

Analysis 2: Supplemental Analysis with Original and Mail-In Data (Movers)

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Analytical Strategy

Variables

- Outcome: Foreigner Suffrage (min 0, max 1)
- Mediator 1: (Objective) Political Knowledge (min = 0, max = 1)
- Mediator 2: Ideology (min 0 = left/liberal, max 1 = right/conservative)
- Mediator 3: LDP - DPJ FT (min 0 = favor DPJ, max 1 = favor LDP)
- Mediator 4: Favorability of South Korea (min = 0, max = 1)
- Mediator 5: Favorability of China (min = 0, max = 1)
- Mediator 6: Favorability of USA (min = 0, max = 1)
- Mediator 7: Income (percentile, min = 0, max = 1)
- Independent Variable: University Education (0 = Junior College or Less, 1 = University or More)
- Moderator 1: Gender (0 = Female, 1 = Male), This means that all “base” coefficients are for female.
- Moderator 2: Age (by 10 years, centered at 20). Reasoning: Two trends may influence the role of university education. (1) There is an evident increase in number of university graduates over the years, especially among women. This trend may impies that university experience may be more gendered in the past than today. (2) There is a trend of “internationalization” in university education in recent days. Therefore, the diversifying and liberalizing effect of education may be stronger for younger generation.
- Control 1: Percent in life residing locally. More locally-identified individuals may dislike outsiders more.
- Control 2: (ZIP level) Residing in densely inhabited district (DID)
- Control 3: (ZIP level) Percent of foreigners in neighborhood (transformed by square root)
- Control 4: (ZIP level) Percent of university graduates in neighborhood (by 10 percent)
- Control 5: (Municipality level) Percent of residents residing in DID
- Control 6: (Municipality level) Percent of foreigners (transformed by square root)

- Control 7: (Municipality level) Percent of university graduates (by 10 percent)

Subset Data

Analysis is conducted on the following subset.

If age - years of local ZIP residence is 23 or larger. 23 is the age of graduating university (the youngest possible) in Japan. Assuming that an individual is living in the local ZIP continuously, this condition implies that one moved to the ZIP of current residence (likely) after graduating the university. This incorporates the possibility that education changes attitudes through the movement in residence.

Modeling Strategy

All models are estimated by OLS. For outcome model, alternative model is estimated by the multinomial logit model, with 3 category DV (disagree, neither, agree), with disagree as a reference category.

Robustness Check (in this file)

SIFCCT has one special survey where they conducted a survey through mail. Mail survey contains identical set of variables as online survey. So I replicated the analysis with the mail survey.

Preparation

```
## Clean Up Space
rm(list=ls())

## Set Working Directory (Automatically) ##
require(rstudioapi); require(rprojroot)
if (rstudioapi::isAvailable() == TRUE) {
  setwd(dirname(rstudioapi::getActiveDocumentContext()$path));
}
projdir <- find_root(has_file("thisishome.txt"))
cat(paste("Working Directory Set to:\n",projdir))

## Working Directory Set to:
## /home/gentok/GoogleDrive/Projects/Fan-Gento-Lab/ForeignerJapan
setwd(projdir)

## Original Data
datadir1a <- paste0(projdir, "/data/sifcct_zip_latest_v5.rds")
datadir1b <- paste0(projdir, "/data/sifcct_zip_latest_panel_v5.rds")
datadir2 <- paste0(projdir, "/data/mail_zip_latest_v5.rds")

## packages
# devtools::install_github("gentok/estvis")
# require(estvis)
require(multiwayvcov)
require(sandwich)
require(lmtest)
require(MASS)
# devtools::install_github("tidyverse/ggplot2") # Need development version (as of Dec 31, 2019)
library(ggplot2)
require(texreg)
```

```
# require(brant)
# require(VGAM)
# require(nnet)
require(mlogit)
require(Formula)
```

Import and clean data

```
#####
## SIFCCT Online ##
#####

sifcct <- rbind(readRDS(datadir1a),readRDS(datadir1b))

## Knowledge Variable (Replaced)
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==2] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==3] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==4] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==5] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==6] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==7] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==8] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==9] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==10] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==11] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==12] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
## Knowledge Variable (Replaced)
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==14] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==15] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==16] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==17] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==18] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==19] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==20] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==21] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==22] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==23] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]
sifcct$knowledge[sifcct$panel==1 & sifcct$wave==24] <- sifcct$knowledge[sifcct$panel==1 & sifcct$wave==1]

## Subset Waves
sifcct <- subset(sifcct, !wave%in%c(1,23,24) & !(panel==1 & wave%in%c(1,3:12,14:24)))
table(sifcct$wave,sifcct$panel)
```

```
##
##      0      1
##  2 1626 1054
##  3  1748    0
##  4  1918    0
##  5  1873    0
##  6  1916    0
##  7  1779    0
##  8  1774    0
```

```
##    9 1789    0
##   10 1674    0
##   11 1731    0
##   12 1668    0
##   13 1636  982
##   14 1648    0
##   15 1758    0
##   16 1744    0
##   17 1673    0
##   18 1724    0
##   19 1728    0
##   20 1672    0
##   21 1717    0
##   22 1787    0
```

```
## sreg with no population as NA
sifcct$c10_sreg_pop[which(sifcct$c10_sreg_pop==0)] <- NA
```

```
## Income Missing Percentage (8.9%)
table(is.na(sifcct$income))/sum(table(is.na(sifcct$income)))
```

```
##
##      FALSE      TRUE
## 0.91032911 0.08967089
```

```
## Exclude Missing Values
sifcctx <- sifcct[,c("id","foreignsuff","foreignsuff3","foreignsuff3x",
  "knowledge","polint","ideology","ldpdpjft",
  "familiarityFT_KOR","familiarityFT_CHN","familiarityFT_USA",
  # "evecon","evecon_verybad","evecon_bad","evecon_notbad","evecon_qtype",
  "income", #"employed",
  "female","male","edu","edu2","age","agecat","bornyr",
  "lvlen","lvpr",
  "zip_did","c10_sreg_foreignN","c10_sreg_pop",
  "c10_sreg_edu_ugsP","c10_sreg_edu_ugs","c10_sreg_edu_graduated",
  "didper","c10_mun_foreignN","c10_mun_pop",
  "c10_mun_edu_ugsP","c10_mun_edu_ugs","c10_mun_edu_graduated",
  "zip","c10_name_pref","c10_name_mun","c10_name_sreg",
  "zip_lat","zip_lon",
  "wave","panel")]
sifcctx <- na.omit(sifcctx)
nrow(sifcctx)
```

```
## [1] 34703
```

```
## Add Income and fper
sifcctx$income <- sifcct$income[match(paste(sifcctx$id,sifcctx$wave),paste(sifcct$id,sifcct$wave))]
summary(sifcctx$income)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.04098 0.18484 0.40915 0.50079 0.78565 0.97505
```

```
sifcctx$fper <- sifcct$fper[match(paste(sifcctx$id,sifcctx$wave),paste(sifcct$id,sifcct$wave))]
summary(sifcctx$fper)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.03136 0.77811 1.35848 1.79431 2.24808 28.08225
```

```

## Replace Data
sifcct <- sifcctx
rm(sifcctx)

nrow(sifcct[which(sifcct$age - sifcct$lvlen>=23),])

## [1] 24147

#####
## SIFCCT Mail ##
#####

mail <- readRDS(datadir2)

## sreg with no population as NA
mail$c10_sreg_pop[which(mail$c10_sreg_pop==0)] <- NA

## Exclude Missing Values
mailx <- mail[,c("id","foreignsuff","foreignsuff3","foreignsuff3x",
  "knowledge","polint","ideology","ldpdpjft",
  "familiarityFT_KOR","familiarityFT_CHN","familiarityFT_USA",
  # "evecon","evecon_verybad","evecon_bad","evecon_notbad","evecon_qtype",
  # "income","employed",
  "female","male","edu","edu2","age","agecat","bornyr",
  "lvlen","lvpr",
  "zip_did","c10_sreg_foreignN","c10_sreg_pop",
  "c10_sreg_edu_ugsP","c10_sreg_edu_ugs","c10_sreg_edu_graduated",
  "didper","c10_mun_foreignN","c10_mun_pop",
  "c10_mun_edu_ugsP","c10_mun_edu_ugs","c10_mun_edu_graduated",
  "zip","c10_name_pref","c10_name_mun","c10_name_sreg",
  "zip_lat","zip_lon")]
mailx <- na.omit(mailx)
nrow(mailx)

## [1] 1000

## Add Income & fper
mailx$income <- mail$income[match(paste(mailx$id),paste(mail$id))]
summary(mailx$income)

##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.      NA's
## 0.05033 0.23742 0.48322 0.53321 0.82203 0.98067     105

mailx$fper <- mail$fper[match(paste(mailx$id),paste(mail$id))]
summary(mailx$fper)

##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.0000 0.6821 1.2061 1.5734 1.9266 10.9614

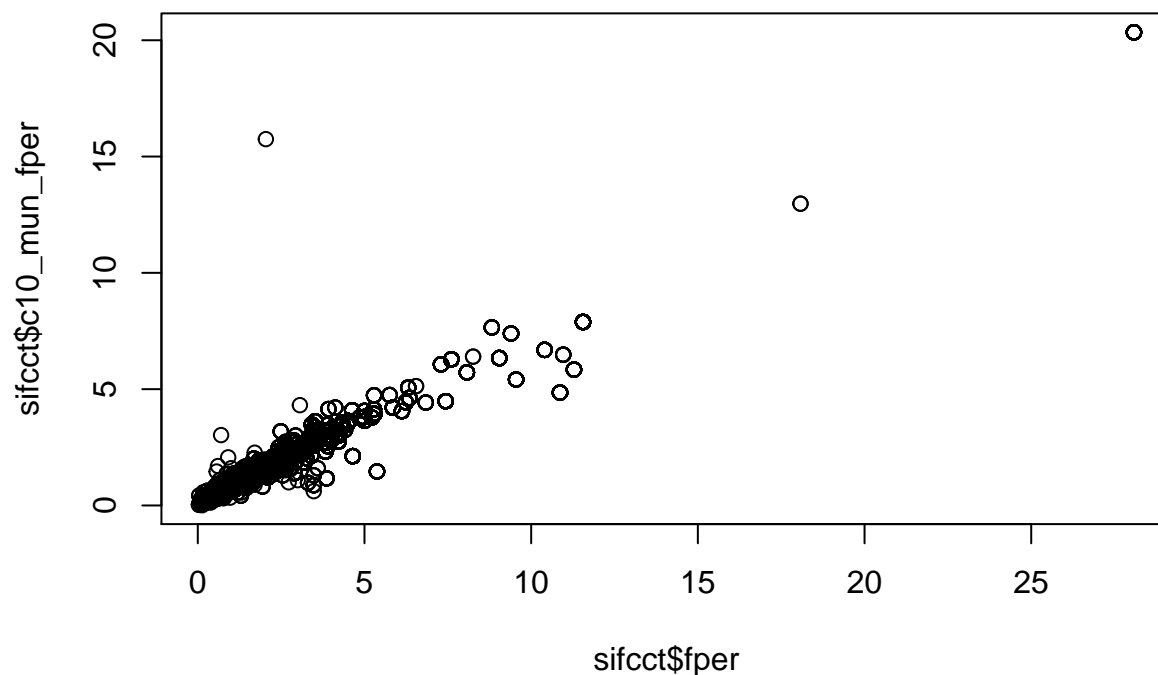
## Replace Data
mail <- mailx
rm(mailx)

```

Recoding Variables

```
## SIFCCT ##

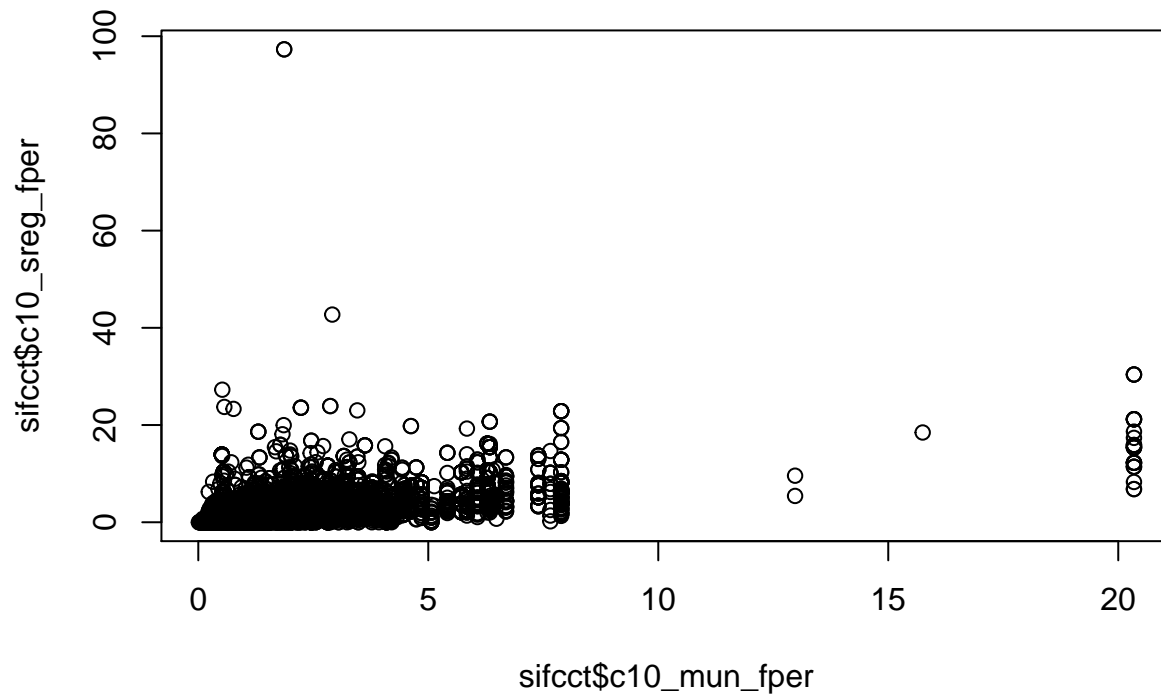
## Binary Age Cohort (50s or over)
sifcct$age2 <- ifelse(sifcct$age >= 50, 1, 0)
sifcct$agex <- sifcct$age/10 - 4.5
## Small Region Foreiner Percent
sifcct$c10_sreg_fper <- sifcct$c10_sreg_foreignN/sifcct$c10_sreg_pop*100
## Municipality Foreiner Percent
sifcct$c10_mun_fper <- sifcct$c10_mun_foreignN/sifcct$c10_mun_pop*100
## Compare Census and Foreinger Registry Numbers
plot(sifcct$fper, sifcct$c10_mun_fper)
```



```
cor(sifcct$fper, sifcct$c10_mun_fper, use="pairwise")
```

```
## [1] 0.972352
```

```
plot(sifcct$c10_mun_fper, sifcct$c10_sreg_fper)
```



```
cor(sifcct$c10_mun_fper, sifcct$c10_sreg_fper, use="pairwise")
```

```
## [1] 0.6087222
```

```
## MAIL ##
```

```
## Binary Age Cohort (50s or over)
```

```
mail$age2 <- ifelse(mail$age >= 50, 1, 0)
```

```
mail$agex <- mail$age/10 - 4.5
```

```
## Small Region Foreiner Percent
```

