

***** DATA PREPARATION *****

```
capture log close
set more off
clear
```

```
global data "... "
global output "... "
```

```
log using "${output}/data.log", replace
```

******* CORE DATASETS *******

```
use "${output}/Gennaro_et_al_A&S.dta"
gen country2=country
label def country2 11 "AT" 12 "DE" 13 "SE" 14 "NL" 15 "SP" 16 "IT" 17 "FR" 18 "DK" 19 "GR" 20 "CH" 23 "BE" 25 "IL" 28 "CZ" 29
"PL" 31 "LU" 33 "PT" 34 "SI" 35 "EE" 47 "HR"
```

```
label val country2 country2
label var country2 "Country identifier - abbreviations"
```

```
keep mergeid dep_15cl depre country country2
ren dep_15cl dep_cat_AS
ren depre eurod_depression
sort mergeid
save "${output}/core_data.dta", replace
clear
```

```
use "${data}/sharew6_rel7-1-0_ALL_datasets_stata/sharew6_rel7-1-0_cv_r.dta"
gen female=gender==2
label var female "R. is female"
label def female 0 "Male" 1 "Female"
label val female female
```

```
replace yrbirth=1955 if mergeid=="GR-573435-01"
gen age2020=2020-yrbirth
replace age2020=. if (age2020<18|age2020>150)
gen age_cat=1 if age2020<60
replace age_cat=2 if age2020>=60 & age2020<65
replace age_cat=3 if age2020>=65 & age2020<70
replace age_cat=4 if age2020>=70 & age2020<75
replace age_cat=5 if age2020>=75 & age2020<80
replace age_cat=6 if age2020>=80 & age2020<85
replace age_cat=7 if age2020>=85 & age2020<150
```

```

label def age_cat 1 "<60" 2 "60-64" 3 "65-69" 4 "70-74" 5 "75-79" 6 "80-84" 7 ">84"
label val age_cat age_cat
label var age_cat "Respondent age in classes"

keep mergeid female age2020 age_cat
sort mergeid
merge 1:1 mergeid using "${output}/core_data.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/core_data.dta", replace
clear

use "${data}/sharew6_rel7-1-0_ALL_datasets_stata/sharew6_rel7-1-0_gv_imputations.dta"
keep if implicat==1
gen education=1 if isced<3
replace education=2 if isced==3
replace education=3 if (isced>3 & isced<7)
label def education 1 "Low" 2 "Middle" 3 "High"
label val education education
label var education "Education of respondent, classified according to ISCED-97 code"

keep mergeid education
sort mergeid
merge 1:1 mergeid using "${output}/core_data.dta"
tab _merge
keep if _merge==3
drop _merge
drop if age2020==.
drop if country==33
sort mergeid
save "${output}/core_data.dta", replace
keep mergeid
sort mergeid
save "${output}/id_all.dta", replace
clear

use "${data}/sharew7_rel7-1-1_ALL_datasets_stata/sharew7_rel7-1-1_cv_r.dta"
keep if deceased==1
sort mergeid
merge 1:1 mergeid using "${output}/id_all.dta"
tab _merge
drop if _merge==1
gen death=_merge==3

```

```

keep mergeid death
sort mergeid
save "${output}/id_all_with_attrition.dta", replace
count
clear

use "${data}/sharew8_rell-0-0_ALL_datasets_stata/sharew8_rell-0-0_cv_r.dta"
keep if deceased_update_ca==1
sort mergeid
merge 1:1 mergeid using "${output}/id_all_with_attrition.dta"
tab _merge
drop if _merge==1
replace death=1 if _merge==3 & death==0
keep mergeid death
sort mergeid
merge 1:1 mergeid using "${output}/core_data.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/id_all_with_attrition.dta", replace
clear

```

*** PHYSICAL HEALTH AND COGNITIVE STATUS *****

```

use "${data}/sharew8_rell-0-0_ALL_datasets_stata/sharew8_rell-0-0_ph.dta"

gen heart_att_stroke_last2y=((ph072_1==1 & ph076_1>2017 & ph076_1<2021)|(ph072_2==1 & ph076_2>2017 & ph076_2<2021))
label var heart_att_stroke_last2y "R. had a heart attack or stroke in the 2 years before pandemic (since 2018)"

gen cancer_last2y=(ph072_3==1 & ph076_3>2017 & ph076_3<2021)
label var cancer_last2y "R. was diagnosed a cancer in the 2 years before pandemic (since 2018)"

gen diabetes_ever_diagn=ph006d5==1
label var diabetes_ever_diagn "R. ever diagnosed diabetes or high blood sugar before lockdown"

gen lung_dis_ever_diagn=ph006d6==1
label var lung_dis_ever_diagn "R. ever diagnosed chronic lung disease (bronchitis,emphysema) before lockdown"

gen hypertens_ever_diagn=ph006d2==1
label var hypertens_ever_diagn "R. ever diagnosed high blood pressure or hypertension before lockdown"

gen cholester_ever_diagn=ph006d3==1
label var cholester_ever_diagn "R. ever diagnosed high blood cholesterol before lockdown"

```

```

gen alzheimer_ever_diagn=ph006d16==1
label var alzheimer_ever_diagn "R. ever diagnosed Alzheimer's disease, dementia, senility before lockdown"

gen affect_dis_ever_diagn=ph006d18==1
label var affect_dis_ever_diagn "R. ever diagnosed other affective/emotional disorders before lockdown"

gen art_rheum_ever_diagn=ph006d19==1
label var art_rheum_ever_diagn "R. ever diagnosed rheumatoid arthritis before lockdown"

gen osteoart_ever_diagn=ph006d20==1
label var osteoart_ever_diagn "R. ever diagnosed osteoarthritis/other rheumatism before lockdown"

gen adl2=(ph049d1==1|ph049d2==1|ph049d3==1|ph049d4==1|ph049d5==1|ph049d6==1)
label var adl2 "R. had at least one ADL limitations before lockdown"

gen iadl2=(ph049d7==1|ph049d8==1|ph049d9==1|ph049d10==1|ph049d11==1|ph049d12==1|ph049d13==1|ph049d14==1|ph049d15==1)
label var iadl2 "R. had at least one IADL limitations before lockdown"

gen weight=ph012 if ph012>10
gen height=ph013/100 if ph013>0

keep mergeid heart_att_stroke_last2y cancer_last2y lung_dis_ever_diagn diabetes_ever_diagn hypertens_ever_diagn
cholester_ever_diagn alzheimer_ever_diagn affect_dis_ever_diagn art_rheum_ever_diagn osteoart_ever_diagn adl2 iadl2 height
weight

sort mergeid
save "${output}/temp_w8.dta", replace
merge 1:1 mergeid using "${output}/core_data.dta"
drop if _merge==1
drop _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear

use "${data}/sharew6_rel7-1-0_ALL_datasets_stata/sharew6_rel7-1-0_ph.dta"
gen diabetes_ever_diagn_w6=ph006d5==1
gen lung_dis_ever_diagn_w6=ph006d6==1
gen hypertens_ever_diagn_w6=ph006d2==1
gen cholesterol_ever_diagn_w6=ph006d3==1
gen alzheimer_ever_diagn_w6=ph006d16==1
gen affect_dis_ever_diagn_w6=ph006d18==1
gen art_rheum_ever_diagn_w6=ph006d19==1
gen osteoart_ever_diagn_w6=ph006d20==1
gen height_w6=ph013/100 if ph013>0

