTSD ~				
##	Y0_PD_Cg_Prc_D	0.128	0.024	5.253	0.000
##	Y0_PD ~				
##	Y0_PD_Depres	0.072	0.014	5.090	0.000
##	Y0_MDD ~				

##	Y0_PD_Eccentr	0.386	0.036	10.869	0.000
##	Y0_PD_Depres ~				
##	Y0_PD_Eccentr	0.094	0.013	7.160	0.000
##	Y0_PD_Odd_Bel_Exp ~				
##	Y0_PD_Eccentr	0.184	0.028	6.482	0.000
##	Y0_PD_Cog_Perc_Dys ~				
##	Y0_PD_Hostilty	0.347	0.035	9.848	0.000
##	Y0_PD_Eccentr ~				
##	Y0_PD_Hostilty	0.357	0.042	8.471	0.000
##	Y0_PD_Sep_Insec ~				
##	Y0_PD_Hostilty	0.231	0.024	9.780	0.000
##	Y1_PD_Hostility ~				
##	Y0_PD_Hostilty	0.137	0.025	5.522	0.000
##	Y0_IMP_Behavior ~				
##	Y0_PD_Impul	0.228	0.030	7.599	0.000
##	Y1_PD_Impul ~				
##	Y0_PD_Impul	0.224	0.043	5.234	0.000
##	Y0_AGOR ~				
##	Y0_PD_Sep_Insc	0.085	0.012	7.345	0.000
##	Y0_SAD ~				
##	Y0_PD_Sep_Insc	0.330	0.040	8.327	0.000
##	Y1_PD_Perc_Dys_Sep_Ins ~				
##	Y0_PD_Sep_Insc	0.220	0.039	5.577	0.000
##	Y0_AU_4Drinks ~				
##	Y0_PD_Suspicion	-0.020	0.005	-3.679	0.000
##	Y0_IMP_Depr_Anxiety ~				
##	Y0_PD_Suspicion	0.166	0.020	8.167	0.000
##	Y0_PD_Cog_Perc_Dys ~				
##	Y0_PD_Suspicion	0.203	0.027	7.399	0.000
##	Y0_PD_Eccentr ~				
##	Y0_PD_Suspicion	0.174	0.032	5.475	0.000
##	Y0_PD_Hostility ~				
##	Y0_PD_Suspicion	0.463	0.025	18.146	0.000
##	Y0_PD_Impul ~				
##	Y0_PD_Suspicion	0.311	0.024	12.830	0.000
##	Y0_PD-Withdrawal ~				
##	Y0_PD_Suspicion	-0.125	0.017	-7.541	0.000
##	Y1_PD_Susp_Eccentr ~				
##	Y0_PD_Suspicion	0.503	0.051	9.927	0.000
##	Y1_PD-Withdrawal ~				
##	Y0_PD-Withdrawal	0.311	0.038	8.128	0.000
##	Y1_PTSD ~				
##	Y0_PTSD	0.176	0.032	5.447	0.000
##	Y0_GAD ~				
##	Y0_SAD	0.301	0.029	10.455	0.000
##	Y0_PD ~				
##	Y0_SAD	0.057	0.008	6.887	0.000
##	Y1_SAD ~				
##	Y0_SAD	0.445	0.029	15.476	0.000
##	Y1_DB_Alone ~				
##	Y1_ARREST	0.622	0.073	8.521	0.000
##	Y1_DB_Group ~				
##	Y1_ARREST	0.627	0.074	8.537	0.000
##	Y1_MUD ~				

##	Y1_ARREST	0.446	0.083	5.350	0.000
##	Y1_DB_Group ~				
##	Y1_CD	0.097	0.017	5.666	0.000
##	Y1_IMP_Behavior ~				
##	Y1_CD	0.370	0.055	6.776	0.000
##	Y1_MUD ~				
##	Y1_CD	0.103	0.019	5.417	0.000
##	Y1_ODD ~				
##	Y1_CD	0.948	0.058	16.242	0.000
##	Y1_PTSD ~				
##	Y1_CD	0.221	0.040	5.515	0.000
##	Y1_CD ~				
##	Y1_DB_Alone	0.847	0.072	11.839	0.000
##	Y1_AUD ~				
##	Y1_DB_Alon_Grp	0.261	0.025	10.325	0.000
##	Y1_MUD ~				
##	Y1_DB_Alon_Grp	0.609	0.063	9.686	0.000
##	Y1_AUD ~				
##	Y1_DB_Group	0.085	0.016	5.203	0.000
##	Y1_DB_Alone_Group ~				
##	Y1_DB_Group	0.202	0.024	8.352	0.000
##	Y1_IMP_Behavior ~				
##	Y1_IMP_Activts	0.201	0.019	10.586	0.000
##	Y1_IMP_Depr_An timer ~				
##	Y1_IMP_Activts	0.169	0.019	9.041	0.000
##	Y1_IMP_Help ~				
##	Y1_IMP_Activts	0.076	0.011	6.669	0.000
##	Y1_IMP_Home ~				
##	Y1_IMP_Activts	0.493	0.030	16.203	0.000
##	Y1_IMP_Par_Worry ~				
##	Y1_IMP_Behavir	0.109	0.025	4.287	0.000
##	Y1_PD_Impul ~				
##	Y1_IMP_Behavir	0.371	0.051	7.261	0.000
##	Y1_GAD ~				
##	Y1_IMP_Dpr_An timer	0.083	0.025	3.375	0.001
##	Y1_PD_Depres ~				
##	Y1_IMP_Dpr_An timer	0.084	0.020	4.254	0.000
##	Y1_PD ~				
##	Y1_MDD	0.045	0.006	7.917	0.000
##	Y1_PD_Depres ~				
##	Y1_MDD	0.069	0.013	5.202	0.000
##	Y1_IMP_Home ~				
##	Y1_ODD	0.313	0.048	6.568	0.000
##	Y1_MDD ~				
##	Y1_ODD	0.360	0.037	9.679	0.000
##	Y1_AUD ~				
##	Y1_PD_Depres	0.057	0.009	6.500	0.000
##	Y1_IMP_Help ~				
##	Y1_PD_Depres	0.242	0.042	5.730	0.000
##	Y1_DB_Alone ~				
##	Y1_PD_Hostilty	0.049	0.010	5.122	0.000
##	Y1_ODD ~				
##	Y1_PD_Hostilty	0.307	0.035	8.791	0.000
##	Y1_PD_Impul ~				

##	Y1_PD_Hostility	0.249	0.060	4.171	0.000
##	Y1_PD_Perc_Dys_Sep_Ins ~				
##	Y1_PD_Impul	0.124	0.025	4.905	0.000
##	Y1_PD_Odd_Bl_E	0.243	0.035	6.924	0.000
##	Y1_PD_Susp_Eccentr ~				
##	Y1_PD_Odd_Bl_E	1.080	0.085	12.699	0.000
##	Y1_IMP_Depr_Anxiety ~				
##	Y1_PD_Ssp_Eccn	0.094	0.012	7.588	0.000
##	Y1_PD_Hostility ~				
##	Y1_PD_Ssp_Eccn	0.216	0.013	17.294	0.000
##	Y1_PD_Impul ~				
##	Y1_PD_Ssp_Eccn	0.227	0.023	9.917	0.000
##	Y1_PD_Perc_Dys_Sep_Ins ~				
##	Y1_PD_Ssp_Eccn	0.091	0.016	5.770	0.000
##	Y1_AUD ~				
##	Y1_PTSD	0.030	0.006	4.616	0.000
##	Y1_AGOR ~				
##	Y1_SAD	0.096	0.010	9.169	0.000
##	Y1_GAD ~				
##	Y1_SAD	0.416	0.033	12.477	0.000
##	Y1_MDD ~				
##	Y1_SAD	0.655	0.059	11.042	0.000
##	Y1_PD ~				
##	Y1_SAD	0.067	0.010	6.419	0.000
##	Y1_PD_Susp_Eccentr ~				
##	Y1_SAD	0.868	0.116	7.473	0.000
##	Y1_PTSD ~				
##	Y1_SAD	0.143	0.033	4.387	0.000
##					
##	Covariances:				
##		Estimate	Std.Err	z-value	P(> z)
##	F0_CJSI ~~				
##	MO_CJSI	-0.070	0.008	-8.375	0.000
##	Y0_ARREST ~~				
##	MO_CJSI	0.015	0.003	4.325	0.000
##	.Y0_PTSD ~~				
##	.Y0_AGOR	0.134	0.031	4.328	0.000
##	.Y0_AU_4Drinks ~~				
##	.Y0_AU_Drinks	0.084	0.012	7.196	0.000
##	Y0_Age ~~				
##	Y0_DB_SnJ	0.534	0.091	5.876	0.000
##	.Y0_CD ~~				
##	.Y0_DB_Gen_Del	0.130	0.028	4.594	0.000
##	.Y0_AU_Freq ~~				
##	Y0_DB_SnJ	0.356	0.037	9.551	0.000
##	.Y1_IMP_Par_Worry ~~				
##	Y0_IMP_Pr_Worry	0.337	0.060	5.658	0.000
##	.Y0_PD_Suspicious ~~				
##	Y0_Male	-0.295	0.070	-4.192	0.000
##	.Y0_PD_Hostility ~~				
##	.Y0_PD_Impul	1.176	0.200	5.879	0.000
##	.Y0_SAD ~~				
##	.Y0_PTSD	0.469	0.107	4.404	0.000
##	.Y0_AGOR ~~				

