# Figure 1

library(ggplot2)

library(dplyr)

DATA <- read.csv(file.choose(), header=TRUE)

DATA$ITEM <- factor(DATA$ITEM, levels=rev(c("Mean ratings of Whites", "Mean ratings of Blacks", "Mean ratings of Hispanics", "Mean ratings of Asians")))

DATA$GROUP <- factor(DATA$GROUP, levels=c("White respondents", "Black respondents", "Hispanic respondents", "Asian respondents"))

DATA$max.w <- max(DATA$COEFF[DATA$GROUP=="White respondents"], na.rm=TRUE)

DATA$min.w <- min(DATA$COEFF[DATA$GROUP=="White respondents"], na.rm=TRUE)

DATA$max.b <- max(DATA$COEFF[DATA$GROUP=="Black respondents"], na.rm=TRUE)

DATA$min.b <- min(DATA$COEFF[DATA$GROUP=="Black respondents"], na.rm=TRUE)

DATA$max.h <- max(DATA$COEFF[DATA$GROUP=="Hispanic respondents"], na.rm=TRUE)

DATA$min.h <- min(DATA$COEFF[DATA$GROUP=="Hispanic respondents"], na.rm=TRUE)

DATA$max.a <- max(DATA$COEFF[DATA$GROUP=="Asian respondents"], na.rm=TRUE)

DATA$min.a <- min(DATA$COEFF[DATA$GROUP=="Asian respondents"], na.rm=TRUE)

plot <- ggplot(DATA, aes(COEFF, ITEM)) +

 geom\_rect(data=filter(DATA, GROUP=="White respondents"), aes(xmin=min.w, xmax=max.w, ymin=-Inf, ymax=Inf), fill="lightsteelblue3", inherit.aes=FALSE) +

 geom\_rect(data=filter(DATA, GROUP=="Black respondents"), aes(xmin=min.b, xmax=max.b, ymin=-Inf, ymax=Inf), fill="lightsteelblue3", inherit.aes=FALSE) +

 geom\_rect(data=filter(DATA, GROUP=="Hispanic respondents"), aes(xmin=min.h, xmax=max.h, ymin=-Inf, ymax=Inf), fill="lightsteelblue3", inherit.aes=FALSE) +

 geom\_rect(data=filter(DATA, GROUP=="Asian respondents"), aes(xmin=min.a, xmax=max.a, ymin=-Inf, ymax=Inf), fill="lightsteelblue3", inherit.aes=FALSE) +

 geom\_vline(data=filter(DATA, GROUP=="White respondents"), aes(xintercept=max.w)) +

 geom\_vline(data=filter(DATA, GROUP=="White respondents"), aes(xintercept=min.w)) +

 geom\_vline(data=filter(DATA, GROUP=="Black respondents"), aes(xintercept=max.b)) +

 geom\_vline(data=filter(DATA, GROUP=="Black respondents"), aes(xintercept=min.b)) +

 geom\_vline(data=filter(DATA, GROUP=="Hispanic respondents"), aes(xintercept=max.h)) +

 geom\_vline(data=filter(DATA, GROUP=="Hispanic respondents"), aes(xintercept=min.h)) +

 geom\_vline(data=filter(DATA, GROUP=="Asian respondents"), aes(xintercept=max.a)) +

 geom\_vline(data=filter(DATA, GROUP=="Asian respondents"), aes(xintercept=min.a)) +

 geom\_point(size=3.5) +

 geom\_errorbarh(aes(xmin=CILO, xmax=CIHI), height=0, size=0.75) +

 facet\_wrap(~GROUP, nrow=2, dir="v") +

 geom\_vline(xintercept=0) +

 scale\_x\_continuous(name="", breaks=seq(60,90,10), limits=c(60,90), labels=scales::number\_format(accuracy=1)) +

 labs(title="How racial groups rate each other", caption="Error bars are 83.4% confidence intervals\nData source: American National Election Studies. 2021. ANES 2020 Time Series Study\nPreliminary Release: Combined Pre-Election and Post-Election Data [dataset and documentation].\nMarch 24, 2021 version. www.electionstudies.org.") +

 theme(

 plot.background=element\_rect(fill="white"),

 strip.background=element\_rect(color="black", fill="black"),

 strip.text.x=element\_text(color="white", face="bold", size=15),

 panel.grid.major.x=element\_blank(),

 panel.grid.major.y=element\_blank(),

 panel.grid.minor.x=element\_blank(),

 panel.grid.minor.y=element\_blank(),

 panel.background=element\_rect(fill="lightsteelblue2", color="black", size=0.5, linetype="solid"),

 panel.border=element\_rect(fill=NA, color="black", linetype="solid", size=1.5),

 panel.spacing.x=unit(2, "lines"),

 panel.spacing.y=unit(1, "lines"),

 axis.title.y=element\_blank(),

 axis.title.x=element\_text(size=12, color="black"),

 axis.ticks.y=element\_blank(),

 axis.ticks.x=element\_blank(),

 axis.text.x=element\_text(size=12, color="black"),

 axis.text.y=element\_text(size=12, color="black"),

 plot.margin=unit(c(0.5,0.5,0.5,0.5),"cm"),

 plot.title=element\_text(face="bold", margin=margin(t=0, b=13), size=17, hjust=0.5),

 plot.subtitle=element\_text(hjust=0.5),

 plot.caption=element\_text(hjust=0, size=9))

plot

ggsave(file="G:ANES 2020 TS HRGREA.svg", width=8, height=5)