2022

An Investigation into whether psychopathic traits negatively contribute to moral judgements

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Esser, M. (2022) 'An Investigation into whether psychopathic traits negatively contribute to moral judgements', The Plymouth Student Scientist, 15(2), pp. 547-562.
http://hdl.handle.net/10026.1/20106

Appendices

Appendix A. URL link to data set
This item was original stored on a MS OneDrive (link has been removed).

Appendix B. R Studio Analysis Script

```
# Generic Qualtrics Data Import library(tidyverse) library(lubridate)
library(psych)

# change the string to the name of your data file
datafile <- 'Psychopathy and Morality_February 3, 2022_03.42.csv'

# first row of the file has variable names, second has item text, and third has junk. Data starts on row 4

# so first read the first row into a vector containing the variable names col_names <-
names(read_csv(datafile, n_max = 0))

# then read the item text from second row
items<- names(read_csv(datafile,skip=1, n_max=0))

# and name these with the variable names names(items)<-col_names

colclasses<-c("POSIXct", "POSIXct", "chr","chr", "num", "num", "logi", "POSIXct", "chr",
rep("logi",4), "num", "num", rep("chr",4), "Date", rep("chr", 89))

# and then read in everything else skipping rows 1 to 3 survey<-read_csv(datafile, col_names
= col_names, skip = 3,

col_types = cols (.default = "c"))

#changing DOB to age
survey$DOB <-dmy(survey$DOB)
survey$StartDate <-as.Date(ymd_hms(survey$StartDate)) survey$age <-
as.numeric((survey$StartDate - survey$DOB)/365)

#remove pilot data
survey<-survey %>% filter(StartDate> dmy("01/01/2022"))

mean(survey.recode$age) #Mapping variables

mapping.list1 <- c("False" = 0, "Somewhat false" = 1, "Somewhat true" = 2, "True" = 3)
mapping.list2 <- c("Not at all relevant" = 0, "Not very relevant" = 1, "Slightly relevant" = 2,
"Somewhat relevant" = 3, "Very relevant" = 4, "Extremely relevant" = 5)
mapping.list3 <- c("Strongly disagree" = 0, "Moderately disagree" = 1, "Slightly disagree" =
2, "Slightly agree" = 3, "Moderately agree" = 4, "Strongly agree" = 5)
```

```
mapping.list1r <- c("False" = 3, "Somewhat false" = 2, "Somewhat true" = 1, "True" = 0)
mapping.list2r <- c("Not at all relevant" = 5, "Not very relevant" = 4, "Slightly relevant" = 3,
"Somewhat relevant" = 2, "Very relevant" = 1, "Extremely relevant" = 0)
mapping.list3r <- c("Strongly disagree" = 5, "Moderately disagree" = 4, "Slightly disagree" =
3, "Slightly agree" = 2, "Moderately agree" = 1, "Strongly agree" = 0)

#Recoding Variables survey.recode <- survey %>%

mutate(
TriPM1_1 = recode(TriPM1_1, !!!mapping.list1), TriPM1_2 = recode(TriPM1_2,
!!!mapping.list1r), TriPM1_3 = recode(TriPM1_3, !!!mapping.list1), TriPM1_4 =
recode(TriPM1_4, !!!mapping.list1r), TriPM1_5 = recode(TriPM1_5, !!!mapping.list1),
TriPM1_6 = recode(TriPM1_6, !!!mapping.list1), TriPM1_7 = recode(TriPM1_7,
!!!mapping.list1), TriPM1_8 = recode(TriPM1_8, !!!mapping.list1), TriPM2_1 =
recode(TriPM2_1, !!!mapping.list1), TriPM2_2 = recode(TriPM2_2, !!!mapping.list1r),
