
*DATA

/*

Data from the German Ageing Survey was used. The data from the German Ageing Survey can be applied for via the website of the German Centre of Gerontology (<https://www.dza.de/en/research/fdz/german-ageing-survey>). It is available for scientific, noncommercial use for researchers free of charge.

In the following syntax we provide the name, version and DOI of the datasets we used. (<https://www.dza.de/en/research/fdz/german-ageing-survey/deas-documentation/doi-deas>)

*/

*Data preparation:

*2014

use //SUF 2014, Version 2.0 DOI: 10.5156/DEAS.2014.M.004

```
rename hc1 gender_14
rename hc2_3 geburtsjahr_14
rename hc323 haushaltsgröße_14
rename hc501 selfratedhealth_14
rename hc523a x523a_14
rename hc524 x524_14 //need for care
rename hc525a_1 x525a_1_14 // gepfl_haushalt
rename hc525a_2 x525a_2_14 // gepfl_betreu
rename hc525a_3 x525a_3_14 // gepfl_pflege
rename hc525a_4 x525a_4_14
rename hc526a_1 x526a_1_14 // gepfl_unterstützendepers1
rename hc526a_2 x526a_2_14 //gepfl_unterstützendepers2
rename hc526a_3 x526a_3_14 //gepfl_unterstützendepers3
rename hc526a_4 x526a_4_14 // gepfl_unterstützendeper3plus
rename hc527a x527a_14
rename hc528a x528a_14
rename hc532 x532_14 // gepf_leistungpfl_
rename hc539 x539_14 // pfl_jn_8
rename hc540_1 x540_1_14
rename hc540_2 x540_2_14
rename hc540_3 x540_3_14
rename hc540_4 x540_4_14
rename hc544 x544_14
```

```

rename hc552_1 x552_1_14 // pfl_haushalt
rename hc552_2 x552_2_14 // pfl_betreu
rename hc552_3 x552_3_14 // pfl_pflege_
rename hc552_4 x552_4_14
rename hc553 x553_14
rename hc556 x556_14 // pflbelastung_
rename hd43 rauchen_14
rename hc427 sport_14
rename hd14 relizugeh_14
rename hd15 reliteiln_14

```

```

keep fallnum intmonat intjahr migrat_14 westost_14 bland_14 alter_14 gender_14
geburtsjahr_14 haushaltsgröße_14 famstand_14 ///
iscd_14 erw_14 schicht_14 hheink_14 partner_14 exkind_14 anzkind_14 wekind_14
exenk_14 anzenk_14 ehramt_14 sport_14 relizugeh_14 reliteiln_14 ///
enkelbetreu_14 nwgroesse_14 zzbearb_14 zzgscore_14 zzfscore_14 zzrscore_14
bmi_14 sf36_14 anzphy_14 selfratedhealth_14 ///
depressiv_14 lone6_14 lz_14 pa_14 na_14 pa_low_14 na_low_14 optimismus_14
selbstwirk_14 selbstwert_14 rauchen_14 ///
optimismus_14 selbstwirk_14 autonomie_14 stress_14 sok_14 erw_14 dostatus_14
natdeutsch_14 ///
x523a_14 x524_14 x525a_1_14 x525a_2_14 x525a_3_14 x525a_4_14 x526a_1_14
x526a_2_14 x526a_3_14 x526a_4_14 x527a_14 x528a_14 x532_14 x539_14 ///
x540_1_14 x540_2_14 x540_3_14 x540_4_14 x544_14 x552_1_14 x552_2_14 x552_3_14
x552_4_14 x553_14 x556_14 x556_14 lft_14 ///
exklusion_14 //social exklusion