```

```

gen adl2_w6=(ph049d1==1|ph049d2==1|ph049d3==1|ph049d4==1|ph049d5==1|ph049d6==1)
gen iadl2_w6=(ph049d7==1|ph049d8==1|ph049d9==1|ph049d10==1|ph049d11==1|ph049d12==1|ph049d13==1|ph049d14==1|ph049d15==1)
gen weight_w6=ph012 if ph012>10

keep mergeid lung_dis_ever_diagn diabetes_ever_diagn hypertens_ever_diagn cholester_ever_diagn alzheimer_ever_diagn
affect_dis_ever_diagn art_rheum_ever_diagn osteoart_ever_diagn height adl2 iadl2 weight

sort mergeid
save "${output}/temp_w6.dta", replace
clear

use "${data}/sharew7_rel7-1-1_ALL_datasets_stata/sharew7_rel7-1-1_ph.dta"
gen diabetes_ever_diagn_w7=ph006d5==1
gen lung_dis_ever_diagn_w7=ph006d6==1
gen hypertens_ever_diagn_w7=ph006d2==1
gen cholester_ever_diagn_w7=ph006d3==1
gen alzheimer_ever_diagn_w7=ph006d16==1
gen affect_dis_ever_diagn_w7=ph006d18==1
gen art_rheum_ever_diagn_w7=ph006d19==1
gen osteoart_ever_diagn_w7=ph006d20==1
gen height_w7=ph013/100 if ph013>0
gen adl2_w7=(ph049d1==1|ph049d2==1|ph049d3==1|ph049d4==1|ph049d5==1|ph049d6==1)
gen iadl2_w7=(ph049d7==1|ph049d8==1|ph049d9==1|ph049d10==1|ph049d11==1|ph049d12==1|ph049d13==1|ph049d14==1|ph049d15==1)
gen weight_w7=ph012 if ph012>10

keep mergeid lung_dis_ever_diagn diabetes_ever_diagn hypertens_ever_diagn cholester_ever_diagn alzheimer_ever_diagn
affect_dis_ever_diagn art_rheum_ever_diagn osteoart_ever_diagn height adl2 iadl2 weight
sort mergeid
save "${output}/temp_w7.dta", replace
clear

use "${output}/temp_w7.dta"
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1
replace diabetes_ever_diagn=1 if diabetes_ever_diagn_w7==1 & diabetes_ever_diagn==.
replace lung_dis_ever_diagn=1 if lung_dis_ever_diagn_w7==1 & diabetes_ever_diagn==.
replace hypertens_ever_diagn=1 if hypertens_ever_diagn_w7==1 & diabetes_ever_diagn==.
replace cholester_ever_diagn=1 if cholester_ever_diagn_w7==1 & diabetes_ever_diagn==.
replace alzheimer_ever_diagn=1 if alzheimer_ever_diagn_w7==1 & diabetes_ever_diagn==.
replace affect_dis_ever_diagn=1 if affect_dis_ever_diagn_w7==1 & diabetes_ever_diagn==.
replace art_rheum_ever_diagn=1 if art_rheum_ever_diagn_w7==1 & diabetes_ever_diagn==.
replace osteoart_ever_diagn=1 if osteoart_ever_diagn_w7==1 & diabetes_ever_diagn==.
replace height=height_w7 if height==. & height_w7!=. & _merge==3
replace height=height_w7 if _merge==2

```

```

#delimit ;
drop lung_dis_ever_diagn_w7 diabetes_ever_diagn_w7 hypertens_ever_diagn_w7 cholester_ever_diagn_w7 alzheimer_ever_diagn_w7
affect_dis_ever_diagn_w7 art_rheum_ever_diagn_w7 osteoart_ever_diagn_w7 height_w7 adl2_w7 iadl2_w7 weight_w7 _merge;
#delimit cr

sort mergeid
save "${output}/temp_w8.dta", replace
clear

use "${output}/temp_w6.dta"
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1

replace diabetes_ever_diagn=1 if diabetes_ever_diagn_w6==1 & diabetes_ever_diagn==.
replace lung_dis_ever_diagn=1 if lung_dis_ever_diagn_w6==1 & diabetes_ever_diagn==.
replace hypertens_ever_diagn=1 if hypertens_ever_diagn_w6==1 & diabetes_ever_diagn==.
replace cholester_ever_diagn=1 if cholester_ever_diagn_w6==1 & diabetes_ever_diagn==.
replace alzheimer_ever_diagn=1 if alzheimer_ever_diagn_w6==1 & diabetes_ever_diagn==.
replace affect_dis_ever_diagn=1 if affect_dis_ever_diagn_w6==1 & diabetes_ever_diagn==.
replace art_rheum_ever_diagn=1 if art_rheum_ever_diagn_w6==1 & diabetes_ever_diagn==.
replace osteoart_ever_diagn=1 if osteoart_ever_diagn_w6==1 & diabetes_ever_diagn==.
tab diabetes_ever_diagn, miss
replace height=height_w6 if height==. & height_w6!=. & _merge==3
replace height=height_w6 if _merge==2

gen bmi=weight/(height^2)
sum bmi, d
gen bmi_class=1 if bmi<25
replace bmi_class=2 if (bmi>=25 & bmi<30)
replace bmi_class=3 if (bmi>=30 & bmi!=.)
label def bmi_class 1 "Normal or below" 2 "Overweighted" 3 "Obese"
label val bmi_class bmi_class
label var bmi_class "BMI status of respondent in classes"

#delimit ;
drop lung_dis_ever_diagn_w6 diabetes_ever_diagn_w6 hypertens_ever_diagn_w6 cholester_ever_diagn_w6 alzheimer_ever_diagn_w6
affect_dis_ever_diagn_w6 art_rheum_ever_diagn_w6 osteoart_ever_diagn_w6 height_w6 adl2_w6 iadl2_w6 weight_w6 _merge;
#delimit cr

sort mergeid
save "${output}/temp_w8.dta", replace
clear

