Scatterplot with multiple axes
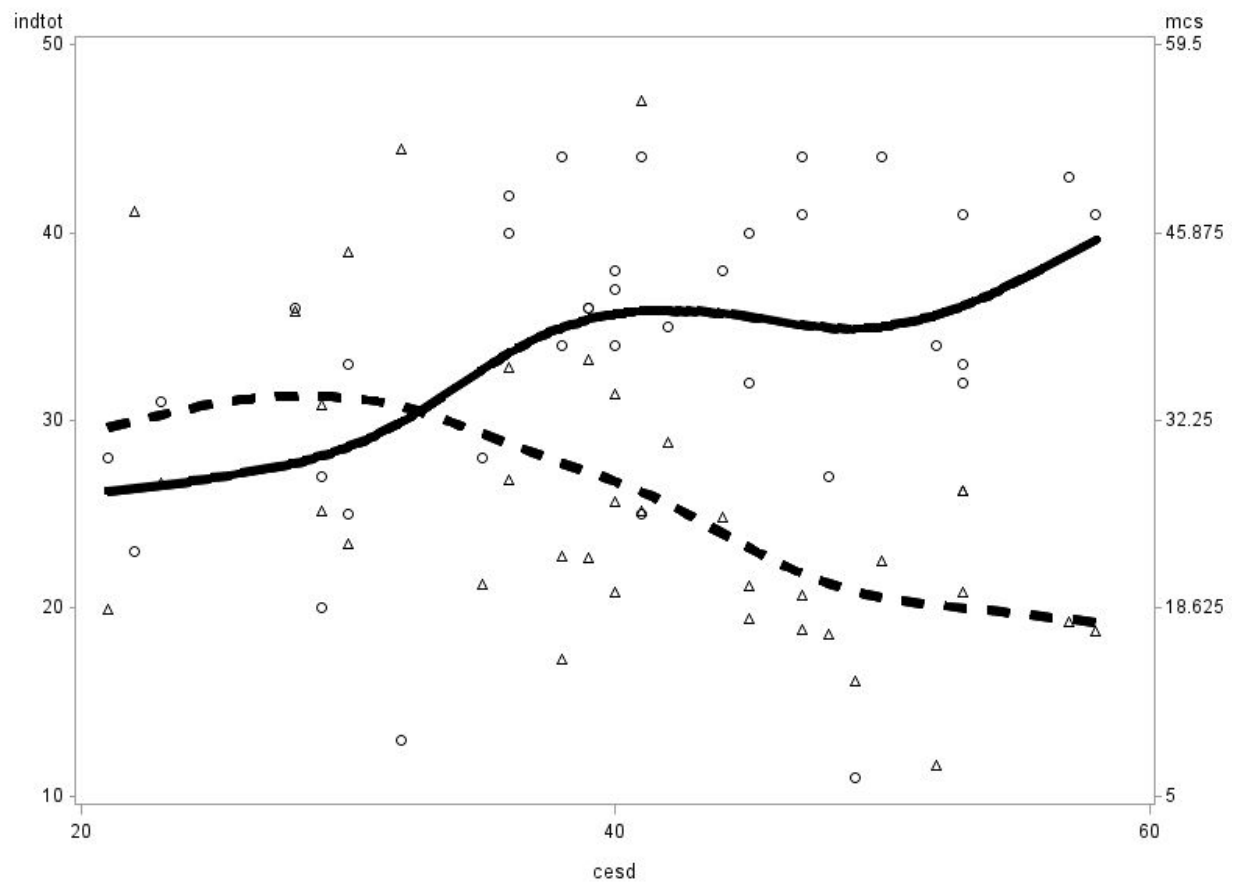