Supplementary Material:
A causal web between chronotype and metabolic health traits

Appendix 1: AppendixTable1EpigraphDBIVWresults.xlsx. EpiGraphDB data downloaded to produce Figure 2.

Appendix 2: AppendixTable2StudyCharacteristics.xlsx. SNP-level information on all 10 studies analyzed needed to reproduce analyses of these 10 studies.

Appendix 3: AppendixTable3MRAnalysisResults.xlsx. Summary level results for each of the 10 MR analyses, including leave-one-out statistics, MR-Egger statistics, and all MR statistics. Used to produce supplementary scatter plots, leave-one-out plots, and Figures 3-5 and supplementary figures.

Appendix 4: AppendixTable4ConfounderGraph.xlsx. Statistics downloaded from EpiGraphDB needed to reproduce figures 6 and 7.

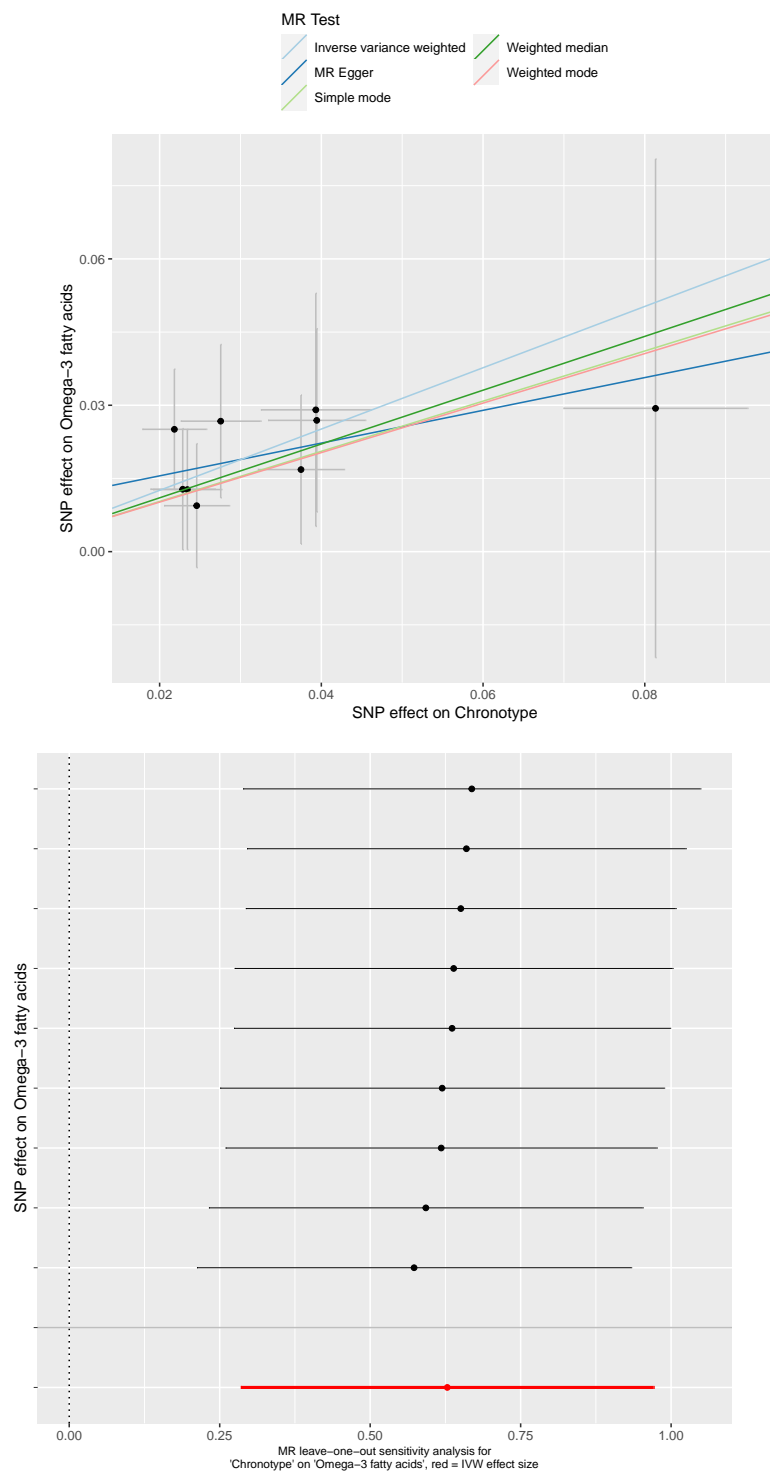Appendix 5: AppendixFigure7: A2 size PDF of Figure 6 for on-screen viewing.

