

*****THIS IS A ROUGH STATA DO FILE COPIED AS A TEXT DOCUMENT. THE MODELS LISTED HERE ARE THOSE USED IN THE BLOG POST: " One Unhappy Year On: The UK's Wellbeing over the Pandemic"

```
set maxvar 30000
```

```
*****covid merge data
```

```
use "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/UKDA-8644-stata/stata/stata13_se/mainstage_data_2019/jk_indresp_cv.dta"
```

```
rename jk_wave off_wave_10_11
```

```
gen wave = 1
```

```
rename jk_* *
```

```
save "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/creating long data/covid1_long", replace
```

```
clear
```

```
*****
```

```
set maxvar 30000
```

```
use "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/UKDA-8644-stata/stata/stata13_se/ca_indresp_w.dta"
```

```
gen wave = 2
```

```
rename ca_* *
```

```
append using "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/creating long data/covid1_long"
```

```
save "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/creating long data/covid2_long", replace
```

```
clear
```

```
*****
```

```
set maxvar 30000
```

```
use "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/UKDA-8644-stata/stata/stata13_se/cb_indresp_w.dta"
```

```
gen wave = 3
```

```
rename cb_ * *
```

```
append using "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/creating long data/covid2_long"
```

```
save "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/creating long data/covid3_long", replace
```

```
clear
```

```
*****
```

```
set maxvar 30000
```

```
use "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/UKDA-8644-stata/stata/stata13_se/cc_indresp_w.dta"
```

```
gen wave = 4
```

```
rename cc_ * *
```

```
append using "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/creating long data/covid3_long"
```

```
save "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/creating long data/covid4_long", replace
```

```
clear
```

```
*****
```

```
set maxvar 30000
```

```
use "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/UKDA-8644-stata/stata/stata13_se/cd_indresp_w.dta"
```

```
gen wave = 5
```

```
rename cd_ * *
```

```
append using "/Users/joegladstone/Dropbox/5.Datasets/Longtitudinal UK Datasets/US covid data Oct 2020/creating long data/covid4_long"
```

```
save "/Users/joegladstone/Dropbox/5.Datasets/Longitudinal UK Datasets/US covid data Oct 2020/creating long data/covid5_long", replace
```

```
clear
```

```
*****
```

```
set maxvar 30000
```

```
use "/Users/joegladstone/Dropbox/5.Datasets/Longitudinal UK Datasets/US covid data Oct 2020/feb 2021/UKDA-8644-stata/stata/stata13_se/ce_indresp_w.dta"
```

```
gen wave = 6
```

```
rename ce_ * *
```

```
append using "/Users/joegladstone/Dropbox/5.Datasets/Longitudinal UK Datasets/US covid data Oct 2020/creating long data/covid5_long"
```

```
save "/Users/joegladstone/Dropbox/5.Datasets/Longitudinal UK Datasets/US covid data Oct 2020/creating long data/covid6_long", replace
```

```
clear
```

```
*****
```

```
set maxvar 30000
```

```
use "/Users/joegladstone/Dropbox/5.Datasets/Longitudinal UK Datasets/US covid data Oct 2020/feb 2021/UKDA-8644-stata/stata/stata13_se/cf_indresp_w.dta"
```

```
gen wave = 7
```

```
rename cf_ * *
```

```
append using "/Users/joegladstone/Dropbox/5.Datasets/Longitudinal UK Datasets/US covid data Oct 2020/creating long data/covid6_long"
```

```
save "/Users/joegladstone/Dropbox/5.Datasets/Longitudinal UK Datasets/US covid data Oct 2020/creating long data/covid7_long", replace
```

```
clear
```

***load most up to date data

use "/Users/joegladstone/Dropbox/5.Datasets/Longitudinal UK Datasets/US covid data Oct 2020/creating long data/covid7_long"