##	.Y1_AGOR	0.073	0.009	7.771	0.000
##	.Y0_AU_Drunk ~~				
##	.Y1_CD	0.092	0.020	4.539	0.000
##	.Y1_GAD ~~				
##	.Y1_MDD	1.121	0.124	9.043	0.000
##	.Y0_AU_4Drinks ~~				
##	.Y1_IMP_Activts	0.299	0.069	4.309	0.000
##	.Y1_IMP_Depr_An timer				
##	.Y0_IMP_Dpr_An timer	0.414	0.124	3.354	0.001
##	.Y0_IMP_Help ~~				
##	.Y1_IMP_Help	0.260	0.051	5.063	0.000
##	.Y1_ND ~~				
##	.Y0_PTSD	0.069	0.019	3.664	0.000
##	.Y0_PD ~~				
##	.Y1_PD	0.040	0.006	6.308	0.000
##	.Y0_PD_Depres ~~				
##	.Y1_PD_Depres	0.209	0.039	5.318	0.000
##	.Y0_PD_Odd_Bl_Exp ~~				
##	.Y1_PD_Odd_Bl_E	0.765	0.154	4.983	0.000
##	.Y0_AU_Drunk ~~				
##	.Y1_PD_Pr_D_S_I	-0.001	0.034	-0.044	0.965
##	.Y1_ND	0.006	0.006	0.931	0.352
##	.Y1_GAD	0.003	0.023	0.132	0.895
##	.Y0_IMP_Help	0.040	0.024	1.695	0.090
##	.Y1_IMP_Home	0.084	0.055	1.531	0.126
##	.Y0_PD	-0.020	0.008	-2.534	0.011
##	.Y0_PD_Odd_Bl_E	0.019	0.035	0.547	0.584
##	.Y1_PD-Withdr	0.045	0.030	1.518	0.129
##	.Y1_MUD	0.028	0.011	2.465	0.014
##	.Y1_AUD	0.012	0.004	2.825	0.005
##	.Y1_IMP_Help	0.020	0.021	0.948	0.343
##	.Y1_IMP_Pr_Wrry	-0.003	0.025	-0.108	0.914
##	.Y1_PD	-0.006	0.008	-0.773	0.439
##	.Y1_AGOR	-0.015	0.008	-1.778	0.075
##	.Y1_PD_Perc_Dys_Sep_Ins ~~				
##	.Y1_ND	-0.020	0.021	-0.960	0.337
##	.Y1_GAD	-0.138	0.080	-1.722	0.085
##	.Y0_IMP_Help	0.194	0.081	2.396	0.017
##	.Y1_IMP_Home	-0.217	0.186	-1.163	0.245
##	.Y0_PD	-0.029	0.027	-1.085	0.278
##	.Y0_PD_Odd_Bl_E	0.001	0.118	0.009	0.993
##	.Y1_PD-Withdr	-0.083	0.101	-0.819	0.413
##	.Y1_MUD	-0.010	0.039	-0.246	0.806
##	.Y1_AUD	-0.013	0.015	-0.894	0.371
##	.Y1_IMP_Help	0.165	0.073	2.260	0.024
##	.Y1_IMP_Pr_Wrry	0.108	0.086	1.257	0.209
##	.Y1_PD	-0.008	0.027	-0.306	0.759
##	.Y1_AGOR	0.050	0.028	1.782	0.075
##	.Y1_ND ~~				
##	.Y1_GAD	0.003	0.015	0.189	0.850
##	.Y0_IMP_Help	-0.011	0.015	-0.784	0.433
##	.Y1_IMP_Home	-0.010	0.034	-0.286	0.775
##	.Y0_PD	-0.000	0.005	-0.084	0.933
##	.Y0_PD_Odd_Bl_E	-0.021	0.022	-0.978	0.328

##	.Y1_PD-Withdr	0.004	0.018	0.226	0.821
##	.Y1_MUD	0.014	0.007	1.944	0.052
##	.Y1_AUD	0.006	0.003	2.126	0.033
##	.Y1_IMP_Help	0.017	0.013	1.265	0.206
##	.Y1_IMP_Pr_Wrry	0.015	0.016	0.976	0.329
##	.Y1_PD	-0.000	0.005	-0.020	0.984
##	.Y1_AGOR	0.012	0.005	2.254	0.024
##	.Y1_GAD ~~				
##	.Y0_IMP_Help	-0.033	0.055	-0.605	0.545
##	.Y1_IMP_Home	0.058	0.127	0.453	0.651
##	.Y0_PD	0.015	0.019	0.797	0.426
##	.Y0_PD_Odd_Bl_E	0.079	0.081	0.972	0.331
##	.Y1_PD-Withdr	-0.011	0.069	-0.166	0.869
##	.Y1_MUD	-0.019	0.027	-0.723	0.470
##	.Y1_AUD	-0.015	0.010	-1.453	0.146
##	.Y1_IMP_Help	0.036	0.050	0.730	0.466
##	.Y1_IMP_Pr_Wrry	0.085	0.059	1.444	0.149
##	.Y1_PD	0.036	0.018	1.983	0.047
##	.Y1_AGOR	0.019	0.019	0.991	0.322
##	.Y0_IMP_Help ~~				
##	.Y1_IMP_Home	-0.022	0.129	-0.169	0.866
##	.Y0_PD	0.021	0.019	1.111	0.267
##	.Y0_PD_Odd_Bl_E	0.009	0.082	0.116	0.908
##	.Y1_PD-Withdr	0.052	0.070	0.750	0.453
##	.Y1_MUD	-0.003	0.027	-0.122	0.903
##	.Y1_AUD	-0.011	0.010	-1.034	0.301
##	.Y1_IMP_Pr_Wrry	0.056	0.059	0.937	0.349
##	.Y1_PD	0.001	0.018	0.037	0.970
##	.Y1_AGOR	0.021	0.019	1.084	0.278
##	.Y1_IMP_Home ~~				
##	.Y0_PD	0.014	0.043	0.326	0.744
##	.Y0_PD_Odd_Bl_E	-0.279	0.189	-1.476	0.140
##	.Y1_PD-Withdr	-0.009	0.161	-0.058	0.954
##	.Y1_MUD	0.113	0.062	1.811	0.070
##	.Y1_AUD	-0.009	0.024	-0.396	0.692
##	.Y1_IMP_Help	0.086	0.116	0.746	0.455
##	.Y1_IMP_Pr_Wrry	0.052	0.137	0.382	0.702
##	.Y1_PD	0.048	0.043	1.138	0.255
##	.Y1_AGOR	0.010	0.045	0.231	0.817
##	.Y0_PD ~~				
##	.Y0_PD_Odd_Bl_E	0.017	0.027	0.617	0.537
##	.Y1_PD-Withdr	-0.020	0.023	-0.857	0.391
##	.Y1_MUD	0.015	0.009	1.612	0.107
##	.Y1_AUD	0.002	0.003	0.497	0.619
##	.Y1_IMP_Help	-0.014	0.017	-0.825	0.410
##	.Y1_IMP_Pr_Wrry	-0.012	0.020	-0.584	0.559
##	.Y1_AGOR	0.017	0.007	2.661	0.008
##	.Y0_PD_Odd_Bel_Exp ~~				
##	.Y1_PD-Withdr	0.055	0.102	0.535	0.593
##	.Y1_MUD	-0.001	0.039	-0.037	0.970
##	.Y1_AUD	0.035	0.015	2.279	0.023
##	.Y1_IMP_Help	0.073	0.074	0.986	0.324
##	.Y1_IMP_Pr_Wrry	0.004	0.087	0.050	0.960
##	.Y1_PD	-0.009	0.027	-0.338	0.736

##	.Y1_AGOR	0.012	0.028	0.411	0.681
##	.Y1_PD-Withdr ~~				
##	.Y1_MUD	-0.001	0.034	-0.030	0.976
##	.Y1_AUD	-0.012	0.013	-0.956	0.339
##	.Y1_IMP_Help	0.077	0.063	1.230	0.219
##	.Y1_IMP_Pr_Wrry	-0.069	0.074	-0.927	0.354
##	.Y1_PD	0.003	0.023	0.119	0.905
##	.Y1_AGOR	-0.020	0.024	-0.829	0.407
##	.Y1_MUD ~~				
##	.Y1_AUD	0.013	0.005	2.514	0.012
##	.Y1_IMP_Help	-0.002	0.024	-0.076	0.940
##	.Y1_IMP_Pr_Wrry	0.002	0.029	0.077	0.938
##	.Y1_PD	-0.019	0.009	-2.085	0.037
##	.Y1_AGOR	0.006	0.009	0.596	0.551
##	.Y1_AUD ~~				
##	.Y1_IMP_Help	0.005	0.009	0.530	0.596
##	.Y1_IMP_Pr_Wrry	-0.015	0.011	-1.316	0.188
##	.Y1_PD	-0.009	0.003	-2.642	0.008
##	.Y1_AGOR	-0.003	0.004	-0.836	0.403
##	.Y1_IMP_Help ~~				
##	.Y1_IMP_Pr_Wrry	0.122	0.054	2.285	0.022
##	.Y1_PD	0.017	0.017	1.006	0.314
##	.Y1_AGOR	-0.008	0.017	-0.442	0.658
##	.Y1_IMP_Par_Worry ~~				
##	.Y1_PD	0.002	0.020	0.119	0.905
##	.Y1_AGOR	-0.008	0.021	-0.382	0.702
##	.Y1_PD ~~				
##	.Y1_AGOR	0.020	0.006	3.077	0.002
##					
##	Variances:				
##		Estimate	Std.Err	z-value	P(> z)
##	.Y1_IMP_Dpr_An timer	2.817	0.163	17.335	0.000
##	.Y0_AU_Freq	0.453	0.026	17.335	0.000
##	.Y0_CD	0.924	0.053	17.335	0.000
##	.Y0_DB_Gen_Del	0.499	0.029	17.335	0.000
##	.Y1_ARREST	0.064	0.004	17.335	0.000
##	.Y0_AU_Drunk	0.254	0.015	17.361	0.000
##	.Y0_PD_Depres	0.991	0.057	17.335	0.000
##	.Y0_AU_4Drinks	0.257	0.015	17.381	0.000
##	.Y0_AU_Drinks	0.298	0.017	17.335	0.000
##	.Y0_IMP_Dpr_An timer	3.194	0.184	17.335	0.000
##	.Y0_PD_Cg_Prc_D	3.732	0.215	17.335	0.000
##	.Y0_SAD	2.940	0.170	17.335	0.000
##	.Y1_PD_Pr_D_S_I	2.862	0.165	17.335	0.000
##	.Y0_IMP_Behavir	3.056	0.176	17.335	0.000
##	.Y0_IMP_Parents	2.378	0.137	17.335	0.000
##	.Y0_MDD	6.943	0.401	17.335	0.000
##	.Y1_CD	0.975	0.056	17.335	0.000
##	.Y1_ND	0.097	0.006	17.347	0.000
##	.Y1_DB_Alone	0.248	0.014	17.335	0.000
##	.Y1_DB_Alon_Grp	0.106	0.006	17.335	0.000
##	.Y0_IMP_Home	10.166	0.586	17.335	0.000
##	.Y0_PD_Suspicion	11.543	0.666	17.335	0.000
##	.Y1_DB_Group	0.238	0.014	17.335	0.000