Figure 1: Propensity to an evening chronotype causes increased omega-3 fatty acids. (top) IVW, Weighted median, mode, weighted mode, and Egger regressions shown. Panel (bottom) depicts leave-one-out sensitivity analyses with the IVW method, where the red line indicates the consensus IVW point estimate.
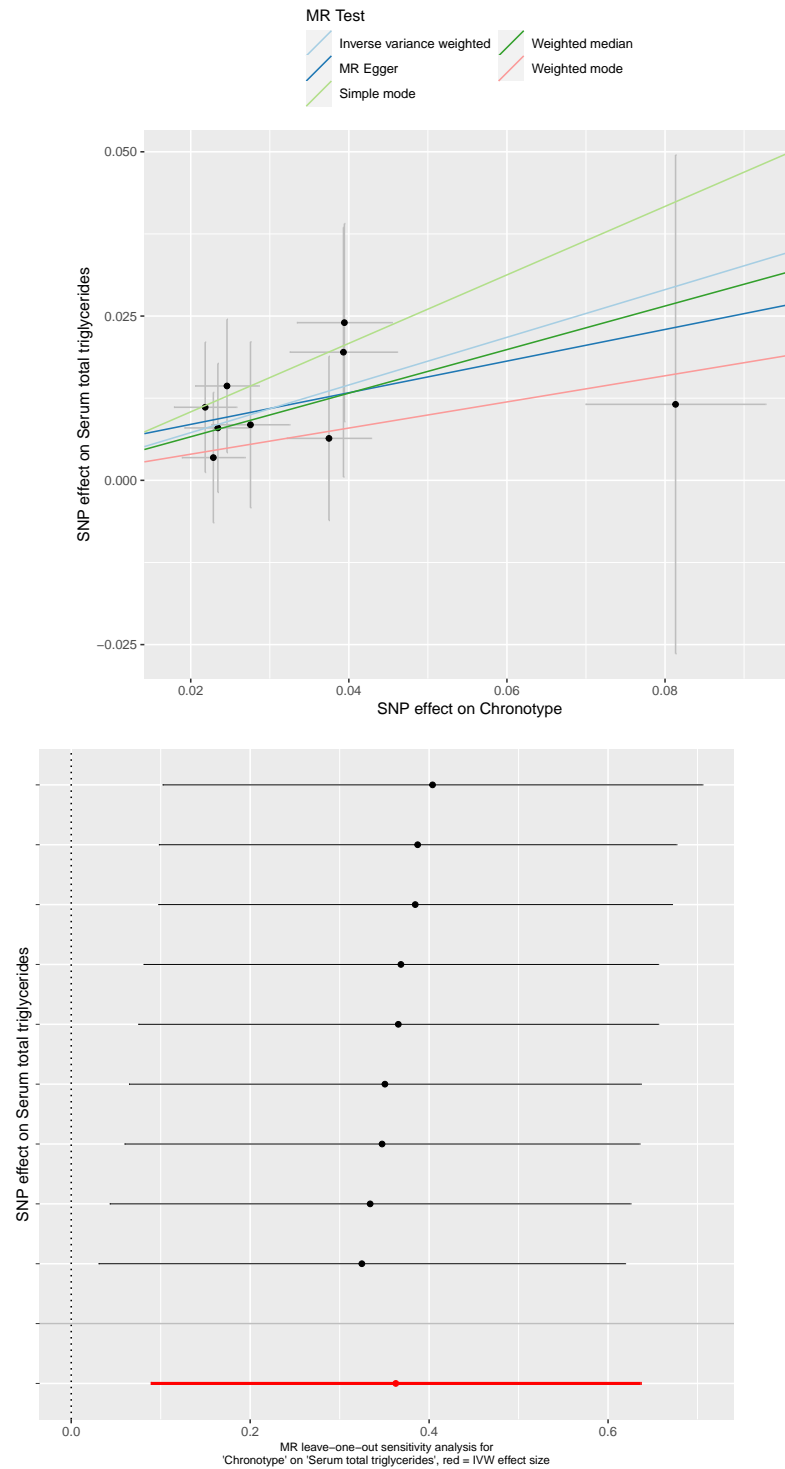
Figure 2: Propensity to an evening chronotype causes increased serum total triglycerides. (top) IVW, Weighted median, mode, weighted mode, and Egger regressions shown. Panel (bottom) depicts leave-one-out sensitivity analyses with the IVW method, where the red line indicates the consensus IVW point estimate.