```

```
use "${data}/sharew8_rel1-0-0_ALL_datasets_stata/sharew8_rel1-0-0_cf.dta"
gen fluency=cf010_ if cf010_>0 & cf010_<61
label var fluency "Cognitive abilities: fluency test"
```

```
keep mergeid fluency
sort mergeid
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1
drop _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear
```

```
use "${data}/sharew7_rel7-1-1_ALL_datasets_stata/sharew7_rel7-1-1_cf.dta"
gen fluency_w7=cf010_ if cf010_>0 & cf010_<61
label var fluency "Cognitive abilities: fluency test"
```

```
keep mergeid fluency
sort mergeid
merge 1:1 mergeid using "${output}/temp_w7.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/temp_w7.dta", replace
clear
```

```
use "${data}/sharew6_rel7-1-0_ALL_datasets_stata/sharew6_rel7-1-0_cf.dta"
gen fluency_w6=cf010_ if cf010_>0 & cf010_<61
label var fluency "Cognitive abilities: fluency test"
```

```
keep mergeid fluency
sort mergeid
merge 1:1 mergeid using "${output}/temp_w6.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/temp_w6.dta", replace
clear
```

**** EMPLOYMENT AND HOUSING ****

```
use "${data}/sharew8_rell-0-0_ALL_datasets_stata/sharew8_rell-0-0_ep.dta"
gen retired_last2y=(ep005==1 & ep329>2017 & ep329<2021)
replace retired_last2y=. if ep005==.
label var retired_last2y "R. retired in the 2 years before pandemic (since 2018)"

gen job_status=1 if ep005_==2 & ep009!=3
replace job_status=2 if ep005_==2 & ep009==3
replace job_status=3 if ep005_==1
replace job_status=4 if (ep005_==3|ep005_==4|ep005_==97)
replace job_status=5 if ep005_==5

label def job_status 1 "Employee" 2 "Self-employed" 3 "Retired" 4 "Unempl., Perm sick, other" 5 "Homemaker"
label val job_status job_status
label var job_status "Current job status of respondent"

keep mergeid retired_last2y job_status
sort mergeid
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1
drop _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear

use "${data}/sharew7_rel7-1-1_ALL_datasets_stata/sharew7_rel7-1-1_ep.dta"
gen job_status_w7=1 if ep005_==2 & ep009!=3
replace job_status_w7=2 if ep005_==2 & ep009==3
replace job_status_w7=3 if ep005_==1
replace job_status_w7=4 if (ep005_==3|ep005_==4|ep005_==97)
replace job_status_w7=5 if ep005_==5

keep mergeid job_status_w7
sort mergeid
merge 1:1 mergeid using "${output}/temp_w7.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/temp_w7.dta", replace
clear
```



```
use "${data}/sharew6_rel7-1-0_ALL_datasets_stata/sharew6_rel7-1-0_ep.dta"
gen job_status_w6=1 if ep005_==2 & ep009!=3
replace job_status_w6=2 if ep005_==2 & ep009==3
replace job_status_w6=3 if ep005_==1
replace job_status_w6=4 if (ep005_==3|ep005_==4|ep005_==97)
replace job_status_w6=5 if ep005_==5
```

```
keep mergeid job_status_w6
sort mergeid
merge 1:1 mergeid using "${output}/temp_w6.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/temp_w6.dta", replace
clear
```

```
use "${output}/temp_w7.dta"
keep mergeid job_status_w7
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1
replace job_status=3 if (job_status==. & job_status_w7==3)
replace retired_last2y=0 if (retired_last2y==. & job_status_w7==3)
drop job_status_w7 _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear
```

```
use "${output}/temp_w6.dta"
keep mergeid job_status_w6
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1
replace job_status=3 if (job_status==. & job_status_w6==3)
replace retired_last2y=0 if (retired_last2y==. & job_status_w6==3)
drop job_status_w6 _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear
```

```
use "${data}/sharew8_rell-0-0_ALL_datasets_stata/sharew8_rell-0-0_ho.dta"
gen house_owners_pre=1 if ho002_>0 & ho002_<3
replace house_owners_pre=2 if ho002_>2 & ho002_<5
replace house_owners_pre=3 if ho002_==5
```

```

bysort hhid8: egen house_owner=max(house_owners_pre)

label def house_owner 1 "Owner/Member cooperative" 2 "Tenant/Subtenant" 3 "Rent free"
label val house_owner house_owner
label var house_owner "Home ownership of the household"

keep mergeid house_owner
sort mergeid
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1
drop _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear

use "${data}/sharew7_rel7-1-1_ALL_datasets_stata/sharew7_rel7-1-1_ho.dta"
gen house_owners_pre=1 if ho002_>0 & ho002_<3
replace house_owners_pre=2 if ho002_>2 & ho002_<5
replace house_owners_pre=3 if ho002_==5
bysort hhid7: egen house_owner_w7=max(house_owners_pre)

label def house_owner 1 "Owner/Member cooperative" 2 "Tenant/Subtenant" 3 "Rent free"
label val house_owner_w7 house_owner
label var house_owner_w7 "Home ownership of the household"

keep mergeid house_owner_w7
sort mergeid
merge 1:1 mergeid using "${output}/temp_w7.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/temp_w7.dta", replace
clear

use "${data}/sharew6_rel7-1-0_ALL_datasets_stata/sharew6_rel7-1-0_ho.dta"
gen house_owners_pre=1 if ho002_>0 & ho002_<3
replace house_owners_pre=2 if ho002_>2 & ho002_<5
replace house_owners_pre=3 if ho002_==5
bysort hhid6: egen house_owner_w6=max(house_owners_pre)

label def house_owner 1 "Owner/Member cooperative" 2 "Tenant/Subtenant" 3 "Rent free"
label val house_owner_w6 house_owner
label var house_owner_w6 "Home ownership of the household"

```

```

keep mergeid house_owner_w6
sort mergeid
merge 1:1 mergeid using "${output}/temp_w6.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/temp_w6.dta", replace
clear

*** DEMOGRAPHIC INFORMATION ***

use "${data}/sharew8_rell-0-0_ALL_datasets_stata/sharew8_rell-0-0_cv_r.dta"
gen partner_hh=partnerinhh==1
label var partner_hh "R. has a partner living in the household"

keep mergeid partner_hh hhsiz
sort mergeid
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1
drop _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear

use "${data}/sharew7_rell-1-1_ALL_datasets_stata/sharew7_rell-1-1_cv_r.dta"
gen partner_hh_w7=partnerinhh==1
label var partner_hh "R. has a partner living in the household"
ren hhsiz hhsiz_w7
keep mergeid partner_hh_w7 hhsiz_w7
sort mergeid
merge 1:1 mergeid using "${output}/temp_w7.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/temp_w7.dta", replace
clear

use "${data}/sharew6_rell-1-0_ALL_datasets_stata/sharew6_rell-1-0_cv_r.dta"
gen partner_hh_w6=partnerinhh==1
label var partner_hh "R. has a partner living in the household"
ren hhsiz hhsiz_w6
keep mergeid partner_hh_w6 hhsiz_w6