*clean all vars

**clean

keep pidp birthy age sex_cv couplewsh hhnum couple hadsymp hassymp
symptoms11 tested testresult hadcovid riskcv19 nhsshield hsownd_cv sclonely_cv
deskpace garden1 garden2 garden3 garden4 garden5 garden6 blwork blnonwork
blhours blhrshow blpayhow blpay_amount blpay_period blpayweek blwah
blhhearn_amount blhhearn_period sempchk semp empchange sempderived
jbindustry hours furlough sempgovt netpay_amount netpay_period netpayweek
hhearners hhearn_amount hhearn_period hhincome_amount hhincome_period
hhearnweek keyworksector wah blbenefitsb651 blbenefitsb652 blbenefitsb653
blbenefitsb654 blbenefitsb655 blbenefitsb656 blbenchangeb65 ucreditb65
ucredit2b65 transfers transfmade1 transfmade2 transfmade3 transfmade4
transfmade5 transfmade6 transfmade7 transfrec1 transfrec2 transfrec3 transfrec4
transfrec5 transfrec6 transfrec7 xphs_cv morhol morhol2 renthol xpbills_cv
credithol1 credithol2 credithol3 credithol4 inoutflows1 inoutflows2 inoutflows9
inoutflows3 inoutflows4 inoutflows5 inoutflows6 inoutflows10 inoutflows7 inoutflows8
save_cv saved_cv debt debt2 debt3 spend finnow finfut_cv jobsec finsec mpc1
mpc2 mpc31 mpc32 mpc33 mpc34 mpc35 foodbank_cv blfoodbank sclfsato_cv
scghqa scghqb scghqc scghqd scghqe scghqf scghqg scghqh scghqi scghqj scghqk
scghql scghq1_dv scghq2_dv gor_dv ff_semp ff_hours ff_furlough ff_ucredit
ff_blwork ff_morhol ff_hsownd_cv wave hhsymp hhtest prodch prodfall wahfut
screlparir_cv screlparar_cv screlparrg screlpards_cv screlhappy_cv relpar blemspt
f2fcontact f2fcontfreq phcontact smcontact scopngbhh_cv nbrcoh3 nbrcoh2 nbrcoh4
scopngbhg trcarfq_cv trbikefq_cv trwalkfq trbusfq_cv trtrnfq_cv trtubefq ff_blwah sex
dvage jbstat mlstatchk mlstat netpuse ukborn higheduc qfhighoth qfhigh gcse5
highdegr fenow_cawi jbsat wkaut1 wkaut2 wkaut3 wkaut4 wkaut5 depenth1
depenth2 depenth3 depenth4 depenth5 depenth6 trcarfq trbusfq trtrnfq trbikefq
remit1 remit2 remit3 remit4 remit5 finfut save saved savreg savlt huboss envhabit1
envhabit2 envhabit3 envhabit4 envhabit5 envhabit6 envhabit7 envhabit8 envhabit9
envhabit10 envhabit11 carmiles flyes1 flyes2 flyes3 flyes4 nflyin nflyeu nflyos
sclfsat1 sclfsat2 sclfsato sclackcom scleftout scisolate sclonely scenv_ftst scenv_crlf
scenv_grn scenv_bccc scenv_pmep scenv_meds scenv_crex scenv_tlat
scenv_nowo scenv_fitl scenv_noot scenv_canc scopecl30 scopecl200 scwemwba
scwemwbb scwemwbc scwemwbd scwemwbe scwemwbf scwemwbg ypnpal
ypsocweb ypnetcht famsup upset ypesta ypesti ypestb ypestj ypestc ypestk ypeste
ypestf scdisadv1 finnow save_cv saved_cv debt debt2 debt3 spend finnow finfut_cv
jobsec finsec mpc1 mpc2 mpc31 mpc32 mpc33 mpc34 mpc35 mpc3_oth hhs_size_dv

```
foreach var of varlist * {  
  recode `var' (-10=.) (-9=.) (-8=.) (-7 = .) (-2 = .) (-1=.)  
}
```

```
save "/Users/joegladstone/Dropbox/5.Datasets/Longitudinal UK Datasets/US covid data Oct 2020/creating long data/covid7_long_cleaned", replace
```

```
clear
```

```
use "/Users/joegladstone/Dropbox/5.Datasets/Longitudinal UK Datasets/US covid data Oct 2020/creating long data/covid7_long_cleaned"
```

```
**timing
```

```
*jk = time 1, 2019
```

```
*ca = time 2, 1st covid
```

```
*cb = time 3, 2nd covid
```

```
*cc = time 4, 3rd covid
```

```
*cd = time 5, 4th covid
```

```
April, May, June, July, September
```

```
wave 6 = november 2020 [i think thats your time 7]
```

```
so i think your time is:
```

```
1 = 2019
```

```
2 = april 2020
```

```
3 = may
```

```
4 = june
```

```
5 = July
```

```
6 = September
```

```
7 = November
```

```
****Controls****
```

```
rename sex female
```

```
rename nmatch number_children
```

```
gen married = 0
```

```
replace married = 1 if mlstat == 2
```

```
replace married = 1 if mlstat == 3
```

```
replace married = 1 if mlstat == 4
```

```
gen age = dvage
```

```
gen working = .
```

```
replace working = 1 if jbhas == 1
```

```
replace working = 0 if jbhas == 2
```

```
gen happy_1item = scghql
```

```
gen happy_high= .
```

```
replace happy_high = 1 if happy_1item == 4
replace happy_high = 2 if happy_1item == 3
replace happy_high = 3 if happy_1item == 2
replace happy_high = 4 if happy_1item == 1
```

```
eigen lonely_combine = rowtotal(sclonely_cv sclonely)
replace lonely_combine = . if lonely_combine == 0
```