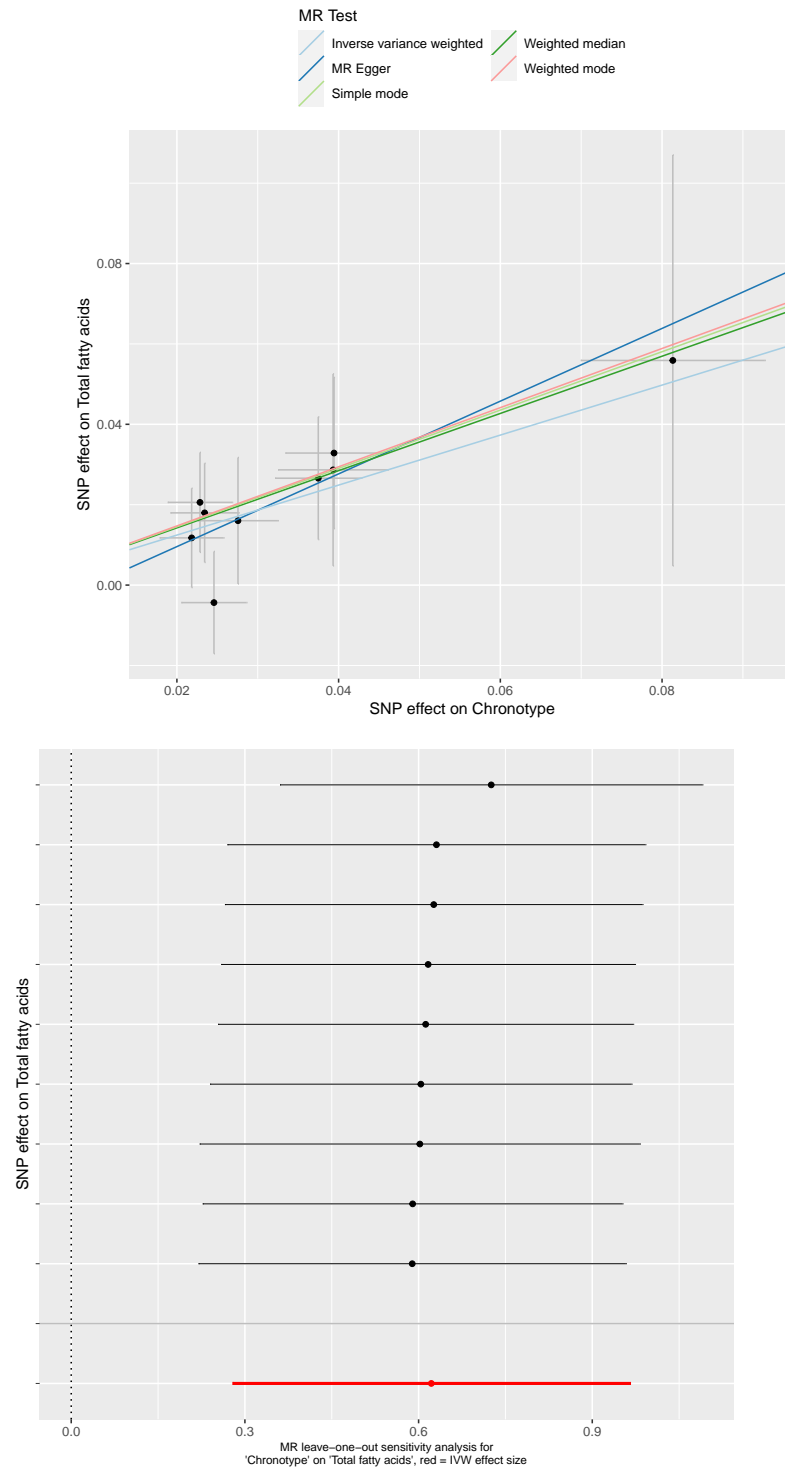
Figure 3: Propensity to an evening chronotype causes increased total fatty acids. (top) IVW, Weighted median, mode, weighted mode, and Egger regressions shown. Panel (bottom) depicts leave-one-out sensitivity analyses with the IVW method, where the red line indicates the consensus IVW point estimate.