```

```

sort mergeid
merge 1:1 mergeid using "${output}/temp_w6.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/temp_w6.dta", replace
clear

use "${data}/sharew8_rell1-0-0_ALL_datasets_stata/sharew8_rell1-0-0_dn.dta"
gen widow_last2y=(dn044==1 & dn019>2017 & dn019<2021)
label var widow "R. become widow/er in the 2 years before pandemic (since 2018)"

keep mergeid widow
sort mergeid
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1
drop _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear

use "${data}/sharew8_rell1-0-0_ALL_datasets_stata/sharew8_rell1-0-0_ch.dta"
gen child_w8=ch001_ if ch001_>=0
bysort hhid8: egen cc=max(child_w8)
gen children=child_w8
replace children=cc if children==.
label var children "Number of living children"
gen child_class=1 if children==0
replace child_class=2 if children==1
replace child_class=3 if children>1 & children!=.
label def child_class 1 "0 children" 2 "1 child" 3 "More than 1 child"
label val child_class child_class
label var child_class "Number of living children in class"

keep mergeid children child_class
sort mergeid
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1
drop _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear

```

```
use "${data}/sharew7_rel7-1-1_ALL_datasets_stata/sharew7_rel7-1-1_ch.dta"
gen child_w7=ch001_ if ch001_>=0
bysort hhid7: egen cc=max(child_w7)
gen children_w7=child_w7
replace children_w7=cc if children_w7==.
keep mergeid children_w7
sort mergeid
merge 1:1 mergeid using "${output}/temp_w7.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/temp_w7.dta", replace
clear
```

```
use "${data}/sharew6_rel7-1-0_ALL_datasets_stata/sharew6_rel7-1-0_ch.dta"
gen child_w6=ch001_ if ch001_>=0
bysort hhid6: egen cc=max(child_w6)
gen children_w6=child_w6
replace children_w6=cc if children_w6==.
keep mergeid children_w6
sort mergeid
merge 1:1 mergeid using "${output}/temp_w6.dta"
tab _merge
keep if _merge==3
drop _merge
sort mergeid
save "${output}/temp_w6.dta", replace
clear
```

```
use "${output}/temp_w7.dta"
keep mergeid children_w7
merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1
replace child_class=1 if children==. & children_w7==0
replace children=0 if children==. & children_w7==0
drop children_w7 _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear
```

```
use "${output}/temp_w6.dta"
keep mergeid children_w6
merge 1:1 mergeid using "${output}/temp_w8.dta"
```

```

tab_merge
drop if _merge==1
replace child_class=1 if children==. & children_w6==0
replace children=0 if children==. & children_w6==0
drop children_w6 _merge
sort mergeid
save "${output}/temp_w8.dta", replace
clear

*** COVID DATA ***

use "${data_covid}/sharew8_rell1-0-0_ca.dta"

gen change_illness=cah003_==1
label var change_illness "Since last interview R. was diagnosed with major illness/health condition"

gen never_left_home=cah010_==5
label var never_left_home "Since Corona outbreak R. has never left home"

gen covid_pos=cac004_==1
label var covid_pos "Anyone tested positive in the hh for COVID-19"

gen covid_neg=cac007_==1
label var covid_neg "Anyone tested negative in the hh for COVID-19"

gen hosp_covid=cac010_==1
label var hosp_covid "Anyone been hospitalized in the hh due to infection from Corona"

gen die_covid=cac013_==1
label var die_covid "Anyone died in the hh due to infection from Corona"

gen no_pers_contact=(cas003_1==4|cas003_1==5) & (cas003_4==4|cas003_4==5) & (cas003_3==4|cas003_3==5)
label var no_pers_contact "Personal contact to children, parents, friends: never/less frequent in 1 week"

gen no_soc_contact=(cas004_1==4|cas004_1==5) & (cas004_4==4|cas004_4==5) & (cas004_3==4|cas004_3==5)
label var no_soc_contact "Electronic contact to children, parents, friends: never/less frequent in 1 week"

gen help_given=cas010_==1
label var help_given "R. helped others outside home to obtain necessities"

gen help_received=cas020_==1
label var help_received "R. was helped by others outside home to obtain necessities"

bysort hhid8: egen cae_max=max(cae003)
gen financial_received=cae_max==1

```

```

label var financial_received "HH received additional financial support due to the outbreak"
drop cae_max

gen unempl_covid=caw002_==1
label var unempl_covid "R. unemployed, laid off or business closed due to COVID-19"

gen dep_by_covid=camh802_==1
label var dep_by_covid "In the last month R. was sad or depressed more so before Corona outbreak"

keep mergeid change_illness-dep_by_covid
sort mergeid
save "${output}/temp_covid.dta", replace
clear

use "${data_covid}/sharew8_rell-0-0_ca_at.dta"

gen change_illness=cah003_==1
label var change_illness "Since last interview R. was diagnosed with major illness/health condition"

gen never_left_home=cah010_==5
label var never_left_home "Since Corona outbreak R. has never left home"

gen covid_pos=cac004_==1
label var covid_pos "Anyone tested positive in the hh for COVID-19"

gen covid_neg=cac007_==1
label var covid_neg "Anyone tested negative in the hh for COVID-19"

gen hosp_covid=cac010_==1
label var hosp_covid "Anyone been hospitalized in the hh due to infection from Corona"

gen die_covid=cac013_==1
label var die_covid "Anyone died in the hh due to infection from Corona"

gen no_pers_contact=(cas003_1==4|cas003_1==5) & (cas003_4==4|cas003_4==5) & (cas003_3==4|cas003_3==5)
label var no_pers_contact "Personal contact to children, parents, friends: never/less frequent in 1 week"

gen no_soc_contact=(cas004_1==4|cas004_1==5) & (cas004_4==4|cas004_4==5) & (cas004_3==4|cas004_3==5)
label var no_soc_contact "Electronic contact to children, parents, friends: never/less frequent in 1 week"

gen help_given=cas010_==1
label var help_given "R. helped others outside home to obtain necessities"

gen help_received=cas020_==1
label var help_received "R. was helped by others outside home to obtain necessities"