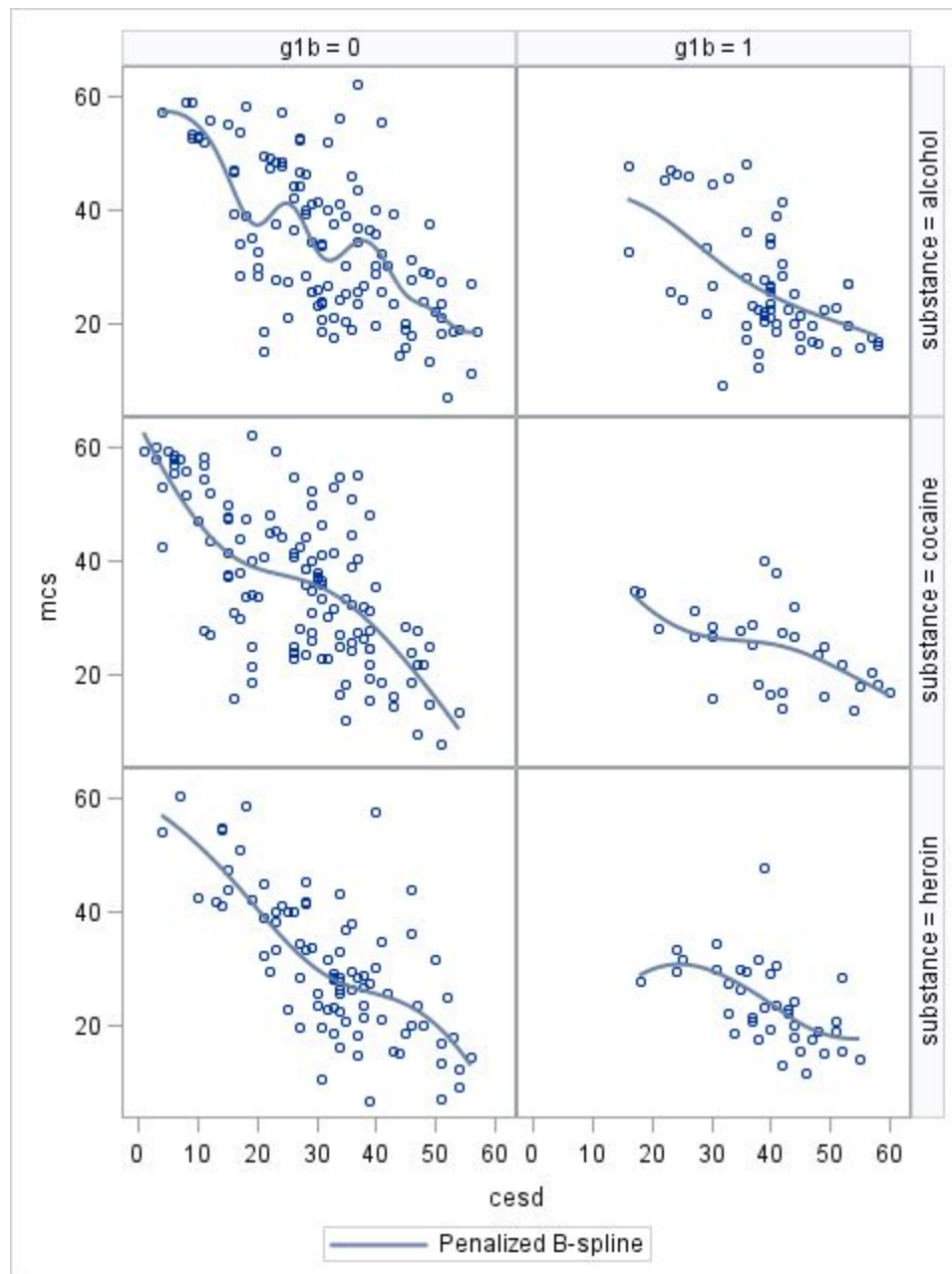