1.Normal distribution for both variables for pearson
2.homoscedasticity assumes that data is equally distributed about the regression line.
3.Linear:
Linear: pearson
Monotonically related (not normal): spearman kendall hoeffding

The CORR Procedure

2 Variables:	WeightD FD806
Freq Variable:	WeightD

Simple Statistics

Variable	N	Mean	Std Dev	Median	Minimum	Maximum	Label
WeightD	8128876	9249	6822	7953	13.01060	34024	
FD806	8128876	326.86463	302.05320	224.12000	11.83000	1573	Expense Non-alcoholic beverages

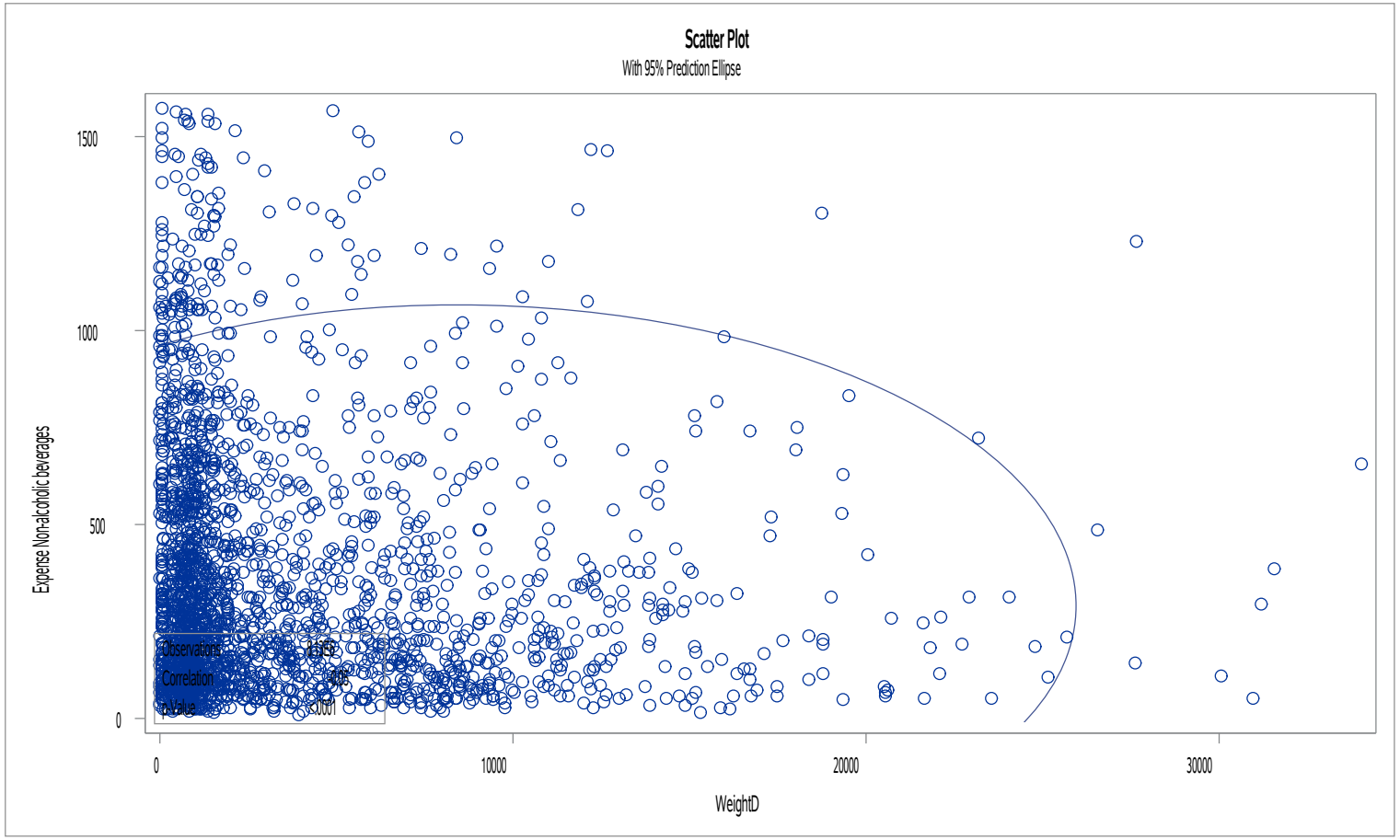
Pearson Correlation Coefficients, N = 8128876
Prob > |r| under H0: Rho=0

	WeightD	FD806
WeightD	1.00000	-0.04954 <.0001
FD806 **Expense Non-alcoholic beverages**	-0.04954 <.0001	1.00000

Spearman Correlation Coefficients, N = 8128876
Prob > |r| under H0: Rho=0

	WeightD	FD806
WeightD	1.00000	-0.07427 <.0001
FD806 **Expense Non-alcoholic beverages**	-0.07427 <.0001	1.00000

The CORR Procedure



The CORR Procedure