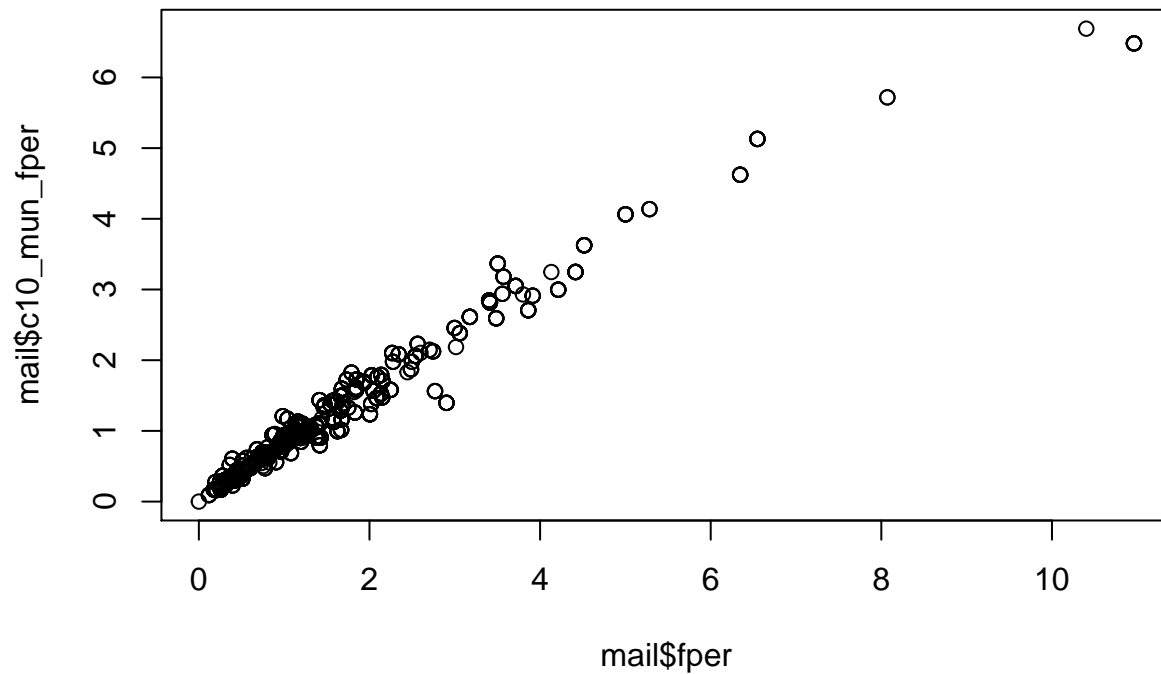
```
mail$c10_sreg_fper <- mail$c10_sreg_foreignN/mail$c10_sreg_pop*100
```

```
## Municipality Foreinger Percent
```

```
mail$c10_mun_fper <- mail$c10_mun_foreignN/mail$c10_mun_pop*100
```

```
## Compare Census and Foreinger Registry Numbers
```

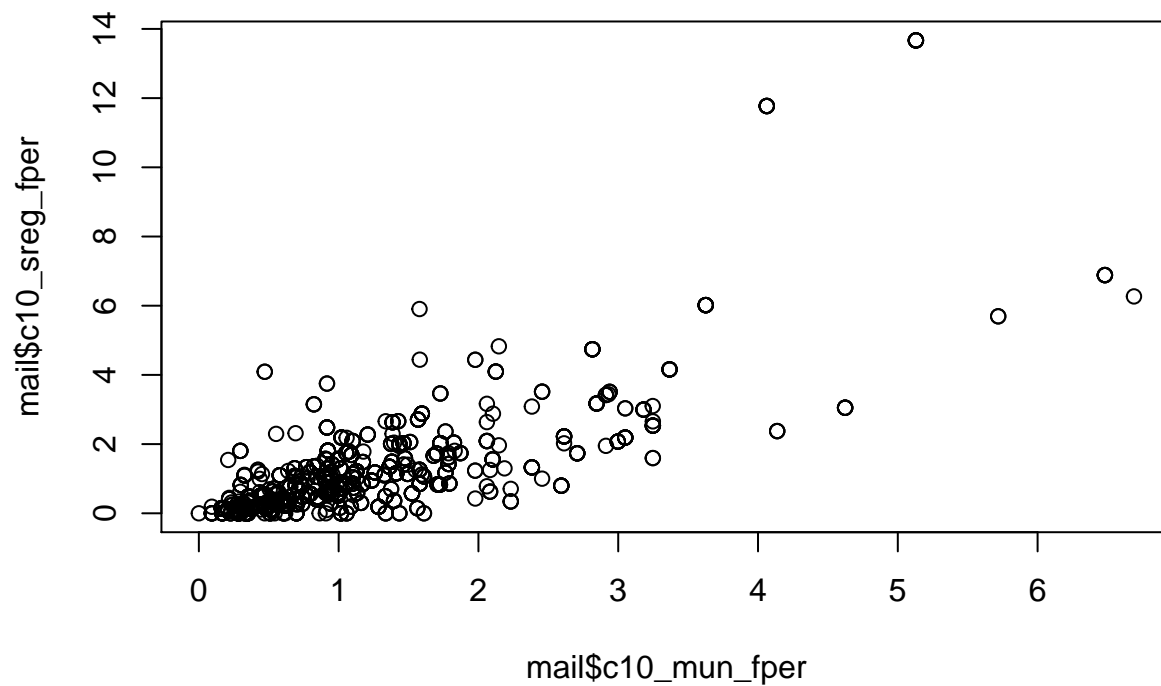
```
plot(mail$fper, mail$c10_mun_fper)
```



```
cor(mail$fper, mail$c10_mun_fper, use="pairwise")
```

```
## [1] 0.9782127
```

```
plot(mail$c10_mun_fper, mail$c10_sreg_fper)
```



```
cor(mail$c10_mun_fper, mail$c10_sreg_fper, use="pairwise")
```

```
## [1] 0.7526452
```

```
## Formula (SIFCCT) ##
```



```

basemod0 <- formula( ~ edu2*male*agex + lvpr +
  as.factor(wave)) # sifcct
basemodA <- formula( ~ edu2*male*agex + lvpr +
  zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10) +
  as.factor(wave)) # sifcct
basemodB <- formula( ~ edu2*male*agex + lvpr +
  didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
  as.factor(wave)) # sifcct
basemodC <- formula( ~ edu2*male*agex + lvpr +
  zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10) +
  didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
  as.factor(wave)) # sifcct

## Formula (SIFCCT.mlogit) ##

outmod0.mlogit <- Formula(foreignsuff3x ~ 0 | edu2*male*agex + lvpr +
  as.factor(wave)) # sifcct
outmodA.mlogit <- Formula(foreignsuff3x ~ 0 | edu2*male*agex + lvpr +
  zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10) +
  as.factor(wave)) # sifcct
outmodB.mlogit <- Formula(foreignsuff3x ~ 0 | edu2*male*agex + lvpr +
  didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
  as.factor(wave)) # sifcct
outmodC.mlogit <- Formula(foreignsuff3x ~ 0 | edu2*male*agex + lvpr +
  zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10) +
  didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
  as.factor(wave)) # sifcct

## Formula (MAIL) ##

basemod0m <- formula( ~ edu2*male*agex + lvpr) # sifcct
basemodAm <- formula( ~ edu2*male*agex + lvpr +
  zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10)) # sifcct
basemodBm <- formula( ~ edu2*male*agex + lvpr +
  didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10)) # sifcct
basemodCm <- formula( ~ edu2*male*agex + lvpr +
  zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10) +
  didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10)) # sifcct

## Formula (MAIL.mlogit) ##

outmod0m.mlogit <- Formula(foreignsuff3x ~ 0 | edu2*male*agex + lvpr) # sifcct
outmodAm.mlogit <- Formula(foreignsuff3x ~ 0 | edu2*male*agex + lvpr +
  zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10)) # sifcct
outmodBm.mlogit <- Formula(foreignsuff3x ~ 0 | edu2*male*agex + lvpr +
  didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10)) # sifcct
outmodCm.mlogit <- Formula(foreignsuff3x ~ 0 | edu2*male*agex + lvpr +
  zip_did + sqrt(c10_sreg_fper) + I(c10_sreg_edu_ugsP/10) +
  didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10)) # sifcct

## Variable Names ##

vnmap <- list("edu2" = "University education",

```

```

"edu2 (1)" = "University education",
"female" = "Gender (female)",
"male" = "Gender (male)",
"male (1)" = "Gender (male)",
"age2" = "Age 50s or older",
"agex" = "Age (by 10 years, centered at 45)",
"edu2:female" = "University * Female",
"edu2:male" = "University * Male",
"edu2 (2)" = "University * Male",
"edu2:age2" = "University * >=50s",
"edu2:agex" = "University * Age",
"edu2 (3)" = "University * Age",
"edu2:female:age2" = "University * Female * >=50s",
"edu2:male:age2" = "University * Male * >=50s",
"edu2:female:agex" = "University * Female * Age",
"edu2:male:agex" = "University * Male * Age",
"edu2 (4)" = "University * Male * Age",
"female:age2" = "Female * >=50s",
"male:age2" = "Male * >=50s",
"female:agex" = "Female * Age",
"male:agex" = "Male * Age",
"male (2)" = "Male * Age",
"agecatMiddle Aged (40-50s)" = "Middle Aged (40-50s)",
"agecatElder (>=60s)" = "Elder (>=60s)",
"lvpr" = "% of Life Residing Locally (zip)",
"zip_did" = "DID residence (zip)",
"sqr(c10_sreg_fper)" = "Foreigner % sqrt. (zip)",
"c10_sreg_edu_ugsP" = "University % (zip)",
"I(c10_sreg_edu_ugsP/10)" = "University % by 10% (zip)",
"didper" = "DID proportion (mun.)",
"sqr(c10_mun_fper)" = "Foreigner % sqrt. (mun.)",
"I(c10_mun_edu_ugsP/10)" = "University % by 10% (mun.)",
"c10_mun_edu_ugsP" = "University % (mun.)"

```

SIFCCT: Outcome Model

```
## Living in Local ZIP since at least age 15 ##
```

```

smo_10 <- lm(update(foreignsuff ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smo_1A <- lm(update(foreignsuff ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smo_1B <- lm(update(foreignsuff ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smo_1C <- lm(update(foreignsuff ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])

screenreg(list(smo_10,smo_1A,smo_1B,smo_1C), digits = 4, #single.row = T,
  override.se = list(coefest(smo_10,vcov.=vcovHC(smo_10))[,2],
    coefest(smo_1A,vcov.=vcovHC(smo_1A))[,2],
    coefest(smo_1B,vcov.=vcovHC(smo_1B))[,2],
    coefest(smo_1C,vcov.=vcovHC(smo_1C))[,2]),
  override.pvalues = list(coefest(smo_10,vcov.=vcovHC(smo_10))[,4],
    coefest(smo_1A,vcov.=vcovHC(smo_1A))[,4],
    coefest(smo_1B,vcov.=vcovHC(smo_1B))[,4],
    coefest(smo_1C,vcov.=vcovHC(smo_1C))[,4]),

```

```
omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
custom.coef.map = vnmap,
custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
##                               Base          ZIP          Municipality      Full
## -----
## University education          -0.0019          -0.0002          -0.0012          -0.0002
##                               (0.0063)          (0.0064)          (0.0063)          (0.0064)
## Gender (male)                 -0.0560 ***          -0.0566 ***          -0.0564 ***          -0.0566 ***
##                               (0.0076)          (0.0076)          (0.0076)          (0.0076)
## Age (by 10 years, centered at 45) -0.0126 ***          -0.0122 ***          -0.0124 ***          -0.0123 ***
##                               (0.0034)          (0.0034)          (0.0034)          (0.0034)
## University * Male             -0.0208 *            -0.0204 *            -0.0206 *            -0.0205 *
##                               (0.0098)          (0.0098)          (0.0098)          (0.0098)
## University * Age              0.0125 *            0.0122 *            0.0123 *            0.0122 *
##                               (0.0051)          (0.0051)          (0.0051)          (0.0051)
## University * Male * Age       -0.0045             -0.0041             -0.0043             -0.0041
##                               (0.0076)          (0.0076)          (0.0076)          (0.0076)
## Male * Age                    0.0170 **           0.0166 **           0.0167 **           0.0166 **
##                               (0.0057)          (0.0057)          (0.0057)          (0.0057)
## % of Life Residing Locally (zip) -0.0276 +           -0.0307 *           -0.0290 +           -0.0305 *
##                               (0.0149)          (0.0149)          (0.0149)          (0.0150)
## DID residence (zip)           -0.0162 **          -0.0162 **          -0.0162 **          -0.0162 **
##                               (0.0056)          (0.0056)          (0.0056)          (0.0056)
## Foreigner % sqrt. (zip)       -0.0037             -0.0037             -0.0037             -0.0037
##                               (0.0039)          (0.0039)          (0.0039)          (0.0039)
## University % by 10% (zip)     -0.0001             -0.0001             -0.0001             -0.0001
##                               (0.0025)          (0.0025)          (0.0025)          (0.0025)
## DID proportion (mun.)         -0.0103             -0.0103             -0.0103             -0.0103
##                               (0.0101)          (0.0101)          (0.0101)          (0.0101)
## Foreigner % sqrt. (mun.)      -0.0071             -0.0071             -0.0071             -0.0071
##                               (0.0053)          (0.0053)          (0.0053)          (0.0053)
## University % by 10% (mun.)    0.0012              0.0012              0.0012              0.0012
##                               (0.0038)          (0.0038)          (0.0038)          (0.0038)
## -----
## R^2                          0.0122              0.0127              0.0124              0.0128
## Adj. R^2                     0.0110              0.0115              0.0111              0.0114
## Num. obs.                    24147              24147              24147              24147
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

SIFCCT: Outcome Model 2

```
## Living in Local ZIP since at least age 15 ##
```

```
# require(nnet)
```

```
# smo2_10 <- multinom(update(foreignsuff3x ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvl>
# smo2_1A <- multinom(update(foreignsuff3x ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvl>
# smo2_1B <- multinom(update(foreignsuff3x ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvl>
# smo2_1C <- multinom(update(foreignsuff3x ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvl>
```