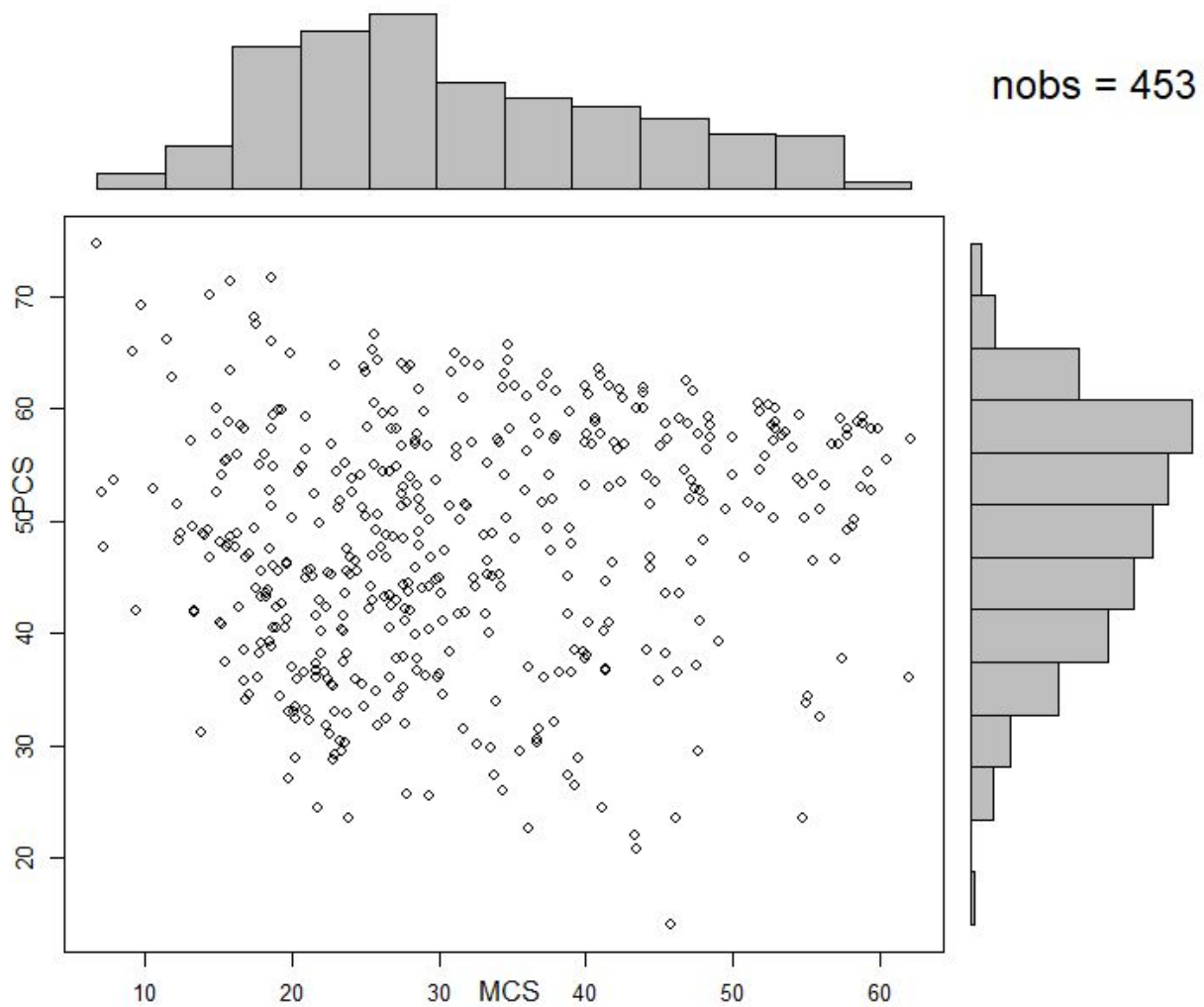
Conditioning Plot