```

```

save keep2014.dta

```

```

****

```

```

*2017

```

```

use //SUF 2017, Version 1.0      DOI: 10.5156/DEAS.2017.M.001

```

```

rename ic1 gender_17
rename ic2_3 geburtsjahr_17
rename ic323 haushaltsgröße_17
rename ic501 selfratedhealth_17
rename ic523a x523a_17
rename ic524 x524_17 //need for care
rename ic525a_1 x525a_1_17 // gepfl_haushalt
rename ic525a_2 x525a_2_17 // gepfl_betreu
rename ic525a_3 x525a_3_17 // gepfl_pflege
rename ic525a_4 x525a_4_17
rename ic526a_1 x526a_1_17 // gepfl_unterstützendepers1
rename ic526a_2 x526a_2_17 //gepfl_unterstützendepers2
rename ic526a_3 x526a_3_17 //gepfl_unterstützendepers3
rename ic526a_4 x526a_4_17 // gepfl_unterstützendeper3plus
rename ic527a x527a_17 //zeitaufwand pflegepersonen
rename ic528a x528a_17 //zeitaufwand Persone
rename ic532 x532_17 // gepf_leistungpfl_
rename ic539 x539_17 // pfl_jn_8
rename ic540_1 x540_1_17

```

```

rename ic540_2 x540_2_17
rename ic540_3 x540_3_17
rename ic540_4 x540_4_17
rename ic544 x544_17
rename ic552_1 x552_1_17 // pfl_haushalt
rename ic552_2 x552_2_17 // pfl_betreu
rename ic552_3 x552_3_17 // pfl_pflege_
rename ic552_4 x552_4_17
rename ic553 x553_17
rename ic556 x556_17 // pflbelastung_
rename id40 rauchen_17
rename ic427 sport_17
rename id11 relizugeh_17
rename id12 reliteiln_17

```

```

keep fallnum intjahr intmonat migrat_17 westost_17 bland_17 alter_17 gender_17
geburtsjahr_17 haushaltsgröße_17 famstand_17 ///
iscd_17 schicht_17 hheink_17 partner_17 exkind_17 anzkind_17 wekind_17 exenk_17
anzenk_17 enkelbetreu_17 ehramt_17 sport_17 relizugeh_17 reliteiln_17 ///
nwgroesse_17 zzbearb_17 zzgscore_17 zzfscore_17 zzrscore_17 exklusion_17 bmi_17
sf36_17 anzphy_17 depressiv_17 lone6_17 lz_17 pa_17 na_17 selbstwirk_17
selbstwert_17 selfratedhealth_17 dostatus_17 ///
optimismus_17 stress_17 autonomie_17 sok_17 lft_17 erw_17 natdeutsch_17 ///
x523a_17 x524_17 x525a_1_17 x525a_2_17 x525a_3_17 x525a_4_17 x526a_1_17
x526a_2_17 x526a_3_17 x526a_4_17 x527a_17 x528a_17 x532_17 x539_17 ///
x540_1_17 x540_2_17 x540_3_17 x540_4_17 x544_17 x552_1_17 x552_2_17 x552_3_17
x552_4_17 x553_17 x556_17 rauchen_17

```

```

save keep2017.dta

```

```

*merging keep2017 and keep2014 with fallnum
merge 1:1 fallnum using keep2014.dta

```

```

*reshape
reshape long migrat_ westost_ bland_ alter_ gender_ geburtsjahr_ haushaltsgröße_
famstand_ ///
iscd_ schicht_ hheink_ partner_ exkind_ anzkind_ wekind_ exenk_ anzenk_
enkelbetreu_ ehramt_ sport_ relizugeh_ reliteiln_ ///
nwgroesse_ zzbearb_ zzgscore_ zzfscore_ zzrscore_ bmi_ sf36_ anzphy_ depressiv_
lone6_ lz_ pa_ na_ selbstwirk_ selbstwert_ selfratedhealth_ ///
optimismus_ stress_ autonomie_ sok_ lft_ rauchen_ erw_ dostatus_ natdeutsch_
///
x523a_ x524_ x525a_1_ x525a_2_ x525a_3_ x525a_4_ x526a_1_ x526a_2_ x526a_3_
x526a_4_ x527a_ x528a_ x532_ x539_ ///
x540_1_ x540_2_ x540_3_ x540_4_ x544_ x552_1_ x552_2_ x552_3_ x552_4_ x553_
x556_ exklusion_ , i(fallnum) j(time)