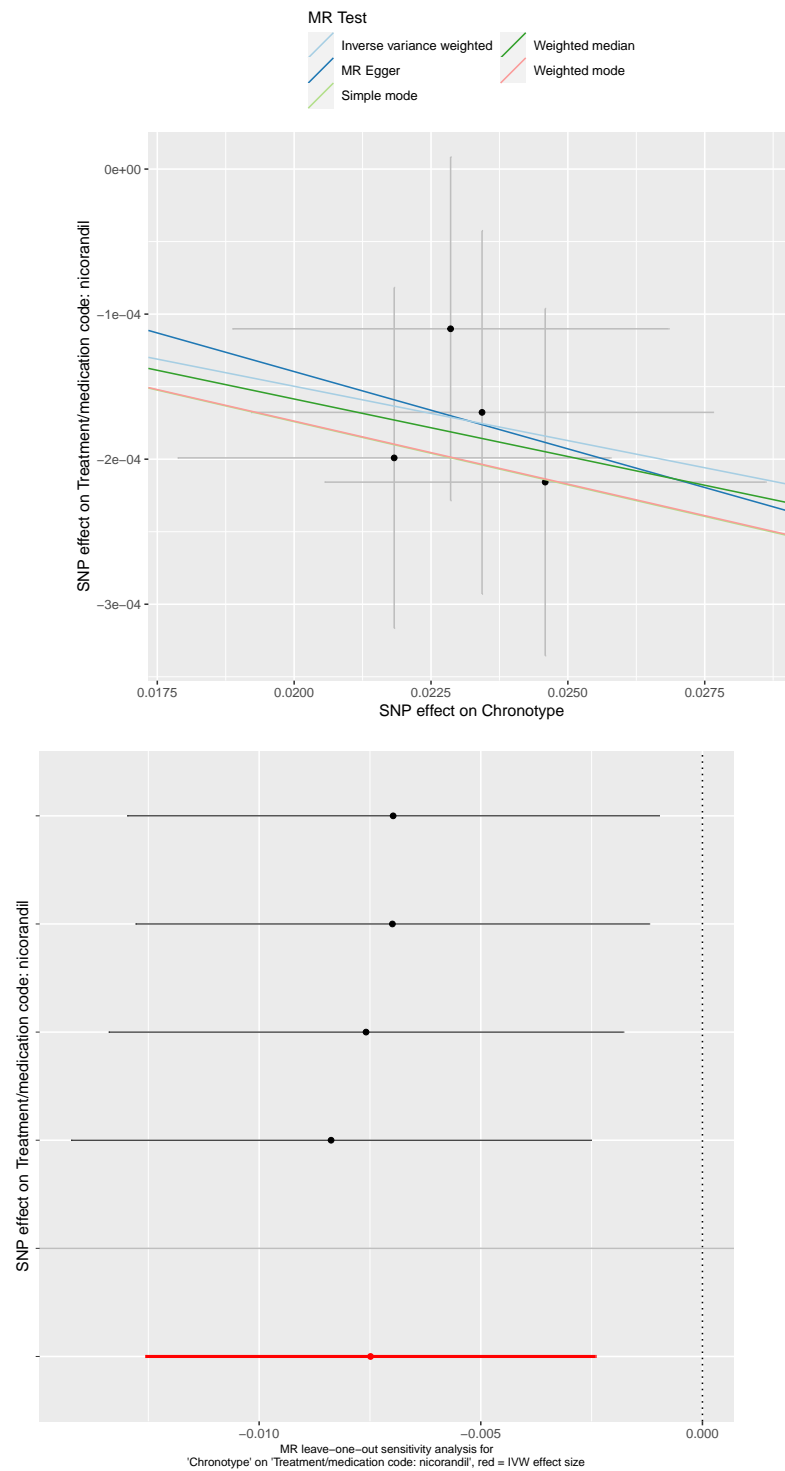
Figure 4: Propensity to an evening chronotype causes decreased likelihood of treatment with nicorandil. (top) IVW, Weighted median, mode, weighted mode, and Egger regressions shown. Panel (bottom) depicts leave-one-out sensitivity analyses with the IVW method, where the red line indicates the consensus IVW point estimate.
