**NLSY79 Round 29 (2020) Design Effects Creation Program (using R code)**

library(survey)

Sdvar <- read.table("sdvars2020p\_out.dat", quote="\"", comment.char="")

colnames(Sdvar) <- toupper(c("norcid", "sd1", "sd2", "sd3", "sd4","sd7", "sd8", "sd9", "sd10" ,"sd11", "sd12" , "sd13" , "sd14" , "SAMPWGHT" , "SAMPTYPE", "ORIGTYPE" , "PSUORIG") )

Psu <- read.table("PSU\_With\_Header.txt", header = TRUE, sep = "\t")

Type <- read.table("Sample\_Type\_Out.txt", header=TRUE, sep="\t")

DeftData <- c(Psu, Sdvar, Type)

rm (Psu, Sdvar, Type)

attach(DeftData)

DeftFrame <- svydesign(id=STRATUM,strata=PSU,weights=SAMPWGHT,data=DeftData,nest=TRUE)

message(paste("Start Results", Sys.time()))

#Output the results

#Number of Children

svymean (~SD1, DeftFrame, deff=TRUE)

svyby(~SD1,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD1,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD1,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD1,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD1,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD1,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD1,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD1,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD1,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD1,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD1,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#Gov. Training

svymean (~SD2, DeftFrame, deff=TRUE)

svyby(~SD2,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD2,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD2,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD2,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD2,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD2,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD2,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD2,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD2,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD2,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD2,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#Curr Married

svymean (~SD3, DeftFrame, deff=TRUE)

svyby(~SD3,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD3,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD3,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD3,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD3,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD3,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD3,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD3,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD3,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD3,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD3,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#Curr. Employed

svymean (~SD4, DeftFrame, deff=TRUE)

svyby(~SD4,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD4,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD4,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD4,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD4,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD4,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD4,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD4,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD4,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD4,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD4,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#Civilian

svymean (~SD7, DeftFrame, deff=TRUE)

svyby(~SD7,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD7,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD7,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD7,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD7,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD7,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD7,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD7,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD7,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD7,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD7,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#Live in South

svymean (~SD8, DeftFrame, deff=TRUE)

svyby(~SD8,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD8,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD8,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD8,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD8,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD8,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD8,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD8,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD8,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD8,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD8,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#HS Dropout

svymean (~SD9, DeftFrame, deff=TRUE)

svyby(~SD9,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD9,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD9,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD9,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD9,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD9,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD9,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD9,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD9,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD9,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD9,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#Attend HS or Less

svymean (~SD10, DeftFrame, deff=TRUE)

svyby(~SD10,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD10,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD10,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD10,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD10,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD10,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD10,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD10,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD10,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD10,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD10,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#Attend College

svymean (~SD11, DeftFrame, deff=TRUE)

svyby(~SD11,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD11,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD11,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD11,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD11,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD11,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD11,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD11,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD11,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD11,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD11,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#HS Grad

svymean (~SD12, DeftFrame, deff=TRUE)

svyby(~SD12,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD12,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD12,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD12,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD12,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD12,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD12,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD12,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD12,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD12,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD12,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#Curr. Enrolled

svymean (~SD13, DeftFrame, deff=TRUE)

svyby(~SD13,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD13,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD13,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD13,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD13,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD13,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD13,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD13,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD13,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD13,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD13,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

#Highest Grade Completed

svymean (~SD14, DeftFrame, deff=TRUE)

svyby(~SD14,~MALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD14,~FEMALE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD14,~HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD14,~BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD14,~WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD14,~MALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD14,~FEMALE\_HISPANIC,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD14,~MALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD14,~FEMALE\_BLACK,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD14,~MALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)

svyby(~SD14,~FEMALE\_WHITE,DeftFrame,svymean,deff=TRUE,keep.var=TRUE)