Supporting material S3
Code used for the analyses

R code for time analyses

```
# working directory
setwd("/Users/naubertbonn/RDirectorySurvey")
getwd()

#install.packages("dplyr")
library("dplyr")


#Import data
#install.packages("readxl")
library(readxl)
TimeDetailsall <- read_excel("timedetails.xlsx")

#Keep only full time respondents
TimeDetails <- TimeDetailsall[ which(TimeDetailsall$FullTime=='Yes'), ]


#First I compute the log of all, just to be able to compare the answers of
 those working full time to those working part time
#TimeDetailsall$LogTeachingall <- log10(TimeDetailsall$Teaching+0.5)
#TimeDetailsall$LogResearchall <- log10(TimeDetailsall$Research+0.5)
#TimeDetailsall$LogServicesall <- log10(TimeDetailsall$Services+0.5)
#TimeDetailsall$LogSupervisionall <- log10(TimeDetailsall$Supervision+0.5)
#TimeDetailsall$LogResearchWorkall <- log10(TimeDetailsall$ResearchWork+0.5)
#TimeDetailsall$LogUpToDateall <- log10(TimeDetailsall$UpToDate+0.5)
#TimeDetailsall$LogWritingall <- log10(TimeDetailsall$Writing+0.5)
#TimeDetailsall$LogReviewingall <- log10(TimeDetailsall$Reviewing+0.5)
#TimeDetailsall$LogGrantWritingall <- log10(TimeDetailsall$GrantWriting+0.5)
#TimeDetailsall$LogOtherall <- log10(TimeDetailsall$Other+0.5)
#For each I test whether the groups are different
#TTTeachingall <- t.test(LogTeachingall ~ FullTime, data = TimeDetailsall,
 paired = FALSE)
#TTResearchall <- t.test(LogResearchall ~ FullTime, data = TimeDetailsall,
 paired = FALSE)
#TTServicesall <- t.test(LogServicesall ~ FullTime, data = TimeDetailsall,
 paired = FALSE)
#TTSupervisionall <- t.test(LogSupervisionall ~ FullTime, data =
 TimeDetailsall, paired = FALSE)
#TTResearchWorkall <- t.test(LogResearchWorkall ~ FullTime, data =
 TimeDetailsall, paired = FALSE)
#TTUpToDateall <- t.test(LogUpToDateall ~ FullTime, data = TimeDetailsall,
 paired = FALSE)
#TTWritingall <- t.test(LogWritingall ~ FullTime, data = TimeDetailsall,
 paired = FALSE)
#TTReviewingall <- t.test(LogReviewingall ~ FullTime, data = TimeDetailsall,
 paired = FALSE)
#TTGrantWritingall <- t.test(LogGrantWritingall ~ FullTime, data =
 TimeDetailsall, paired = FALSE)
#TTOtherall <- t.test(LogOtherall ~ FullTime, data = TimeDetailsall, paired =
 FALSE)
```

```
#TTTeachingall
#TTResearchall
#TTServicesall
#TTSupervisionall
#TTResearchWorkall
#TTUpToDateall
#TTWritingall
#TTReviewingall
#TTGrantWritingall
#TTOtherall
# RESULTS ---> I found that 'Research', 'Other' / 'Hands-on Research work'and
 'Other' differed between full time and part time respondents. As a result, I
 chose to keep only full time respondents for the next analyses...