##	.Y1_GAD	1.583	0.091	17.384	0.000
##	.Y0_PD-Withdr	2.099	0.121	17.335	0.000
##	.Y1_IMP_Behavir	2.824	0.163	17.335	0.000
##	.Y0_IMP_Activts	3.500	0.202	17.335	0.000
##	.Y0_IMP_Help	1.366	0.079	17.335	0.000
##	.Y1_IMP_Activts	12.006	0.693	17.335	0.000
##	.Y1_IMP_Home	7.276	0.420	17.335	0.000
##	.Y0_GAD	1.699	0.098	17.335	0.000
##	.Y0_PD	0.154	0.009	17.335	0.000
##	.Y1_MDD	5.129	0.296	17.335	0.000
##	.Y1_SAD	1.695	0.098	17.335	0.000
##	.Y0_PD_Eccentr	4.612	0.266	17.335	0.000
##	.Y0_PD_Odd_Bl_E	3.065	0.177	17.350	0.000
##	.Y0_PTSD	2.369	0.136	17.374	0.000
##	.Y0_PD_Sep_Insc	2.600	0.150	17.335	0.000
##	.Y1_PD_Hostilty	2.721	0.157	17.335	0.000
##	.Y1_PD_Impul	6.080	0.351	17.335	0.000
##	.Y0_AGOR	0.279	0.016	17.388	0.000
##	.Y0_PD_Hostilty	4.999	0.288	17.335	0.000
##	.Y0_PD_Impul	4.530	0.261	17.335	0.000
##	.Y1_PD_Ssp_Eccn	19.663	1.134	17.335	0.000
##	.Y1_PD-Withdr	2.136	0.123	17.335	0.000
##	.Y1_PTSD	1.543	0.089	17.335	0.000
##	.Y1_MUD	0.317	0.018	17.335	0.000
##	.Y1_ODD	3.245	0.187	17.335	0.000
##	.Y1_AUD	0.047	0.003	17.335	0.000
##	.Y1_IMP_Help	1.107	0.064	17.335	0.000
##	.Y1_IMP_Pr_Wrry	1.636	0.094	17.355	0.000
##	.Y1_PD_Depres	0.891	0.051	17.335	0.000
##	.Y1_PD	0.149	0.009	17.335	0.000
##	.Y1_AGOR	0.185	0.011	17.417	0.000
##	Y0_ARREST	0.037	0.002	17.335	0.000
##	Y0_Age	3.429	0.198	17.335	0.000
##	Y0_DB_SnJ	1.646	0.094	17.486	0.000
##	Y0_Male	0.250	0.014	17.335	0.000
##	Y1_PD_Odd_Bl_E	4.519	0.261	17.335	0.000
##	F0_CJSI	0.184	0.011	17.335	0.000
##	M0_CJSI	0.207	0.012	17.398	0.000
##	Y0_IMP_Pr_Wrry	1.260	0.073	17.335	0.000

Loading graph from Causal-Cmd and come out with the graph without standlized

```
library(lavaan)
setwd('/Users/jonah/Downloads/lab_data/')
# load graph file (txt) saved from Tetrad
con = file('graspcfci_1701977640763_out.txt', "r")
while ( TRUE ) {
  line = readLines(con, n = 1)
  if ( length(line) == 0 | line == 'Graph Edges:' ) {
    break
  }
}
```

```

el<-data.frame()
while ( TRUE ) {
  line = readLines(con, n = 1)
  if ( line == "" ) {
    break
  }
  el<-rbind(el,t(as.data.frame(strsplit(line,split=' ')[1])[2:4]))
}

close(con)
rownames(el) <- NULL
names(el)<-c('source','edgetype','target')

# now make model string for lavaan
mdstr<-' '
for (i in 1:nrow(el)){
  e<-el[i,, drop=FALSE]
  if (e$edgetype=='-->'){
    # estimating o-> as as '-->' here
    mdstr<-paste0(mdstr,e$target,'~',e$source,'\n')
  }
  if(e$edgetype=='<->'|e$edgetype=='o-o'|e$edgetype=='o->'){
    mdstr<-paste0(mdstr,e$source,'~~',e$target,'\n')
  }
}

# fit lavaan model
library(lavaan)
data<-read.table("Jonah_Y0_Y1_Model_3.csv1_final_copy.txt",header= TRUE)
fit<-sem(mdstr,data=data)

summary(fit,fit.measures=TRUE)

```

```

## lavaan 0.6.16 ended normally after 211 iterations
##
##      Estimator                      ML
##      Optimization method          NLMINB
##      Number of model parameters    316
##
##      Number of observations        601
##
## Model Test User Model:
##
##      Test statistic                  3898.100
##      Degrees of freedom              1637
##      P-value (Chi-square)           0.000
##
## Model Test Baseline Model:
##
##      Test statistic                  15799.229
##      Degrees of freedom              1891
##      P-value                        0.000

```

```

##
## User Model versus Baseline Model:
##
##   Comparative Fit Index (CFI)                0.837
##   Tucker-Lewis Index (TLI)                  0.812
##
## Loglikelihood and Information Criteria:
##
##   Loglikelihood user model (H0)              -55697.246
##   Loglikelihood unrestricted model (H1)       -53748.196
##
##   Akaike (AIC)                             112026.493
##   Bayesian (BIC)                           113416.449
##   Sample-size adjusted Bayesian (SABIC)      112413.234
##
## Root Mean Square Error of Approximation:
##
##   RMSEA                                     0.048
##   90 Percent confidence interval - lower      0.046
##   90 Percent confidence interval - upper      0.050
##   P-value H_0: RMSEA <= 0.050               0.960
##   P-value H_0: RMSEA >= 0.080               0.000
##
## Standardized Root Mean Square Residual:
##
##   SRMR                                     0.097
##
## Parameter Estimates:
##
##   Standard errors                          Standard
##   Information                             Expected
##   Information saturated (h1) model         Structured
##
## Regressions:
##           Estimate  Std.Err  z-value  P(>|z|)
##   Y0_AU_Drunk ~
##     Y0_AU_Drinks      0.512    0.024   21.627   0.000
##   Y0_AU_4Drinks ~
##     Y0_AU_Drunk       0.293    0.032    9.085   0.000
##     Y0_AU_Freq        0.535    0.032   16.629   0.000
##   Y0_AU_Drinks ~
##     Y0_AU_Freq        1.023    0.032   32.041   0.000
##   Y0_IMP_Behavior ~
##     Y0_CD             0.406    0.066    6.192   0.000
##   Y1_ARREST ~
##     Y0_CD             0.091    0.009   10.330   0.000
##   Y1_CD ~
##     Y0_CD             0.437    0.035   12.368   0.000
##   Y1_ND ~
##     Y0_CD             0.098    0.010    9.428   0.000
##   Y0_ARREST ~
##     Y0_DB_Gen_Del     0.058    0.007    8.691   0.000
##   Y0_PD_Depres ~
##     Y0_DB_Gen_Del     0.217    0.040    5.468   0.000

```

##	Y1_DB_Alone ~				
##	Y0_DB_Gen_Del	0.172	0.020	8.500	0.000
##	Y1_DB_Alone_Group ~				
##	Y0_DB_Gen_Del	0.101	0.013	7.804	0.000
##	Y0_AU_Freq ~				
##	Y0_DB_SnJ	0.260	0.019	13.797	0.000
##	Y0_CD ~				
##	Y0_DB_SnJ	0.492	0.031	15.872	0.000
##	Y0_DB_Gen_Del ~				
##	Y0_DB_SnJ	0.571	0.023	25.216	0.000
##	Y0_PD_Suspicious ~				
##	Y0_DB_SnJ	0.847	0.105	8.043	0.000
##	Y0_SAD ~				
##	Y0_GAD	0.506	0.036	13.955	0.000
##	Y1_GAD ~				
##	Y0_GAD	0.221	0.029	7.710	0.000
##	Y0_IMP_Home ~				
##	Y0_IMP_Behavir	0.643	0.059	10.811	0.000
##	Y0_PD_Impul ~				
##	Y0_IMP_Behavir	0.352	0.039	9.058	0.000
##	Y1_IMP_Behavior ~				
##	Y0_IMP_Behavir	0.283	0.034	8.209	0.000
##	Y0_IMP_Activities ~				
##	Y0_IMP_Dpr_An timer	0.237	0.040	5.957	0.000
##	Y0_IMP_Help ~				
##	Y0_IMP_Dpr_An timer	0.138	0.023	6.068	0.000
##	Y1_IMP_Depr_An timer ~				
##	Y0_IMP_Dpr_An timer	0.241	0.036	6.728	0.000
##	Y0_IMP_Activities ~				
##	Y0_IMP_Home	0.294	0.024	12.031	0.000
##	Y0_IMP_Depr_An timer ~				
##	Y0_IMP_Home	0.208	0.022	9.293	0.000
##	Y0_IMP_Parents ~				
##	Y0_IMP_Home	0.318	0.020	16.056	0.000
##	Y1_IMP_Activities ~				
##	Y0_IMP_Home	0.249	0.040	6.213	0.000
##	Y1_IMP_Home ~				
##	Y0_IMP_Parents	0.405	0.057	7.100	0.000
##	Y0_GAD ~				
##	Y0_MDD	0.313	0.020	16.063	0.000
##	Y0_PD ~				
##	Y0_MDD	0.043	0.006	7.389	0.000
##	Y0_PTSD ~				
##	Y0_MDD	0.144	0.022	6.702	0.000
##	Y1_PD ~				
##	Y0_PD	0.277	0.034	8.106	0.000
##	Y0_PD_Odd_Bel_Exp ~				
##	Y0_PD_Cg_Prc_D	0.256	0.036	7.131	0.000
##	Y1_PD_Depres ~				
##	Y0_PD_Depres	0.258	0.034	7.500	0.000
##	Y0_MDD ~				
##	Y0_PD_Eccentr	0.355	0.034	10.317	0.000
##	Y0_PD_Cog_Perc_Dys ~				
##	Y0_PD_Eccentr	0.322	0.032	10.068	0.000

##	Y0_PD_Odd_Bel_Exp ~				
##	Y0_PD_Eccentr	0.206	0.029	7.076	0.000
##	Y0_IMP_Behavior ~				
##	Y0_PD_Hostilty	0.225	0.028	7.977	0.000
##	Y0_PD_Cog_Perc_Dys ~				
##	Y0_PD_Hostilty	0.281	0.035	8.024	0.000
##	Y0_PD_Depres ~				
##	Y0_PD_Hostilty	0.119	0.015	7.935	0.000
##	Y1_PD_Odd_Bel_Exp ~				
##	Y0_PD_Odd_Bl_E	0.323	0.040	8.120	0.000
##	Y0_SAD ~				
##	Y0_PD_Sep_Insc	0.245	0.035	7.003	0.000
##	Y1_PD_Perc_Dys_Sep_Ins ~				
##	Y0_PD_Sep_Insc	0.256	0.040	6.435	0.000
##	Y0_IMP_Depr_An timer ~				
##	Y0_PD_Suspicion	0.157	0.021	7.567	0.000
##	Y0_PD_Eccentr ~				
##	Y0_PD_Suspicion	0.470	0.029	16.296	0.000
##	Y0_PD_Hostility ~				
##	Y0_PD_Suspicion	0.463	0.025	18.303	0.000
##	Y0_PD_Impul ~				
##	Y0_PD_Suspicion	0.237	0.023	10.519	0.000
##	Y0_PD_Sep_Insec ~				
##	Y0_PD_Suspicion	0.180	0.018	9.808	0.000
##	Y0_PD-Withdr ~				
##	Y0_PD_Suspicion	-0.094	0.017	-5.588	0.000
##	Y1_PD_Susp_Eccentr ~				
##	Y0_PD_Suspicion	0.566	0.053	10.666	0.000
##	Y1_PD-Withdr ~				
##	Y0_PD-Withdr	0.305	0.039	7.878	0.000
##	Y1_PTSD ~				
##	Y0_PTSD	0.197	0.031	6.260	0.000
##	Y0_AGOR ~				
##	Y0_SAD	0.096	0.011	8.758	0.000
##	Y0_PD ~				
##	Y0_SAD	0.062	0.009	6.605	0.000
##	Y1_SAD ~				
##	Y0_SAD	0.357	0.027	13.272	0.000
##	Y1_DB_Alone ~				
##	Y1_ARREST	0.655	0.075	8.760	0.000
##	Y1_DB_Group ~				
##	Y1_ARREST	0.675	0.075	8.939	0.000
##	Y1_PD_Depres ~				
##	Y1_AUD	0.939	0.142	6.618	0.000
##	Y1_PTSD ~				
##	Y1_AUD	1.198	0.190	6.310	0.000
##	Y1_DB_Group ~				
##	Y1_CD	0.124	0.017	7.462	0.000
##	Y1_MUD ~				
##	Y1_CD	0.138	0.018	7.544	0.000
##	Y1_ODD ~				
##	Y1_CD	0.948	0.057	16.571	0.000
##	Y1_CD ~				
##	Y1_DB_Alone	0.867	0.072	12.017	0.000