```

```

bysort hhid8: egen cae_max=max(cae003)
gen financial_received=cae_max==1
label var financial_received "HH received additional financial support due to the outbreak"
drop cae_max

gen unempl_covid=caw002==1
label var unempl_covid "R. unemployed, laid off or business closed due to COVID-19"

gen dep_by_covid=camh802==1
label var dep_by_covid "In the last month R. was sad or depressed more so before Corona outbreak"

keep mergeid change_illness-dep_by_covid
append using "${output}/temp_covid.dta"
sort mergeid
save "${output}/temp_covid.dta", replace

merge 1:1 mergeid using "${output}/temp_w8.dta"
tab _merge
drop if _merge==1

gen sel=dep_by_covid!=.
label var sel "R provided a valid answer to the variable of interest"
drop _merge
sort mergeid
save "${output}/temp_w8.dta", replace

#delimit ;
order mergeid country country2 female age2020 age_cat education dep_cat_AS eurod_depression widow_last2y retired_last2y
heart_att_stroke_last2y cancer_last2y diabetes_ever_diagn lung_dis_ever_diagn hypertens_ever_diagn cholester_ever_diagn
alzheimer_ever_diagn affect_dis_ever_diagn art_rheum_ever_diagn osteoart_ever_diagn adl2 iadl2 weight height fluency bmi
bmi_class hhsz partner_hh children child_class job_status house_owner dep_by_covid covid_pos covid_neg hosp_covid
die_covid no_pers_contact no_soc_contact help_given help_received financial_received unempl_covid never_left_home
change_illness sel;
#delimit cr

sort mergeid
save "${output}/temp_w8.dta", replace
clear

use "${output}/temp_w6.dta"
merge 1:1 mergeid using "${output}/core_data.dta"
drop if _merge==1
drop _merge
sort mergeid

```



```

#delimit ;
order mergeid country country2 female age2020 age_cat education dep_cat_AS eurod_depression diabetes_ever_diagn
      lung_dis_ever_diagn hypertens_ever_diagn cholester_ever_diagn alzheimer_ever_diagn affect_dis_ever_diagn
      art_rheum_ever_diagn osteoart_ever_diagn adl2 iadl2 weight fluency hhsized partner_hh children job_status_ house_owner;
#delimit cr

sort mergeid
save "${output}/temp_w6.dta", replace
clear

use "${output}/temp_w7.dta"
merge 1:1 mergeid using "${output}/core_data.dta"
drop if _merge==1
drop _merge
sort mergeid

#delimit ;
order mergeid country country2 female age2020 age_cat education dep_cat_AS eurod_depression diabetes_ever_diagn
      lung_dis_ever_diagn hypertens_ever_diagn cholester_ever_diagn alzheimer_ever_diagn affect_dis_ever_diagn
      art_rheum_ever_diagn osteoart_ever_diagn adl2 iadl2 weight fluency hhsized partner_hh children job_status_ house_owner;
#delimit cr

sort mergeid
save "${output}/temp_w7.dta", replace
clear

log close

*** DATA IMPUTATION ***

capture log close
set more off
set matsize 1000
clear

global data "..."
global data_covid "..."
global output "..."

log using "${output}/imputed.log", replace

```

```

***** IMPUTING W6 VARIABLES *****

use "${output}/temp_w6.dta"

mi set wide

#delimit ;
mi register imputed weight_w6 fluency_w6 children_w6 job_status_w6 house_owner_w6 height_w6;
mi register regular mergeid country country2 female age2020 age_cat education dep_cat_AS eurod_depression
    diabetes_ever_diagn_w6 lung_dis_ever_diagn_w6 hypertens_ever_diagn_w6 cholester_ever_diagn_w6 alzheimer_ever_diagn_w6
    affect_dis_ever_diagn_w6 art_rheum_ever_diagn_w6 osteoart_ever_diagn_w6 adl2_w6 iadl2_w6 hhsizesize_w6 partner_hh_w6;

mi set M = 0;
mi xtset, clear;
mi describe;

mi impute chained (mlogit) job_status_w6 house_owner_w6
    (pmm, knn(5)) weight_w6 height_w6 fluency_w6 children_w6 = age2020 i.country i.education eurod_depression
    diabetes_ever_diagn_w6 lung_dis_ever_diagn_w6 hypertens_ever_diagn_w6 cholester_ever_diagn_w6 alzheimer_ever_diagn_w6
    affect_dis_ever_diagn_w6 art_rheum_ever_diagn_w6 osteoart_ever_diagn_w6 adl2_w6 iadl2_w6 hhsizesize_w6 partner_hh_w6,
    by(female) add(1) replace rseed(100) augment burnin(20);

mi unset;

drop weight_w6 fluency_w6 children_w6 job_status_w6 house_owner_w6 height_w6;
ren weight_w6_1_ weight_w6;
ren fluency_w6_1_ fluency_w6;
ren children_w6_1_ children_w6;
ren job_status_w6_1_ job_status_w6;
ren house_owner_w6_1_ house_owner_w6;
ren height_w6_1_ height_w6;

keep mergeid diabetes_ever_diagn_w6 lung_dis_ever_diagn_w6 hypertens_ever_diagn_w6 cholester_ever_diagn_w6
    alzheimer_ever_diagn_w6 affect_dis_ever_diagn_w6 art_rheum_ever_diagn_w6 osteoart_ever_diagn_w6 adl2_w6 iadl2_w6
    hhsizesize_w6 partner_hh_w6 weight_w6 fluency_w6 children_w6 job_status_w6 house_owner_w6 height_w6;

#delimit cr

sort mergeid
save "${output}/w6_imputed.dta", replace
clear