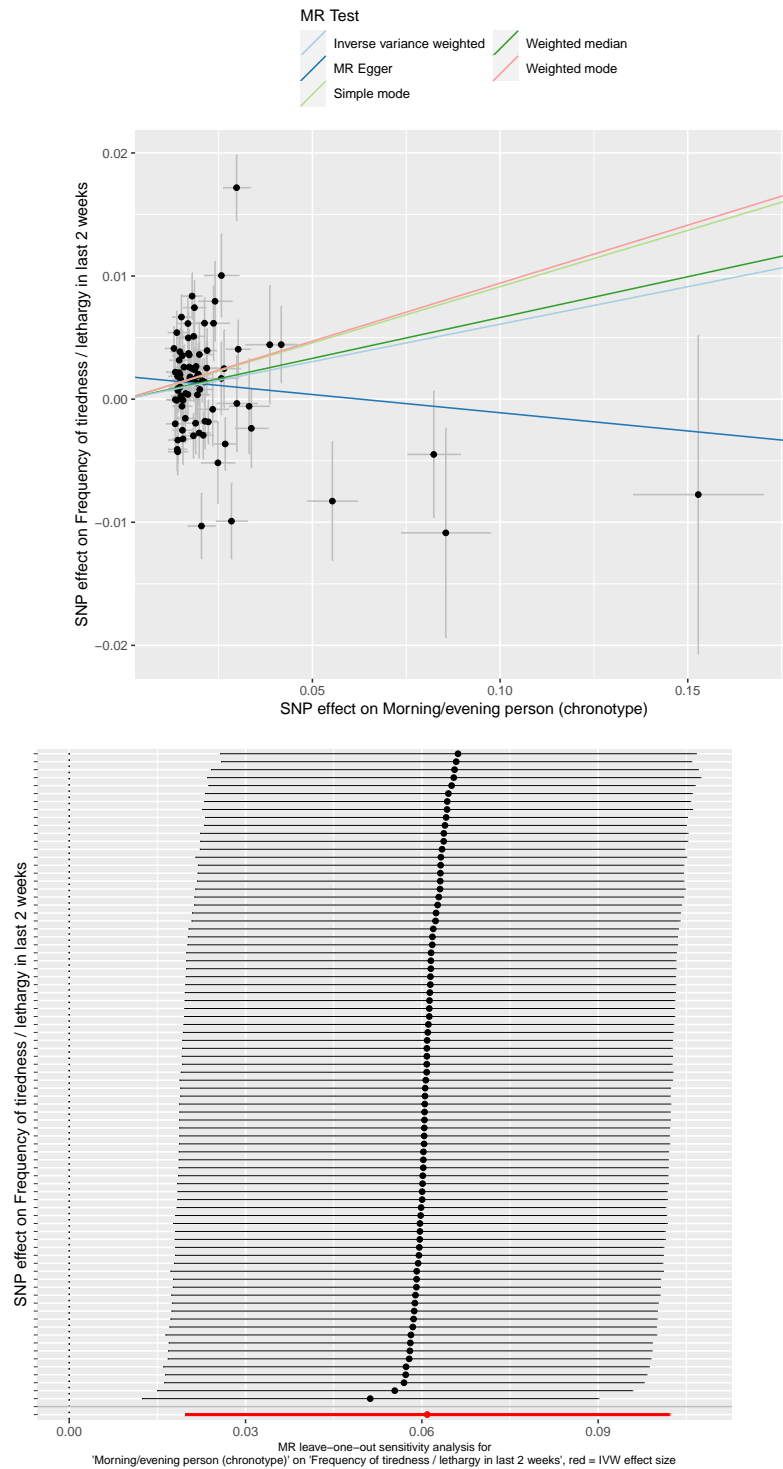
Figure 5: Propensity to an evening chronotype causes increases in self-reported lethargy in the last two weeks. (top) IVW, Weighted median, mode, weighted mode, and Egger regressions shown. Panel (bottom) depicts leave-one-out sensitivity analyses with the IVW method, where the red line indicates the consensus IVW point estimate.