##	Y1_AUD ~				
##	Y1_DB_Alon_Grp	0.276	0.027	10.215	0.000
##	Y1_MUD ~				
##	Y1_DB_Alon_Grp	0.636	0.064	9.975	0.000
##	Y1_AUD ~				
##	Y1_DB_Group	0.112	0.017	6.475	0.000
##	Y1_DB_Alone_Group ~				
##	Y1_DB_Group	0.202	0.023	8.620	0.000
##	Y1_IMP_Behavior ~				
##	Y1_IMP_Activts	0.216	0.020	10.869	0.000
##	Y1_IMP_Help ~				
##	Y1_IMP_Activts	0.078	0.011	6.855	0.000
##	Y1_IMP_Home ~				
##	Y1_IMP_Activts	0.494	0.031	16.187	0.000
##	Y1_IMP_Par_Worry ~				
##	Y1_IMP_Behavir	0.099	0.025	4.018	0.000
##	Y1_PD_Hostility ~				
##	Y1_IMP_Behavir	0.228	0.033	6.934	0.000
##	Y1_PD_Impul ~				
##	Y1_IMP_Behavir	0.459	0.049	9.279	0.000
##	Y1_IMP_Activities ~				
##	Y1_IMP_Dpr_An timer	0.638	0.068	9.395	0.000
##	Y1_GAD ~				
##	Y1_MDD	0.210	0.017	12.095	0.000
##	Y1_PD ~				
##	Y1_MDD	0.054	0.005	10.437	0.000
##	Y1_SAD ~				
##	Y1_MDD	0.192	0.017	11.600	0.000
##	Y1_IMP_Home ~				
##	Y1_ODD	0.289	0.048	6.069	0.000
##	Y1_MDD ~				
##	Y1_ODD	0.482	0.044	11.029	0.000
##	Y1_IMP_Help ~				
##	Y1_PD_Depres	0.232	0.041	5.652	0.000
##	Y1_ODD ~				
##	Y1_PD_Hostilty	0.307	0.035	8.816	0.000
##	Y1_PD_Perc_Dys_Sep_Ins ~				
##	Y1_PD_Odd_Bl_E	0.259	0.036	7.165	0.000
##	Y1_PD_Susp_Eccentr ~				
##	Y1_PD_Odd_Bl_E	1.149	0.089	12.879	0.000
##	Y1_IMP_Depr_An timer				
##	Y1_PD_Ssp_Eccn	0.108	0.013	8.483	0.000
##	Y1_MDD ~				
##	Y1_PD_Ssp_Eccn	0.138	0.018	7.820	0.000
##	Y1_PD_Hostility ~				
##	Y1_PD_Ssp_Eccn	0.216	0.012	18.501	0.000
##	Y1_PD_Impul ~				
##	Y1_PD_Ssp_Eccn	0.297	0.018	16.594	0.000
##	Y1_PD_Perc_Dys_Sep_Ins ~				
##	Y1_PD_Ssp_Eccn	0.132	0.014	9.528	0.000
##	Y1_AGOR ~				
##	Y1_SAD	0.101	0.011	9.276	0.000
##	Y1_GAD ~				
##	Y1_SAD	0.228	0.035	6.516	0.000


```

##
## Covariances:
##          Estimate  Std.Err  z-value  P(>|z|)
##  F0_CJSI ~~
##      MO_CJSI          -0.072    0.009   -8.485    0.000
##  .Y0_CD ~~
##      .Y0_DB_Gen_Del      0.180    0.031    5.879    0.000
##  Y0_DB_SnJ ~~
##      Y0_Age             0.793    0.102    7.802    0.000
##  .Y1_IMP_Par_Worry ~~
##      Y0_IMP_Pr_Wrry      0.332    0.059    5.613    0.000
##  .Y0_PD_Withdr ~~
##      Y0_Male             0.090    0.031    2.951    0.003
##  .Y0_PD_Eccentr ~~
##      .Y0_PD_Hostilty     2.350    0.246    9.562    0.000
##  .Y0_PD_Hostility ~~
##      .Y0_PD_Sep_Insc     0.485    0.134    3.627    0.000
##  .Y0_SAD ~~
##      Y0_Age            -0.683    0.113   -6.046    0.000
##  .Y0_AGOR ~~
##      .Y1_AGOR             0.079    0.010    8.093    0.000
##  .Y1_ARREST ~~
##      .Y0_ARREST           0.011    0.002    5.756    0.000
##  .Y0_IMP_Help ~~
##      .Y1_IMP_Help         0.261    0.051    5.090    0.000
##  .Y0_MDD ~~
##      .Y1_MDD              2.414    0.301    8.034    0.000
##  .Y0_AU_4Drinks ~~
##      .Y1_ND              -0.009    0.006   -1.518    0.129
##      .Y0_ARREST          -0.001    0.003   -0.156    0.876
##      .Y1_GAD             -0.027    0.023   -1.203    0.229
##      .Y0_PD_Impul         0.018    0.039    0.464    0.643
##      .Y0_IMP_Activts      0.032    0.036    0.873    0.383
##      .Y0_IMP_Help         0.003    0.023    0.133    0.894
##      .Y1_IMP_Home        -0.032    0.053   -0.605    0.545
##      .Y1_PD              -0.005    0.007   -0.711    0.477
##      .Y1_PD_Pr_D_S_I      0.050    0.034    1.471    0.141
##      .Y1_PD_Withdr        0.025    0.028    0.876    0.381
##      .Y1_PTSD             0.051    0.025    2.077    0.038
##      .Y0_AGOR            -0.016    0.010   -1.546    0.122
##      .Y1_MUD             -0.003    0.011   -0.292    0.771
##      .Y1_IMP_Help        -0.027    0.021   -1.328    0.184
##      .Y1_IMP_Pr_Wrry       0.014    0.024    0.591    0.555
##      .Y1_PD_Impul        -0.057    0.050   -1.141    0.254
##      .Y1_AGOR            -0.018    0.008   -2.102    0.036
##  .Y1_ND ~~
##      .Y0_ARREST          -0.001    0.002   -0.421    0.674
##      .Y1_GAD              0.009    0.015    0.603    0.547
##      .Y0_PD_Impul        -0.038    0.025   -1.509    0.131
##      .Y0_IMP_Activts     -0.012    0.024   -0.506    0.613
##      .Y0_IMP_Help        -0.014    0.015   -0.976    0.329
##      .Y1_IMP_Home        -0.009    0.034   -0.251    0.802
##      .Y1_PD              0.001    0.005    0.130    0.896
##      .Y1_PD_Pr_D_S_I     -0.016    0.022   -0.744    0.457

```

##	.Y1_PD-Withdr	0.003	0.019	0.163	0.870
##	.Y1_PTSD	-0.013	0.016	-0.842	0.400
##	.Y0_AGOR	0.010	0.007	1.462	0.144
##	.Y1_MUD	0.018	0.007	2.465	0.014
##	.Y1_IMP_Help	0.019	0.013	1.425	0.154
##	.Y1_IMP_Pr_Wrry	0.016	0.016	1.044	0.296
##	.Y1_PD_Impul	0.012	0.032	0.369	0.712
##	.Y1_AGOR	0.014	0.006	2.596	0.009
##	.Y0_ARREST ~~				
##	.Y1_GAD	-0.019	0.008	-2.238	0.025
##	.Y0_PD_Impul	-0.026	0.014	-1.801	0.072
##	.Y0_IMP_Activts	-0.001	0.013	-0.059	0.953
##	.Y0_IMP_Help	-0.002	0.008	-0.199	0.843
##	.Y1_IMP_Home	-0.013	0.019	-0.687	0.492
##	.Y1_PD	0.001	0.003	0.304	0.761
##	.Y1_PD_Pr_D_S_I	-0.004	0.012	-0.346	0.730
##	.Y1_PD-Withdr	-0.002	0.010	-0.185	0.853
##	.Y1_PTSD	0.003	0.009	0.387	0.699
##	.Y0_AGOR	-0.009	0.004	-2.486	0.013
##	.Y1_MUD	-0.010	0.004	-2.333	0.020
##	.Y1_IMP_Help	-0.006	0.008	-0.857	0.391
##	.Y1_IMP_Pr_Wrry	0.010	0.009	1.091	0.275
##	.Y1_PD_Impul	0.009	0.018	0.467	0.640
##	.Y1_AGOR	-0.008	0.003	-2.490	0.013
##	.Y1_GAD ~~				
##	.Y0_PD_Impul	-0.138	0.095	-1.455	0.146
##	.Y0_IMP_Activts	0.015	0.088	0.175	0.861
##	.Y0_IMP_Help	-0.012	0.055	-0.224	0.823
##	.Y1_IMP_Home	0.081	0.128	0.633	0.527
##	.Y1_PD	0.047	0.018	2.592	0.010
##	.Y1_PD_Pr_D_S_I	-0.047	0.082	-0.568	0.570
##	.Y1_PD-Withdr	-0.042	0.069	-0.605	0.545
##	.Y1_PTSD	0.001	0.060	0.016	0.987
##	.Y0_AGOR	-0.003	0.024	-0.106	0.916
##	.Y1_MUD	-0.030	0.027	-1.100	0.271
##	.Y1_IMP_Help	0.068	0.050	1.373	0.170
##	.Y1_IMP_Pr_Wrry	0.124	0.059	2.109	0.035
##	.Y1_PD_Impul	0.027	0.121	0.225	0.822
##	.Y1_AGOR	0.027	0.021	1.303	0.193
##	.Y0_PD_Impul ~~				
##	.Y0_IMP_Activts	-0.168	0.153	-1.100	0.271
##	.Y0_IMP_Help	-0.024	0.095	-0.251	0.802
##	.Y1_IMP_Home	0.391	0.221	1.773	0.076
##	.Y1_PD	0.064	0.031	2.049	0.041
##	.Y1_PD_Pr_D_S_I	-0.154	0.142	-1.082	0.279
##	.Y1_PD-Withdr	-0.034	0.119	-0.287	0.774
##	.Y1_PTSD	0.106	0.103	1.034	0.301
##	.Y0_AGOR	-0.003	0.042	-0.071	0.943
##	.Y1_MUD	-0.040	0.047	-0.849	0.396
##	.Y1_IMP_Help	0.122	0.086	1.422	0.155
##	.Y1_IMP_Pr_Wrry	0.134	0.102	1.314	0.189
##	.Y1_PD_Impul	0.622	0.210	2.966	0.003
##	.Y1_AGOR	0.081	0.036	2.286	0.022
##	.Y0_IMP_Activities ~~				