```

```

xtset fallnum time // sort data

```

```

*missing diagnostics

```

```

foreach var of varlist migrat_ westost_ bland_ alter_ gender_ geburtsjahr_
haushaltsgröße_ famstand_ ///
iscd_ erw_ schicht_ partner_ wekind_ anzenk_ ehramt_ natdeutsch_ {

tab `var', miss nola
}
replace haushaltsgröße_ = 1 if haushaltsgröße_ ==95 //95 living alone
tab haushaltsgröße_, nola miss

tab hheink_, miss nola

foreach var of varlist enkelbetreu_ nwgroesse_ zzbearb_ zzgscore_ zzfscore_
zzrscore_ sf36_ anzphy_ selfratedhealth_ ///
depressiv_ lone6_ lz_ pa_ na_ optimismus_ selbstwert_ rauchen_ {

tab `var', miss nola
}

tab bmi_, miss nola
sum bmi_

foreach var of varlist x523a_ x524_ x525a_1_ x525a_2_ x525a_3_ x525a_4_ x526a_1_
x526a_2_ x526a_3_ x526a_4_ x527a_ x528a_ x532_ x539_ ///
x540_1_ x540_2_ x540_3_ x540_4_ x544_ x552_1_ x552_2_ x552_3_ x552_4_ x553_
x556_ x556_ lft_ exklusion_ {

tab `var', miss nola
}

**Preparation of variables

*+++++*variable creation*+++++*

*****receipt of informal care*****
*need for care
tab x524_
tab x524_, nola
gen x524_umk = 0 if x524_ == 2
replace x524_umk = 1 if x524_ ==1
label variable x524_umk "need for care"
tab x524_umk, nola

*transition no receipt of care (= no need for care) to receipt of specific form
of care

tab x525a_1_
gen x525a_1_umk = 0 if x524_umk == 0
replace x525a_1_umk = 1 if x525a_1_ == 1
label var x525a_1_umk "Pflegeerhalt Haushalt"
tab x525a_1_umk

```

```

tab x525a_2_
gen x525a_2_umk = 0 if x524_umk == 0
replace x525a_2_umk = 1 if x525a_2_ == 1
label var x525a_2_umk "Pflegeerhalt Betreuung Begleitung"
tab x525a_2_umk

```

```

tab x525a_3_
gen x525a_3_umk = 0 if x524_umk == 0
replace x525a_3_umk = 1 if x525a_3_ == 1
label var x525a_3_umk "Pflegeerhalt pflegebezogene Hilfe"
tab x525a_3_umk

```

```

tab x525a_4_
gen x525a_s_umk = 0 if x524_umk == 0
replace x525a_s_umk = 1 if x525a_4_ == 1
label var x525a_s_umk "sonstige Pflegehilfe"
tab x525a_s_umk

```

*receipt of care in general - no receipt of care vs. receipt of care in at least one area

```

gen erhaltjnp = 0 if x524_umk == 0
replace erhaltjnp = 1 if (x525a_1_umk == 1 | x525a_2_umk==1 | x525a_3_umk==1 |
x525a_s_umk==1) & x526a_1_ != 702
tab erhaltjnp
xttrans erhaltjnp, freq

```

*care receipt - from spouses und adult children - x526a_1_

```

tab x526a_1_

gen spousalcarereceipt = 0 if erhaltjn == 0
replace spousalcarereceipt = 1 if x526a_1_ == 106
tab spousalcarereceipt
xttrans spousalcarereceipt, freq