```

```
***** IMPUTING W8 VARIABLES *****
```

```
use "${output}/temp_w8.dta"
keep if sel==1
drop dep_by_covid covid_pos covid_neg hosp_covid die_covid no_pers_contact no_soc_contact help_given help_received
financial_received unempl_covid never_left_home change_illness sel

sort mergeid
merge 1:1 mergeid using "${output}/w6_imputed.dta"
tab _merge
keep if _merge==3
drop _merge

gen bmi=weight/(height^2)
sum bmi, d
gen obese=(bmi>=30)
replace obese=. if bmi==.
label var obese "R. is obese"
gen overweight=(bmi>=25 & bmi<30)
replace overweight=. if bmi==.
label var overweight "R. is overweighted"

gen bmi_order=1 if bmi<25
replace bmi_order=2 if bmi>=25 & bmi<30
replace bmi_order=3 if bmi>=30 & bmi!=.

drop bmi

mi set wide

#delimit ;
mi register imputed widow_last2y retired_last2y heart_att_stroke_last2y cancer_last2y diabetes_ever_diagn lung_dis_ever_diagn
hypertens_ever_diagn cholester_ever_diagn alzheimer_ever_diagn affect_dis_ever_diagn art_rheum_ever_diagn
osteoart_ever_diagn adl2 iadl2 bmi_order fluency child_class job_status house_owner;
mi register regular mergeid country country2 female age2020 age_cat education dep_cat_AS eurod_depression hhsizesize partner_hh
diabetes_ever_diagn_w6 lung_dis_ever_diagn_w6 hypertens_ever_diagn_w6 cholester_ever_diagn_w6 alzheimer_ever_diagn_w6
affect_dis_ever_diagn_w6 art_rheum_ever_diagn_w6 osteoart_ever_diagn_w6 adl2_w6 iadl2_w6 hhsizesize_w6 partner_hh_w6
weight_w6 fluency_w6 children_w6 job_status_w6 house_owner_w6 height_w6;
mi register passive children weight height;

mi set M = 0;
mi xtset, clear;
mi describe;
```

```

mi impute chained (logit) widow_last2y retired_last2y heart_att_stroke_last2y cancer_last2y diabetes_ever_diagn
lung_dis_ever_diagn hypertens_ever_diagn cholester_ever_diagn alzheimer_ever_diagn affect_dis_ever_diagn
art_rheum_ever_diagn osteoart_ever_diagn adl2 iadl2 (mlogit) job_status house_owner (pmm, knn(5)) fluency child_class
bmi_order = age2020 i.country i.education eurod_depression hhsiz_e partner_hh diabetes_ever_diagn_w6
lung_dis_ever_diagn_w6 hypertens_ever_diagn_w6 cholester_ever_diagn_w6 alzheimer_ever_diagn_w6 affect_dis_ever_diagn_w6
art_rheum_ever_diagn_w6 osteoart_ever_diagn_w6 adl2_w6 iadl2_w6 hhsiz_e_w6 partner_hh_w6 weight_w6 fluency_w6 children_w6
job_status_w6 house_owner_w6 height_w6, by(female, noreport) dots add(5) replace rseed(1000) augment burnin(10);

#delimit cr

sort mergeid
save "${output}/data.dta", replace
clear

*** ESTIMATION ***

capture log close
set more off
set matsize 1000
clear

global data "...
global data_covid "...
global output "...

log using "${output}/estimation.log", replace

use "${output}/data.dta"
merge 1:1 mergeid using "${output}/temp_covid.dta"
tab _merge
keep if _merge==3
drop _merge
mi xtset, clear
sort mergeid
save "${output}/final_dataset.dta", replace

#delimit ;

*** MALES ****;

mi estimate, dots: logit dep_by_covid i.age_cat i.education i.dep_cat_AS i.country if female==0, robust;
mimrgns, predict(pr) dydx(*);

```

```
mi estimate, dots: logit dep_by_covid i.age_cat i.education i.dep_cat_AS i.widow_last2y i.retired_last2y
    i.heart_att_stroke_last2y i.cancer_last2y i.diabetes_ever_diagn i.lung_dis_ever_diagn i.hypertens_ever_diagn
    i.cholester_ever_diagn i.alzheimer_ever_diagn i.affect_dis_ever_diagn i.art_rheum_ever_diagn i.ossteoart_ever_diagn
    i.adl2 i.iadl2 i.bmi_class fluency hhszize i.partner_hh i.child_class i.job_status i.house_owner i.country
    if female==0, robust;
mimrgns, predict(pr) dydx(*);
```

```
mi estimate, dots: logit dep_by_covid i.age_cat i.education i.dep_cat_AS i.widow_last2y i.retired_last2y
    i.heart_att_stroke_last2y i.cancer_last2y i.diabetes_ever_diagn i.lung_dis_ever_diagn i.hypertens_ever_diagn
    i.cholester_ever_diagn i.alzheimer_ever_diagn i.affect_dis_ever_diagn i.art_rheum_ever_diagn i.ossteoart_ever_diagn
    i.adl2 i.iadl2 i.bmi_class fluency hhszize i.partner_hh i.child_class i.job_status i.house_owner
    i.covid_pos i.covid_neg i.hosp_covid i.die_covid i.no_pers_contact i.no_soc_contact i.help_given i.help_received
    i.financial_received i.unempl_covid i.never_left_home i.change_illness i.country if female==0, robust;
mimrgns, predict(pr) dydx(*);
```

*** FEMALES ****;

```
mi estimate, dots: logit dep_by_covid i.age_cat i.education i.dep_cat_AS i.country if female==1, robust;
mimrgns, predict(pr) dydx(*);
```

```
mi estimate, dots: logit dep_by_covid i.age_cat i.education i.dep_cat_AS i.widow_last2y i.retired_last2y
    i.heart_att_stroke_last2y i.cancer_last2y i.diabetes_ever_diagn i.lung_dis_ever_diagn i.hypertens_ever_diagn
    i.cholester_ever_diagn i.alzheimer_ever_diagn i.affect_dis_ever_diagn i.art_rheum_ever_diagn i.ossteoart_ever_diagn
    i.adl2 i.iadl2 i.bmi_class fluency hhszize i.partner_hh i.child_class i.job_status i.house_owner i.country
    if female==1, robust;
mimrgns, predict(pr) dydx(*);
```

```
mi estimate, dots: logit dep_by_covid i.age_cat i.education i.dep_cat_AS i.widow_last2y i.retired_last2y
    i.heart_att_stroke_last2y i.cancer_last2y i.diabetes_ever_diagn i.lung_dis_ever_diagn i.hypertens_ever_diagn
    i.cholester_ever_diagn i.alzheimer_ever_diagn i.affect_dis_ever_diagn i.art_rheum_ever_diagn i.ossteoart_ever_diagn
    i.adl2 i.iadl2 i.bmi_class fluency hhszize i.partner_hh i.child_class i.job_status i.house_owner
    i.covid_pos i.covid_neg i.hosp_covid i.die_covid i.no_pers_contact i.no_soc_contact i.help_given i.help_received
    i.financial_received i.unempl_covid i.never_left_home i.change_illness i.country if female==1, robust;
mimrgns, predict(pr) dydx(*);
```

*** ALL ****;

```
mi estimate, dots: logit dep_by_covid i.female i.age_cat i.education i.dep_cat_AS i.widow_last2y i.retired_last2y
    i.heart_att_stroke_last2y i.cancer_last2y i.diabetes_ever_diagn i.lung_dis_ever_diagn i.hypertens_ever_diagn
    i.cholester_ever_diagn i.alzheimer_ever_diagn i.affect_dis_ever_diagn i.art_rheum_ever_diagn i.ossteoart_ever_diagn
    i.adl2 i.iadl2 i.bmi_class fluency hhszize i.partner_hh i.child_class i.job_status i.house_owner
    i.covid_pos i.covid_neg i.hosp_covid i.die_covid i.no_pers_contact i.no_soc_contact i.help_given i.help_received
    i.financial_received i.unempl_covid i.never_left_home i.change_illness i.country, robust;
mimrgns, predict(pr) dydx(*);
```