##	.Y0_IMP_Help	0.189	0.090	2.115	0.034
##	.Y1_IMP_Home	-0.441	0.207	-2.133	0.033
##	.Y1_PD	-0.042	0.029	-1.434	0.152
##	.Y1_PD_Pr_D_S_I	0.017	0.133	0.130	0.896
##	.Y1_PD-Withdr	0.057	0.112	0.508	0.611
##	.Y1_PTSD	-0.057	0.096	-0.590	0.555
##	.Y0_AGOR	-0.015	0.040	-0.389	0.697
##	.Y1_MUD	-0.040	0.044	-0.905	0.365
##	.Y1_IMP_Help	-0.060	0.080	-0.741	0.459
##	.Y1_IMP_Pr_Wrry	-0.054	0.095	-0.565	0.572
##	.Y1_PD_Impul	-0.086	0.195	-0.444	0.657
##	.Y1_AGOR	0.036	0.033	1.078	0.281
##	.Y0_IMP_Help ~~				
##	.Y1_IMP_Home	-0.025	0.129	-0.192	0.848
##	.Y1_PD	-0.001	0.018	-0.077	0.938
##	.Y1_PD_Pr_D_S_I	0.211	0.083	2.538	0.011
##	.Y1_PD-Withdr	0.052	0.070	0.745	0.456
##	.Y1_PTSD	0.027	0.060	0.446	0.656
##	.Y0_AGOR	0.051	0.025	2.052	0.040
##	.Y1_MUD	-0.012	0.027	-0.432	0.666
##	.Y1_IMP_Pr_Wrry	0.056	0.059	0.945	0.345
##	.Y1_PD_Impul	-0.058	0.122	-0.474	0.635
##	.Y1_AGOR	0.037	0.021	1.780	0.075
##	.Y1_IMP_Home ~~				
##	.Y1_PD	0.038	0.042	0.899	0.369
##	.Y1_PD_Pr_D_S_I	-0.158	0.191	-0.824	0.410
##	.Y1_PD-Withdr	-0.019	0.161	-0.117	0.907
##	.Y1_PTSD	0.027	0.139	0.191	0.848
##	.Y0_AGOR	-0.093	0.057	-1.635	0.102
##	.Y1_MUD	0.105	0.063	1.656	0.098
##	.Y1_IMP_Help	0.090	0.116	0.776	0.438
##	.Y1_IMP_Pr_Wrry	0.057	0.137	0.414	0.679
##	.Y1_PD_Impul	0.486	0.282	1.726	0.084
##	.Y1_AGOR	-0.011	0.048	-0.230	0.818
##	.Y1_PD ~~				
##	.Y1_PD_Pr_D_S_I	0.004	0.027	0.167	0.868
##	.Y1_PD-Withdr	-0.004	0.023	-0.180	0.857
##	.Y1_PTSD	0.031	0.020	1.605	0.109
##	.Y0_AGOR	0.003	0.008	0.329	0.742
##	.Y1_MUD	-0.018	0.009	-2.064	0.039
##	.Y1_IMP_Help	0.025	0.016	1.516	0.130
##	.Y1_IMP_Pr_Wrry	0.019	0.019	0.967	0.333
##	.Y1_PD_Impul	-0.116	0.040	-2.913	0.004
##	.Y1_AGOR	0.016	0.007	2.347	0.019
##	.Y1_PD_Perc_Dys_Sep_Ins ~~				
##	.Y1_PD-Withdr	-0.101	0.104	-0.975	0.330
##	.Y1_PTSD	-0.070	0.089	-0.779	0.436
##	.Y0_AGOR	0.043	0.037	1.164	0.244
##	.Y1_MUD	-0.032	0.041	-0.795	0.427
##	.Y1_IMP_Help	0.165	0.075	2.202	0.028
##	.Y1_IMP_Pr_Wrry	0.111	0.088	1.263	0.207
##	.Y1_PD_Impul	0.751	0.183	4.093	0.000
##	.Y1_AGOR	0.055	0.031	1.768	0.077
##	.Y1_PD-Withdr ~~				

##	.Y1_PTSD	-0.108	0.075	-1.438	0.151
##	.Y0_AGOR	-0.049	0.031	-1.575	0.115
##	.Y1_MUD	0.007	0.034	0.204	0.839
##	.Y1_IMP_Help	0.077	0.063	1.228	0.219
##	.Y1_IMP_Pr_Wrry	-0.070	0.074	-0.943	0.346
##	.Y1_PD_Impul	-0.251	0.153	-1.649	0.099
##	.Y1_AGOR	-0.026	0.026	-1.021	0.307
##	.Y1_PTSD ~~				
##	.Y0_AGOR	0.000	0.027	0.002	0.999
##	.Y1_MUD	0.053	0.030	1.791	0.073
##	.Y1_IMP_Help	-0.044	0.054	-0.813	0.416
##	.Y1_IMP_Pr_Wrry	0.098	0.064	1.525	0.127
##	.Y1_PD_Impul	0.023	0.131	0.175	0.861
##	.Y1_AGOR	0.036	0.022	1.633	0.102
##	.Y0_AGOR ~~				
##	.Y1_MUD	0.011	0.012	0.867	0.386
##	.Y1_IMP_Help	0.002	0.022	0.082	0.935
##	.Y1_IMP_Pr_Wrry	0.015	0.026	0.573	0.567
##	.Y1_PD_Impul	0.035	0.054	0.647	0.518
##	.Y1_MUD ~~				
##	.Y1_IMP_Help	-0.009	0.025	-0.347	0.728
##	.Y1_IMP_Pr_Wrry	-0.003	0.029	-0.089	0.929
##	.Y1_PD_Impul	0.042	0.060	0.703	0.482
##	.Y1_AGOR	0.007	0.010	0.674	0.500
##	.Y1_IMP_Help ~~				
##	.Y1_IMP_Pr_Wrry	0.124	0.054	2.314	0.021
##	.Y1_PD_Impul	-0.103	0.110	-0.944	0.345
##	.Y1_AGOR	-0.007	0.019	-0.384	0.701
##	.Y1_IMP_Par_Worry ~~				
##	.Y1_PD_Impul	-0.039	0.129	-0.298	0.766
##	.Y1_AGOR	-0.005	0.022	-0.233	0.816
##	.Y1_PD_Impul ~~				
##	.Y1_AGOR	-0.006	0.045	-0.132	0.895
##					
##	Variances:				
##		Estimate	Std.Err	z-value	P(> z)
##	.Y0_AU_Drunk	0.272	0.016	17.335	0.000
##	.Y0_AU_4Drinks	0.228	0.013	17.335	0.000
##	.Y0_AU_Drinks	0.298	0.017	17.335	0.000
##	.Y0_IMP_Behavir	3.628	0.209	17.335	0.000
##	.Y1_ARREST	0.069	0.004	17.335	0.000
##	.Y1_CD	0.975	0.056	17.335	0.000
##	.Y1_ND	0.097	0.006	17.335	0.000
##	.Y0_ARREST	0.033	0.002	17.378	0.000
##	.Y0_PD_Depres	1.021	0.059	17.335	0.000
##	.Y1_DB_Alone	0.259	0.015	17.335	0.000
##	.Y1_DB_Alon_Grp	0.106	0.006	17.335	0.000
##	.Y0_AU_Freq	0.369	0.021	17.335	0.000
##	.Y0_CD	0.999	0.058	17.335	0.000
##	.Y0_DB_Gen_Del	0.534	0.031	17.335	0.000
##	.Y0_PD_Suspici	11.542	0.666	17.335	0.000
##	.Y0_SAD	2.357	0.136	17.335	0.000
##	.Y1_GAD	1.342	0.077	17.335	0.000
##	.Y0_IMP_Home	9.168	0.529	17.335	0.000

##	.Y0_PD_Impul	4.001	0.231	17.335	0.000
##	.Y1_IMP_Behavir	3.031	0.175	17.335	0.000
##	.Y0_IMP_Activts	3.500	0.202	17.335	0.000
##	.Y0_IMP_Help	1.367	0.079	17.335	0.000
##	.Y1_IMP_Dpr_An timer	3.131	0.181	17.335	0.000
##	.Y0_IMP_Dpr_An timer	3.276	0.189	17.335	0.000
##	.Y0_IMP_Parents	2.582	0.149	17.335	0.000
##	.Y1_IMP_Activts	10.478	0.604	17.335	0.000
##	.Y1_IMP_Home	7.280	0.420	17.335	0.000
##	.Y0_GAD	1.959	0.113	17.335	0.000
##	.Y0_PD	0.160	0.009	17.335	0.000
##	.Y0_PTSD	2.384	0.138	17.335	0.000
##	.Y1_PD	0.145	0.008	17.335	0.000
##	.Y0_PD_Odd_Bl_E	3.041	0.175	17.335	0.000
##	.Y1_PD_Depres	0.853	0.049	17.335	0.000
##	.Y0_MDD	7.403	0.427	17.335	0.000
##	.Y0_PD_Cg_Prc_D	3.541	0.204	17.335	0.000
##	.Y1_PD_Odd_Bl_E	4.072	0.235	17.335	0.000
##	.Y1_PD_Pr_D_S_I	3.019	0.174	17.335	0.000
##	.Y0_PD_Eccentr	6.385	0.368	17.335	0.000
##	.Y0_PD_Hostilty	4.911	0.282	17.392	0.000
##	.Y0_PD_Sep_Insc	2.598	0.150	17.335	0.000
##	.Y0_PD-Withdr	2.215	0.128	17.335	0.000
##	.Y1_PD_Ssp_Eccn	21.444	1.237	17.335	0.000
##	.Y1_PD-Withdr	2.137	0.123	17.335	0.000
##	.Y1_PTSD	1.587	0.092	17.335	0.000
##	.Y0_AGOR	0.268	0.015	17.335	0.000
##	.Y1_SAD	1.419	0.082	17.335	0.000
##	.Y1_DB_Group	0.250	0.014	17.335	0.000
##	.Y1_MUD	0.328	0.019	17.335	0.000
##	.Y1_ODD	3.245	0.187	17.335	0.000
##	.Y1_AUD	0.051	0.003	17.335	0.000
##	.Y1_IMP_Help	1.107	0.064	17.335	0.000
##	.Y1_IMP_Pr_Wrry	1.634	0.094	17.367	0.000
##	.Y1_PD_Hostilty	2.647	0.153	17.335	0.000
##	.Y1_PD_Impul	6.513	0.376	17.335	0.000
##	.Y1_MDD	6.544	0.378	17.335	0.000
##	.Y1_AGOR	0.188	0.011	17.335	0.000
##	Y0_DB_SnJ	1.730	0.100	17.335	0.000
##	F0_CJSI	0.184	0.011	17.335	0.000
##	M0_CJSI	0.209	0.012	17.335	0.000
##	Y0_Age	3.416	0.196	17.441	0.000
##	Y0_IMP_Pr_Wrry	1.260	0.073	17.335	0.000
##	Y0_Male	0.250	0.014	17.335	0.000