*****actual analyses

```
eigen sex_combined = rowtotal(sex_cv female)
replace sex_combined = . if sex_combined == 0
replace sex_combined = . if sex_combined == 3
gen female_covid = sex_combined
replace female_covid = 0 if female_covid == 1
replace female_covid = 1 if female_covid == 2
```

```
eigen age_combined = rowtotal(age dvage)
replace age_combined = . if age_combined == 0
```

```
gen yes_shielding = .
replace yes_shielding = 1 if nhsshield == 1
replace yes_shielding = 0 if nhsshield == 2
```

```
***set up analyses
xtset pidp wave
```

```
*most distressed
gen happy_ghq = 36 - scghq1_dv
```

```
xtreg scghq1_dv c.wave##c.wave##c.wave##c.female_covid, re
margins, at(wave =(1(1)7) female_covid = (0 1))
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))
graphregion(color(white)) bgcolor(white)
```

```
xtreg happy_ghq c.wave##c.wave##c.wave##c.female_covid, re
margins, at(wave =(1(1)7) female_covid = (0 1))
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))
graphregion(color(white)) bgcolor(white)
```

```
xtreg happy_ghq c.wave##c.wave##c.wave##c.female_covid age_combined, re
margins, at(wave =(1(.2)7) female_covid = (0 1))
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))
graphregion(color(white)) bgcolor(white)
```

```
xtreg finnow c.wave##c.wave##c.wave##c.female_covid age_combined, re
margins, at(wave =(1(.2)7) female_covid = (0 1))
```

```
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
egen z_fin_distress = std(finnow)  
gen z_fin_wellbeing = -1 * z_fin_distress
```

```
mixed z_fin_wellbeing  
c.wave##c.wave##c.wave##c.age_combined##c.age_combined female_covid ||  
pidp: wave  
margins, at(wave =(1(1)7) age_combined = (20 40 70))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
xtreg lonely_combine c.wave##c.wave##c.wave##c.female_covid, re  
margins, at(wave =(1(1)7) female_covid = (0 1))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
xtreg lonely_combine c.wave##c.wave##c.female_covid age_combined, re  
margins, at(wave =(1(1)7) female_covid = (0 1))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
xtreg scghq1_dv c.wave##c.wave##c.wave##c.age_combined##c.age_combined, re  
margins, at(age_combined = (15(5)100) wave =(1 2 3 4 5 6 7))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
xtreg lonely_combine  
c.wave##c.wave##c.wave##c.age_combined##c.age_combined, re  
margins, at(wave =(1(1)5) age_combined = (20 40 60 80) )  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
xtreg lonely_combine  
c.wave##c.wave##c.age_combined##c.age_combined##c.female_covid, re  
margins, at(wave =(1(1)7) age_combined = (20 40 70) female_covid = (0 1))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
*looks nicer = smoother curves. need more graph editing  
margins, at(wave =(1(1)7) age_combined = (20 40 70) female_covid = (0 1))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
margins, at(wave =(1(.2)7) age_combined = (20 40 70) female_covid = (0 1))
```

```
xtreg scghq1_dv
```

```
c.wave##c.wave##c.age_combined##c.age_combined##c.female_covid, re  
margins, at(wave =(1(1)5) age_combined = (20 40 70) female_covid = (0 1))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
egen couple_combined = rowtotal(couplewsh couple)
```

```
replace couple_combined = . if couple_combined == 0
```

```
replace couple_combined = . if couple_combined == 4
```

```
xtreg scghq1_dv
```

```
c.wave##c.wave##c.age_combined##c.age_combined##c.couple_combined, re  
margins, at(wave =(1(1)7) age_combined = (20 40 70) couple_combined = (1 2))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
xtreg lonely_combine
```

```
c.wave##c.wave##c.age_combined##c.age_combined##c.couple_combined, re  
margins, at(wave =(1(1)5) age_combined = (20 40 70) couple_combined = (1 2))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
**finances
```

```
*fin couples
```

```
xtreg finnow
```

```
c.wave##c.wave##c.age_combined##c.age_combined##c.couple_combined, re  
margins, at(wave =(1(.5)7) age_combined = (20 40 70) couple_combined = (1 2))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
*fin gender: very interesting
```

```
xtreg finnow c.wave##c.wave##c.wave##c.female_covid, re
```

```
margins, at(wave =(1(1)7) female_covid = (0 1))
```

```
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
*fin gender: very interesting
```

```
xtreg finnow
```

```
c.wave##c.wave##c.age_combined##c.age_combined##c.female_covid, re  
margins, at(wave =(1(1)7) age_combined = (20 40 70) female_covid = (0 1))  
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))  
graphregion(color(white)) bgcolor(white)
```

```
*fin age
```

```
xtreg finnow c.wave##c.wave##c.age_combined##c.age_combined, re
```

```
margins, at(wave =(1(1)7) age_combined = (20 40 60 80))
```



```
marginsplot , recast(line) recastci(rarea) ciopts(color(*.8)) ci1opts(fintensity(10))
graphregion(color(white)) bgcolor(white)
```