***** POWER ANALYSIS: MALES *****

```
capture log close
set more off
set matsize 1000
clear
```

```
global output "..."
```

```
use "${output}/final_dataset.dta"
#delimit ;
keep dep_by_covid age_cat education dep_cat_AS female _1_widow_last2y _1_retired_last2y _1_heart_att_stroke_last2y
    _1_cancer_last2y _1_diabetes_ever_diagn _1_lung_dis_ever_diagn _1_hypertens_ever_diagn _1_cholester_ever_diagn
    _1_alzheimer_ever_diagn _1_affect_dis_ever_diagn _1_art_rheum_ever_diagn _1_osteoart_ever_diagn _1_adl2 _1_iadl2
    _1_bmi_class _1_fluency hhsiz partner_hh _1_child_class _1_job_status _1_house_owner covid_pos covid_neg hosp_covid
    die_covid no_pers_contact no_soc_contact help_given help_received financial_received unempl_covid never_left_home
    change_illness country mergeid;
#delimit cr
```

```
keep if female==0
sort mergeid
save "${output}/final_dataset_M.dta"
```

```
local N=10000
forvalues i = 1(1)87 {
    scalar ho_`i'=0
}
```

```
log using "${output}/power_M.log", replace
```

```
forvalues i = 1(1)`N' {
    use "${output}/final_dataset_M.dta"
    bsample
    #delimit ;
    qui logit dep_by_covid i.age_cat i.education i.dep_cat_AS i._1_widow_last2y i._1_retired_last2y
        i._1_heart_att_stroke_last2y i._1_cancer_last2y i._1_diabetes_ever_diagn i._1_lung_dis_ever_diagn
        i._1_hypertens_ever_diagn i._1_cholester_ever_diagn i._1_alzheimer_ever_diagn i._1_affect_dis_ever_diagn
        i._1_art_rheum_ever_diagn i._1_osteoart_ever_diagn i._1_adl2 i._1_iadl2 i._1_bmi_class _1_fluency hhsiz
        i.partner_hh i._1_child_class i._1_job_status i._1_house_owner i.covid_pos i.covid_neg i.hosp_covid i.die_covid
        i.no_pers_contact i.no_soc_contact i.help_given i.help_received i.financial_received i.unempl_covid
        i.never_left_home i.change_illness i.country, robust;
    #delimit cr
```

```
qui margins, dydx(*)
mat results=r(table)
```

```

    forvalues i = 1(1)87 {
        scalar t_ame`i'=results[4,`i']<0.05
        scalar ho_`i'=ho_`i'+t_ame_`i'
    }
    clear
}

```

```

forvalues i = 1(1)87 {
    dis ho_`i'/'N'
}

```

```
log close
```

***** POWER ANALYSIS: FEMALES *****

```

capture log close
set more off
set matsize 1000
clear

```

```
global output "..."
```

```
use "${output}/final_dataset.dta"
```

```
#delimit ;
```

```

keep dep_by_covid age_cat education dep_cat_AS female _1_widow_last2y _1_retired_last2y _1_heart_att_stroke_last2y
    _1_cancer_last2y _1_diabetes_ever_diagn _1_lung_dis_ever_diagn _1_hypertens_ever_diagn _1_cholester_ever_diagn
    _1_alzheimer_ever_diagn _1_affect_dis_ever_diagn _1_art_rheum_ever_diagn _1_osteoart_ever_diagn _1_adl2 _1_iadl2
    _1_bmi_class _1_fluency hhsizes partner_hh _1_child_class _1_job_status _1_house_owner covid_pos covid_neg hosp_covid
    die_covid no_pers_contact no_soc_contact help_given help_received financial_received unempl_covid never_left_home
    change_illness country mergeid;

```

```
#delimit cr
```

```
keep if female==1
```

```
sort mergeid
```

```
save "${output}/final_dataset_F.dta"
```

```
local N=10000
```

```

forvalues i = 1(1)87 {
    scalar ho_`i'=0
}

```

```
log using "${output}/power_F.log", replace
```

```

forvalues i = 1(1)`N' {
  use "${output}/final_dataset_F.dta"
  bsample
  #delimit ;
  qui logit dep_by_covid i.age_cat i.education i.dep_cat_AS i._1_widow_last2y i._1_retired_last2y
    i._1_heart_att_stroke_last2y i._1_cancer_last2y i._1_diabetes_ever_diagn i._1_lung_dis_ever_diagn
    i._1_hypertens_ever_diagn i._1_cholester_ever_diagn i._1_alzheimer_ever_diagn i._1_affect_dis_ever_diagn
    i._1_art_rheum_ever_diagn i._1_osteoart_ever_diagn i._1_adl2 i._1_iadl2 i._1_bmi_class _1_fluency hhsiz
    i.partner_hh i._1_child_class i._1_job_status i._1_house_owner i.covid_pos i.covid_neg i.hosp_covid i.die_covid
    i.no_pers_contact i.no_soc_contact i.help_given i.help_received i.financial_received i.unempl_covid
    i.never_left_home i.change_illness i.country, robust;
  #delimit cr

  qui margins, dydx(*)
  mat results=r(table)

  forvalues j = 1(1)87 {
    scalar t_ame_`j'=results[4,`j']<0.05
    scalar ho_`j'=ho_`j'+t_ame_`j'
  }
  clear
}

forvalues i = 1(1)87 {
  dis ho_`i'/'N'
}

log close

```

***** TESTING GENDER DIFFERENCES *****

```

capture log close
set more off
set matsize 1000
clear

global output "..."

log using "${output}/gender_differences.log", replace

use "${output}/final_dataset.dta"

ren dep_by_covid Y