Scatterplot with Marginal Histograms
(in R because I didn't have SAS dataset)

nobs = 453
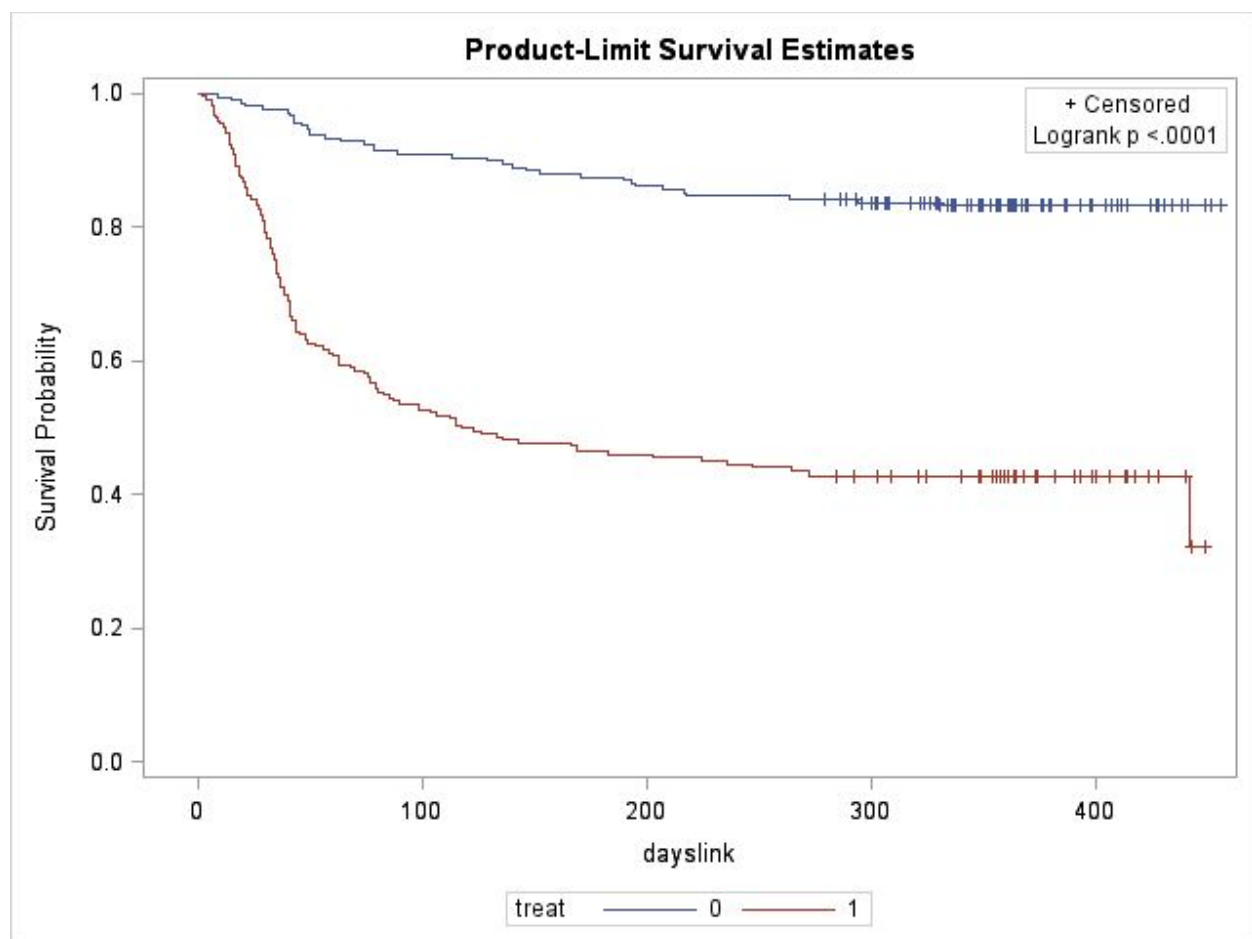
Kaplan-Meier Plot

The SAS System

The LIFETEST Procedure

Summary of the Number of Censored and Uncensored Values

Stratum	treat	Total	Failed	Censored	Percent Censored
1	0	209	35	174	83.25
2	1	222	128	94	42.34
Total		431	163	268	62.18

Note: 22 observations with invalid time, censoring, or strata values were deleted.

