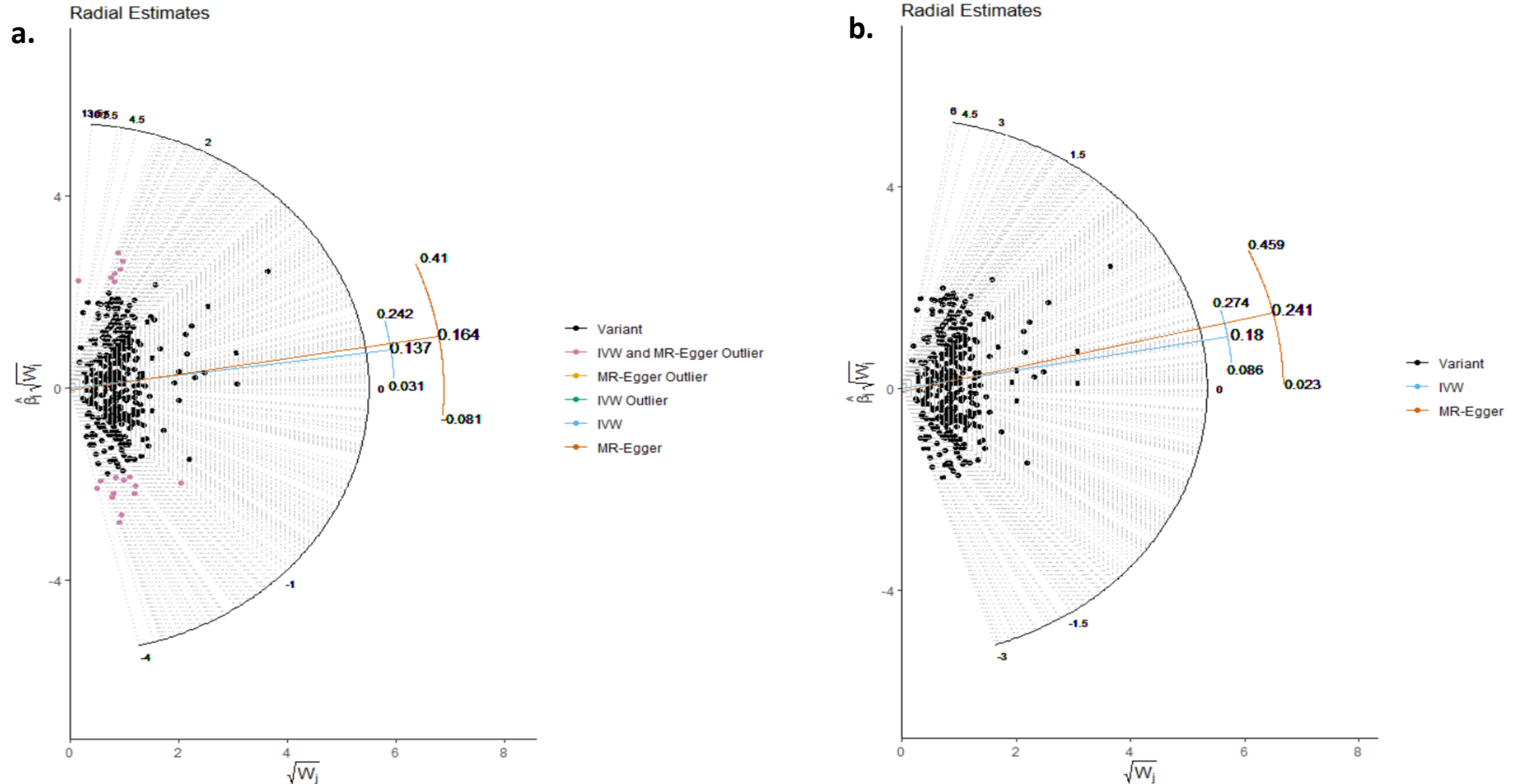
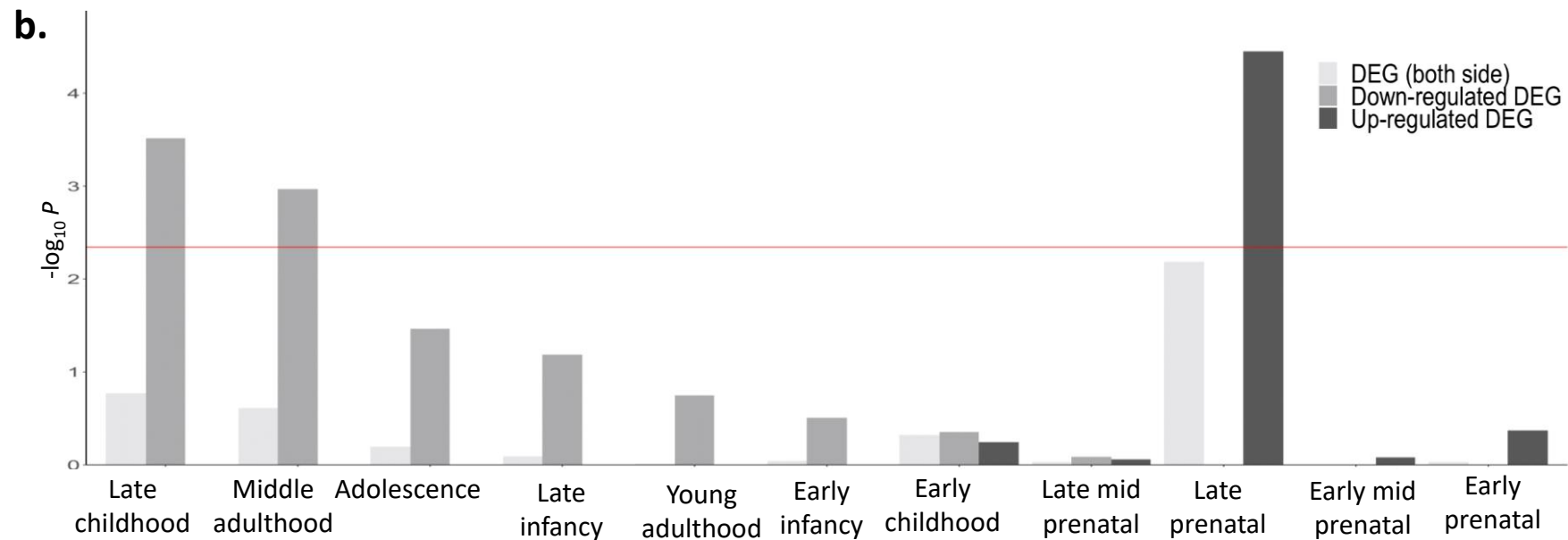
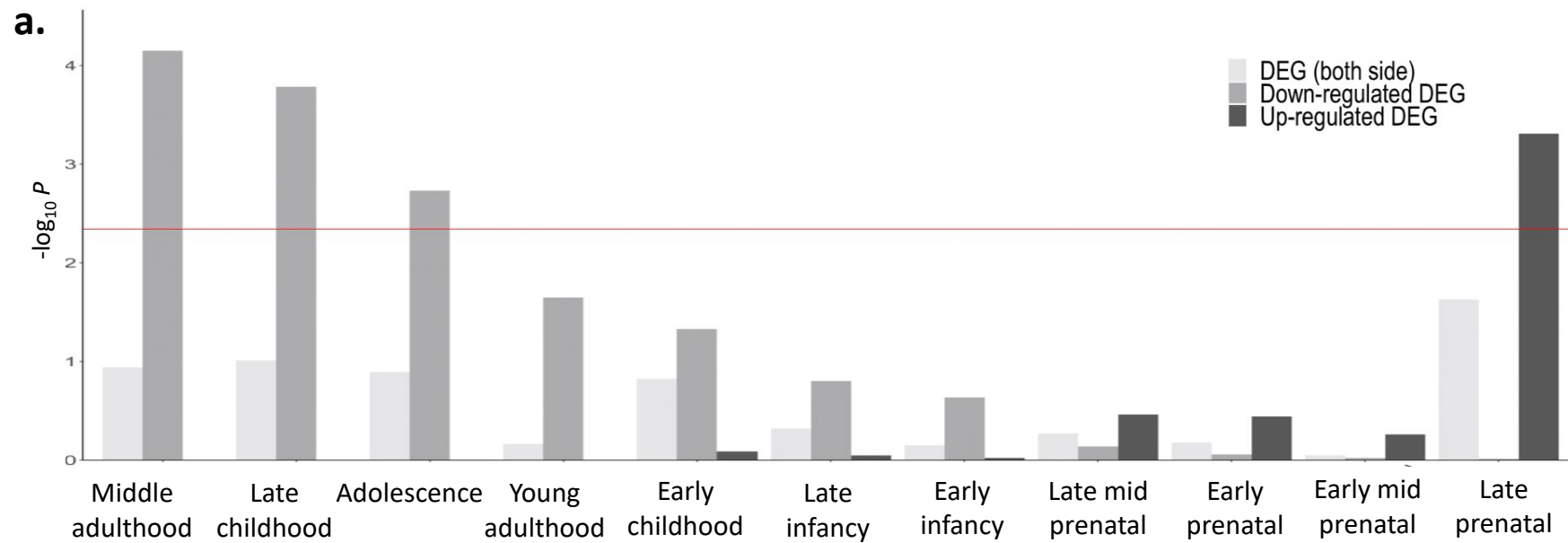


Supplementary Figure 1. Radial plot to visualize individual outlier SNPs in the MR estimates for timed up-and-go (TUG). Black dots show valid SNPs and colored dots (if any) display invalid outlier SNPs. The curved black line represents ratio estimates of each SNPs. a) Radial plot before removal of outliers; b) Radial plot after removal of outliers





Supplementary Figure 2. Enrichment of genes in brain tissues from 11 general developmental stages from Brainspan database. a) Enrichments observed using 518 genes down-regulated in the substantia nigra. b) Enrichments observed using 552 genes down-regulated in the amygdala. Red threshold line indicates $P_{Adj} = 0.05$. Full results of all Brainspan developmental stage enrichments (both-sided, down-regulated and up-regulated) available in supplementary tables S9 and S15.