*Questions

```
cd "/Users/joegladstone/Dropbox/32. Becoming a Behavioral Scientist/Blog about
covid - March 2021"
```

```
gen time = wave - 1
```

```
egen z_happy_ghq = std(happy_ghq)
```

```
egen overall_swl_1 = rowtotal(scflsato_cv scflsato), missing
```

```
egen z_overall_swl_1 = std(overall_swl_1)
```

```
egen z_lonely_combine = std(lonely_combine)
```

*****PLAN: For each question, answer across 3 dimensions. Happiness. Financial Wellbeing. Loneliness.

*QUESTION 1: How did wellbeing change over the year?

```
mixed z_happy_ghq c.time##c.time##c.time age_combined female_covid i.gor_dv ||
pidp: wave
```

```
margins, at(time =(0(.1)6)) saving(wellbeing_GHQ_time_margins, replace)
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Wellbeing (GHQ) over Time") ytitle(Wellbeing (GHQ)) xtitle(Time)
saving(wellbeing_GHQ_time, replace)
```

```
mixed z_overall_swl_1 c.time##c.time##c.time age_combined female_covid i.gor_dv
|| pidp: wave
```

```
margins, at(time =(0(.1)6)) saving(wellbeing_swl_time_margins, replace)
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Wellbeing (SWL) over Time") ytitle(Wellbeing (SWL)) xtitle(Time)
saving(wellbeing_swl_time, replace)
```

```
mixed z_fin_wellbeing c.time##c.time##c.time age_combined female_covid i.gor_dv
|| pidp: wave
```

```
margins, at(time =(0(.1)6))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Financial Wellbeing over Time") ytitle(Financial Wellbeing) xtitle(Time)
saving(fin_well_time, replace)
```

```

mixed z_lonely_combine c.time##c.time##c.time age_combined female_covid
i.gor_dv || pidp: wave
margins, at(time =(0(.1)6))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Loneliness over Time") ytitle(Loneliness) xtitle(Time) saving(lonely_time,
replace)

```

*QUESTION 2: Did young people suffer more than older people in terms of wellbeing?

```

mixed z_happy_ghq c.time##c.time##c.time##c.age_combined##c.age_combined
female_covid i.gor_dv || pidp: wave
margins, at(time =(0(.1)6) age_combined = (20 40 70))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Wellbeing (GHQ) over Time by Age Group") ytitle(Wellbeing (GHQ))
xtitle(Time) saving(wellbeing_GHQ_time_age, replace)

```

```

mixed z_fin_wellbeing c.time##c.time##c.time##c.age_combined##c.age_combined
female_covid i.gor_dv || pidp: wave
margins, at(time =(0(.1)6) age_combined = (20 40 70))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Financial Wellbeing over Time by Age Group") ytitle(Financial Wellbeing)
xtitle(Time) saving(fin_well_time_age, replace)

```

```

mixed z_lonely_combine
c.time##c.time##c.time##c.age_combined##c.age_combined female_covid i.gor_dv
|| pidp: wave
margins, at(time =(0(.1)6) age_combined = (20 40 70))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Loneliness over Time by Age Group") ytitle(Loneliness) xtitle(Time)
saving(Loneliness_time_age, replace)