#Test normality
#a) compute the difference between reality and ideal
DiffTeaching <- with(TimeDetails,
                     Teaching[group == "Reality"] - Teaching[group ==
 "Ideal"])
DiffResearch <- with(TimeDetails,
                     Research[group == "Reality"] - Research[group ==
 "Ideal"])
DiffServices <- with(TimeDetails,
                     Services[group == "Reality"] - Services[group ==
 "Ideal"])
DiffSupervision <- with(TimeDetails,
                        Supervision[group == "Reality"] - Supervision[group
 == "Ideal"])
DiffResearchWork <- with(TimeDetails,
                         ResearchWork[group == "Reality"] -
 ResearchWork[group == "Ideal"])
DiffUpToDate <- with(TimeDetails,
                     UpToDate[group == "Reality"] - UpToDate[group ==
 "Ideal"])
DiffWriting <- with(TimeDetails,
                    Writing[group == "Reality"] - Writing[group == "Ideal"])
DiffReviewing <- with(TimeDetails,
                      Reviewing[group == "Reality"] - Reviewing[group ==
 "Ideal"])
DiffGrantWriting <- with(TimeDetails,
                         GrantWriting[group == "Reality"] -
 GrantWriting[group == "Ideal"])
DiffOther <- with(TimeDetails,
                  Other[group == "Reality"] - Other[group == "Ideal"])


# Shapiro-Wilk normality test for the differences
shapiro.test(DiffTeaching)
shapiro.test(DiffResearch)
shapiro.test(DiffServices)
shapiro.test(DiffSupervision)
shapiro.test(DiffResearchWork)
shapiro.test(DiffUpToDate)
shapiro.test(DiffWriting)
shapiro.test(DiffGrantWriting)
shapiro.test(DiffTeaching)
shapiro.test(DiffOther)
```

```
# RESULT ---> Most are NOT normally distributed, so I transform them to Logs,
 adding 0.5% to avoid zero values

TimeDetails$LogTeaching <- log10(TimeDetails$Teaching+0.5)
TimeDetails$LogResearch <- log10(TimeDetails$Research+0.5)
TimeDetails$LogServices <- log10(TimeDetails$Services+0.5)
TimeDetails$LogSupervision <- log10(TimeDetails$Supervision+0.5)
TimeDetails$LogResearchWork <- log10(TimeDetails$ResearchWork+0.5)
TimeDetails$LogUpToDate <- log10(TimeDetails$UpToDate+0.5)
TimeDetails$LogWriting <- log10(TimeDetails$Writing+0.5)
TimeDetails$LogReviewing <- log10(TimeDetails$Reviewing+0.5)
TimeDetails$LogGrantWriting <- log10(TimeDetails$GrantWriting+0.5)
TimeDetails$LogOther <- log10(TimeDetails$Other+0.5)

# Then I compute the Paired t-test

TTTeaching <- t.test(LogTeaching ~ group, data = TimeDetails, paired = TRUE)
TTResearch <- t.test(LogResearch ~ group, data = TimeDetails, paired = TRUE)
TTServices <- t.test(LogServices ~ group, data = TimeDetails, paired = TRUE)
TTSupervision <- t.test(LogSupervision ~ group, data = TimeDetails, paired =
 TRUE)
TTResearchWork <- t.test(LogResearchWork ~ group, data = TimeDetails, paired
 = TRUE)
TTUpToDate <- t.test(LogUpToDate ~ group, data = TimeDetails, paired = TRUE)
TTWriting <- t.test(LogWriting ~ group, data = TimeDetails, paired = TRUE)
TTReviewing <- t.test(LogReviewing ~ group, data = TimeDetails, paired =
 TRUE)
TTGrantWriting <- t.test(LogGrantWriting ~ group, data = TimeDetails, paired
 = TRUE)
TTOther <- t.test(LogOther ~ group, data = TimeDetails, paired = TRUE)


#And one by one I display first the result of the T Test, and then the means
 attached to it

#Display the T Test Result
TTTeaching
#And I add the following to be able to view the means and SD
library("dplyr")
group_by(TimeDetails, group) %>%
  summarise(
    count = n(),
    mean = mean(Teaching, na.rm = TRUE),
    sd = sd(Teaching, na.rm = TRUE)
  )

#Display the T Test Result
TTResearch
#And I add the following to be able to view the means and SD
library("dplyr")
group_by(TimeDetails, group) %>%
  summarise(
    count = n(),
    mean = mean(Research, na.rm = TRUE),
    sd = sd(Research, na.rm = TRUE)
  )

#Display the T Test Result
```

```
TTServices
#And I add the following to be able to view the means and SD
library("dplyr")
group_by(TimeDetails, group) %>%
  summarise(
    count = n(),
    mean = mean(Services, na.rm = TRUE),
    sd = sd(Services, na.rm = TRUE)
  )

#Display the T Test Result
TTSupervision
#And I add the following to be able to view the means and SD
library("dplyr")
group_by(TimeDetails, group) %>%
  summarise(
    count = n(),
    mean = mean(Supervision, na.rm = TRUE),
    sd = sd(Supervision, na.rm = TRUE)