```

sifcct.mlogit <- dffix(sifcct[which(sifcct$age - sifcct$lvlen>=23),],
                      shape = "wide", choice = "foreignsuuff3x")
# levels(sifcct.mlogit$id2) <- c("Disagree", "Neither", "Agree")
smo2_10 <- mlogit(outmod0.mlogit, data=sifcct.mlogit, reflevel="Disagree")
smo2_1A <- mlogit(outmodA.mlogit, data=sifcct.mlogit, reflevel="Disagree")
smo2_1B <- mlogit(outmodB.mlogit, data=sifcct.mlogit, reflevel="Disagree")
smo2_1C <- mlogit(outmodC.mlogit, data=sifcct.mlogit, reflevel="Disagree")

screenreg(list(smo2_10,smo2_1A), digits = 4, #single.row = T,
            override.se = list(coefest(smo2_10,vcov=sandwich)[grep(":Neither",names(coef(smo2_10))),2],
                                coefest(smo2_10,vcov=sandwich)[grep(":Agree",names(coef(smo2_10))),2],
                                coefest(smo2_1A,vcov=sandwich)[grep(":Neither",names(coef(smo2_1A))),2],
                                coefest(smo2_1A,vcov=sandwich)[grep(":Agree",names(coef(smo2_1A))),2]),
            override.pvalues = list(coefest(smo2_10,vcov=sandwich)[grep(":Neither",names(coef(smo2_10))),4],
                                    coefest(smo2_10,vcov=sandwich)[grep(":Agree",names(coef(smo2_10))),4],
                                    coefest(smo2_1A,vcov=sandwich)[grep(":Neither",names(coef(smo2_1A))),4],
                                    coefest(smo2_1A,vcov=sandwich)[grep(":Agree",names(coef(smo2_1A))),4]),

            beside = T,
            omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
            custom.model.names = c("Base: Agree","Base: Neither",
                                   "ZIP: Agree","ZIP: Neither"),
            custom.coef.map = vnmap)

```

```

##
## =====
##                               Base: Agree      Base: Neither      ZIP: Agree      ZIP: Neither
## -----
## University education          0.0063 ***      -0.3391          0.0199 ***      -0.3256
##                               (0.0498)         (0.0503)         (0.0503)         (0.0508)
## Gender (male)                 -0.3609 ***      -0.5868 ***      -0.3662 ***      -0.5918 **
##                               (0.0563)         (0.0580)         (0.0563)         (0.0581)
## Age (by 10 years, centered at 45) -0.0835 ***      -0.1487 **       -0.0807 ***      -0.1470 **
##                               (0.0271)         (0.0281)         (0.0272)         (0.0281)
## University * Male             -0.1262          0.0215 +        -0.1232          0.0239 +
##                               (0.0734)         (0.0738)         (0.0734)         (0.0738)
## University * Age              0.0947 *         0.1007 *         0.0927 *         0.0997 *
##                               (0.0398)         (0.0402)         (0.0398)         (0.0402)
## University * Male * Age       -0.0331          -0.0377         -0.0301          -0.0370
##                               (0.0569)         (0.0563)         (0.0569)         (0.0564)
## Male * Age                    0.1272          0.0550 **       0.1244          0.0535 **
##                               (0.0428)         (0.0431)         (0.0428)         (0.0431)
## % of Life Residing Locally (zip) -0.2106          -0.0032 +        -0.2329          -0.0243 *
##                               (0.1123)         (0.1081)         (0.1128)         (0.1085)
## DID residence (zip)           -0.1274          -0.0373 **       -0.1274          -0.0373 **
##                               (0.0418)         (0.0409)         (0.0418)         (0.0409)
## Foreigner % sqrt. (zip)       -0.0176          -0.0425         -0.0176          -0.0425
##                               (0.0290)         (0.0280)         (0.0290)         (0.0280)
## University % by 10% (zip)     -0.0036          -0.0168         -0.0036          -0.0168
##                               (0.0185)         (0.0183)         (0.0185)         (0.0183)
## -----
## AIC                           51942.8378       51942.8378       51938.2602       51938.2602
## Log Likelihood                 -25913.4189      -25913.4189      -25905.1301      -25905.1301
## Num. obs.                     24147           24147           24147           24147
## K                             3                3                3                3

```

```
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
screenreg(list(smo2_1B,smo2_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(smo2_1B,vcov=sandwich)[grep("Neither",names(coef(smo2_1B))),2],
    coeftest(smo2_1B,vcov=sandwich)[grep("Agree",names(coef(smo2_1B))),2],
    coeftest(smo2_1C,vcov=sandwich)[grep("Neither",names(coef(smo2_1C))),2],
    coeftest(smo2_1C,vcov=sandwich)[grep("Agree",names(coef(smo2_1C))),2]),
  override.pvalues = list(coeftest(smo2_1B,vcov=sandwich)[grep("Neither",names(coef(smo2_1B))),4],
    coeftest(smo2_1B,vcov=sandwich)[grep("Agree",names(coef(smo2_1B))),4],
    coeftest(smo2_1C,vcov=sandwich)[grep("Neither",names(coef(smo2_1C))),4],
    coeftest(smo2_1C,vcov=sandwich)[grep("Agree",names(coef(smo2_1C))),4]),
  beside = T,
  omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Mun.: Agree","Mun.: Neither",
    "Full: Agree","Full: Neither"))

##
## =====
##
## Mun.: Agree      Mun.: Neither      Full: Agree      Full: Neither
## -----
## University education      0.0126 ***      -0.3328      0.0197 ***      -0.3261
##                          (0.0502)      (0.0506)      (0.0503)      (0.0508)
## Gender (male)      -0.3639 ***      -0.5893 ***      -0.3657 ***      -0.5914 **
##                          (0.0563)      (0.0581)      (0.0563)      (0.0581)
## Age (by 10 years, centered at 45)      -0.0823 ***      -0.1478 **      -0.0813 ***      -0.1472 **
##                          (0.0272)      (0.0281)      (0.0272)      (0.0281)
## University * Male      -0.1245      0.0226 +      -0.1238      0.0237 +
##                          (0.0734)      (0.0738)      (0.0734)      (0.0738)
## University * Age      0.0935 *      0.1001 *      0.0932 *      0.1004 *
##                          (0.0398)      (0.0402)      (0.0398)      (0.0402)
## University * Male * Age      -0.0317      -0.0369      -0.0306      -0.0381
##                          (0.0569)      (0.0563)      (0.0569)      (0.0563)
## Male * Age      0.1256      0.0543 **      0.1248      0.0541 **
##                          (0.0428)      (0.0431)      (0.0428)      (0.0431)
## % of Life Residing Locally (zip)      -0.2215      -0.0098 *      -0.2318      -0.0260 *
##                          (0.1126)      (0.1083)      (0.1130)      (0.1087)
## DID residence (zip)      -0.1480      -0.0490 **
##                          (0.0494)      (0.0483)
## Foreigner % sqrt. (zip)      -0.0169 +      -0.0685
##                          (0.0403)      (0.0391)
## University % by 10% (zip)      -0.0157      -0.0262
##                          (0.0263)      (0.0261)
## DID proportion (mun.)      -0.0794      -0.0162      0.0607      0.0327
##                          (0.0752)      (0.0739)      (0.0887)      (0.0871)
## Foreigner % sqrt. (mun.)      -0.0296      -0.0201      -0.0114      0.0436
##                          (0.0394)      (0.0388)      (0.0539)      (0.0536)
## University % by 10% (mun.)      0.0003      -0.0162      0.0163      0.0113
##                          (0.0280)      (0.0275)      (0.0384)      (0.0380)
## -----
## AIC      51951.2486      51951.2486      51948.0233      51948.0233
## Log Likelihood      -25911.6243      -25911.6243      -25904.0117      -25904.0117
## Num. obs.      24147      24147      24147      24147
## K      3      3      3      3
```

```
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

SIFCCT: Mediator Models

Knowledge

```
smm01_10 <- lm(update(knowledge ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm01_1A <- lm(update(knowledge ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm01_1B <- lm(update(knowledge ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm01_1C <- lm(update(knowledge ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(smm01_10,smm01_1A,smm01_1B,smm01_1C), digits = 4, #single.row = T,
  override.se = list(coefestest(smm01_10,vcov.=vcovHC(smm01_10))[,2],
    coefestest(smm01_1A,vcov.=vcovHC(smm01_1A))[,2],
    coefestest(smm01_1B,vcov.=vcovHC(smm01_1B))[,2],
    coefestest(smm01_1C,vcov.=vcovHC(smm01_1C))[,2]),
  override.pvalues = list(coefestest(smm01_10,vcov.=vcovHC(smm01_10))[,4],
    coefestest(smm01_1A,vcov.=vcovHC(smm01_1A))[,4],
    coefestest(smm01_1B,vcov.=vcovHC(smm01_1B))[,4],
    coefestest(smm01_1C,vcov.=vcovHC(smm01_1C))[,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
##                                     Base          ZIP          Municipality      Full
## -----
## University education                0.1545 ***      0.1438 ***      0.1467 ***      0.1436 ***
##                                     (0.0058)      (0.0059)      (0.0059)      (0.0059)
## Gender (male)                       0.1738 ***      0.1781 ***      0.1767 ***      0.1780 ***
##                                     (0.0069)      (0.0069)      (0.0069)      (0.0069)
## Age (by 10 years, centered at 45)    0.0668 ***      0.0656 ***      0.0658 ***      0.0655 ***
##                                     (0.0032)      (0.0032)      (0.0032)      (0.0032)
## University * Male                    0.0035          0.0017          0.0023          0.0018
##                                     (0.0088)      (0.0087)      (0.0087)      (0.0087)
## University * Age                    -0.0119 *       -0.0123 **      -0.0116 *       -0.0121 **
##                                     (0.0047)      (0.0047)      (0.0047)      (0.0047)
## University * Male * Age              -0.0238 ***      -0.0238 ***      -0.0244 ***      -0.0240 ***
##                                     (0.0065)      (0.0065)      (0.0065)      (0.0065)
## Male * Age                          0.0196 ***      0.0199 ***      0.0200 ***      0.0199 ***
##                                     (0.0050)      (0.0049)      (0.0049)      (0.0049)
## % of Life Residing Locally (zip)     -0.0369 **       -0.0235 +       -0.0307 *       -0.0250 *
##                                     (0.0127)      (0.0127)      (0.0127)      (0.0127)
## DID residence (zip)                  0.0079 +
##                                     (0.0047)
## Foreigner % sqrt. (zip)              0.0092 **
##                                     (0.0032)
## University % by 10% (zip)            0.0234 ***
##                                     (0.0021)
## DID proportion (mun.)                -0.0041
##                                     (0.0086)
## Foreigner % sqrt. (mun.)             0.0086 +
##                                     (0.0101)
##                                     0.0028
```

```
## (0.0044) (0.0061)
## University % by 10% (mun.) 0.0298 *** 0.0118 **
## (0.0032) (0.0044)
## -----
## R^2 0.2267 0.2325 0.2312 0.2328
## Adj. R^2 0.2258 0.2315 0.2302 0.2317
## Num. obs. 24147 24147 24147 24147
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Ideology

```
smm02_10 <- lm(update(ideology ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm02_1A <- lm(update(ideology ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm02_1B <- lm(update(ideology ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm02_1C <- lm(update(ideology ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(smm02_10,smm02_1A,smm02_1B,smm02_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(smm02_10,vcov.=vcovHC(smm02_10))[,2],
    coeftest(smm02_1A,vcov.=vcovHC(smm02_1A))[,2],
    coeftest(smm02_1B,vcov.=vcovHC(smm02_1B))[,2],
    coeftest(smm02_1C,vcov.=vcovHC(smm02_1C))[,2]),
  override.pvalues = list(coeftest(smm02_10,vcov.=vcovHC(smm02_10))[,4],
    coeftest(smm02_1A,vcov.=vcovHC(smm02_1A))[,4],
    coeftest(smm02_1B,vcov.=vcovHC(smm02_1B))[,4],
    coeftest(smm02_1C,vcov.=vcovHC(smm02_1C))[,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
## Base ZIP Municipality Full
## -----
## University education -0.0132 *** -0.0130 *** -0.0125 ** -0.0129 ***
## (0.0039) (0.0039) (0.0039) (0.0039)
## Gender (male) -0.0377 *** -0.0378 *** -0.0379 *** -0.0379 ***
## (0.0052) (0.0052) (0.0052) (0.0052)
## Age (by 10 years, centered at 45) -0.0082 *** -0.0083 *** -0.0081 *** -0.0082 ***
## (0.0022) (0.0022) (0.0022) (0.0022)
## University * Male 0.0229 *** 0.0229 *** 0.0230 *** 0.0230 ***
## (0.0065) (0.0065) (0.0065) (0.0065)
## University * Age -0.0061 + -0.0059 + -0.0061 + -0.0060 +
## (0.0032) (0.0032) (0.0032) (0.0032)
## University * Male * Age -0.0025 -0.0028 -0.0024 -0.0026
## (0.0050) (0.0050) (0.0050) (0.0050)
## Male * Age 0.0144 *** 0.0146 *** 0.0144 *** 0.0145 ***
## (0.0039) (0.0039) (0.0039) (0.0039)
## % of Life Residing Locally (zip) 0.0184 + 0.0184 + 0.0178 + 0.0182 +
## (0.0098) (0.0098) (0.0098) (0.0098)
## DID residence (zip) 0.0096 ** 0.0144 ***
## (0.0036) (0.0043)
## Foreigner % sqrt. (zip) -0.0017 0.0001
## (0.0025) (0.0035)
## University % by 10% (zip) -0.0023 -0.0003
```



```
##
## DID proportion (mun.)
##
## Foreigner % sqrt. (mun.)
##
## University % by 10% (mun.)
##
## -----
## R^2
## Adj. R^2
## Num. obs.
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

LDP - DPJ FT

```
smm03_10 <- lm(update(ldpdpjft ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm03_1A <- lm(update(ldpdpjft ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm03_1B <- lm(update(ldpdpjft ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm03_1C <- lm(update(ldpdpjft ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(smm03_10,smm03_1A,smm03_1B,smm03_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(smm03_10,vcov.=vcovHC(smm03_10))[,2],
    coeftest(smm03_1A,vcov.=vcovHC(smm03_1A))[,2],
    coeftest(smm03_1B,vcov.=vcovHC(smm03_1B))[,2],
    coeftest(smm03_1C,vcov.=vcovHC(smm03_1C))[,2]),
  override.pvalues = list(coeftest(smm03_10,vcov.=vcovHC(smm03_10))[,4],
    coeftest(smm03_1A,vcov.=vcovHC(smm03_1A))[,4],
    coeftest(smm03_1B,vcov.=vcovHC(smm03_1B))[,4],
    coeftest(smm03_1C,vcov.=vcovHC(smm03_1C))[,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))

##
## =====
##
## Base ZIP Municipality Full
## -----
## University education
##
## Gender (male)
##
## Age (by 10 years, centered at 45)
##
## University * Male
##
## University * Age
##
## University * Male * Age
##
## Male * Age
##
## % of Life Residing Locally (zip)
##
## DID residence (zip)
```



```

##                                     (0.0028)                                     (0.0033)
## Foreigner % sqrt. (zip)              0.0038 *                               0.0049 +
##                                     (0.0019)                                     (0.0027)
## University % by 10% (zip)            0.0001                               0.0018
##                                     (0.0012)                                     (0.0018)
## DID proportion (mun.)                0.0050                               -0.0019
##                                     (0.0049)                                     (0.0058)
## Foreigner % sqrt. (mun.)            0.0036                               -0.0010
##                                     (0.0026)                                     (0.0036)
## University % by 10% (mun.)          -0.0011                               -0.0031
##                                     (0.0018)                                     (0.0025)
## -----
## R^2                                0.1203                0.1207                0.1204                0.1208
## Adj. R^2                          0.1192                0.1196                0.1193                0.1196
## Num. obs.                         24147                24147                24147                24147
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1