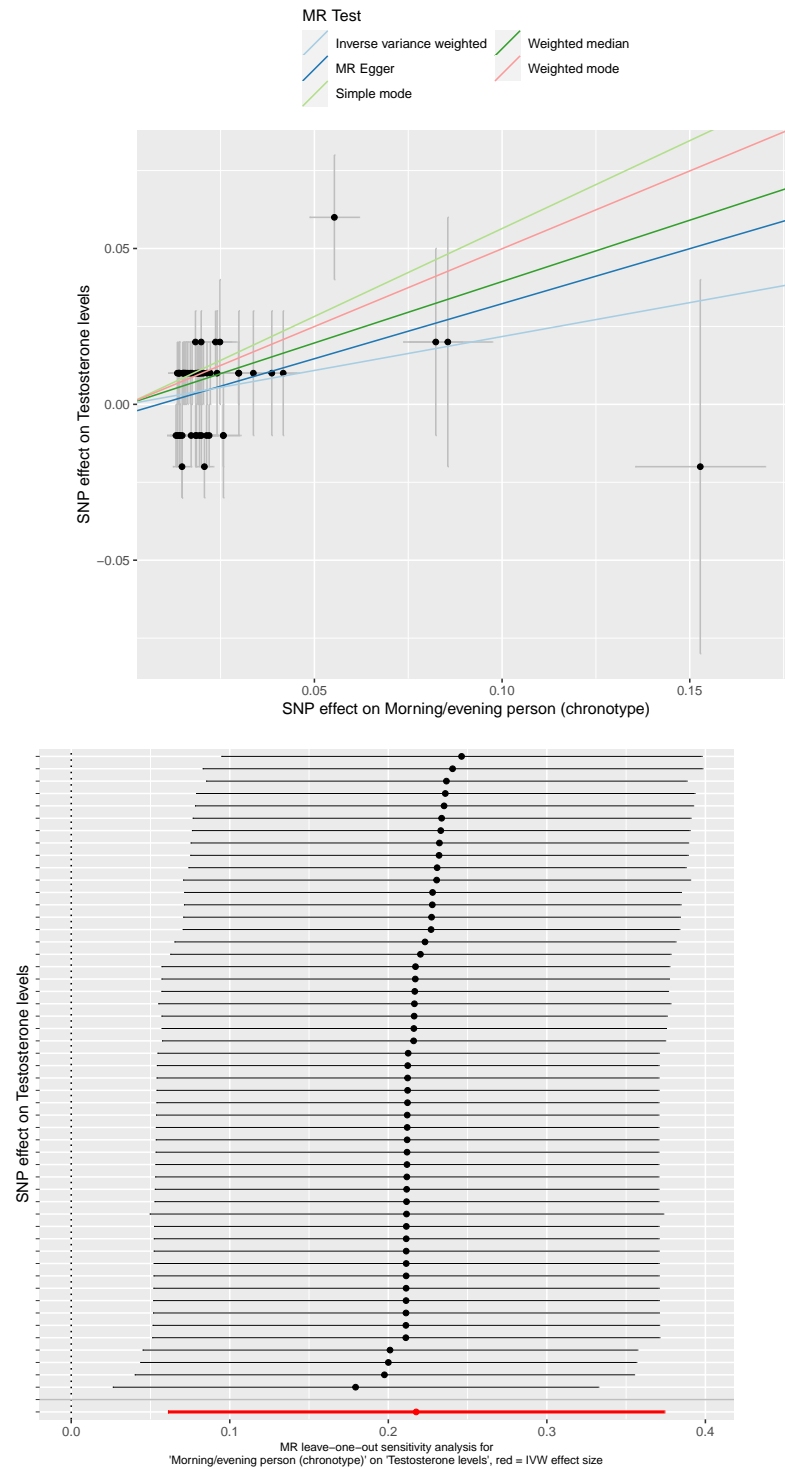
Figure 6: Propensity to an evening chronotype causes increases in serum testosterone. (top) IVW, Weighted median, mode, weighted mode, and Egger regressions shown. Panel (bottom) depicts leave-one-out sensitivity analyses with the IVW method, where the red line indicates the consensus IVW point estimate.