```

*QUESTION 3: Did women suffer more than men?

```

mixed z_happy_ghq c.time##c.time##c.time##c.female_covid age_combined
i.gor_dv || pidp: wave
margins, at(time =(0(.1)6) female_covid = (0 1))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Wellbeing (GHQ) over Time by Gender") ytitle(Wellbeing (GHQ)) xtitle(Time)
saving(wellbeing_GHQ_time_gender, replace)

```

```

testparm c.time#c.female_covid

```

```

mixed z_fin_wellbeing c.time##c.time##c.time##c.female_covid age_combined

```

```
i.gor_dv || pidp: wave
margins, at(time =(0(.1)6) female_covid = (0 1))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Financial Wellbeing over Time by Gender") ytitle(Financial Wellbeing)
xtitle(Time) saving(fin_well_time_gender, replace)
```

```
testparm c.time#c.female_covid
```

```
mixed z_lonely_combine c.time##c.time##c.time##c.female_covid age_combined
i.gor_dv || pidp: wave
margins, at(time =(0(.1)6) female_covid = (0 1))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Loneliness over Time by Gender") ytitle(Loneliness) xtitle(Time)
saving(Loneliness_time_gender, replace)
```

```
testparm c.time#c.female_covid
```

```
*QUESTION 4: Did women suffer more than men by age group?
egen age_combined_3g = cut(age_combined), group(3) label
```

```
mixed z_happy_ghq
c.time##c.time##c.time##c.female_covid##c.age_combined_3g##c.age_combined_
3g i.gor_dv || pidp: wave
margins, at(time =(0(.1)6) age_combined_3g = (0 1 2) female_covid = (0 1))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Wellbeing (GHQ) over Time by Gender and Age Group") ytitle(Wellbeing
(GHQ)) xtitle(Time) saving(wellbeing_GHQ_time_gender_age, replace)
```

```
mixed z_fin_wellbeing
c.time##c.time##c.time##c.female_covid##c.age_combined_3g##c.age_combined_
3g i.gor_dv || pidp: wave
margins, at(time =(0(.1)6) age_combined_3g = (0 1 2) female_covid = (0 1))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Financial Wellbeing over Time by Gender and Age Group") ytitle(Financial
Wellbeing) xtitle(Time) saving(fin_well_time_gender_age, replace)
```

```
mixed z_lonely_combine
c.time##c.time##c.time##c.female_covid##c.age_combined_3g##c.age_combined_
3g i.gor_dv || pidp:
margins, at(time =(0(.1)6) age_combined_3g = (0 1 2) female_covid = (0 1))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Loneliness over Time by Gender and Age Group") ytitle(Loneliness) xtitle(Time)
saving(Loneliness_time_gender_age, replace)
```

*QUESTION 5: Did single people suffer more than couples?

```
gen living_partner = .  
replace living_partner = 1 if couple == 1  
replace living_partner = 0 if couple == 2
```

```
mixed z_happy_ghq c.time##c.time##c.time##c.living_partner female_covid  
age_combined i.gor_dv || pidp: wave  
margins, at(time =(0(.1)6) living_partner = (0 1))  
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))  
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))  
title ("Wellbeing (GHQ) over Time by Relationship Status") ytitle(Wellbeing (GHQ))  
xtitle(Time) saving(wellbeing_GHQ_time_rel, replace)
```

```
testparm c.time#c.living_partner
```

```
mixed z_fin_wellbeing c.time##c.time##c.time##c.living_partner female_covid  
age_combined i.gor_dv || pidp: wave  
margins, at(time =(0(.1)6) living_partner = (0 1))  
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))  
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))  
title ("Financial Wellbeing over Time by Relationship Status") ytitle(Financial  
Wellbeing) xtitle(Time) saving(fin_well_time_rel, replace)
```

```
testparm c.time#c.living_partner
```

```
mixed z_lonely_combine c.time##c.time##c.time##c.living_partner female_covid  
age_combined i.gor_dv || pidp: wave  
margins, at(time =(0(.1)6) living_partner = (0 1))  
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))  
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))  
title ("Loneliness over Time by Relationship Status") ytitle(Loneliness) xtitle(Time)  
saving(Loneliness_time_rel, replace)
```

```
testparm c.time#c.living_partner
```

```
gen hh_size_5g = hhsizedv  
replace hh_size_5g = 5 if hh_size_5g == 6  
replace hh_size_5g = 5 if hh_size_5g == 7  
replace hh_size_5g = 5 if hh_size_5g == 8  
replace hh_size_5g = 5 if hh_size_5g == 9  
replace hh_size_5g = 5 if hh_size_5g == 10  
replace hh_size_5g = 5 if hh_size_5g == 11  
replace hh_size_5g = 5 if hh_size_5g == 12  
replace hh_size_5g = 5 if hh_size_5g == 13  
replace hh_size_5g = 5 if hh_size_5g == 14  
replace hh_size_5g = 5 if hh_size_5g == 15
```

```

gen hh_size2_5g = hhnum
replace hh_size2_5g = 5 if hh_size2_5g == 6
replace hh_size2_5g = 5 if hh_size2_5g == 7
replace hh_size2_5g = 5 if hh_size2_5g == 8
replace hh_size2_5g = 5 if hh_size2_5g == 9
replace hh_size2_5g = 5 if hh_size2_5g == 10
replace hh_size2_5g = 5 if hh_size2_5g == 11
replace hh_size2_5g = 5 if hh_size2_5g == 12
replace hh_size2_5g = 5 if hh_size2_5g == 13
replace hh_size2_5g = 5 if hh_size2_5g == 14
replace hh_size2_5g = 5 if hh_size2_5g == 15