```

Favorability of South Korea

```

smm04_10 <- lm(update(familiarityFT_KOR ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
smm04_1A <- lm(update(familiarityFT_KOR ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
smm04_1B <- lm(update(familiarityFT_KOR ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
smm04_1C <- lm(update(familiarityFT_KOR ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
screenreg(list(smm04_10,smm04_1A,smm04_1B,smm04_1C), digits = 4, #single.row = T,
  override.se = list(coefestest(smm04_10,vcov.=vcovHC(smm04_10))[,2],
    coefestest(smm04_1A,vcov.=vcovHC(smm04_1A))[,2],
    coefestest(smm04_1B,vcov.=vcovHC(smm04_1B))[,2],
    coefestest(smm04_1C,vcov.=vcovHC(smm04_1C))[,2]),
  override.pvalues = list(coefestest(smm04_10,vcov.=vcovHC(smm04_10))[,4],
    coefestest(smm04_1A,vcov.=vcovHC(smm04_1A))[,4],
    coefestest(smm04_1B,vcov.=vcovHC(smm04_1B))[,4],
    coefestest(smm04_1C,vcov.=vcovHC(smm04_1C))[,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))

```

```

##
## =====
##                                     Base                ZIP                Municipality        Full
## -----
## University education              0.0100 *              0.0104 *              0.0099 +              0.0103 *
##                                     (0.0050)              (0.0051)              (0.0050)              (0.0051)
## Gender (male)                     -0.0589 ***          -0.0591 ***          -0.0590 ***          -0.0591 ***
##                                     (0.0057)              (0.0057)              (0.0057)              (0.0058)
## Age (by 10 years, centered at 45) -0.0015              -0.0014              -0.0015              -0.0014
##                                     (0.0027)              (0.0027)              (0.0027)              (0.0027)
## University * Male                  0.0077              0.0078              0.0078              0.0078
##                                     (0.0074)              (0.0074)              (0.0074)              (0.0074)
## University * Age                  -0.0001              -0.0002              -0.0001              -0.0001
##                                     (0.0040)              (0.0040)              (0.0040)              (0.0040)
## University * Male * Age            0.0004              0.0006              0.0005              0.0005
##                                     (0.0057)              (0.0057)              (0.0057)              (0.0057)
## Male * Age                        0.0272 ***          0.0271 ***          0.0272 ***          0.0271 ***

```

```
## (0.0043) (0.0043) (0.0043) (0.0043)
## % of Life Residing Locally (zip) -0.0209 + -0.0218 * -0.0215 * -0.0222 *
## (0.0108) (0.0109) (0.0108) (0.0109)
## DID residence (zip) -0.0083 * -0.0082 +
## (0.0041) (0.0049)
## Foreigner % sqrt. (zip) 0.0004 -0.0023
## (0.0028) (0.0039)
## University % by 10% (zip) 0.0005 -0.0009
## (0.0018) (0.0026)
## DID proportion (mun.) -0.0092 -0.0013
## (0.0073) (0.0087)
## Foreigner % sqrt. (mun.) 0.0025 0.0048
## (0.0039) (0.0052)
## University % by 10% (mun.) 0.0016 0.0026
## (0.0027) (0.0038)
## -----
## R^2 0.0684 0.0686 0.0685 0.0686
## Adj. R^2 0.0673 0.0674 0.0673 0.0673
## Num. obs. 24147 24147 24147 24147
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Favorability of China

```
smm05_10 <- lm(update(familiarityFT_CHN ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
smm05_1A <- lm(update(familiarityFT_CHN ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
smm05_1B <- lm(update(familiarityFT_CHN ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
smm05_1C <- lm(update(familiarityFT_CHN ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
screenreg(list(smm05_10,smm05_1A,smm05_1B,smm05_1C), digits = 4, #single.row = T,
  override.se = list(coefestest(smm05_10,vcov.=vcovHC(smm05_10))[,2],
    coefestest(smm05_1A,vcov.=vcovHC(smm05_1A))[,2],
    coefestest(smm05_1B,vcov.=vcovHC(smm05_1B))[,2],
    coefestest(smm05_1C,vcov.=vcovHC(smm05_1C))[,2]),
  override.pvalues = list(coefestest(smm05_10,vcov.=vcovHC(smm05_10))[,4],
    coefestest(smm05_1A,vcov.=vcovHC(smm05_1A))[,4],
    coefestest(smm05_1B,vcov.=vcovHC(smm05_1B))[,4],
    coefestest(smm05_1C,vcov.=vcovHC(smm05_1C))[,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
## Base ZIP Municipality Full
## -----
## University education 0.0201 *** 0.0196 *** 0.0190 *** 0.0194 ***
## (0.0043) (0.0043) (0.0043) (0.0043)
## Gender (male) -0.0137 ** -0.0136 ** -0.0134 ** -0.0136 **
## (0.0049) (0.0050) (0.0050) (0.0050)
## Age (by 10 years, centered at 45) -0.0000 -0.0001 -0.0001 -0.0001
## (0.0024) (0.0024) (0.0024) (0.0024)
## University * Male 0.0029 0.0029 0.0028 0.0029
## (0.0064) (0.0064) (0.0064) (0.0064)
## University * Age -0.0024 -0.0024 -0.0023 -0.0022
```

```

##              (0.0034)      (0.0034)      (0.0034)      (0.0034)
## University * Male * Age      0.0014      0.0015      0.0014      0.0013
##              (0.0049)      (0.0049)      (0.0049)      (0.0049)
## Male * Age      0.0070 +      0.0070 +      0.0071 +      0.0071 +
##              (0.0037)      (0.0037)      (0.0037)      (0.0037)
## % of Life Residing Locally (zip) -0.0257 **      -0.0250 **      -0.0252 **      -0.0259 **
##              (0.0094)      (0.0094)      (0.0094)      (0.0094)
## DID residence (zip)              -0.0022              -0.0014
##              (0.0035)              (0.0041)
## Foreigner % sqrt. (zip)      0.0027              -0.0008
##              (0.0024)              (0.0033)
## University % by 10% (zip)      0.0009              -0.0024
##              (0.0016)              (0.0022)
## DID proportion (mun.)              -0.0064              -0.0052
##              (0.0064)              (0.0075)
## Foreigner % sqrt. (mun.)      0.0049              0.0055
##              (0.0034)              (0.0046)
## University % by 10% (mun.)      0.0042 +              0.0066 *
##              (0.0024)              (0.0033)
## -----
## R^2              0.0241      0.0242      0.0244      0.0244
## Adj. R^2      0.0230      0.0229      0.0231      0.0231
## Num. obs.      24147      24147      24147      24147
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1

```

Favorability of USA

```

smm06_10 <- lm(update(familiarityFT_USA ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
smm06_1A <- lm(update(familiarityFT_USA ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
smm06_1B <- lm(update(familiarityFT_USA ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
smm06_1C <- lm(update(familiarityFT_USA ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23
screenreg(list(smm06_10,smm06_1A,smm06_1B,smm06_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(smm06_10,vcov.=vcovHC(smm06_10))[,2],
    coeftest(smm06_1A,vcov.=vcovHC(smm06_1A))[,2],
    coeftest(smm06_1B,vcov.=vcovHC(smm06_1B))[,2],
    coeftest(smm06_1C,vcov.=vcovHC(smm06_1C))[,2]),
  override.pvalues = list(coeftest(smm06_10,vcov.=vcovHC(smm06_10))[,4],
    coeftest(smm06_1A,vcov.=vcovHC(smm06_1A))[,4],
    coeftest(smm06_1B,vcov.=vcovHC(smm06_1B))[,4],
    coeftest(smm06_1C,vcov.=vcovHC(smm06_1C))[,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))

```

```

##
## =====
##              Base              ZIP              Municipality              Full
## -----
## University education      0.0128 **      0.0090 *      0.0104 *      0.0091 *
##              (0.0041)      (0.0041)      (0.0041)      (0.0041)
## Gender (male)      0.0061      0.0077      0.0070      0.0077
##              (0.0052)      (0.0052)      (0.0052)      (0.0052)
## Age (by 10 years, centered at 45)      0.0080 ***      0.0076 ***      0.0077 ***      0.0076 ***

```

```

##                                (0.0023)      (0.0023)      (0.0023)      (0.0023)
## University * Male              0.0215 ***    0.0209 **    0.0211 **    0.0209 **
##                                (0.0065)      (0.0065)      (0.0065)      (0.0065)
## University * Age              -0.0045      -0.0048      -0.0044      -0.0048
##                                (0.0032)      (0.0032)      (0.0032)      (0.0032)
## University * Male * Age        -0.0034      -0.0032      -0.0036      -0.0033
##                                (0.0049)      (0.0049)      (0.0049)      (0.0049)
## Male * Age                     0.0207 ***    0.0206 ***    0.0208 ***    0.0207 ***
##                                (0.0038)      (0.0038)      (0.0038)      (0.0038)
## % of Life Residing Locally (zip) -0.0151      -0.0107      -0.0130      -0.0104
##                                (0.0095)      (0.0095)      (0.0095)      (0.0095)
## DID residence (zip)            -0.0036      (0.0036)      (0.0036)      -0.0058
##                                (0.0036)      (0.0036)      (0.0036)      (0.0043)
## Foreigner % sqrt. (zip)        0.0030      (0.0025)      (0.0025)      0.0025
##                                (0.0025)      (0.0025)      (0.0025)      (0.0034)
## University % by 10% (zip)      0.0096 ***    (0.0016)      (0.0016)      0.0098 ***
##                                (0.0016)      (0.0016)      (0.0016)      (0.0023)
## DID proportion (mun.)          0.0014      (0.0065)      (0.0065)      0.0075
##                                (0.0065)      (0.0065)      (0.0065)      (0.0076)
## Foreigner % sqrt. (mun.)       0.0024      (0.0035)      (0.0035)      0.0006
##                                (0.0035)      (0.0035)      (0.0035)      (0.0047)
## University % by 10% (mun.)     0.0086 ***    (0.0024)      (0.0024)      -0.0012
##                                (0.0024)      (0.0024)      (0.0024)      (0.0033)
## -----
## R^2                            0.0324      0.0341      0.0334      0.0341
## Adj. R^2                       0.0313      0.0328      0.0321      0.0328
## Num. obs.                      24147      24147      24147      24147
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1

```

Income

```

smm07_10 <- lm(update(income ~ ., basemod0), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm07_1A <- lm(update(income ~ ., basemodA), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm07_1B <- lm(update(income ~ ., basemodB), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
smm07_1C <- lm(update(income ~ ., basemodC), data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
screenreg(list(smm07_10,smm07_1A,smm07_1B,smm07_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(smm07_10,vcov.=vcovHC(smm07_10))[,2],
    coeftest(smm07_1A,vcov.=vcovHC(smm07_1A))[,2],
    coeftest(smm07_1B,vcov.=vcovHC(smm07_1B))[,2],
    coeftest(smm07_1C,vcov.=vcovHC(smm07_1C))[,2]),
  override.pvalues = list(coeftest(smm07_10,vcov.=vcovHC(smm07_10))[,4],
    coeftest(smm07_1A,vcov.=vcovHC(smm07_1A))[,4],
    coeftest(smm07_1B,vcov.=vcovHC(smm07_1B))[,4],
    coeftest(smm07_1C,vcov.=vcovHC(smm07_1C))[,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))

```

```

##
## =====
##                                Base          ZIP          Municipality      Full
## -----
## University education          0.0961 ***    0.0747 ***    0.0807 ***    0.0742 ***

```

```

##                                (0.0054)          (0.0053)          (0.0053)          (0.0053)
## Gender (male)                 -0.0430 ***      -0.0342 ***      -0.0374 ***      -0.0340 ***
##                                (0.0059)          (0.0058)          (0.0058)          (0.0058)
## Age (by 10 years, centered at 45) -0.0049 +      -0.0072 *      -0.0069 *      -0.0072 *
##                                (0.0028)          (0.0028)          (0.0028)          (0.0028)
## University * Male              0.0385 ***      0.0350 ***      0.0362 ***      0.0351 ***
##                                (0.0078)          (0.0076)          (0.0077)          (0.0076)
## University * Age               0.0332 ***      0.0320 ***      0.0342 ***      0.0325 ***
##                                (0.0044)          (0.0043)          (0.0044)          (0.0043)
## University * Male * Age        -0.0167 **      -0.0160 **      -0.0178 **      -0.0168 **
##                                (0.0060)          (0.0060)          (0.0060)          (0.0060)
## Male * Age                    -0.0056          -0.0055          -0.0045          -0.0051
##                                (0.0043)          (0.0043)          (0.0043)          (0.0043)
## % of Life Residing Locally (zip) 0.1046 ***      0.1305 ***      0.1169 ***      0.1279 ***
##                                (0.0127)          (0.0125)          (0.0126)          (0.0125)
## DID residence (zip)              -0.0031          -0.0028
##                                (0.0044)          (0.0052)
## Foreigner % sqrt. (zip)         0.0169 ***      -0.0042
##                                (0.0031)          (0.0042)
## University % by 10% (zip)       0.0514 ***      0.0455 ***
##                                (0.0020)          (0.0029)
## DID proportion (mun.)           -0.0118          -0.0055
##                                (0.0080)          (0.0094)
## Foreigner % sqrt. (mun.)        0.0326 ***      0.0386 ***
##                                (0.0043)          (0.0059)
## University % by 10% (mun.)      0.0549 ***      0.0095 *
##                                (0.0031)          (0.0042)
## -----
## R^2                           0.0537          0.0847          0.0765          0.0866
## Adj. R^2                      0.0526          0.0835          0.0754          0.0853
## Num. obs.                     24147          24147          24147          24147
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1

```

MAIL: Outcome Model

```

## Living in Local ZIP since at least age 15 ##

mmo_10 <- lm(update(foreignsuff ~ ., basemod0m), data=mail[which(mail$age - mail$lvlen>=23),])
mmo_1A <- lm(update(foreignsuff ~ ., basemodAm), data=mail[which(mail$age - mail$lvlen>=23),])
mmo_1B <- lm(update(foreignsuff ~ ., basemodBm), data=mail[which(mail$age - mail$lvlen>=23),])
mmo_1C <- lm(update(foreignsuff ~ ., basemodCm), data=mail[which(mail$age - mail$lvlen>=23),])
screenreg(list(mmo_10,mmo_1A,mmo_1B,mmo_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(mmo_10,vcov.=vcovHC(mmo_10))[2],
    coeftest(mmo_1A,vcov.=vcovHC(mmo_1A))[2],
    coeftest(mmo_1B,vcov.=vcovHC(mmo_1B))[2],
    coeftest(mmo_1C,vcov.=vcovHC(mmo_1C))[2]),
  override.pvalues = list(coeftest(mmo_10,vcov.=vcovHC(mmo_10))[4],
    coeftest(mmo_1A,vcov.=vcovHC(mmo_1A))[4],
    coeftest(mmo_1B,vcov.=vcovHC(mmo_1B))[4],
    coeftest(mmo_1C,vcov.=vcovHC(mmo_1C))[4]),
  omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,

```