```



```

label var female ""
tab dep_cat_AS, gen(category_)
tab age_cat, gen(age_class_)
tab education, gen(edu_)
tab child_class, gen(ch_)
tab job_status, gen(occup_)
tab house_owner, gen(house_)
tab bmi_class, gen(obesity_)

#delimit ;
mi estimate, dots: logit Y i.female age_class_2#female age_class_3#female age_class_4#female age_class_5#female
age_class_6#female age_class_7#female edu_2#female edu_3#female category_2#female category_3#female category_4#female
category_5#female category_6#female category_7#female i.widow_last2y#female i.retired_last2y#female
i.heart_att_stroke_last2y#female i.cancer_last2y#female i.diabetes_ever_diagn#female i.lung_dis_ever_diagn#female
i.hypertens_ever_diagn#female i.cholester_ever_diagn#female i.alzheimer_ever_diagn#female i.affect_dis_ever_diagn#female
i.art_rheum_ever_diagn#female i.osteart_ever_diagn#female i.adl2#female i.iadl2#female obesity_2#female
obesity_3#female c.fluency#female c.hhsize#female i.partner_hh#female ch_1#female ch_2#female occup_2#female
occup_3#female occup_4#female occup_5#female house_2#female house_3#female i.covid_pos#female i.covid_neg#female
i.hosp_covid#female i.die_covid#female i.no_pers_contact#female i.no_soc_contact#female i.help_given#female
i.help_received#female i.financial_received#female i.unempl_covid#female i.never_left_home#female
i.change_illness#female i.country, robust;

foreach var of varlist age_class_2 age_class_3 age_class_4 age_class_5 age_class_6 age_class_7 edu_2 edu_3 category_2
category_3 category_4 category_5 category_6 category_7 widow_last2y retired_last2y heart_att_stroke_last2y cancer_last2y
diabetes_ever_diagn lung_dis_ever_diagn hypertens_ever_diagn cholesterol_ever_diagn alzheimer_ever_diagn
affect_dis_ever_diagn art_rheum_ever_diagn osteart_ever_diagn adl2 iadl2 obesity_2 obesity_3 partner_hh occup_2 occup_3
occup_4 occup_5 house_2 house_3 covid_pos covid_neg hosp_covid die_covid no_pers_contact no_soc_contact help_given
help_received financial_received unempl_covid change_illness{;

    mimrgns, dydx(`var') predict(pr) at(female=(0 1)) cmdmargins vsquish;

};
#delimit cr

*** WEIGHTS ***

capture log close
set more off
clear

global data_analysis "... "
global output_ipw "... "
log using "${output_ipw}/ipw.log", replace

```

```

use "${data_analysis}/final_dataset.dta"
keep mergeid
sort mergeid
merge 1:1 mergeid using "${data_analysis}/id_all_with_attrition.dta"
gen sel=_merge==3

keep mergeid sel
sort mergeid
merge 1:1 mergeid using "${data_analysis}/temp_w6.dta"
tab _merge
drop _merge

#delimit ;

qui logit sel female age2020 i.education eurod_depression diabetes_ever_diagn_w6 lung_dis_ever_diagn_w6
    hypertens_ever_diagn_w6 cholester_ever_diagn_w6 alzheimer_ever_diagn_w6 affect_dis_ever_diagn_w6 art_rheum_ever_diagn_w6
    osteoart_ever_diagn_w6 adl2_w6 iadl2_w6 hhsizesize_w6 partner_hh_w6, robust;
predict p_sel;
gen weight_sel=1/p_sel;

keep mergeid weight_sel
sort mergeid
save "${output_ipw}/weights.dta", replace

merge 1:1 mergeid using "${data_analysis}/final_dataset.dta"

keep if female==0
#delimit ;
qui logit dep_by_covid i.age_cat i.education i.dep_cat_AS i.widow_last2y i.retired_last2y i.heart_att_stroke_last2y
    i.cancer_last2y i.diabetes_ever_diagn i.lung_dis_ever_diagn i.hypertens_ever_diagn i.cholester_ever_diagn
    i.alzheimer_ever_diagn i.affect_dis_ever_diagn i.art_rheum_ever_diagn i.osteoart_ever_diagn i.adl2 i.iadl2 i.bmi_class
    fluency hhsizesize i.partner_hh i.child_class i.job_status i.house_owner i.covid_pos i.covid_neg i.hosp_covid i.die_covid
    i.no_pers_contact i.no_soc_contact i.help_given i.help_received i.financial_received i.unempl_covid i.never_left_home
    i.change_illness i.country [pw=weight_sel], robust;
margins [pw=weight_sel], dydx(*);

qui logit dep_by_covid i.age_cat i.education i.dep_cat_AS i._1_widow_last2y i._1_retired_last2y i._1_heart_att_stroke_last2y
    i._1_cancer_last2y i._1_diabetes_ever_diagn i._1_lung_dis_ever_diagn i._1_hypertens_ever_diagn i._1_cholester_ever_diagn
    i._1_alzheimer_ever_diagn i._1_affect_dis_ever_diagn i._1_art_rheum_ever_diagn i._1_osteoart_ever_diagn i._1_adl2
    i._1_iadl2 i._1_bmi_class _1_fluency hhsizesize i.partner_hh i._1_child_class i._1_job_status i._1_house_owner i.covid_pos
    i.covid_neg i.hosp_covid i.die_covid i.no_pers_contact i.no_soc_contact i.help_given i.help_received
    i.financial_received i.unempl_covid i.never_left_home i.change_illness i.country [pw=weight_sel], robust;
margins [pw=weight_sel], dydx(*);
#delimit cr

```

```

clear
use "${output_ipw}/weights.dta"
merge 1:1 mergeid using "${data_analysis}/final_dataset.dta"

keep if female==1
#delimit ;
qui logit dep_by_covid i.age_cat i.education i.dep_cat_AS i.widow_last2y i.retired_last2y i.heart_att_stroke_last2y
    i.cancer_last2y i.diabetes_ever_diagn i.lung_dis_ever_diagn i.hypertens_ever_diagn i.cholester_ever_diagn
    i.alzheimer_ever_diagn i.affect_dis_ever_diagn i.art_rheum_ever_diagn i.osteoart_ever_diagn i.adl2 i.iadl2 i.bmi_class
    fluency hhsz i.partner_hh i.child_class i.job_status i.house_owner i.covid_pos i.covid_neg i.hosp_covid i.die_covid
    i.no_pers_contact i.no_soc_contact i.help_given i.help_received i.financial_received i.unempl_covid i.never_left_home
    i.change_illness i.country [pw=weight_sel], robust;
margins [pw=weight_sel], dydx(*);

qui logit dep_by_covid i.age_cat i.education i.dep_cat_AS i._1_widow_last2y i._1_retired_last2y i._1_heart_att_stroke_last2y
    i._1_cancer_last2y i._1_diabetes_ever_diagn i._1_lung_dis_ever_diagn i._1_hypertens_ever_diagn i._1_cholester_ever_diagn
    i._1_alzheimer_ever_diagn i._1_affect_dis_ever_diagn i._1_art_rheum_ever_diagn i._1_osteoart_ever_diagn i._1_adl2
    i._1_iadl2 i._1_bmi_class _1_fluency hhsz i.partner_hh i._1_child_class i._1_job_status i._1_house_owner i.covid_pos
    i.covid_neg i.hosp_covid i.die_covid i.no_pers_contact i.no_soc_contact i.help_given i.help_received
    i.financial_received i.unempl_covid i.never_left_home i.change_illness i.country [pw=weight_sel], robust;
margins [pw=weight_sel], dydx(*);
#delimit cr

log close

```