Loading graph from Tetrad and come out with the graph with standlized

```
library(lavaan)
setwd('/Users/jonah/Downloads/lab_data/')
# load graph file (txt) saved from Tetrad
con = file('12_19_graph.txt', "r")
while ( TRUE ) {
```

```

line = readLines(con, n = 1)
if ( length(line) == 0 | line == 'Graph Edges:' ) {
  break
}
}
el<-data.frame()
while ( TRUE ) {
  line = readLines(con, n = 1)
  if ( line == "" ) {
    break
  }
  el<-rbind(el,t(as.data.frame(strsplit(line,split=' ')[[1]][2:4])))
}

close(con)
rownames(el) <- NULL
names(el)<-c('source','edgetype','target')

# now make model string for lavaan
mdstr<-' '
for (i in 1:nrow(el)){
  e<-el[i,, drop=FALSE]
  if (e$edgetype=='-->'){
    # estimating o-> as as '-->' here
    mdstr<-paste0(mdstr,e$target,'~',e$source,'\n')
  }
  if(e$edgetype=='<->' | e$edgetype=='o-o' | e$edgetype=='o->'){
    mdstr<-paste0(mdstr,e$source,'~~',e$target,'\n')
  }
}

# fit lavaan model
library(lavaan)
data<-read.table("Jonah_Y0_Y1_Model_3.csv1_final_copy.txt",header= TRUE)
fit<-sem(mdstr,data=scale(data))

summary(fit,fit.measures=TRUE)

```

```

## lavaan 0.6.16 ended normally after 30 iterations
##
##      Estimator                      ML
##      Optimization method          NLMINB
##      Number of model parameters    305
##
##      Number of observations        601
##
## Model Test User Model:
##
##      Test statistic                  3519.588
##      Degrees of freedom              1648
##      P-value (Chi-square)           0.000
##

```

```

## Model Test Baseline Model:
##
##   Test statistic                15799.229
##   Degrees of freedom            1891
##   P-value                        0.000
##
## User Model versus Baseline Model:
##
##   Comparative Fit Index (CFI)      0.865
##   Tucker-Lewis Index (TLI)        0.846
##
## Loglikelihood and Information Criteria:
##
##   Loglikelihood user model (H0)    -46701.642
##   Loglikelihood unrestricted model (H1) -44941.847
##
##   Akaike (AIC)                    94013.283
##   Bayesian (BIC)                   95354.855
##   Sample-size adjusted Bayesian (SABIC) 94386.562
##
## Root Mean Square Error of Approximation:
##
##   RMSEA                          0.043
##   90 Percent confidence interval - lower 0.041
##   90 Percent confidence interval - upper 0.045
##   P-value H_0: RMSEA <= 0.050        1.000
##   P-value H_0: RMSEA >= 0.080        0.000
##
## Standardized Root Mean Square Residual:
##
##   SRMR                          0.097
##
## Parameter Estimates:
##
##   Standard errors                Standard
##   Information                    Expected
##   Information saturated (h1) model Structured
##
## Regressions:
##           Estimate Std.Err z-value P(>|z|)
## Y1_IMP_Depr_An timer ~
##   YO_AGOR              0.160   0.034   4.681   0.000
## Y0_AU_Freq ~
##   YO_ARREST            0.190   0.036   5.325   0.000
## Y0_CD ~
##   YO_ARREST            0.236   0.033   7.178   0.000
## Y0_DB_Gen_Del ~
##   YO_ARREST            0.182   0.028   6.607   0.000
## Y1_ARREST ~
##   YO_ARREST            0.241   0.037   6.525   0.000
## Y1_IMP_Depr_An timer ~
##   YO_ARREST           -0.121   0.034  -3.541   0.000
## Y0_AU_Drunk ~
##   YO_AU_4Drinks        0.282   0.038   7.404   0.000

```

##	Y0_AU_Drinks	0.477	0.038	12.399	0.000
##	Y0_PD_Depres ~				
##	Y0_AU_Drinks	0.157	0.036	4.323	0.000
##	Y0_AU_4Drinks ~				
##	Y0_AU_Freq	0.701	0.030	23.403	0.000
##	Y0_AU_Drinks ~				
##	Y0_AU_Freq	0.794	0.025	31.537	0.000
##	Y0_IMP_Depr_Anxiety ~				
##	Y0_Age	-0.133	0.035	-3.807	0.000
##	Y0_PD_Cog_Perc_Dys ~				
##	Y0_Age	-0.149	0.032	-4.652	0.000
##	Y0_SAD ~				
##	Y0_Age	-0.208	0.037	-5.616	0.000
##	Y1_PD_Perc_Dys_Sep_Ins ~				
##	Y0_Age	-0.120	0.031	-3.859	0.000
##	Y0_IMP_Behavior ~				
##	Y0_CD	0.161	0.036	4.508	0.000
##	Y0_IMP_Parents ~				
##	Y0_CD	0.125	0.034	3.649	0.000
##	Y0_MDD ~				
##	Y0_CD	0.220	0.037	5.914	0.000
##	Y1_ARREST ~				
##	Y0_CD	0.334	0.038	8.744	0.000
##	Y1_CD ~				
##	Y0_CD	0.407	0.033	12.412	0.000
##	Y1_ND ~				
##	Y0_CD	0.325	0.038	8.440	0.000
##	Y1_DB_Alone ~				
##	Y0_DB_Gen_Del	0.274	0.037	7.427	0.000
##	Y1_DB_Alone_Group ~				
##	Y0_DB_Gen_Del	0.282	0.039	7.314	0.000
##	Y0_CD ~				
##	Y0_DB_SnJ	0.490	0.034	14.500	0.000
##	Y0_DB_Gen_Del ~				
##	Y0_DB_SnJ	0.676	0.028	23.954	0.000
##	Y0_IMP_Home ~				
##	Y0_DB_SnJ	0.272	0.040	6.758	0.000
##	Y0_PD_Suspicion ~				
##	Y0_DB_SnJ	0.321	0.039	8.192	0.000
##	Y1_DB_Group ~				
##	Y0_DB_SnJ	0.198	0.037	5.372	0.000
##	Y1_GAD ~				
##	Y0_GAD	0.294	0.032	9.198	0.000
##	Y0_IMP_Parents ~				
##	Y0_IMP_Activts	0.228	0.038	5.951	0.000
##	Y0_PD_Depres ~				
##	Y0_IMP_Activts	0.203	0.036	5.594	0.000
##	Y0_PD-Withdr ~				
##	Y0_IMP_Activts	0.228	0.039	5.829	0.000
##	Y1_IMP_Behavior ~				
##	Y0_IMP_Behavir	0.227	0.035	6.426	0.000
##	Y0_IMP_Activities ~				
##	Y0_IMP_Dpr_Anxiety	0.227	0.037	6.149	0.000
##	Y0_IMP_Behavior ~				

##	Y0_IMP_Dpr_An timer	0.173	0.038	4.593	0.000
##	Y0_IMP_Help ~				
##	Y0_IMP_Dpr_An timer	0.251	0.039	6.448	0.000
##	Y0_IMP_Activities ~				
##	Y0_IMP_Home	0.428	0.036	11.885	0.000
##	Y0_IMP_Behavior ~				
##	Y0_IMP_Home	0.213	0.037	5.817	0.000
##	Y0_IMP_Depr_An timer				
##	Y0_IMP_Home	0.319	0.035	9.118	0.000
##	Y0_IMP_Parents ~				
##	Y0_IMP_Home	0.403	0.038	10.525	0.000
##	Y1_IMP_Activities ~				
##	Y0_IMP_Home	0.301	0.038	7.868	0.000
##	Y1_IMP_Home ~				
##	Y0_IMP_Parents	0.208	0.031	6.670	0.000
##	Y0_GAD ~				
##	Y0_MDD	0.418	0.032	13.152	0.000
##	Y0_PD ~				
##	Y0_MDD	0.236	0.034	6.863	0.000
##	Y1_MDD ~				
##	Y0_MDD	0.306	0.028	11.053	0.000
##	Y1_SAD ~				
##	Y0_Male	-0.147	0.034	-4.366	0.000
##	Y0_PD_Eccentr ~				
##	Y0_PD_Cg_Prc_D	0.307	0.036	8.488	0.000
##	Y0_PD_Odd_Bel_Exp ~				
##	Y0_PD_Cg_Prc_D	0.267	0.041	6.448	0.000
##	Y0_PTSD ~				
##	Y0_PD_Cg_Prc_D	0.196	0.037	5.253	0.000
##	Y0_PD ~				
##	Y0_PD_Depres	0.177	0.035	5.090	0.000
##	Y0_MDD ~				
##	Y0_PD_Eccentr	0.391	0.036	10.869	0.000
##	Y0_PD_Depres ~				
##	Y0_PD_Eccentr	0.257	0.036	7.160	0.000
##	Y0_PD_Odd_Bel_Exp ~				
##	Y0_PD_Eccentr	0.269	0.042	6.482	0.000
##	Y0_PD_Cog_Perc_Dys ~				
##	Y0_PD_Hostilty	0.392	0.040	9.848	0.000
##	Y0_PD_Eccentr ~				
##	Y0_PD_Hostilty	0.327	0.039	8.471	0.000
##	Y0_PD_Sep_Insec ~				
##	Y0_PD_Hostilty	0.370	0.038	9.780	0.000
##	Y1_PD_Hostility ~				
##	Y0_PD_Hostilty	0.174	0.032	5.522	0.000
##	Y0_IMP_Behavior ~				
##	Y0_PD_Impul	0.262	0.035	7.599	0.000
##	Y1_PD_Impul ~				
##	Y0_PD_Impul	0.158	0.030	5.234	0.000
##	Y0_AGOR ~				
##	Y0_PD_Sep_Insc	0.267	0.036	7.345	0.000
##	Y0_SAD ~				
##	Y0_PD_Sep_Insc	0.308	0.037	8.327	0.000
##	Y1_PD_Perc_Dys_Sep_Ins ~				