```
custom.model.names = c("Base", "ZIP", "Municipality", "Full")
```

```
##
## =====
##               Base           ZIP           Municipality Full
## -----
## University education      -0.0229      -0.0260      -0.0276      -0.0283
##                          (0.0514)      (0.0520)      (0.0524)      (0.0518)
## Gender (male)             -0.0666 +    -0.0596      -0.0625      -0.0564
##                          (0.0384)      (0.0389)      (0.0388)      (0.0391)
## Age (by 10 years, centered at 45) -0.0310 *    -0.0334 *    -0.0327 *    -0.0349 *
##                          (0.0156)      (0.0156)      (0.0156)      (0.0156)
## University * Male         -0.0117      -0.0075      -0.0122      -0.0140
##                          (0.0688)      (0.0688)      (0.0690)      (0.0689)
## University * Age          0.0117      0.0134      0.0136      0.0156
##                          (0.0356)      (0.0354)      (0.0357)      (0.0355)
## University * Male * Age   0.0057      0.0005      -0.0006      -0.0017
##                          (0.0452)      (0.0449)      (0.0452)      (0.0452)
## Male * Age                -0.0073      -0.0066      -0.0062      -0.0048
##                          (0.0211)      (0.0214)      (0.0213)      (0.0214)
## % of Life Residing Locally (zip) 0.1703 +    0.1784 +    0.1816 *    0.1692 +
##                          (0.0918)      (0.0923)      (0.0922)      (0.0926)
## DID residence (zip)                0.0415
##                          (0.0326)
## Foreigner % sqrt. (zip)          -0.0610 **
##                          (0.0208)
## University % by 10% (zip)          -0.0009
##                          (0.0137)
## DID proportion (mun.)                -0.0443
##                          (0.0577)
## Foreigner % sqrt. (mun.)          -0.0729 *
##                          (0.0329)
## University % by 10% (mun.)          0.0366
##                          (0.0227)
## -----
## R^2                        0.0266      0.0371      0.0353      0.0438
## Adj. R^2                   0.0158      0.0224      0.0206      0.0251
## Num. obs.                  731        731        731        731
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

MAIL: Outcome Model 2

```
## Living in Local ZIP since at least age 15 ##
```

```
# require(nnet)
```

```
# mmo2_10 <- multinom(update(foreignsuff3x ~ ., basemod0), data=mail[which(mail$age - mail$lflen>=23),])
```

```
# mmo2_1A <- multinom(update(foreignsuff3x ~ ., basemodA), data=mail[which(mail$age - mail$lflen>=23),])
```

```
# mmo2_1B <- multinom(update(foreignsuff3x ~ ., basemodB), data=mail[which(mail$age - mail$lflen>=23),])
```

```
# mmo2_1C <- multinom(update(foreignsuff3x ~ ., basemodC), data=mail[which(mail$age - mail$lflen>=23),])
```

```
mail.mlogit <- dfidx(mail[which(mail$age - mail$lflen>=23),],
  shape = "wide", choice = "foreignsuff3x")
```

```

# levels(mail.mlogit$id1$id2) <- c("Disagree","Neither","Agree")
mmo2_10 <- mlogit(outmod0m.mlogit, data=mail.mlogit, reflevel="Disagree")
mmo2_1A <- mlogit(outmodAm.mlogit, data=mail.mlogit, reflevel="Disagree")
mmo2_1B <- mlogit(outmodBm.mlogit, data=mail.mlogit, reflevel="Disagree")
mmo2_1C <- mlogit(outmodCm.mlogit, data=mail.mlogit, reflevel="Disagree")

screenreg(list(mmo2_10,mmo2_1A), digits = 4, #single.row = T,
  override.se = list(coeftest(mmo2_10,vcov=sandwich)[grep(":Neither",names(coef(mmo2_10))),2],
    coeftest(mmo2_10,vcov=sandwich)[grep(":Agree",names(coef(mmo2_10))),2],
    coeftest(mmo2_1A,vcov=sandwich)[grep(":Neither",names(coef(mmo2_1A))),2],
    coeftest(mmo2_1A,vcov=sandwich)[grep(":Agree",names(coef(mmo2_1A))),2]),
  override.pvalues = list(coeftest(mmo2_10,vcov=sandwich)[grep(":Neither",names(coef(mmo2_10))),4],
    coeftest(mmo2_10,vcov=sandwich)[grep(":Agree",names(coef(mmo2_10))),4],
    coeftest(mmo2_1A,vcov=sandwich)[grep(":Neither",names(coef(mmo2_1A))),4],
    coeftest(mmo2_1A,vcov=sandwich)[grep(":Agree",names(coef(mmo2_1A))),4]),

  beside = T,
  omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.model.names = c("Base: Agree","Base: Neither",
    "ZIP: Agree","ZIP: Neither"),
  custom.coef.map = vnmap)

```

```

##
## =====
##                               Base: Agree   Base: Neither   ZIP: Agree   ZIP: Neither
## -----
## University education          -0.1678 **    -1.1971         -0.2111 **    -1.3167
##                               (0.4300)        (0.3295)        (0.4353)        (0.3336)
## Gender (male)                 -0.5387 *     -0.6271 +       -0.4887 +     -0.5641 +
##                               (0.3120)        (0.2846)        (0.3150)        (0.2897)
## Age (by 10 years, centered at 45) -0.2432 +     -0.2049 *       -0.2574 +     -0.2016 *
##                               (0.1186)        (0.1186)        (0.1200)        (0.1189)
## University * Male              0.0135        0.7116          0.0458        0.7193
##                               (0.5467)        (0.4391)        (0.5486)        (0.4420)
## University * Age               0.0381        -0.0742         0.0369        -0.1016
##                               (0.2899)        (0.2027)        (0.2889)        (0.2041)
## University * Male * Age        0.1527        0.1059          0.1362        0.1666
##                               (0.3433)        (0.2646)        (0.3431)        (0.2663)
## Male * Age                    -0.0460       -0.1025         -0.0490       -0.1335
##                               (0.1712)        (0.1532)        (0.1712)        (0.1565)
## % of Life Residing Locally (zip) 1.1605 **     1.9066 +        1.2496 **     1.9965 *
##                               (0.6555)        (0.6021)        (0.6646)        (0.6079)
## DID residence (zip)                                0.2725         0.3398
##                               (0.2421)        (0.2182)
## Foreigner % sqrt. (zip)         -0.3832       0.0860 *
##                               (0.1684)        (0.1535)
## University % by 10% (zip)        0.0372        0.0763
##                               (0.1086)        (0.0954)
## -----
## AIC                           1571.2886      1571.2886      1569.4923      1569.4923
## Log Likelihood                 -767.6443      -767.6443      -760.7462      -760.7462
## Num. obs.                      731           731           731           731
## K                              3             3             3             3
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1

```



```

screenreg(list(mmo2_1B,mmo2_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(mmo2_1B,vcov=sandwich)[grep(":Neither",names(coef(mmo2_1B))),2],
    coeftest(mmo2_1B,vcov=sandwich)[grep(":Agree",names(coef(mmo2_1B))),2],
    coeftest(mmo2_1C,vcov=sandwich)[grep(":Neither",names(coef(mmo2_1C))),2],
    coeftest(mmo2_1C,vcov=sandwich)[grep(":Agree",names(coef(mmo2_1C))),2]),
  override.pvalues = list(coeftest(mmo2_1B,vcov=sandwich)[grep(":Neither",names(coef(mmo2_1B))),4],
    coeftest(mmo2_1B,vcov=sandwich)[grep(":Agree",names(coef(mmo2_1B))),4],
    coeftest(mmo2_1C,vcov=sandwich)[grep(":Neither",names(coef(mmo2_1C))),4],
    coeftest(mmo2_1C,vcov=sandwich)[grep(":Agree",names(coef(mmo2_1C))),4]),

  beside = T,
  omit.coef = "(wave)",stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Mun.: Agree","Mun.: Neither",
    "Full: Agree","Full: Neither"))

```

```

##
## =====
##                               Mun.: Agree   Mun.: Neither   Full: Agree   Full: Neither
## -----
## University education          -0.2141 **    -1.2204         -0.2403 **    -1.3259
##                               (0.4344)      (0.3352)        (0.4362)      (0.3330)
## Gender (male)                 -0.5128 +    -0.6133 +      -0.4807 +     -0.6069 +
##                               (0.3163)      (0.2894)        (0.3192)      (0.2916)
## Age (by 10 years, centered at 45) -0.2575 +    -0.2137 *      -0.2690        -0.1959 *
##                               (0.1203)      (0.1199)        (0.1212)      (0.1201)
## University * Male              0.0096       0.6956         0.0222         0.7643
##                               (0.5484)      (0.4437)        (0.5529)      (0.4442)
## University * Age               0.0514       -0.0708         0.0520         -0.0918
##                               (0.2936)      (0.2039)        (0.2911)      (0.2044)
## University * Male * Age        0.1147       0.0835         0.1206         0.1381
##                               (0.3485)      (0.2661)        (0.3476)      (0.2676)
## Male * Age                    -0.0383      -0.0920        -0.0388        -0.1338
##                               (0.1732)      (0.1552)        (0.1730)      (0.1573)
## % of Life Residing Locally (zip) 1.2404 **    1.9352 *       1.2101 **     1.9534 *
##                               (0.6532)      (0.6039)        (0.6689)      (0.6096)
## DID residence (zip)                                0.4926 *       0.7561 +
##                               (0.2998)      (0.2741)
## Foreigner % sqrt. (zip)                                -0.3635 +     0.4838
##                               (0.2680)      (0.2385)
## University % by 10% (zip)                                -0.0505        0.1518
##                               (0.1407)      (0.1271)
## DID proportion (mun.)          -0.2800      -0.5226        -0.7911 *     -1.1618
##                               (0.4207)      (0.3963)        (0.4999)      (0.5131)
## Foreigner % sqrt. (mun.)       -0.4729      -0.1622 *      -0.1154 *     -0.8247
##                               (0.2602)      (0.2252)        (0.4150)      (0.3568)
## University % by 10% (mun.)      0.2645       0.2493         0.3254         0.0623
##                               (0.1754)      (0.1615)        (0.2220)      (0.2103)
## -----
## AIC                           1576.0771     1576.0771      1565.8437     1565.8437
## Log Likelihood                 -764.0386     -764.0386      -752.9219     -752.9219
## Num. obs.                      731          731           731          731
## K                              3            3            3            3
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1

```


MAIL: Mediator Models

Knowledge

```
mmm01_10 <- lm(update(knowledge ~ ., basemod0m), data=mail[which(mail$age - mail$lvlen>=23),])
mmm01_1A <- lm(update(knowledge ~ ., basemodAm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm01_1B <- lm(update(knowledge ~ ., basemodBm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm01_1C <- lm(update(knowledge ~ ., basemodCm), data=mail[which(mail$age - mail$lvlen>=23),])
screenreg(list(mmm01_10,mmm01_1A,mmm01_1B,mmm01_1C), digits = 4, #single.row = T,
  override.se = list(coefest(mmm01_10,vcov.=vcovHC(mmm01_10))[ ,2],
    coefest(mmm01_1A,vcov.=vcovHC(mmm01_1A))[ ,2],
    coefest(mmm01_1B,vcov.=vcovHC(mmm01_1B))[ ,2],
    coefest(mmm01_1C,vcov.=vcovHC(mmm01_1C))[ ,2]),
  override.pvalues = list(coefest(mmm01_10,vcov.=vcovHC(mmm01_10))[ ,4],
    coefest(mmm01_1A,vcov.=vcovHC(mmm01_1A))[ ,4],
    coefest(mmm01_1B,vcov.=vcovHC(mmm01_1B))[ ,4],
    coefest(mmm01_1C,vcov.=vcovHC(mmm01_1C))[ ,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
##                               Base          ZIP          Municipality  Full
## -----
## University education          0.1531 ***    0.1338 **    0.1347 **    0.1316 **
##                               (0.0416)    (0.0415)    (0.0426)    (0.0421)
## Gender (male)                 0.1057 **    0.1187 **    0.1156 **    0.1200 **
##                               (0.0392)    (0.0393)    (0.0389)    (0.0392)
## Age (by 10 years, centered at 45) 0.0073      0.0078      0.0064      0.0070
##                               (0.0150)    (0.0150)    (0.0151)    (0.0152)
## University * Male             -0.0010      0.0029     -0.0032      0.0009
##                               (0.0580)    (0.0577)    (0.0579)    (0.0577)
## University * Age              0.0314      0.0229      0.0288      0.0235
##                               (0.0331)    (0.0328)    (0.0336)    (0.0334)
## University * Male * Age       0.0048      0.0127      0.0104      0.0129
##                               (0.0398)    (0.0397)    (0.0403)    (0.0401)
## Male * Age                   -0.0032     -0.0068     -0.0056     -0.0062
##                               (0.0214)    (0.0216)    (0.0215)    (0.0216)
## % of Life Residing Locally (zip) 0.0252      0.0525      0.0409      0.0525
##                               (0.0799)    (0.0806)    (0.0796)    (0.0811)
## DID residence (zip)           0.0216      0.0060
##                               (0.0286)    (0.0348)
## Foreigner % sqrt. (zip)       -0.0108     -0.0274
##                               (0.0209)    (0.0327)
## University % by 10% (zip)      0.0301 *    0.0217
##                               (0.0121)    (0.0157)
## DID proportion (mun.)         0.0467      0.0360
##                               (0.0536)    (0.0640)
## Foreigner % sqrt. (mun.)      0.0015      0.0303
##                               (0.0315)    (0.0494)
## University % by 10% (mun.)    0.0324      0.0119
##                               (0.0217)    (0.0267)
## -----
```

```
## R^2                0.1116        0.1231        0.1216        0.1251
## Adj. R^2           0.1018        0.1097        0.1082        0.1080
## Num. obs.          731          731          731          731
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Ideology

