

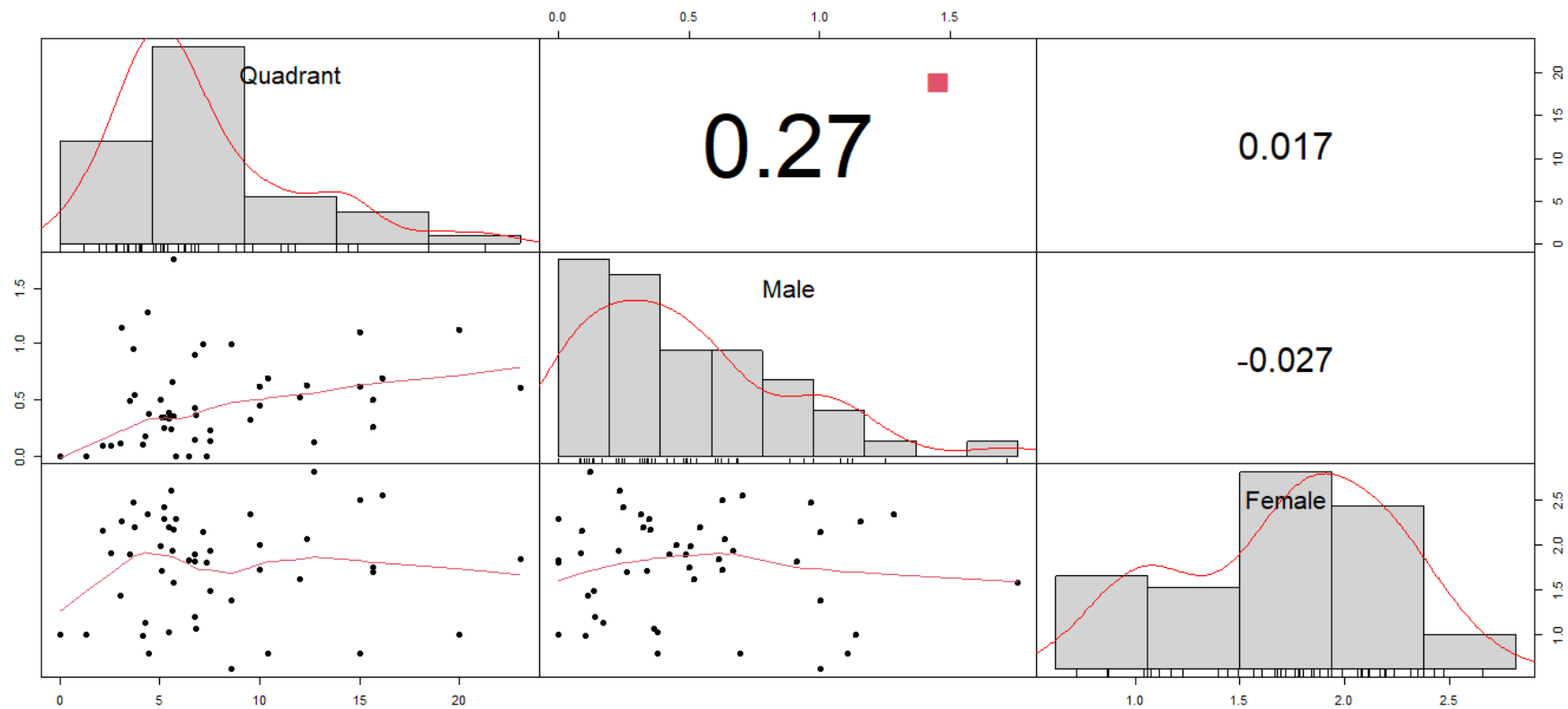


Figure S3. Scatterplot and Correlation Matrix of Independent Variables.

The diagonal panels display the histograms and density curves illustrating the distribution of each variable (Quadrant, Male, Female).

The upper right panels present the linear correlation coefficients (Pearson's r) between the variable pairs.

The lower left panels exhibit the scatterplots, along with a non-parametric smoothing line (red curve) to visualize the pattern of the relationship between the variable pairs.

Correlation coefficients close to zero indicate low intercorrelation among the variables, confirming the absence of multicollinearity.