```

```

egen hh_size_combine_5g = rowtotal(hh_size_5g hh_size2_5g)
replace hh_size_combine_5g = . if hh_size_combine_5g == 0

```

```

mixed z_happy_ghq c.time##c.time##c.time##i.hh_size_combine_5g female_covid
age_combined i.gor_dv || pidp: wave
margins hh_size_combine_5g, at(time =(0(.1)6))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Wellbeing (GHQ) over Time by HH Size") ytitle(Wellbeing (GHQ)) xtitle(Time)
saving(wellbeing_GHQ_time_rel2, replace)

```

```

mixed z_fin_wellbeing c.time##c.time##c.time##i.hh_size_combine_5g female_covid
age_combined i.gor_dv || pidp: wave
margins hh_size_combine_5g, at(time =(0(.1)6))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Financial Wellbeing over Time by HH Size") ytitle(Financial Wellbeing)
xtitle(Time) saving(Financial_Wellbeing_time_rel2, replace)

```

```

mixed z_lonely_combine c.time##c.time##c.time##i.hh_size_combine_5g
female_covid age_combined i.gor_dv || pidp: wave
margins hh_size_combine_5g, at(time =(0(.1)6))
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Loneliness over Time by HH Size") ytitle(Loneliness) xtitle(Time)
saving(Loneliness_time_rel2, replace)

```

```

ciopt(color(%20))

```

*were some regions of UK more impacted than others?

```

mixed z_overall_sw1_1 c.time##c.time##c.time##i.gor_dv age_combined
female_covid || pidp: wave
margins gor_dv, at(time =(0(.1)6) )
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))
title ("Wellbeing (SWL) over Time by Region") ytitle(Wellbeing (SWL)) xtitle(Time)

```

```
saving(wellbeing_swl_time_region, replace)
```

```
mixed z_happy_ghq c.time##c.time##c.time##i.gor_dv age_combined female_covid  
|| pidp: wave  
margins gor_dv, at(time =(0(.1)6) )  
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))  
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))  
title ("Wellbeing (GHQ) over Time by Region") ytitle(Wellbeing (GHQ)) xtitle(Time)  
saving(wellbeing_GHQ_time_region, replace)
```

```
mixed z_fin_wellbeing c.time##c.time##c.time##i.gor_dv age_combined  
female_covid || pidp: wave  
margins gor_dv, at(time =(0(.1)6) )  
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))  
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))  
title ("Financial Wellbeing over Time by Region") ytitle(Financial Wellbeing)  
xtitle(Time) saving(Financial_Wellbeing_time_region, replace)
```

```
mixed z_lonely_combine c.time##c.time##c.time##i.gor_dv age_combined  
female_covid || pidp: wave  
margins gor_dv, at(time =(0(.1)6) )  
marginsplot, recast(line) recastci(rarea) ciopts(color(*.4) color(%30) lpattern(dash))  
ci1opts(fintensity(30)) graphregion(color(white)) xlabel(0 (1) 6, labsize(medsmall))  
title ("Loneliness over Time by Region") ytitle(Loneliness) xtitle(Time)  
saving(Loneliness_time_region, replace)
```