```
mmm02_10 <- lm(update(ideology ~ ., basemod0m), data=mail[which(mail$age - mail$lvlen>=23),])
mmm02_1A <- lm(update(ideology ~ ., basemodAm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm02_1B <- lm(update(ideology ~ ., basemodBm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm02_1C <- lm(update(ideology ~ ., basemodCm), data=mail[which(mail$age - mail$lvlen>=23),])
screenreg(list(mmm02_10,mmm02_1A,mmm02_1B,mmm02_1C), digits = 4, #single.row = T,
  override.se = list(coefest(mmm02_10,vcov.=vcovHC(mmm02_10))[,2],
    coefest(mmm02_1A,vcov.=vcovHC(mmm02_1A))[,2],
    coefest(mmm02_1B,vcov.=vcovHC(mmm02_1B))[,2],
    coefest(mmm02_1C,vcov.=vcovHC(mmm02_1C))[,2]),
  override.pvalues = list(coefest(mmm02_10,vcov.=vcovHC(mmm02_10))[,4],
    coefest(mmm02_1A,vcov.=vcovHC(mmm02_1A))[,4],
    coefest(mmm02_1B,vcov.=vcovHC(mmm02_1B))[,4],
    coefest(mmm02_1C,vcov.=vcovHC(mmm02_1C))[,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
##              Base          ZIP          Municipality    Full
## -----
## University education      -0.0225      -0.0227      -0.0218      -0.0223
##                          (0.0280)      (0.0289)      (0.0287)      (0.0291)
## Gender (male)             -0.0526 *    -0.0517 *    -0.0531 *    -0.0521 *
##                          (0.0230)      (0.0234)      (0.0233)      (0.0234)
## Age (by 10 years, centered at 45)  0.0089      0.0084      0.0089      0.0087
##                          (0.0084)      (0.0084)      (0.0084)      (0.0084)
## University * Male          0.0736 +     0.0742 +     0.0749 +     0.0750 +
##                          (0.0390)      (0.0393)      (0.0390)      (0.0393)
## University * Age           -0.0422 *    -0.0411 *    -0.0414 *    -0.0414 *
##                          (0.0196)      (0.0198)      (0.0197)      (0.0200)
## University * Male * Age      0.0454 +     0.0445 +     0.0446 +     0.0448 +
##                          (0.0249)      (0.0253)      (0.0253)      (0.0255)
## Male * Age                 0.0128      0.0128      0.0126      0.0126
##                          (0.0124)      (0.0125)      (0.0125)      (0.0126)
## % of Life Residing Locally (zip) -0.0396      -0.0407      -0.0388      -0.0399
##                          (0.0481)      (0.0480)      (0.0482)      (0.0485)
## DID residence (zip)                0.0142      0.0126
##                          (0.0176)      (0.0198)
## Foreigner % sqrt. (zip)         -0.0093      -0.0079
##                          (0.0138)      (0.0195)
## University % by 10% (zip)        -0.0035      -0.0011
##                          (0.0078)      (0.0090)
## DID proportion (mun.)                0.0220      0.0083
##                          (0.0328)      (0.0363)
## Foreigner % sqrt. (mun.)        -0.0103      -0.0018
```

```
## (0.0206) (0.0297)
## University % by 10% (mun.) -0.0078 -0.0065
## (0.0138) (0.0161)
## -----
## R^2 0.0283 0.0297 0.0293 0.0299
## Adj. R^2 0.0175 0.0148 0.0145 0.0109
## Num. obs. 731 731 731 731
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

LDP - DPJ FT

```
mmm03_10 <- lm(update(ldpdpjft ~ ., basemod0m), data=mail[which(mail$age - mail$lvlen>=23),])
mmm03_1A <- lm(update(ldpdpjft ~ ., basemodAm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm03_1B <- lm(update(ldpdpjft ~ ., basemodBm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm03_1C <- lm(update(ldpdpjft ~ ., basemodCm), data=mail[which(mail$age - mail$lvlen>=23),])
screenreg(list(mmm03_10,mmm03_1A,mmm03_1B,mmm03_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(mmm03_10,vcov.=vcovHC(mmm03_10))[2],
    coeftest(mmm03_1A,vcov.=vcovHC(mmm03_1A))[2],
    coeftest(mmm03_1B,vcov.=vcovHC(mmm03_1B))[2],
    coeftest(mmm03_1C,vcov.=vcovHC(mmm03_1C))[2]),
  override.pvalues = list(coeftest(mmm03_10,vcov.=vcovHC(mmm03_10))[4],
    coeftest(mmm03_1A,vcov.=vcovHC(mmm03_1A))[4],
    coeftest(mmm03_1B,vcov.=vcovHC(mmm03_1B))[4],
    coeftest(mmm03_1C,vcov.=vcovHC(mmm03_1C))[4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
## Base ZIP Municipality Full
## -----
## University education -0.0156 -0.0162 -0.0187 -0.0177
## (0.0188) (0.0194) (0.0191) (0.0196)
## Gender (male) 0.0336 * 0.0348 * 0.0349 * 0.0355 *
## (0.0154) (0.0156) (0.0157) (0.0158)
## Age (by 10 years, centered at 45) 0.0053 0.0046 0.0051 0.0040
## (0.0071) (0.0071) (0.0071) (0.0071)
## University * Male -0.0091 -0.0086 -0.0078 -0.0098
## (0.0270) (0.0274) (0.0272) (0.0277)
## University * Age -0.0081 -0.0061 -0.0079 -0.0055
## (0.0153) (0.0157) (0.0155) (0.0156)
## University * Male * Age 0.0279 0.0272 0.0285 0.0271
## (0.0201) (0.0205) (0.0203) (0.0204)
## Male * Age -0.0079 -0.0082 -0.0088 -0.0080
## (0.0092) (0.0093) (0.0092) (0.0093)
## % of Life Residing Locally (zip) -0.0583 -0.0624 -0.0543 -0.0621
## (0.0386) (0.0388) (0.0387) (0.0388)
## DID residence (zip) 0.0299 * 0.0204
## (0.0140) (0.0171)
## Foreigner % sqrt. (zip) -0.0099 -0.0159
## (0.0109) (0.0170)
## University % by 10% (zip) -0.0082 -0.0134
```

```
##                                     (0.0062)                (0.0084)
## DID proportion (mun.)                0.0439 +            0.0214
##                                     (0.0241)            (0.0289)
## Foreigner % sqrt. (mun.)            -0.0087            0.0101
##                                     (0.0158)            (0.0249)
## University % by 10% (mun.)          -0.0055            0.0085
##                                     (0.0104)            (0.0138)
## -----
## R^2                                0.0158            0.0229            0.0203            0.0257
## Adj. R^2                          0.0049            0.0080            0.0053            0.0066
## Num. obs.                          731              731              731              731
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Favorability of South Korea

```
mmm04_10 <- lm(update(familiarityFT_KOR ~ ., basemod0m), data=mail[which(mail$age - mail$lvlen>=23),])
mmm04_1A <- lm(update(familiarityFT_KOR ~ ., basemodAm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm04_1B <- lm(update(familiarityFT_KOR ~ ., basemodBm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm04_1C <- lm(update(familiarityFT_KOR ~ ., basemodCm), data=mail[which(mail$age - mail$lvlen>=23),])
screenreg(list(mmm04_10,mmm04_1A,mmm04_1B,mmm04_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(mmm04_10,vcov.=vcovHC(mmm04_10))[2],
    coeftest(mmm04_1A,vcov.=vcovHC(mmm04_1A))[2],
    coeftest(mmm04_1B,vcov.=vcovHC(mmm04_1B))[2],
    coeftest(mmm04_1C,vcov.=vcovHC(mmm04_1C))[2]),
  override.pvalues = list(coeftest(mmm04_10,vcov.=vcovHC(mmm04_10))[4],
    coeftest(mmm04_1A,vcov.=vcovHC(mmm04_1A))[4],
    coeftest(mmm04_1B,vcov.=vcovHC(mmm04_1B))[4],
    coeftest(mmm04_1C,vcov.=vcovHC(mmm04_1C))[4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
##                                     Base          ZIP          Municipality  Full
## -----
## University education              -0.0188        -0.0170        -0.0111        -0.0129
##                                     (0.0346)      (0.0353)      (0.0354)      (0.0357)
## Gender (male)                     -0.1306 ***    -0.1323 ***    -0.1349 ***    -0.1328 ***
##                                     (0.0267)      (0.0270)      (0.0267)      (0.0270)
## Age (by 10 years, centered at 45) -0.0092        -0.0089        -0.0084        -0.0079
##                                     (0.0106)      (0.0106)      (0.0105)      (0.0106)
## University * Male                  0.0424         0.0417         0.0420         0.0443
##                                     (0.0449)      (0.0452)      (0.0451)      (0.0454)
## University * Age                   0.0004         0.0002         0.0000        -0.0027
##                                     (0.0232)      (0.0235)      (0.0233)      (0.0234)
## University * Male * Age            -0.0100        -0.0100        -0.0096        -0.0080
##                                     (0.0284)      (0.0287)      (0.0286)      (0.0286)
## Male * Age                        0.0416 **      0.0419 **      0.0424 **      0.0419 **
##                                     (0.0142)      (0.0143)      (0.0142)      (0.0143)
## % of Life Residing Locally (zip)  -0.0256        -0.0268        -0.0355        -0.0294
##                                     (0.0563)      (0.0573)      (0.0567)      (0.0572)
## DID residence (zip)                -0.0134                                0.0048
```

```
## (0.0212) (0.0250)
## Foreigner % sqrt. (zip) 0.0077 -0.0094
## (0.0148) (0.0241)
## University % by 10% (zip) 0.0004 0.0120
## (0.0098) (0.0123)
## DID proportion (mun.) -0.0293 -0.0357
## (0.0382) (0.0450)
## Foreigner % sqrt. (mun.) 0.0301 0.0393
## (0.0214) (0.0357)
## University % by 10% (mun.) -0.0140 -0.0257
## (0.0165) (0.0202)
## -----
## R^2 0.0436 0.0443 0.0489 0.0506
## Adj. R^2 0.0330 0.0297 0.0343 0.0321
## Num. obs. 731 731 731 731
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Favorability of China

```
mmm05_10 <- lm(update(familiarityFT_CHN ~ ., basemod0m), data=mail[which(mail$age - mail$lvlen>=23),])
mmm05_1A <- lm(update(familiarityFT_CHN ~ ., basemodAm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm05_1B <- lm(update(familiarityFT_CHN ~ ., basemodBm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm05_1C <- lm(update(familiarityFT_CHN ~ ., basemodCm), data=mail[which(mail$age - mail$lvlen>=23),])
screenreg(list(mmm05_10,mmm05_1A,mmm05_1B,mmm05_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(mmm05_10,vcov.=vcovHC(mmm05_10))[ ,2],
    coeftest(mmm05_1A,vcov.=vcovHC(mmm05_1A))[ ,2],
    coeftest(mmm05_1B,vcov.=vcovHC(mmm05_1B))[ ,2],
    coeftest(mmm05_1C,vcov.=vcovHC(mmm05_1C))[ ,2]),
  override.pvalues = list(coeftest(mmm05_10,vcov.=vcovHC(mmm05_10))[ ,4],
    coeftest(mmm05_1A,vcov.=vcovHC(mmm05_1A))[ ,4],
    coeftest(mmm05_1B,vcov.=vcovHC(mmm05_1B))[ ,4],
    coeftest(mmm05_1C,vcov.=vcovHC(mmm05_1C))[ ,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
## Base ZIP Municipality Full
## -----
## University education 0.0728 * 0.0837 ** 0.0856 ** 0.0863 **
## (0.0308) (0.0313) (0.0314) (0.0316)
## Gender (male) -0.0323 -0.0401 + -0.0390 + -0.0407 +
## (0.0239) (0.0236) (0.0236) (0.0237)
## Age (by 10 years, centered at 45) 0.0192 * 0.0191 * 0.0199 * 0.0199 *
## (0.0095) (0.0094) (0.0095) (0.0095)
## University * Male -0.0454 -0.0479 -0.0452 -0.0466
## (0.0393) (0.0395) (0.0392) (0.0395)
## University * Age -0.0103 -0.0060 -0.0091 -0.0071
## (0.0213) (0.0219) (0.0213) (0.0219)
## University * Male * Age -0.0003 -0.0042 -0.0036 -0.0041
## (0.0255) (0.0259) (0.0256) (0.0259)
## Male * Age 0.0071 0.0091 0.0092 0.0090
```

```
## (0.0131) (0.0131) (0.0130) (0.0131)
## % of Life Residing Locally (zip) -0.0272 -0.0421 -0.0395 -0.0445
## (0.0558) (0.0567) (0.0565) (0.0570)
## DID residence (zip) -0.0192 0.0047
## (0.0194) (0.0236)
## Foreigner % sqrt. (zip) 0.0116 0.0181
## (0.0138) (0.0217)
## University % by 10% (zip) -0.0153 + -0.0080
## (0.0082) (0.0108)
## DID proportion (mun.) -0.0602 + -0.0621
## (0.0352) (0.0425)
## Foreigner % sqrt. (mun.) 0.0095 -0.0108
## (0.0212) (0.0333)
## University % by 10% (mun.) -0.0147 -0.0076
## (0.0136) (0.0178)
## -----
## R^2 0.0251 0.0344 0.0380 0.0399
## Adj. R^2 0.0143 0.0196 0.0233 0.0211
## Num. obs. 731 731 731 731
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Favorability of USA

```
mmm06_10 <- lm(update(familiarityFT_USA ~ ., basemod0m), data=mail[which(mail$age - mail$lvlen>=23),])
mmm06_1A <- lm(update(familiarityFT_USA ~ ., basemodAm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm06_1B <- lm(update(familiarityFT_USA ~ ., basemodBm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm06_1C <- lm(update(familiarityFT_USA ~ ., basemodCm), data=mail[which(mail$age - mail$lvlen>=23),])
screenreg(list(mmm06_10,mmm06_1A,mmm06_1B,mmm06_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(mmm06_10,vcov.=vcovHC(mmm06_10))[,2],
    coeftest(mmm06_1A,vcov.=vcovHC(mmm06_1A))[,2],
    coeftest(mmm06_1B,vcov.=vcovHC(mmm06_1B))[,2],
    coeftest(mmm06_1C,vcov.=vcovHC(mmm06_1C))[,2]),
  override.pvalues = list(coeftest(mmm06_10,vcov.=vcovHC(mmm06_10))[,4],
    coeftest(mmm06_1A,vcov.=vcovHC(mmm06_1A))[,4],
    coeftest(mmm06_1B,vcov.=vcovHC(mmm06_1B))[,4],
    coeftest(mmm06_1C,vcov.=vcovHC(mmm06_1C))[,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
## Base ZIP Municipality Full
## -----
## University education 0.0084 0.0077 0.0109 0.0092
## (0.0275) (0.0280) (0.0279) (0.0282)
## Gender (male) 0.0312 0.0324 0.0301 0.0321
## (0.0236) (0.0236) (0.0237) (0.0236)
## Age (by 10 years, centered at 45) 0.0270 ** 0.0266 ** 0.0269 ** 0.0270 **
## (0.0089) (0.0090) (0.0090) (0.0090)
## University * Male -0.0099 -0.0092 -0.0094 -0.0085
## (0.0371) (0.0374) (0.0373) (0.0376)
## University * Age -0.0173 -0.0168 -0.0165 -0.0175
```

```
##          (0.0203)      (0.0203)      (0.0203)      (0.0206)
## University * Male * Age      0.0211      0.0204      0.0193      0.0205
##          (0.0245)      (0.0247)      (0.0246)      (0.0249)
## Male * Age      0.0001      0.0001      0.0007      0.0000
##          (0.0127)      (0.0128)      (0.0128)      (0.0129)
## % of Life Residing Locally (zip) -0.1196 * -0.1190 * -0.1205 * -0.1205 *
##          (0.0502)      (0.0505)      (0.0508)      (0.0511)
## DID residence (zip)      0.0110      0.0251
##          (0.0181)      (0.0221)
## Foreigner % sqrt. (zip) -0.0097      -0.0058
##          (0.0148)      (0.0215)
## University % by 10% (zip) -0.0013      0.0031
##          (0.0080)      (0.0102)
## DID proportion (mun.)      -0.0104      -0.0365
##          (0.0335)      (0.0403)
## Foreigner % sqrt. (mun.) -0.0113      -0.0065
##          (0.0210)      (0.0303)
## University % by 10% (mun.) -0.0015      -0.0047
##          (0.0130)      (0.0153)
## -----
## R^2      0.0353      0.0364      0.0364      0.0387
## Adj. R^2      0.0246      0.0216      0.0217      0.0199
## Num. obs.      731      731      731      731
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1
```

Income