  )

#Display the T Test Result
TTResearchWork
#And I add the following to be able to view the means and SD
library("dplyr")
group_by(TimeDetails, group) %>%
  summarise(
    count = n(),
    mean = mean(ResearchWork, na.rm = TRUE),
    sd = sd(ResearchWork, na.rm = TRUE)
  )

#Display the T Test Result
TTUpToDate
#And I add the following to be able to view the means and SD
library("dplyr")
group_by(TimeDetails, group) %>%
  summarise(
    count = n(),
    mean = mean(UpToDate, na.rm = TRUE),
    sd = sd(UpToDate, na.rm = TRUE)
  )

#Display the T Test Result
TTWriting
#And I add the following to be able to view the means and SD
library("dplyr")
group_by(TimeDetails, group) %>%
  summarise(
    count = n(),
    mean = mean(Writing, na.rm = TRUE),
    sd = sd(Writing, na.rm = TRUE)
  )

#Display the T Test Result
TTReviewing
#And I add the following to be able to view the means and SD
library("dplyr")
```

```
group_by(TimeDetails, group) %>%
  summarise(
    count = n(),
    mean = mean(Reviewing, na.rm = TRUE),
    sd = sd(Reviewing, na.rm = TRUE)
  )

#Display the T Test Result
TTGrantWriting
#And I add the following to be able to view the means and SD
library("dplyr")
group_by(TimeDetails, group) %>%
  summarise(
    count = n(),
    mean = mean(GrantWriting, na.rm = TRUE),
    sd = sd(GrantWriting, na.rm = TRUE)
  )

#Display the T Test Result
TTOther
#And I add the following to be able to view the means and SD
library("dplyr")
group_by(TimeDetails, group) %>%
  summarise(
    count = n(),
    mean = mean(Other, na.rm = TRUE),
    sd = sd(Other, na.rm = TRUE)
  )
```

SPSS codes for dimension analyses

```
GLM S1Career S1Science S1Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S2Career S2Science S2Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S3Career S3Science S3Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S4Career S4Science S4Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S5Career S5Science S5Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S6Career S6Science S6Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.
```

```
GLM S7Career S7Science S7Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S8Career S8Science S8Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S9Career S9Science S9Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S10Career S10Science S10Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S11Career S11Science S11Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S12Career S12Science S12Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S13Career S13Science S13Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
```

```
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S14Career S14Science S14Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S15Career S15Science S15Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S16Career S16Science S16Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S17Career S17Science S17Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.

GLM S18Career S18Science S18Satisfaction
  /WSFACTOR=Dimension 3 Polynomial
  /MEASURE=importance
  /METHOD=SSTYPE(3)
  /EMMEANS=TABLES(Dimension) COMPARE ADJ(LSD)
  /PRINT=DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Dimension.


GET DATA
  /TYPE=XLSX
  /FILE='/Volumes/…/Survey/Data/SPSS/QuestionsStatements.xlsx'
  /SHEET=name 'Responses Statements'
  /CELLRANGE=FULL
  /READNAMES=ON
  /DATATYPEMIN PERCENTAGE=95.0
```

```
  /HIDDEN IGNORE=YES.
EXECUTE.
DATASET NAME DataSet5 WINDOW=FRONT.
DATASET CLOSE DataSet4.
DESCRIPTIVES VARIABLES=S1Career S1Science S1Satisfaction S2Career S2Science
S2Satisfaction S3Career
    S3Science S3Satisfaction S4Career S4Science S4Satisfaction S5Career
S5Science S5Satisfaction
    S6Career S6Science S6Satisfaction S7Career S7Science S7Satisfaction
S8Career S8Science
    S8Satisfaction S9Career S9Science S9Satisfaction S10Career S10Science
S10Satisfaction S11Career
    S11Science S11Satisfaction S12Career S12Science S12Satisfaction S13Career
S13Science
    S13Satisfaction S14Career S14Science S14Satisfaction S15Career S15Science
S15Satisfaction S16Career
    S16Science S16Satisfaction S17Career S17Science S17Satisfaction S18Career
S18Science S18Satisfaction
  /STATISTICS=MEAN STDDEV MIN MAX.
```