##	Y0_PD_Sep_Insc	0.174	0.031	5.577	0.000
##	Y0_AU_4Drinks ~				
##	Y0_PD_Suspici	-0.103	0.028	-3.679	0.000
##	Y0_IMP_Depr_Anxi ~				
##	Y0_PD_Suspici	0.286	0.035	8.167	0.000
##	Y0_PD_Cog_Perc_Dys ~				
##	Y0_PD_Suspici	0.295	0.040	7.399	0.000
##	Y0_PD_Eccentr ~				
##	Y0_PD_Suspici	0.205	0.037	5.475	0.000
##	Y0_PD_Hostility ~				
##	Y0_PD_Suspici	0.595	0.033	18.146	0.000
##	Y0_PD_Impul ~				
##	Y0_PD_Suspici	0.464	0.036	12.830	0.000
##	Y0_PD-Withdr ~				
##	Y0_PD_Suspici	-0.292	0.039	-7.541	0.000
##	Y1_PD_Susp_Eccentr ~				
##	Y0_PD_Suspici	0.311	0.031	9.927	0.000
##	Y1_PD-Withdr ~				
##	Y0_PD-Withdr	0.309	0.038	8.128	0.000
##	Y1_PTSD ~				
##	Y0_PTSD	0.211	0.039	5.447	0.000
##	Y0_GAD ~				
##	Y0_SAD	0.333	0.032	10.455	0.000
##	Y0_PD ~				
##	Y0_SAD	0.236	0.034	6.887	0.000
##	Y1_SAD ~				
##	Y0_SAD	0.527	0.034	15.476	0.000
##	Y1_DB_Alone ~				
##	Y1_ARREST	0.305	0.036	8.521	0.000
##	Y1_DB_Group ~				
##	Y1_ARREST	0.311	0.036	8.537	0.000
##	Y1_MUD ~				
##	Y1_ARREST	0.192	0.036	5.350	0.000
##	Y1_DB_Group ~				
##	Y1_CD	0.215	0.038	5.666	0.000
##	Y1_IMP_Behavior ~				
##	Y1_CD	0.234	0.035	6.776	0.000
##	Y1_MUD ~				
##	Y1_CD	0.197	0.036	5.417	0.000
##	Y1_ODD ~				
##	Y1_CD	0.518	0.032	16.242	0.000
##	Y1_PTSD ~				
##	Y1_CD	0.213	0.039	5.515	0.000
##	Y1_CD ~				
##	Y1_DB_Alone	0.385	0.033	11.839	0.000
##	Y1_AUD ~				
##	Y1_DB_Alone_Grp	0.363	0.035	10.325	0.000
##	Y1_MUD ~				
##	Y1_DB_Alone_Grp	0.338	0.035	9.686	0.000
##	Y1_AUD ~				
##	Y1_DB_Group	0.185	0.036	5.203	0.000
##	Y1_DB_Alone_Group ~				
##	Y1_DB_Group	0.315	0.038	8.352	0.000
##	Y1_IMP_Behavior ~				

##	Y1_IMP_Activts	0.357	0.034	10.586	0.000
##	Y1_IMP_Depr_AnX ~				
##	Y1_IMP_Activts	0.309	0.034	9.041	0.000
##	Y1_IMP_Help ~				
##	Y1_IMP_Activts	0.244	0.037	6.669	0.000
##	Y1_IMP_Home ~				
##	Y1_IMP_Activts	0.501	0.031	16.203	0.000
##	Y1_IMP_Par_Worry ~				
##	Y1_IMP_Behavir	0.171	0.040	4.287	0.000
##	Y1_PD_Impul ~				
##	Y1_IMP_Behavir	0.224	0.031	7.261	0.000
##	Y1_GAD ~				
##	Y1_IMP_Dpr_AnX	0.103	0.030	3.375	0.001
##	Y1_PD_Depres ~				
##	Y1_IMP_Dpr_AnX	0.167	0.039	4.254	0.000
##	Y1_PD ~				
##	Y1_MDD	0.317	0.040	7.917	0.000
##	Y1_PD_Depres ~				
##	Y1_MDD	0.217	0.042	5.202	0.000
##	Y1_IMP_Home ~				
##	Y1_ODD	0.207	0.032	6.568	0.000
##	Y1_MDD ~				
##	Y1_ODD	0.271	0.028	9.679	0.000
##	Y1_AUD ~				
##	Y1_PD_Depres	0.213	0.033	6.500	0.000
##	Y1_IMP_Help ~				
##	Y1_PD_Depres	0.214	0.037	5.730	0.000
##	Y1_DB_Alone ~				
##	Y1_PD_Hostilty	0.183	0.036	5.122	0.000
##	Y1_ODD ~				
##	Y1_PD_Hostilty	0.283	0.032	8.791	0.000
##	Y1_PD_Impul ~				
##	Y1_PD_Hostilty	0.160	0.038	4.171	0.000
##	Y1_PD_Perc_Dys_Sep_Ins ~				
##	Y1_PD_Impul	0.192	0.039	4.905	0.000
##	Y1_PD_Odd_Bl_E	0.236	0.034	6.924	0.000
##	Y1_PD_Susp_Eccentr ~				
##	Y1_PD_Odd_Bl_E	0.398	0.031	12.699	0.000
##	Y1_IMP_Depr_AnX ~				
##	Y1_PD_Ssp_Eccn	0.272	0.036	7.588	0.000
##	Y1_PD_Hostility ~				
##	Y1_PD_Ssp_Eccn	0.573	0.033	17.294	0.000
##	Y1_PD_Impul ~				
##	Y1_PD_Ssp_Eccn	0.387	0.039	9.917	0.000
##	Y1_PD_Perc_Dys_Sep_Ins ~				
##	Y1_PD_Ssp_Eccn	0.239	0.041	5.770	0.000
##	Y1_AUD ~				
##	Y1_PTSD	0.150	0.033	4.616	0.000
##	Y1_AGOR ~				
##	Y1_SAD	0.319	0.035	9.169	0.000
##	Y1_GAD ~				
##	Y1_SAD	0.407	0.033	12.477	0.000
##	Y1_MDD ~				
##	Y1_SAD	0.328	0.030	11.042	0.000

```

## Y1_PD ~
## Y1_SAD 0.236 0.037 6.419 0.000
## Y1_PD_Susp_Eccentr ~
## Y1_SAD 0.237 0.032 7.473 0.000
## Y1_PTSD ~
## Y1_SAD 0.168 0.038 4.387 0.000
##
## Covariances:
## Estimate Std.Err z-value P(>|z|)
## F0_CJSI ~~
## MO_CJSI -0.356 0.043 -8.375 0.000
## YO_ARREST ~~
## MO_CJSI 0.166 0.038 4.325 0.000
## .YO_PTSD ~~
## .YO_AGOR 0.152 0.035 4.328 0.000
## .YO_AU_4Drinks ~~
## .YO_AU_Drinks 0.134 0.019 7.196 0.000
## YO_Age ~~
## YO_DB_SnJ 0.219 0.037 5.876 0.000
## .YO_CD ~~
## .YO_DB_Gen_Del 0.104 0.023 4.594 0.000
## .YO_AU_Freq ~~
## YO_DB_SnJ 0.388 0.041 9.551 0.000
## .Y1_IMP_Par_Worry ~~
## YO_IMP_Pr_Wrry 0.230 0.041 5.658 0.000
## .YO_PD_Suspicion ~~
## YO_Male -0.165 0.039 -4.192 0.000
## .YO_PD_Hostility ~~
## .YO_PD_Impul 0.176 0.030 5.879 0.000
## .YO_SAD ~~
## .YO_PTSD 0.157 0.036 4.404 0.000
## .YO_AGOR ~~
## .Y1_AGOR 0.280 0.036 7.771 0.000
## .YO_AU_Drunk ~~
## .Y1_CD 0.102 0.022 4.539 0.000
## .Y1_GAD ~~
## .Y1_MDD 0.221 0.024 9.043 0.000
## .YO_AU_4Drinks ~~
## .Y1_IMP_Activts 0.118 0.027 4.309 0.000
## .Y1_IMP_Depr_An timer ~~
## .YO_IMP_Dpr_An timer 0.100 0.030 3.355 0.001
## .YO_IMP_Help ~~
## .Y1_IMP_Help 0.188 0.037 5.063 0.000
## .Y1_ND ~~
## .YO_PTSD 0.130 0.035 3.664 0.000
## .YO_PD ~~
## .Y1_PD 0.200 0.032 6.308 0.000
## .YO_PD_Depres ~~
## .Y1_PD_Depres 0.188 0.035 5.318 0.000
## .YO_PD_Odd_Bel_Exp ~~
## Y1_PD_Odd_Bl_E 0.173 0.035 4.983 0.000
## .YO_AU_Drunk ~~
## .Y1_PD_Pr_D_S_I -0.001 0.022 -0.044 0.965
## .Y1_ND 0.025 0.027 0.931 0.352

```

##	.Y1_GAD	0.003	0.021	0.132	0.895
##	.Y0_IMP_Help	0.047	0.028	1.695	0.090
##	.Y1_IMP_Home	0.034	0.022	1.531	0.126
##	.Y0_PD	-0.064	0.025	-2.534	0.011
##	.Y0_PD_Odd_Bl_E	0.013	0.024	0.547	0.584
##	.Y1_PD-Withdr	0.042	0.028	1.518	0.129
##	.Y1_MUD	0.060	0.024	2.465	0.014
##	.Y1_AUD	0.067	0.024	2.825	0.005
##	.Y1_IMP_Help	0.025	0.027	0.948	0.343
##	.Y1_IMP_Pr_Wrry	-0.003	0.028	-0.108	0.914
##	.Y1_PD	-0.019	0.025	-0.773	0.439
##	.Y1_AGOR	-0.044	0.025	-1.778	0.075
##	.Y1_PD_Perc_Dys_Sep_Ins ~~				
##	.Y1_ND	-0.028	0.029	-0.960	0.337
##	.Y1_GAD	-0.039	0.023	-1.722	0.085
##	.Y0_IMP_Help	0.073	0.030	2.396	0.017
##	.Y1_IMP_Home	-0.028	0.024	-1.163	0.245
##	.Y0_PD	-0.030	0.028	-1.085	0.278
##	.Y0_PD_Odd_Bl_E	0.000	0.026	0.009	0.993
##	.Y1_PD-Withdr	-0.024	0.030	-0.819	0.413
##	.Y1_MUD	-0.007	0.026	-0.246	0.806
##	.Y1_AUD	-0.023	0.026	-0.894	0.371
##	.Y1_IMP_Help	0.066	0.029	2.260	0.024
##	.Y1_IMP_Pr_Wrry	0.038	0.030	1.257	0.209
##	.Y1_PD	-0.008	0.027	-0.306	0.759
##	.Y1_AGOR	0.048	0.027	1.782	0.075
##	.Y1_ND ~~				
##	.Y1_GAD	0.005	0.027	0.189	0.850
##	.Y0_IMP_Help	-0.029	0.036	-0.784	0.433
##	.Y1_IMP_Home	-0.008	0.028	-0.286	0.775
##	.Y0_PD	-0.003	0.033	-0.084	0.933
##	.Y0_PD_Odd_Bl_E	-0.031	0.031	-0.978	0.328
##	.Y1_PD-Withdr	0.008	0.036	0.226	0.821
##	.Y1_MUD	0.062	0.032	1.944	0.052
##	.Y1_AUD	0.065	0.031	2.126	0.033
##	.Y1_IMP_Help	0.044	0.035	1.265	0.206
##	.Y1_IMP_Pr_Wrry	0.035	0.036	0.976	0.329
##	.Y1_PD	-0.001	0.033	-0.020	0.984
##	.Y1_AGOR	0.074	0.033	2.254	0.024
##	.Y1_GAD ~~				
##	.Y0_IMP_Help	-0.017	0.028	-0.605	0.545
##	.Y1_IMP_Home	0.010	0.022	0.453	0.651
##	.Y0_PD	0.020	0.026	0.797	0.426
##	.Y0_PD_Odd_Bl_E	0.024	0.024	0.972	0.331
##	.Y1_PD-Withdr	-0.005	0.028	-0.166	0.869
##	.Y1_MUD	-0.018	0.025	-0.723	0.470
##	.Y1_AUD	-0.035	0.024	-1.453	0.146
##	.Y1_IMP_Help	0.020	0.027	0.730	0.466
##	.Y1_IMP_Pr_Wrry	0.041	0.028	1.444	0.149
##	.Y1_PD	0.050	0.025	1.983	0.047
##	.Y1_AGOR	0.025	0.025	0.991	0.322
##	.Y0_IMP_Help ~~				
##	.Y1_IMP_Home	-0.005	0.030	-0.169	0.866
##	.Y0_PD	0.038	0.034	1.111	0.267