```
mmm07_10 <- lm(update(income ~ ., basemod0m), data=mail[which(mail$age - mail$lvlen>=23),])
mmm07_1A <- lm(update(income ~ ., basemodAm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm07_1B <- lm(update(income ~ ., basemodBm), data=mail[which(mail$age - mail$lvlen>=23),])
mmm07_1C <- lm(update(income ~ ., basemodCm), data=mail[which(mail$age - mail$lvlen>=23),])
screenreg(list(mmm07_10,mmm07_1A,mmm07_1B,mmm07_1C), digits = 4, #single.row = T,
  override.se = list(coeftest(mmm07_10,vcov.=vcovHC(mmm07_10))[,2],
    coeftest(mmm07_1A,vcov.=vcovHC(mmm07_1A))[,2],
    coeftest(mmm07_1B,vcov.=vcovHC(mmm07_1B))[,2],
    coeftest(mmm07_1C,vcov.=vcovHC(mmm07_1C))[,2]),
  override.pvalues = list(coeftest(mmm07_10,vcov.=vcovHC(mmm07_10))[,4],
    coeftest(mmm07_1A,vcov.=vcovHC(mmm07_1A))[,4],
    coeftest(mmm07_1B,vcov.=vcovHC(mmm07_1B))[,4],
    coeftest(mmm07_1C,vcov.=vcovHC(mmm07_1C))[,4]),
  omit.coef = "(wave)", stars = c(0.1,0.05,0.01,0.001), symbol = "+",
  custom.coef.map = vnmap,
  custom.model.names = c("Base","ZIP","Municipality","Full"))
```

```
##
## =====
##          Base          ZIP          Municipality Full
## -----
## University education      0.1041 *      0.0903 *      0.0964 *      0.0909 *
##          (0.0407)      (0.0414)      (0.0411)      (0.0416)
## Gender (male)      0.0209      0.0276      0.0274      0.0272
##          (0.0308)      (0.0310)      (0.0310)      (0.0310)
## Age (by 10 years, centered at 45) -0.0414 ** -0.0404 ** -0.0424 ** -0.0404 **
```



```

##              (0.0132)      (0.0131)      (0.0132)      (0.0132)
## University * Male      -0.0165      -0.0125      -0.0221      -0.0133
##              (0.0523)      (0.0526)      (0.0524)      (0.0530)
## University * Age        0.0381        0.0307        0.0376        0.0315
##              (0.0368)      (0.0371)      (0.0375)      (0.0377)
## University * Male * Age    0.0145        0.0176        0.0140        0.0166
##              (0.0411)      (0.0413)      (0.0417)      (0.0417)
## Male * Age              -0.0308 +      -0.0310 +      -0.0302 +      -0.0312 +
##              (0.0164)      (0.0164)      (0.0164)      (0.0165)
## % of Life Residing Locally (zip)    0.1347 +      0.1613 *      0.1418 *      0.1626 *
##              (0.0699)      (0.0700)      (0.0703)      (0.0707)
## DID residence (zip)                -0.0460 +
##              (0.0242)
## Foreigner % sqrt. (zip)              0.0097
##              (0.0178)
## University % by 10% (zip)            0.0363 ***
##              (0.0107)
## DID proportion (mun.)                -0.0665
##              (0.0467)
## Foreigner % sqrt. (mun.)              -0.0032
##              (0.0271)
## University % by 10% (mun.)            0.0445 *
##              (0.0202)
## -----
## R^2              0.1067        0.1223        0.1144        0.1237
## Adj. R^2         0.0958        0.1075        0.0995        0.1049
## Num. obs.        667          667          667          667
## =====
## *** p < 0.001; ** p < 0.01; * p < 0.05; + p < 0.1

```

Plotting

```

extout <- function(gender,ageset,sub=1) {

  if (gender=="Male") sifcct$gender <- sifcct$female
  if (gender=="Female") sifcct$gender <- sifcct$male
  sifcct$ageset <- (sifcct$age - ageset)/10

  if (sub==1) {
    modset <- lm(foreignsuff ~ edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
      I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
      as.factor(wave), data=sifcct[which(sifcct$age - sifcct$lvlen<=15),])
    subname = "Stayed"
  } else {
    modset <- lm(foreignsuff ~ edu2 * gender * ageset + lvpr + as.factor(wave),
      data=sifcct[which(sifcct$age - sifcct$lvlen>=23),])
    subname = "Moved"
  }

  res <- c(gender,ageset,coef(modset)[2],
    coefci(modset, vcov.=vcovHC(modset), level = 0.95)[2,],
    coefci(modset, vcov.=vcovHC(modset), level = 0.90)[2,],
    coeftest(modset, vcov.=vcovHC(modset))[2,c(2,4)],

```



```

        subname)
names(res) <- c("gender","age","est","lci95","uci95","lci90","uci90","se","p","lv")

return(res)
}

outdt0 <- rbind(extout("Female",25,2),
                extout("Female",35,2),
                extout("Female",45,2),
                extout("Female",55,2),
                extout("Female",65,2),
                extout("Male",25,2),
                extout("Male",35,2),
                extout("Male",45,2),
                extout("Male",55,2),
                extout("Male",65,2))
outdt0 <- as.data.frame(outdt0)
for(i in 2:9) outdt0[,i] <- as.numeric(outdt0[,i])
outdt0$gender <- factor(outdt0$gender, levels=unique(outdt0$gender))
summary(outdt0)

```

```

##      gender      age      est      lci95      uci95      lci90
## Female:5  Min.   :25  Min.   :-0.038697  Min.   :-0.070512  Min.   :-0.0084444  Min.   :-0.065
## Male   :5  1st Qu.:35  1st Qu.: -0.025859  1st Qu.: -0.048402  1st Qu.: -0.0056096  1st Qu.: -0.044
##          Median :45  Median : -0.014550  Median : -0.029892  Median : 0.0007912  Median : -0.027
##          Mean   :45  Mean   : -0.012305  Mean   : -0.031594  Mean   : 0.0069831  Mean   : -0.028
##          3rd Qu.:55  3rd Qu.: -0.003113  3rd Qu.: -0.017312  3rd Qu.: 0.0124302  3rd Qu.: -0.015
##          Max.   :65  Max.   : 0.023066  Max.   : 0.001465  Max.   : 0.0446669  Max.   : 0.004
##      uci90      se      p      lv
## Min.   :-0.012021  Min.   :0.006296  Min.   :0.002659  Length:10
## 1st Qu.: -0.009158  1st Qu.:0.007436  1st Qu.:0.021370  Class :character
## Median : -0.001675  Median :0.009408  Median :0.036055  Mode  :character
## Mean   : 0.003882  Mean   :0.009841  Mean   :0.165248
## 3rd Qu.: 0.009550  3rd Qu.:0.011268  3rd Qu.:0.139450
## Max.   : 0.041194  Max.   :0.016232  Max.   :0.759719

```

```

extout <- function(gender,ageset,sub=1) {

  if (gender=="Male") mail$gender <- mail$female
  if (gender=="Female") mail$gender <- mail$male
  mail$ageset <- (mail$age - ageset)/10

  if (sub==1) {
    modset <- lm(foreignsuff ~ edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
                  I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10),
                  data=mail[which(mail$age - mail$lvlen<=15),])
    subname = "Stayed"
  } else {
    modset <- lm(foreignsuff ~ edu2 * gender * ageset + lvpr,
                  data=mail[which(mail$age - mail$lvlen>=23),])
    subname = "Moved"
  }
}

```

```

res <- c(gender,ageset,coef(modset)[2],
        coefci(modset, vcov.=vcovHC(modset), level = 0.95)[2,],
        coefci(modset, vcov.=vcovHC(modset), level = 0.90)[2,],
        coeftest(modset, vcov.=vcovHC(modset))[2,c(2,4)],
        subname)
names(res) <- c("gender","age","est","lci95","uci95","lci90","uci90","se","p","lv")

return(res)
}

```

```

outdtm <- rbind(extout("Female",25,2),
               extout("Female",35,2),
               extout("Female",45,2),
               extout("Female",55,2),
               extout("Female",65,2),
               extout("Male",25,2),
               extout("Male",35,2),
               extout("Male",45,2),
               extout("Male",55,2),
               extout("Male",65,2))
outdtm <- as.data.frame(outdtm)
for(i in 2:9) outdtm[,i] <- as.numeric(outdtm[,i])
outdtm$gender <- factor(outdtm$gender, levels=unique(outdtm$gender))
summary(outdtm)

```

```

##      gender      age      est      lci95      uci95      lci90
## Female:5  Min.   :25  Min.   :-0.0693356  Min.   :-0.24300  Min.   :0.05526  Min.   :-0.2150
## Male   :5  1st Qu.:35  1st Qu.: -0.0432717  1st Qu.: -0.17567  1st Qu.:0.07580  1st Qu.: -0.1550
##          Median :45  Median : -0.0286834  Median : -0.14192  Median :0.09813  Median : -0.1216
##          Mean   :45  Mean   : -0.0287040  Mean   : -0.15440  Mean   :0.09699  Mean   : -0.1342
##          3rd Qu.:55  3rd Qu.: -0.0126839  3rd Qu.: -0.12391  3rd Qu.:0.10386  3rd Qu.: -0.1068
##          Max.   :65  Max.   : 0.0004725  Max.   : -0.09445  Max.   :0.15996  Max.   : -0.0820
##      uci90      se      p      lv
## Min.   :0.04079  Min.   :0.03937  Min.   :0.4222  Length:10
## 1st Qu.:0.05639  1st Qu.:0.05076  1st Qu.:0.4892  Class :character
## Median :0.07600  Median :0.06128  Median :0.6402  Mode  :character
## Mean   :0.07674  Mean   :0.06403  Mean   :0.6694
## 3rd Qu.:0.08397  3rd Qu.:0.07765  3rd Qu.:0.8008
## Max.   :0.13427  Max.   :0.09405  Max.   :0.9965

```

```

outdt0$data <- "Online"
outdtm$data <- "Mail-in"

visdt <- rbind(outdt0,outdtm)
visdt$data <- factor(visdt$data, levels=c("Online","Mail-in"))

visdt$pstar <- factor(ifelse(visdt$p>=.1,"n.s.",ifelse(visdt$p>=.05,"p<.1","p<.05")),
                      levels = c("p<.05","p<.1","n.s."))

saveRDS(subset(visdt, data=="Mail-in"), paste0(projdir, "/out/visdtx_mail_ols.rds"))

require(ggplot2)
p <- ggplot(visdt, aes(x=factor(age, levels=rev(names(table(age))))), y=est)) +

```

```

geom_hline(aes(yintercept=0), linetype=2) +
geom_errorbar(aes(ymin=lci95,ymax=uci95,colour="1",alpha=pstar),
              position=position_dodge(width=-0.7), size=0.5, width=0.3) +
geom_errorbar(aes(ymin=lci90,ymax=uci90,colour="1",alpha=pstar),
              position=position_dodge(width=-0.7), size=1.5, width=0.0) +
geom_point(aes(shape=lv, colour="1",alpha=pstar),
           position=position_dodge(width=-0.7), size=3) +
facet_grid(gender ~ data) +
scale_y_continuous(breaks = c(-0.1,-0.05,0.00,0.05)) +
scale_shape_discrete(name="Change in residece after university") +
scale_color_manual(name="Change in residece after university",values=rep("black", 1)) +
scale_alpha_manual(name="Significance",values=c(1,0.5,0.2)) +
ylab("(Thin Line = 95% CI; Thick Line 90% CI)") +
xlab("Age") +
labs(caption="Treatment: University education (1:attained, 0:not attained). Outcome: Agreement with g
coord_flip() + theme_bw() +
theme(legend.position = "bottom",
      strip.text.x = element_text(size=9),
      strip.text.y = element_text(angle=0,size=11),
      strip.background = element_rect(fill=NA,color=NA),
      plot.caption = element_text(hjust=0),
      plot.subtitle = element_text(hjust=0.5))

```

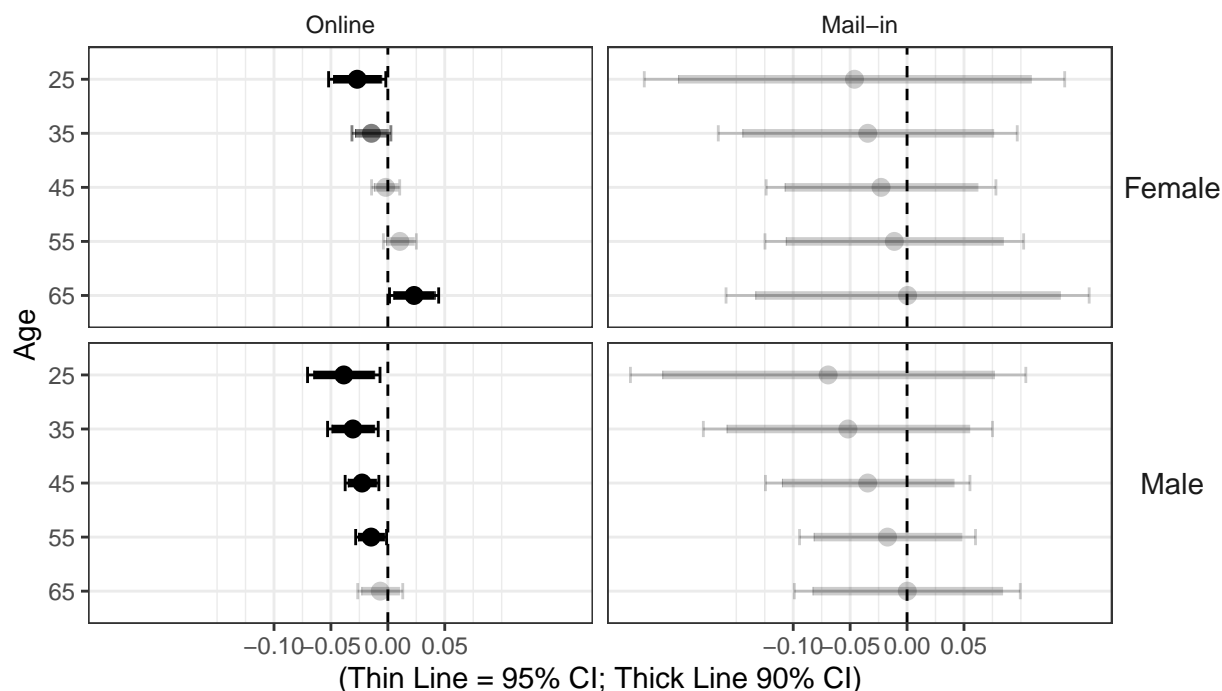
p

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```



● p<.1 ● n.s. Change in residence after university ● 1 Change in residence after ur

Treatment: University education (1:attained, 0:not attained). Outcome: Agreement with granting suffrage to pe

```
ggsave(paste0(projdir, "/out/mailineffectplotx.png"), p, width=8, height=5)
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Multinomial Logit ##
```

```
extout <- function(gender, ageset, sub=1) {
```

```
  if (gender=="Male") sifcct$gender <- sifcct$female
```

```
  if (gender=="Female") sifcct$gender <- sifcct$male
```

```
  sifcct$ageset <- (sifcct$age - ageset)/10
```

```
  if (sub==1) {
```

```
    # modset <- multinom(foreignsuff3x ~ edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
```