Product-Limit Survival Estimates

ROC Curve

The SAS System

The LOGISTIC Procedure

Model Information	
Data Set	WORK.HELP
Response Variable	g1b
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	453
Number of Observations Used	453

Response Profile		
Ordered Value	g1b	Total Frequency
1	1	127
2	0	326

Probability modeled is g1b='1'.

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	539.518	485.378
SC	543.634	493.610
-2 Log L	537.518	481.378

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	56.1398	1	<.0001
Score	51.3463	1	<.0001
Wald	45.7147	1	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-3.4329	0.4043	72.0892	<.0001
cesd	1	0.0709	0.0105	45.7147	<.0001

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
cesd	1.073	1.052	1.096

Association of Predicted Probabilities and Observed Responses

Percent Concordant	71.3	Somers' D	0.445
Percent Discordant	26.7	Gamma	0.455
Percent Tied	2.0	Tau-a	0.180
Pairs	41402	c	0.723

Pairs Plot
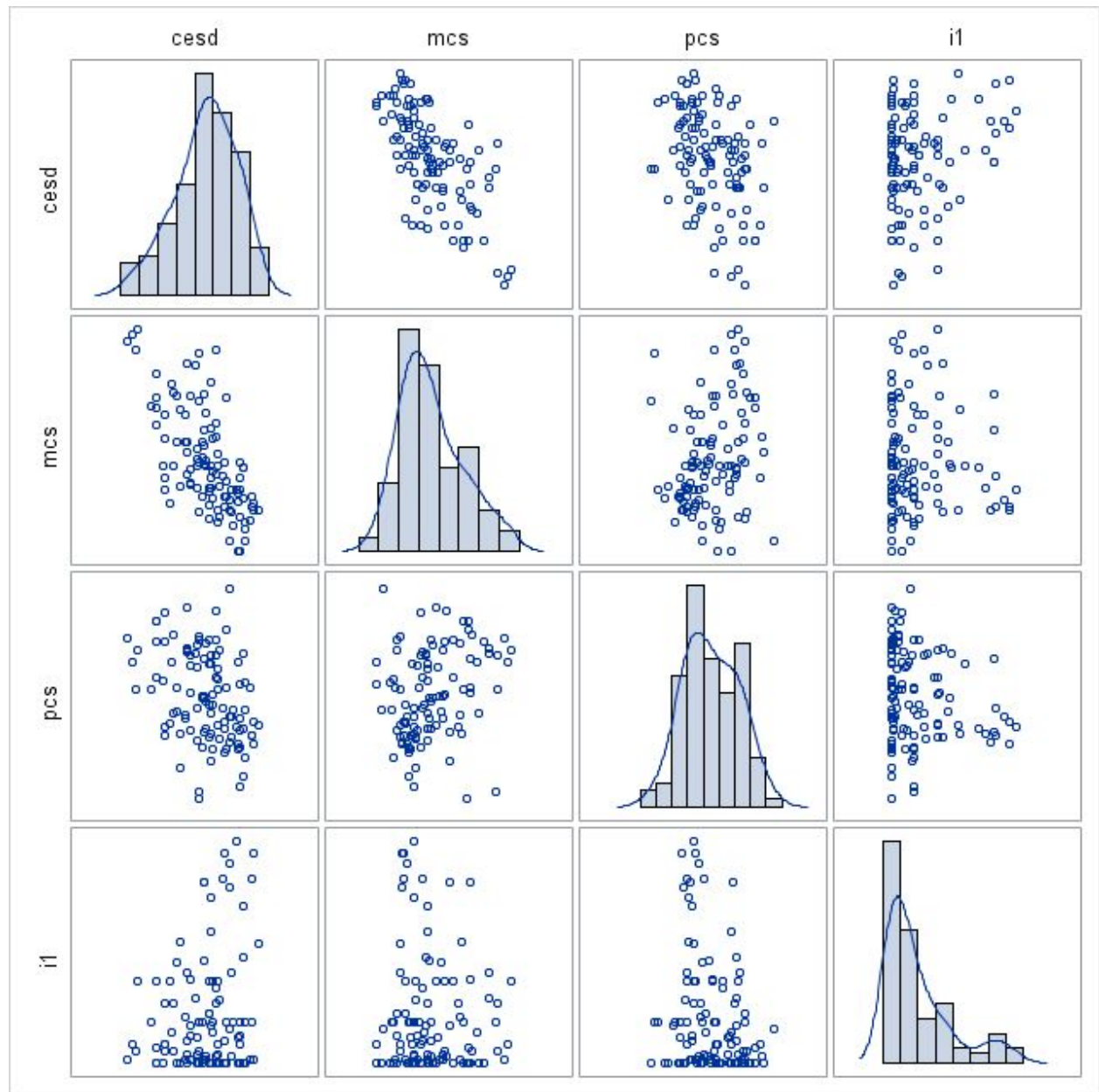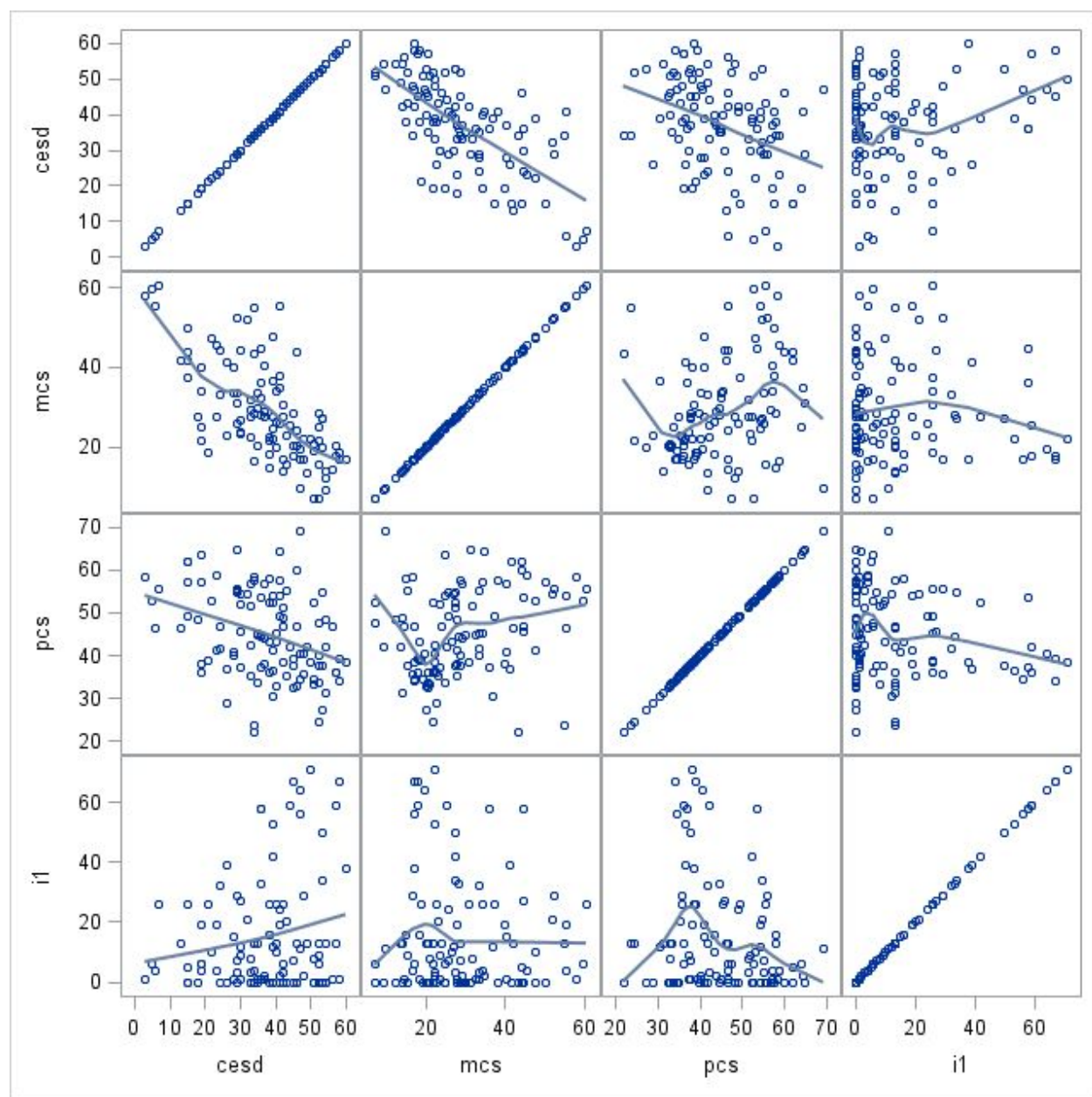
Visualize Correlation Matrix
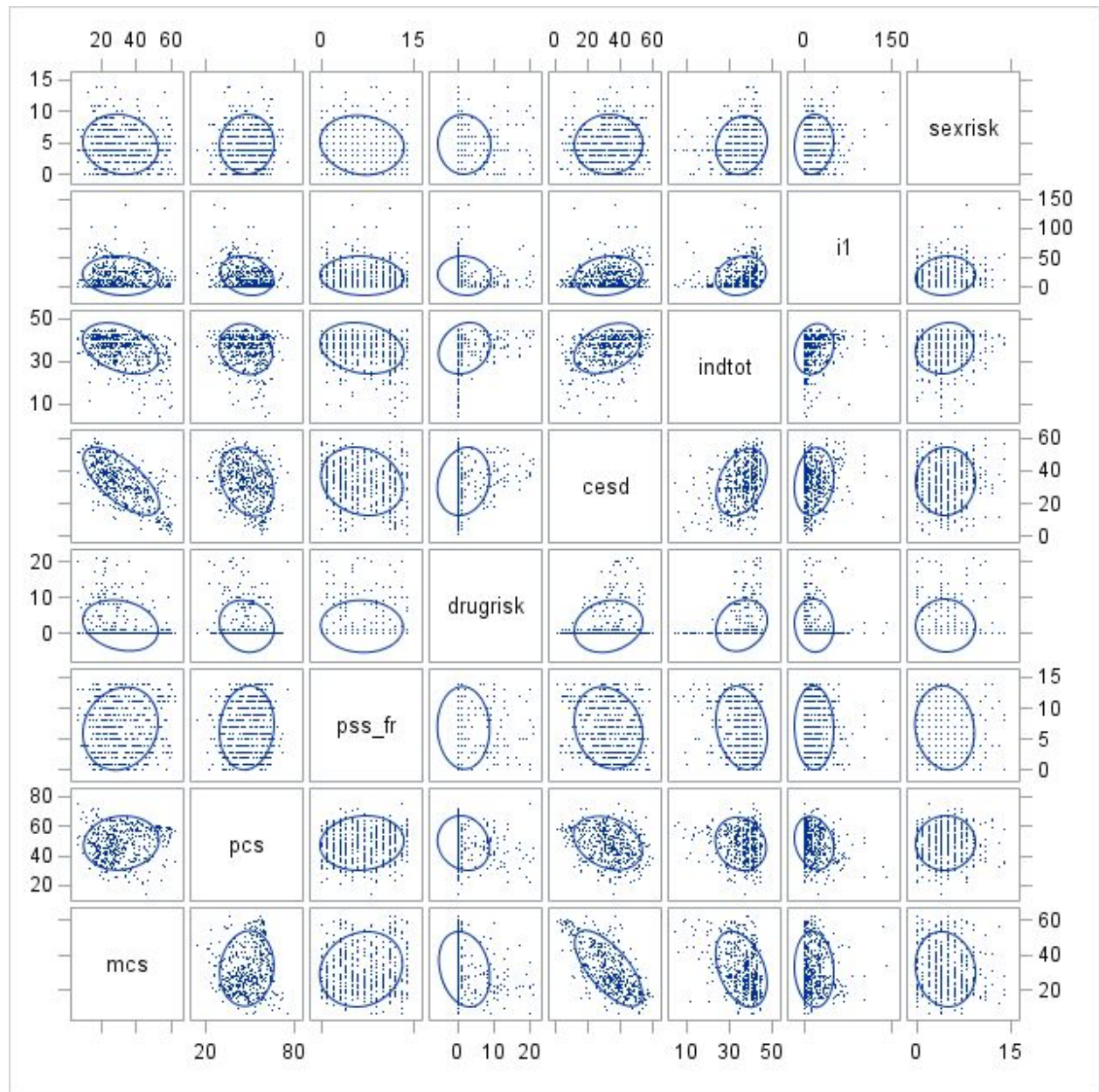
```
#Don't know why you'd want this, but I guess it can't hurt to include it
proc import datafile="\\Client\C$\help.csv"
out=help dbms=csv replace;
delimiter=',';
getnames=yes;
axis1 minor=none;
axis2 minor=none order=(5 to 60 by 13.625);
axis3 minor=none order=(20, 40, 60);
symbol1 i=sm65s v=circle color=black l=1 w=5;
symbol2 i=sm65s v=triangle color=black l=2 w=5;
run;
proc gplot data=help;
where female eq 1 and substance eq 'alcohol';
plot indtot*cesd / vaxis=axis1 haxis=axis3;
plot2 mcs*cesd / vaxis = axis2;
run;
quit;