Figure 7: Propensity to an evening chronotype causes decrease in odds of waking early. (top) IVW, Weighted median, mode, weighted mode, and Egger regressions shown. Panel (bottom) depicts leave-one-out sensitivity analyses with the IVW method, where the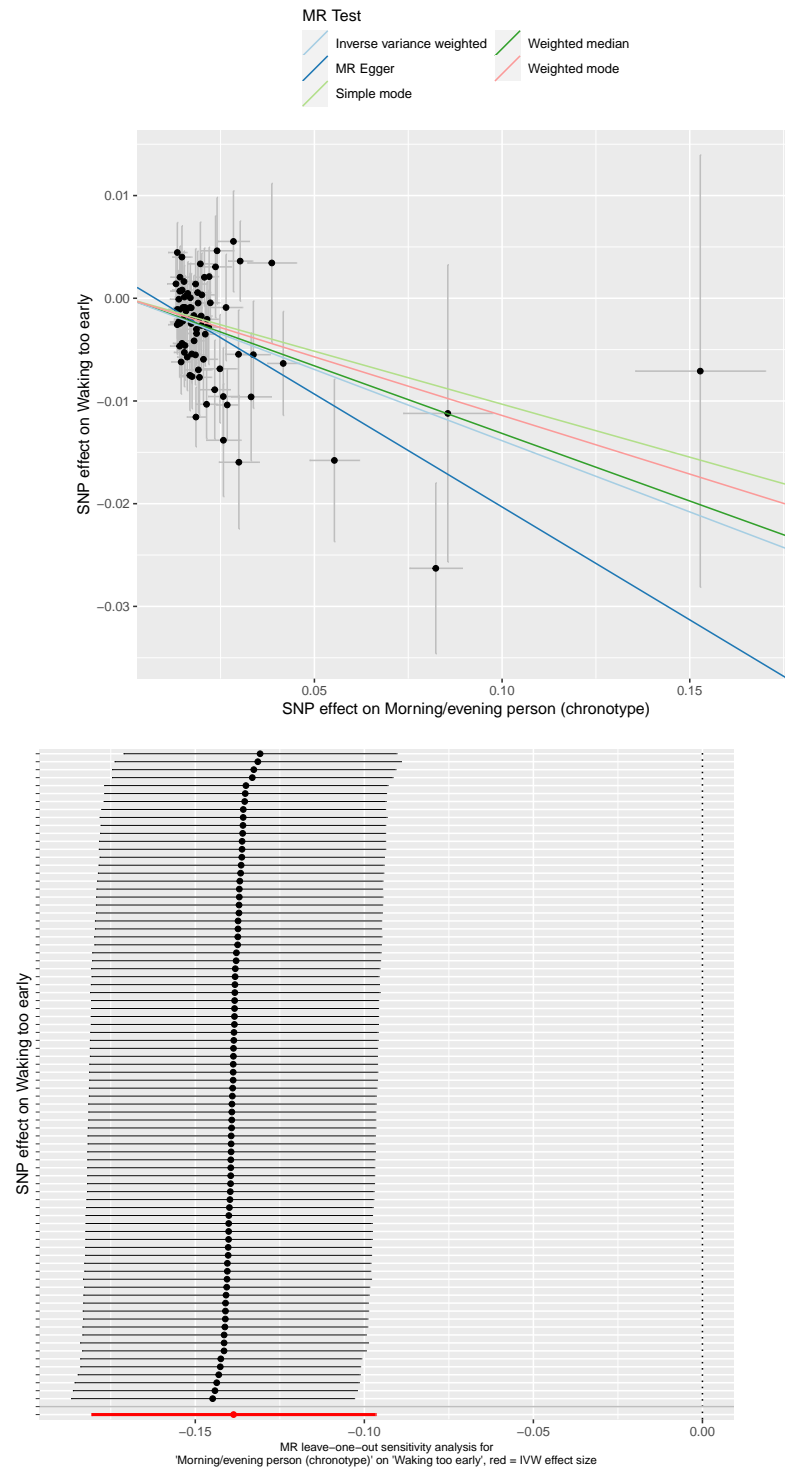 red line indicates the consensus IVW point estimate.