```

```

gen childcarereceipt = 0 if erhaltjn == 0
replace childcarereceipt = 1 if x526a_1_ == 201 | x526a_1_ == 202 | x526a_1_ ==
203 | x526a_1_ == 204 | x526a_1_ == 205 | x526a_1_ == 107 | x526a_1_ == 108
tab childcarereceipt
xttrans childcarereceipt, freq

```

Autonomy correction of variable -> shift to 1-4

```

tab autonomie_, miss
tab autonomie_ if dostatus_ ==1, miss
gen autonomie_n = (autonomie_-1)
tab autonomie_n //correct range 1-4
tab autonomie_ //previous range 2-5

```

*Data check regarding within-variability/transitions:

```

xtset fallnum time

```

```

xttrans erhaltjnp , freq
xttrans childcarereceipt , freq
xttrans spousalcarereceipt , freq

xttrans erhaltjnp if dostatus_ == 1, freq
xttrans childcarereceipt if dostatus_ == 1, freq
xttrans spousalcarereceipt if dostatus_ == 1, freq

xtsum erhaltjnp childcarereceipt spousalcarereceipt autonomie_n selbstwert_

*****

*Data analysis:
*****

*descriptive statistics - analytical sample (pooled over both waves (2014 and
2017)):
*****

xtreg autonomie_n i.erhaltjnp alter_ i.famstand_ i.erw_ selfratedhealth_ sf36_
anzphy_, fe robust
gen sample1 = 1 if e(sample) ==1

foreach var of varlist erhaltjnp childcarereceipt spousalcarereceipt alter_
gender_ famstand_ erw_ ///
selfratedhealth_ sf36_ anzphy_ selbstwert_ autonomie_n migrat_ natdeutsch_ {
sum `var' if sample1==1 & dostatus_ == 1
tab `var' if sample1==1 & dostatus_ == 1
}

pwcorr selbstwert_ autonomie_n if sample1==1 , sig

*gender and age:
qui xtreg autonomie_n i.erhaltjnp alter_ i.famstand_ i.erw_ selfratedhealth_
sf36_ anzphy_, fe robust
gen sample1 = 1 if e(sample) ==1

bys alter_: tab gender_ if sample1==1 & dostatus_ == 1

gen agegroups = 1 if alter_ >=40 & alter_ <50
replace agegroups = 2 if alter_ >=50 & alter_ <60
replace agegroups = 3 if alter_ >=60 & alter_ <70
replace agegroups = 4 if alter_ >= 70 & alter_ <80
replace agegroups = 5 if alter_ >=80 & alter_ !=.
tab alter_
tab agegroups

bys agegroups: tab gender_ if sample1==1 & dostatus_ == 1

**Transitions for pooled sample only for participants who completed the
structured interview AND the written drop-off questionnaire:
xttrans erhaltjnp if dostatus_ == 1, freq

```

```
xttrans childcarereceipt if dostatus_ == 1, freq
xttrans spousalcarereceipt if dostatus_ == 1, freq
```

*regression analyses:

*check data analyses choice:

*Sargan-Hansen/Hausman-Tests:

```
tab famstand_, gen(fam)
```

```
tab erw_, gen(erw)
```

```
foreach var of varlist fam1 fam2 fam3 fam4 fam5 erw1 erw2 erw3 {
  tab `var'
}
```

```
xtreg autonomie_n erhaltjnp alter_ fam2 fam3 fam4 fam5 erw2 erw3
selfratedhealth_ sf36_ anzphy_, re robust
xtoverid //sig chisquared-test
```

```
xtreg autonomie_n spousalcarereceipt alter_ fam2 fam3 fam4 fam5 erw2 erw3
selfratedhealth_ sf36_ anzphy_, re robust
xtoverid //sig chisquared-test
```

```
xtreg autonomie_n childcarereceipt alter_ fam2 fam3 fam4 fam5 erw2 erw3
selfratedhealth_ sf36_ anzphy_, re robust
xtoverid //sig chisquared-test
```