proc sgpanel data=help;
panelby g1b substance / layout=lattice;
pbspline x=cesd y=mcs;
run; quit;
ods select censoredsummary survivalplot;
proc lifetest data=help plots=s(test);
time dayslink*linkstatus(0);
strata treat;
run;
ods graphics on;
ods select roccurve;
proc logistic data=help descending plots(only)=roc;
model g1b = cesd;
run;
ods graphics off;
proc sgscatter data=help;
 where female eq 1;
 matrix cesd mcs pcs i1 / diagonal=(histogram kernel);
run; quit;
proc sgscatter data=help;
 where female eq 1;
 compare x = (cesd mcs pcs i1)
 y = (cesd mcs pcs i1) / loess;
run; quit;
proc sgscatter data=help;
matrix mcs pcs pss_fr drugrisk cesd indtot i1 sexrisk /
ellipse=(alpha=.25) start=bottomleft
markerattrs=(symbol=circlefilled size=4);
run; quit;
```

```r
#R code
scatterhist = function(x, y, xlab="x label", ylab="y label"){
  zones=matrix(c(3,1,2,4), ncol=2, byrow=TRUE)
  layout(zones, widths=c(4/5,1/5), heights=c(1/5,4/5))
  par(mar=c(0,0,0,0))
  plot(type="n",x=1, y =1, bty="n",xaxt="n", yaxt="n")
  text(x=1,y=1,paste0("nobs = ",min(length(x), length(y))), cex
      =1.8)
  xhist = hist(x, plot=FALSE)
  yhist = hist(y, plot=FALSE)
  top = max(c(xhist$counts, yhist$counts))
  par(mar=c(3,3,1,1))
  plot(x,y)
  par(mar=c(0,3,1,1))
  barplot(xhist$counts, axes=FALSE, ylim=c(0, top), space=0)
  par(mar=c(3,0,1,1))
  barplot(yhist$counts, axes=FALSE, xlim=c(0, top), space=0,
          horiz=TRUE)
  par(oma=c(3,3,0,0))
  mtext(xlab, side=1, line=1, outer=TRUE, adj=0,
        at=.8 * (mean(x) - min(x))/(max(x)-min(x)))
  mtext(ylab, side=2, line=1, outer=TRUE, adj=0,
        at=(.8 * (mean(y) - min(y))/(max(y) - min(y)))) }
```