##	.Y0_PD_Odd_Bl_E	0.004	0.032	0.116	0.908
##	.Y1_PD-Withdr	0.028	0.037	0.750	0.453
##	.Y1_MUD	-0.004	0.033	-0.122	0.903
##	.Y1_AUD	-0.033	0.032	-1.034	0.301
##	.Y1_IMP_Pr_Wrry	0.035	0.037	0.937	0.349
##	.Y1_PD	0.001	0.034	0.037	0.970
##	.Y1_AGOR	0.037	0.034	1.084	0.278
##	.Y1_IMP_Home ~~				
##	.Y0_PD	0.009	0.027	0.326	0.744
##	.Y0_PD_Odd_Bl_E	-0.038	0.025	-1.476	0.140
##	.Y1_PD-Withdr	-0.002	0.029	-0.058	0.954
##	.Y1_MUD	0.047	0.026	1.811	0.070
##	.Y1_AUD	-0.010	0.025	-0.396	0.692
##	.Y1_IMP_Help	0.021	0.028	0.746	0.456
##	.Y1_IMP_Pr_Wrry	0.011	0.029	0.382	0.702
##	.Y1_PD	0.030	0.026	1.138	0.255
##	.Y1_AGOR	0.006	0.026	0.231	0.817
##	.Y0_PD ~~				
##	.Y0_PD_Odd_Bl_E	0.018	0.029	0.617	0.537
##	.Y1_PD-Withdr	-0.029	0.034	-0.857	0.391
##	.Y1_MUD	0.048	0.030	1.612	0.107
##	.Y1_AUD	0.014	0.029	0.497	0.619
##	.Y1_IMP_Help	-0.027	0.033	-0.825	0.410
##	.Y1_IMP_Pr_Wrry	-0.020	0.034	-0.584	0.559
##	.Y1_AGOR	0.082	0.031	2.661	0.008
##	.Y0_PD_Odd_Bel_Exp ~~				
##	.Y1_PD-Withdr	0.017	0.032	0.535	0.593
##	.Y1_MUD	-0.001	0.028	-0.037	0.970
##	.Y1_AUD	0.062	0.027	2.279	0.023
##	.Y1_IMP_Help	0.031	0.031	0.986	0.324
##	.Y1_IMP_Pr_Wrry	0.002	0.032	0.050	0.960
##	.Y1_PD	-0.010	0.029	-0.338	0.736
##	.Y1_AGOR	0.012	0.029	0.411	0.681
##	.Y1_PD-Withdr ~~				
##	.Y1_MUD	-0.001	0.032	-0.030	0.976
##	.Y1_AUD	-0.030	0.031	-0.956	0.339
##	.Y1_IMP_Help	0.044	0.036	1.230	0.219
##	.Y1_IMP_Pr_Wrry	-0.034	0.037	-0.927	0.354
##	.Y1_PD	0.004	0.033	0.119	0.905
##	.Y1_AGOR	-0.028	0.033	-0.829	0.407
##	.Y1_MUD ~~				
##	.Y1_AUD	0.070	0.028	2.514	0.012
##	.Y1_IMP_Help	-0.002	0.032	-0.076	0.940
##	.Y1_IMP_Pr_Wrry	0.003	0.033	0.077	0.938
##	.Y1_PD	-0.062	0.030	-2.085	0.037
##	.Y1_AGOR	0.018	0.029	0.596	0.551
##	.Y1_AUD ~~				
##	.Y1_IMP_Help	0.016	0.031	0.531	0.596
##	.Y1_IMP_Pr_Wrry	-0.042	0.032	-1.316	0.188
##	.Y1_PD	-0.076	0.029	-2.642	0.008
##	.Y1_AGOR	-0.024	0.028	-0.836	0.403
##	.Y1_IMP_Help ~~				
##	.Y1_IMP_Pr_Wrry	0.083	0.036	2.285	0.022
##	.Y1_PD	0.033	0.032	1.006	0.314

```

##      .Y1_AGOR                -0.014    0.032   -0.442    0.658
##      .Y1_IMP_Par_Worry ~~
##      .Y1_PD                  0.004    0.033    0.119    0.905
##      .Y1_AGOR                -0.013    0.033   -0.382    0.702
##      .Y1_PD ~~
##      .Y1_AGOR                0.093    0.030    3.077    0.002
##
## Variances:
##      Estimate Std.Err z-value P(>|z|)
##      .Y1_IMP_Dpr_An timer 0.709    0.041   17.335    0.000
##      .Y0_AU_Freq timer 0.931    0.054   17.335    0.000
##      .Y0_CD timer 0.651    0.038   17.335    0.000
##      .Y0_DB_Gen_Del timer 0.454    0.026   17.335    0.000
##      .Y1_ARREST timer 0.772    0.045   17.335    0.000
##      .Y0_AU_Drunk timer 0.524    0.030   17.361    0.000
##      .Y0_PD_Depres timer 0.811    0.047   17.335    0.000
##      .Y0_AU_4Drinks timer 0.529    0.030   17.381    0.000
##      .Y0_AU_Drinks timer 0.369    0.021   17.335    0.000
##      .Y0_IMP_Dpr_An timer 0.740    0.043   17.335    0.000
##      .Y0_PD_Cg_Prc_D timer 0.615    0.035   17.335    0.000
##      .Y0_SAD timer 0.847    0.049   17.335    0.000
##      .Y1_PD_Pr_D_S_I timer 0.598    0.034   17.335    0.000
##      .Y0_IMP_Behavir timer 0.697    0.040   17.335    0.000
##      .Y0_IMP_Parents timer 0.643    0.037   17.335    0.000
##      .Y0_MDD timer 0.773    0.045   17.335    0.000
##      .Y1_CD timer 0.582    0.034   17.335    0.000
##      .Y1_ND timer 0.879    0.051   17.347    0.000
##      .Y1_DB_Alone timer 0.717    0.041   17.335    0.000
##      .Y1_DB_Alon_Grp timer 0.764    0.044   17.335    0.000
##      .Y0_IMP_Home timer 0.924    0.053   17.335    0.000
##      .Y0_PD_Suspicious timer 0.901    0.052   17.335    0.000
##      .Y1_DB_Group timer 0.704    0.041   17.335    0.000
##      .Y1_GAD timer 0.613    0.035   17.384    0.000
##      .Y0_PD-Withdr timer 0.893    0.052   17.335    0.000
##      .Y1_IMP_Behavir timer 0.673    0.039   17.335    0.000
##      .Y0_IMP_Activts timer 0.683    0.039   17.335    0.000
##      .Y0_IMP_Help timer 0.925    0.053   17.335    0.000
##      .Y1_IMP_Activts timer 0.904    0.052   17.335    0.000
##      .Y1_IMP_Home timer 0.567    0.033   17.335    0.000
##      .Y0_GAD timer 0.598    0.034   17.335    0.000
##      .Y0_PD timer 0.760    0.044   17.335    0.000
##      .Y1_MDD timer 0.518    0.030   17.335    0.000
##      .Y1_SAD timer 0.685    0.039   17.335    0.000
##      .Y0_PD_Eccentr timer 0.500    0.029   17.335    0.000
##      .Y0_PD_Odd_Bl_E timer 0.712    0.041   17.350    0.000
##      .Y0_PTSD timer 0.920    0.053   17.374    0.000
##      .Y0_PD_Sep_Insc timer 0.861    0.050   17.335    0.000
##      .Y1_PD_Hostilty timer 0.571    0.033   17.335    0.000
##      .Y1_PD_Impul timer 0.527    0.030   17.335    0.000
##      .Y0_AGOR timer 0.915    0.053   17.388    0.000
##      .Y0_PD_Hostilty timer 0.645    0.037   17.335    0.000
##      .Y0_PD_Impul timer 0.784    0.045   17.335    0.000
##      .Y1_PD_Ssp_Eccn timer 0.589    0.034   17.335    0.000
##      .Y1_PD-Withdr timer 0.897    0.052   17.335    0.000

```

##	.Y1_PTSD	0.855	0.049	17.335	0.000
##	.Y1_MUD	0.702	0.041	17.335	0.000
##	.Y1_ODD	0.578	0.033	17.335	0.000
##	.Y1_AUD	0.656	0.038	17.335	0.000
##	.Y1_IMP_Help	0.856	0.049	17.335	0.000
##	.Y1_IMP_Pr_Wrry	0.964	0.056	17.355	0.000
##	.Y1_PD_Depres	0.886	0.051	17.335	0.000
##	.Y1_PD	0.740	0.043	17.335	0.000
##	.Y1_AGOR	0.826	0.047	17.417	0.000
##	Y0_ARREST	0.998	0.058	17.335	0.000
##	Y0_Age	0.998	0.058	17.335	0.000
##	Y0_DB_SnJ	0.949	0.054	17.486	0.000
##	Y0_Male	0.998	0.058	17.335	0.000
##	Y1_PD_Odd_Bl_E	0.998	0.058	17.335	0.000
##	F0_CJSI	0.998	0.058	17.335	0.000
##	M0_CJSI	0.990	0.057	17.398	0.000
##	Y0_IMP_Pr_Wrry	0.998	0.058	17.335	0.000