**Analyses without age

```
xtreg autonomie_n i.erhaltjnp i.famstand_ i.erw_ selfratedhealth_ sf36_
anzphy_, fe robust
xtreg autonomie_n i.spousalcarereceipt i.famstand_ i.erw_ selfratedhealth_
sf36_ anzphy_, fe robust
xtreg autonomie_n i.childcarereceipt i.famstand_ i.erw_ selfratedhealth_ sf36_
anzphy_, fe robust
```

**Analyses with age as moderator

```
xtreg autonomie_n i.erhaltjnp##c.alter_ i.famstand_ i.erw_ selfratedhealth_
sf36_ anzphy_, fe robust
xtreg autonomie_n i.spousalcarereceipt##c.alter_ i.famstand_ i.erw_
selfratedhealth_ sf36_ anzphy_, fe robust
xtreg autonomie_n i.childcarereceipt##c.alter_ i.famstand_ i.erw_
selfratedhealth_ sf36_ anzphy_, fe robust
```

*Analyses with age

```
xtreg autonomie_n i.erhaltjnp alter_ i.famstand_ i.erw_ selfratedhealth_ sf36_
anzphy_, fe robust
xtreg autonomie_n i.spousalcarereceipt alter_ i.famstand_ i.erw_
```

```
selfratedhealth_ sf36_ anzphy_, fe robust
xtreg autonomie_n i.childcarereceipt alter_ i.famstand_ i.erw_ selfratedhealth_
sf36_ anzphy_, fe robust
```

*Moderatoranalyses with moderator self-esteem and without controlling for age:

```
xtreg autonomie_n i.erhaltjnp##c.selbstwert_ i.famstand_ i.erw_
selfratedhealth_ sf36_ anzphy_, fe robust
xtreg autonomie_n i.spousalcarereceipt##c.selbstwert_ i.famstand_ i.erw_
selfratedhealth_ sf36_ anzphy_, fe robust
xtreg autonomie_n i.childcarereceipt##c.selbstwert_ i.famstand_ i.erw_
selfratedhealth_ sf36_ anzphy_, fe robust
```

*Analyses with moderator self-esteem and with controlling for age as covariate

```
xtreg autonomie_n i.erhaltjnp##c.selbstwert_ alter_ i.famstand_ i.erw_
selfratedhealth_ sf36_ anzphy_, fe robust
xtreg autonomie_n i.spousalcarereceipt##c.selbstwert_ alter_ i.famstand_ i.erw_
selfratedhealth_ sf36_ anzphy_, fe robust
xtreg autonomie_n i.childcarereceipt##c.selbstwert_ alter_ i.famstand_ i.erw_
selfratedhealth_ sf36_ anzphy_, fe robust
```

*Figures:

```
qui xtreg autonomie_n i.childcarereceipt##c.selbstwert_ alter_ i.famstand_
i.erw_ selfratedhealth_ sf36_ anzphy_, fe robust
  margins, at (childcarereceipt=(0 1) selbstwert_=(1 (0.5) 4))
  marginsplot ,x(childcarereceipt) recast(bar) by(selbstwert_)
graph export Graphadultchild_R2_neu_171221.jpg, width(4000)

  margins, dydx(childcarereceipt) at (selbstwert_=(1(.5)4))
  marginsplot, yline(0)
*manual changes in Graph Editor
graph export GraphAMEadultchildcare_22032021.jpg, width(4000)
```