```
    # I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
```

```
    # as.factor(wave), data=sifcct[which(sifcct$age - sifcct$lvlen<=15),],
```

```
    # Hess = TRUE)
```

```
    sifcct.mlogit.tmp <- dfidx(sifcct[which(sifcct$age - sifcct$lvlen<=15),],
```

```
    shape = "wide", choice = "foreignsuff3x")
```

```
    # levels(sifcct.mlogit.tmp$id2) <- c("Disagree", "Neither", "Agree")
```

```
    modset <- mlogit(foreignsuff3x ~ 0 | edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
```

```
    I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10) +
```

```

        as.factor(wave), data=sifcct.mlogit.tmp, reflevel="Disagree")
  subname = "Stayed"
} else {
  # modset <- multinom(foreignsuff3x ~ edu2 * gender * ageset + lvpr + as.factor(wave),
  #                    data=sifcct[which(sifcct$age - sifcct$lvlen>=23),],
  #                    Hess = TRUE)
  sifcct.mlogit.tmp <- dfidx(sifcct[which(sifcct$age - sifcct$lvlen>=23),],
                           shape = "wide", choice = "foreignsuff3x")
  # levels(sifcct.mlogit.tmp$id2) <- c("Disagree", "Neither", "Agree")
  modset <- mlogit(foreignsuff3x ~ 0 | edu2 * gender * ageset + lvpr + as.factor(wave),
                  data=sifcct.mlogit.tmp, reflevel="Disagree")
  subname = "Moved"
}

# modres <- extract(modset)

# res <- c(gender, ageset, modres@coef[grep("^Agree: edu2$", modres@coef.names)],
#          modres@coef[grep("^Agree: edu2$", modres@coef.names)] - qnorm(0.975)*modres@se[grep("^Agree:
#          modres@coef[grep("^Agree: edu2$", modres@coef.names)] + qnorm(0.975)*modres@se[grep("^Agree:
#          modres@coef[grep("^Agree: edu2$", modres@coef.names)] - qnorm(0.95)*modres@se[grep("^Agree:
#          modres@coef[grep("^Agree: edu2$", modres@coef.names)] + qnorm(0.95)*modres@se[grep("^Agree:
#          modres@se[grep("^Agree: edu2$", modres@coef.names)],
#          modres@pvalues[grep("^Agree: edu2$", modres@coef.names)],
#          subname)
res <- c(gender, ageset, coef(modset)[3],
        coefci(modset, vcov=sandwich, level = 0.95)[3,],
        coefci(modset, vcov=sandwich, level = 0.90)[3,],
        coeftest(modset, vcov=sandwich)[3,c(2,4)],
        subname)

names(res) <- c("gender", "age", "est", "lci95", "uci95", "lci90", "uci90", "se", "p", "lv")

return(res)
}

outdt0 <- rbind(extout("Female", 25, 2),
                extout("Female", 35, 2),
                extout("Female", 45, 2),
                extout("Female", 55, 2),
                extout("Female", 65, 2),
                extout("Male", 25, 2),
                extout("Male", 35, 2),
                extout("Male", 45, 2),
                extout("Male", 55, 2),
                extout("Male", 65, 2))
outdt0 <- as.data.frame(outdt0)
for(i in 2:9) outdt0[,i] <- as.numeric(outdt0[,i])
outdt0$gender <- factor(outdt0$gender, levels=unique(outdt0$gender))
summary(outdt0)

```

##	gender	age	est	lci95	uci95	lci90
##	Female:5	Min. :25	Min. :-0.243140	Min. :-0.47155	Min. :-0.021194	Min. :-0.43483
##	Male :5	1st Qu.:35	1st Qu.: -0.166098	1st Qu.: -0.31315	1st Qu.: -0.005643	1st Qu.: -0.28920

```
##           Median :45      Median :-0.073352      Median :-0.18847      Median : 0.042493      Median :-0.17057
##           Mean    :45      Mean    :-0.056795      Mean    :-0.20097      Mean    : 0.087382      Mean    :-0.17779
##           3rd Qu.:55      3rd Qu.: 0.005561      3rd Qu.: -0.10201      3rd Qu.: 0.129604      3rd Qu.: -0.08472
##           Max.    :65      Max.     : 0.195778      Max.     : 0.02856      Max.     : 0.363000      Max.     : 0.05544
##      uci90              se              p              lv
## Min.    :-0.05145      Min.     :0.04746      Min.     :0.02175      Length:10
## 1st Qu.: -0.02656      1st Qu.:0.05482      1st Qu.:0.02910      Class :character
## Median : 0.02387      Median :0.06967      Median :0.07742      Mode  :character
## Mean    : 0.06420      Mean    :0.07356      Mean    :0.25585
## 3rd Qu.: 0.10943      3rd Qu.:0.08443      3rd Qu.:0.21760
## Max.    : 0.33611      Max.     :0.11653      Max.     :0.96055
```

```
extout <- function(gender,ageset,sub=1) {

  if (gender=="Male") mail$gender <- mail$female
  if (gender=="Female") mail$gender <- mail$male
  mail$ageset <- (mail$age - ageset)/10

  if (sub==1) {
    # modset <- multinom(foreignsuff3x ~ edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
    #                   I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10),
    #                   data=mail[which(mail$age - mail$lvlen<=15),],
    #                   Hess = TRUE)
    mail.mlogit.tmp <- dfidx(mail[which(mail$age - mail$lvlen<=15),],
                           shape = "wide", choice = "foreignsuff3x")
    # levels(mail.mlogit.tmp$id2) <- c("Disagree", "Neither", "Agree")
    modset <- mlogit(foreignsuff3x ~ 0 | edu2 * gender * ageset + lvpr + zip_did + sqrt(c10_sreg_fper) +
                    I(c10_sreg_edu_ugsP/10) + didper + sqrt(c10_mun_fper) + I(c10_mun_edu_ugsP/10),
                    data=mail.mlogit.tmp, reflevel="Disagree")
    subname = "Stayed"
  } else {
    # modset <- multinom(foreignsuff3x ~ edu2 * gender * ageset + lvpr,
    #                   data=mail[which(mail$age - mail$lvlen>=23),],
    #                   Hess = TRUE)
    mail.mlogit.tmp <- dfidx(mail[which(mail$age - mail$lvlen>=23),],
                           shape = "wide", choice = "foreignsuff3x")
    # levels(mail.mlogit.tmp$id2) <- c("Disagree", "Neither", "Agree")
    modset <- mlogit(foreignsuff3x ~ 0 | edu2 * gender * ageset + lvpr,
                    data=mail.mlogit.tmp, reflevel="Disagree")
    subname = "Moved"
  }

  # modres <- extract(modset)

  # res <- c(gender,ageset,modres@coef[grep("^Agree: edu2$",modres@coef.names)],
  #         modres@coef[grep("^Agree: edu2$",modres@coef.names)] - qnorm(0.975)*modres@se[grep("^Agree:
  #         modres@coef[grep("^Agree: edu2$",modres@coef.names)] + qnorm(0.975)*modres@se[grep("^Agree:
  #         modres@coef[grep("^Agree: edu2$",modres@coef.names)] - qnorm(0.95)*modres@se[grep("^Agree:
  #         modres@coef[grep("^Agree: edu2$",modres@coef.names)] + qnorm(0.95)*modres@se[grep("^Agree:
  #         modres@se[grep("^Agree: edu2$",modres@coef.names)],
  #         modres@pvalues[grep("^Agree: edu2$",modres@coef.names)],
  #         subname)
  res <- c(gender,ageset,coef(modset)[3],
          coefci(modset, vcov=sandwich, level = 0.95)[3,],
```

```

coefci(modset, vcov=sandwich, level = 0.90)[3,],
coeftest(modset, vcov=sandwich)[3,c(2,4)],
subname)

names(res) <- c("gender", "age", "est", "lci95", "uci95", "lci90", "uci90", "se", "p", "lv")

return(res)
}

```

```

outdtm <- rbind(extout("Female",25,2),
  extout("Female",35,2),
  extout("Female",45,2),
  extout("Female",55,2),
  extout("Female",65,2),
  extout("Male",25,2),
  extout("Male",35,2),
  extout("Male",45,2),
  extout("Male",55,2),
  extout("Male",65,2))
outdtm <- as.data.frame(outdtm)
for(i in 2:9) outdtm[,i] <- as.numeric(outdtm[,i])
outdtm$gender <- factor(outdtm$gender, levels=unique(outdtm$gender))
summary(outdtm)

```

```

##      gender      age      est      lci95      uci95      lci90      uci90
## Female:5  Min.   :25  Min.   :-0.5361  Min.   :-1.6288  Min.   :0.4162  Min.   :-1.4527  Min.
## Male   :5  1st Qu.:35  1st Qu.: -0.2346  1st Qu.: -1.1317  1st Qu.:0.4844  1st Qu.: -0.9994  1st Q
##        Median :45  Median : -0.1611  Median : -0.8692  Median :0.5341  Median : -0.7501  Medi
##        Mean   :45  Mean   : -0.1611  Mean   : -0.9312  Mean   :0.6090  Mean   : -0.8071  Mean
##        3rd Qu.:55  3rd Qu.: -0.1011  3rd Qu.: -0.7336  3rd Qu.:0.7215  3rd Qu.: -0.6393  3rd Q
##        Max.   :65  Max.   : 0.2274  Max.   : -0.3632  Max.   :0.9438  Max.   : -0.2681  Max.
##
##      se      p      lv
## Min.   :0.2420  Min.   :0.3358  Length:10
## 1st Qu.:0.3059  1st Qu.:0.4864  Class :character
## Median :0.3698  Median :0.6264  Mode  :character
## Mean   :0.3922  Mean   :0.6117
## 3rd Qu.:0.4382  3rd Qu.:0.6866
## Max.   :0.6051  Max.   :0.8801

```

```

outdt0$data <- "Online"
outdtm$data <- "Mail-in"

visdt <- rbind(outdt0, outdtm)
visdt$data <- factor(visdt$data, levels=c("Online", "Mail-in"))

visdt$ppstar <- factor(ifelse(visdt$p>=.1, "n.s.", ifelse(visdt$p>=.05, "p<.1", "p<.05")),
  levels = c("p<.05", "p<.1", "n.s."))

saveRDS(subset(visdt, data=="Mail-in"), paste0(projdir, "/out/visdtx_mail_multinom.rds"))

require(ggplot2)
p <- ggplot(visdt, aes(x=factor(age, levels=rev(names(table(age))))), y=est)) +
  geom_hline(aes(yintercept=0), linetype=2) +

```

```

geom_errorbar(aes(ymin=lci95,ymax=uci95,colour="1",alpha=pstar),
              position=position_dodge(width=-0.7), size=0.5, width=0.3) +
geom_errorbar(aes(ymin=lci90,ymax=uci90,colour="1",alpha=pstar),
              position=position_dodge(width=-0.7), size=1.5, width=0.0) +
geom_point(aes(shape=lv, colour="1",alpha=pstar),
           position=position_dodge(width=-0.7), size=3) +
facet_grid(gender ~ data) +
#scale_y_continuous(breaks = c(-0.1,-0.05,0.00,0.05)) +
scale_shape_discrete(name="Change in residece after university") +
scale_color_manual(name="Change in residece after university",values=rep("black", 1)) +
scale_alpha_manual(name="Significance",values=c(1,0.5,0.2)) +
ylab("(Thin Line = 95% CI; Thick Line 90% CI)") +
xlab("Age") +
labs(caption="Treatment: University education (1:attained, 0:not attained). Outcome: Agreement with g
coord_flip() + theme_bw() +
theme(legend.position = "bottom",
      strip.text.x = element_text(size=9),
      strip.text.y = element_text(angle=0,size=11),
      strip.background = element_rect(fill=NA,color=NA),
      plot.caption = element_text(hjust=0),
      plot.subtitle = element_text(hjust=0.5))

```

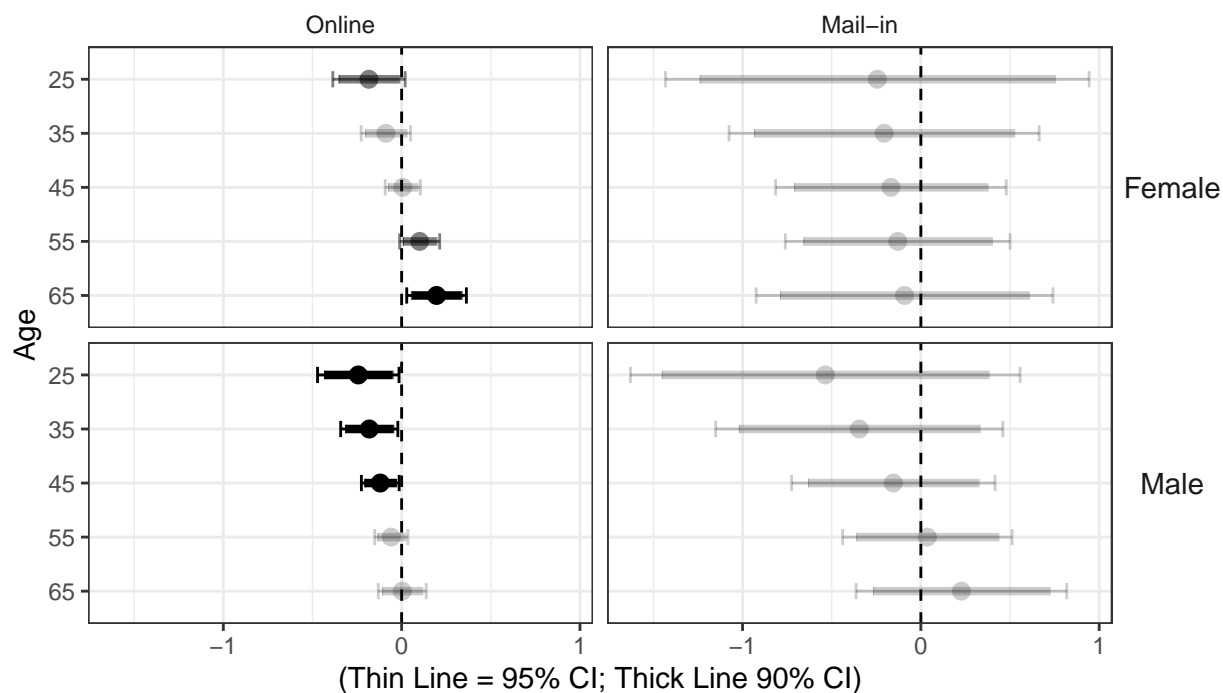
p

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

● p < .1 ○ n.s. Change in residence after university 1 Change in residence after ur

Treatment: University education (1:attained, 0:not attained). Outcome: Agreement with granting suffrage to pe

```
ggsave(paste0(projdir, "/out/mailineffectplotx_multinom.png"), p, width=8, height=5)
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

```
## Warning: position_dodge requires non-overlapping x intervals
```

Save Image

```
save.image(file=paste0(projdir, "/out/heavy/analysis_1x_original_mail_v5.RData"))
```