*****additional descriptive statistics:

Descriptive Statistics per wave

*2014

```
use "H:\_Meine Ordner\Organisatorisches\Anträge\DFG 2020\Zweiter
Versuch\Überarbeitung\Daten\unbearb\SUF_DEAS_2014_2-0_de_Stata.dta", clear
```

```
gen erhaltjn14 = 0 if hc524 ==2
replace erhaltjn14 = 1 if (hc525a_1 == 1 | hc525a_2==1 | hc525a_3==1 |
hc525a_4==1) & hc526a_1 != 702
tab erhaltjn14
```

```
tab hc526a_1
```

```
gen spousalcarereceipt14 = 0 if erhaltjn14 == 0
```



```

replace spousalcarereceipt14 = 1 if hc526a_1 == 106
tab spousalcarereceipt14

gen childcarereceipt14 = 0 if erhaltjn14 == 0
replace childcarereceipt14 = 1 if hc526a_1 == 201 | hc526a_1 == 202 | hc526a_1
== 203 | hc526a_1 == 204 | hc526a_1 == 205 | hc526a_1 == 107 | hc526a_1 == 108
tab childcarereceipt14

tab autonomie_14, miss
tab autonomie_14 if dostatus_ ==1, miss
gen autonomie_14n = (autonomie_14-1)
tab autonomie_14n //correct range 1-4

foreach var of varlist erhaltjn14 childcarereceipt14 spousalcarereceipt14
alter_14 hc1 famstand_14 erw_14 hc501 sf36_14 anzphy_14 selbstwert_14
autonomie_14n {
sum `var'
tab `var'
}

*gender & age:
gen agegroups = 1 if alter_14 >=40 & alter_14 <50
replace agegroups = 2 if alter_14 >=50 & alter_14 <60
replace agegroups = 3 if alter_14 >=60 & alter_14 <70
replace agegroups = 4 if alter_14 >= 70 & alter_14 <80
replace agegroups = 5 if alter_14 >=80 & alter_14 !=.
tab alter_14
tab agegroups

bys agegroups: tab hc1

*ethnic background and nationality:
foreach var of varlist natdeutsch_14 migrat_14 {
sum `var'
tab `var'
}

*2017
use "H:\_Meine Ordner\Organisatorisches\Anträge\DFG 2020\Zweiter
Versuch\Überarbeitung\Daten\unbearb\SUF_DEAS_2017_1-0_de_Stata_miterw.dta" ,
clear

gen erhaltjn17 = 0 if ic524 ==2
replace erhaltjn17 = 1 if (ic525a_1 == 1 | ic525a_2==1 | ic525a_3==1 |
ic525a_4==1) & ic526a_1 !=702
tab erhaltjn17

tab ic526a_1

gen spousalcarereceipt17 = 0 if erhaltjn17 == 0

```

```
replace spousalcarereceipt17 = 1 if ic526a_1 == 106
tab spousalcarereceipt17
```

```
gen childcarereceipt17 = 0 if erhaltjn17 == 0
replace childcarereceipt17 = 1 if ic526a_1 == 201 | ic526a_1 == 202 | ic526a_1
== 203 | ic526a_1 == 204 | ic526a_1 == 205 | ic526a_1 == 107 | ic526a_1 == 108
tab childcarereceipt17
```

```
tab autonomie_17, miss
tab autonomie_17 if dostatus_ ==1, miss
gen autonomie_17n = (autonomie_17-1)
tab autonomie_17n
```

```
foreach var of varlist erhaltjn17 childcarereceipt17 spousalcarereceipt17
alter_17 ic1 famstand_17 erw_17 ic501 sf36_17 anzphy_17 selbstwert_17
autonomie_17n {
sum `var'
tab `var'
}
```

*gender & age

```
gen agegroups = 1 if alter_17 >=40 & alter_17 <50
replace agegroups = 2 if alter_17 >=50 & alter_17 <60
replace agegroups = 3 if alter_17 >=60 & alter_17 <70
replace agegroups = 4 if alter_17 >= 70 & alter_17 <80
replace agegroups = 5 if alter_17 >=80 & alter_17 !=.
tab alter_17
tab agegroups
```

```
bys agegroups: tab ic1
```

*ethnic background and nationality:

```
foreach var of varlist natdeutsch_17 migrat_17 {
sum `var'
tab `var'
}
```