TriPM2_3 = recode(TriPM2_3, !!!mapping.list1r), TriPM2_4 = recode(TriPM2_4,
!!!mapping.list1), TriPM2_5 = recode(TriPM2_5, !!!mapping.list1), TriPM2_6 =
recode(TriPM2_6, !!!mapping.list1), TriPM2_7 = recode(TriPM2_7, !!!mapping.list1),
TriPM2_8 = recode(TriPM2_8, !!!mapping.list1r), TriPM3_1 = recode(TriPM3_1,
!!!mapping.list1), TriPM3_2 = recode(TriPM3_2, !!!mapping.list1), TriPM3_3 =
recode(TriPM3_3, !!!mapping.list1), TriPM3_4 = recode(TriPM3_4, !!!mapping.list1),
TriPM3_5 = recode(TriPM3_5, !!!mapping.list1r), TriPM3_6 = recode(TriPM3_6,
!!!mapping.list1), TriPM3_7 = recode(TriPM3_7, !!!mapping.list1), TriPM3_8 =
recode(TriPM3_8, !!!mapping.list1), TriPM4_1 = recode(TriPM4_1, !!!mapping.list1r),
TriPM4_2 = recode(TriPM4_2, !!!mapping.list1), TriPM4_3 = recode(TriPM4_3,
!!!mapping.list1), TriPM4_4 = recode(TriPM4_4, !!!mapping.list1), TriPM4_5 =
recode(TriPM4_5, !!!mapping.list1), TriPM4_6 = recode(TriPM4_6, !!!mapping.list1r),
TriPM4_7 = recode(TriPM4_7, !!!mapping.list1), TriPM4_8 = recode(TriPM4_8,
!!!mapping.list1), TriPM5_1 = recode(TriPM5_1, !!!mapping.list1r), TriPM5_2 =
recode(TriPM5_2, !!!mapping.list1), TriPM5_3 = recode(TriPM5_3, !!!mapping.list1r),

TriPM5_4 = recode(TriPM5_4, !!!mapping.list1), TriPM5_5 = recode(TriPM5_5,
!!!mapping.list1), TriPM5_6 = recode(TriPM5_6, !!!mapping.list1), TriPM5_7 =
recode(TriPM5_7, !!!mapping.list1r), TriPM5_8 = recode(TriPM5_8, !!!mapping.list1),
TriPM6_1 = recode(TriPM6_1, !!!mapping.list1r), TriPM6_2 = recode(TriPM6_2,
!!!mapping.list1), TriPM6_3 = recode(TriPM6_3, !!!mapping.list1), TriPM6_4 =
recode(TriPM6_4, !!!mapping.list1r), TriPM6_5 = recode(TriPM6_5, !!!mapping.list1),
TriPM6_6 = recode(TriPM6_6, !!!mapping.list1), TriPM6_7 = recode(TriPM6_7,
!!!mapping.list1r), TriPM6_8 = recode(TriPM6_8, !!!mapping.list1), TriPM7_1 =
recode(TriPM7_1, !!!mapping.list1), TriPM7_2 = recode(TriPM7_2, !!!mapping.list1r),
TriPM7_3 = recode(TriPM7_3, !!!mapping.list1), TriPM7_4 = recode(TriPM7_4,
!!!mapping.list1r), TriPM7_5 = recode(TriPM7_5, !!!mapping.list1), TriPM7_6 =
recode(TriPM7_6, !!!mapping.list1), TriPM7_7 = recode(TriPM7_7, !!!mapping.list1),
TriPM7_8 = recode(TriPM7_8, !!!mapping.list1r), MFQ1_1 = recode(MFQ1_1,
!!!mapping.list2), MFQ1_2 = recode(MFQ1_2, !!!mapping.list2), MFQ1_3 =
recode(MFQ1_3, !!!mapping.list2), MFQ1_4 = recode(MFQ1_4, !!!mapping.list2), MFQ1_5
= recode(MFQ1_5, !!!mapping.list2), MFQ1_6 = recode(MFQ1_6, !!!mapping.list2),
MFQ1_7 = recode(MFQ1_7, !!!mapping.list2), MFQ1_8 = recode(MFQ1_8,
!!!mapping.list2), MFQ2_1 = recode(MFQ2_1, !!!mapping.list2), MFQ2_2 =
recode(MFQ2_2, !!!mapping.list2), MFQ2_3 = recode(MFQ2_3, !!!mapping.list2), MFQ2_4
```

```
= recode(MFQ2_4, !!!mapping.list2), MFQ2_5 = recode(MFQ2_5, !!!mapping.list2),
MFQ2_6 = recode(MFQ2_6, !!!mapping.list2), MFQ2_7 = recode(MFQ2_7,
!!!mapping.list2), MFQ2_8 = recode(MFQ2_8, !!!mapping.list2), MFQ3_1 =
recode(MFQ3_1, !!!mapping.list3), MFQ3_2 = recode(MFQ3_2, !!!mapping.list3), MFQ3_3
= recode(MFQ3_3, !!!mapping.list3), MFQ3_4 = recode(MFQ3_4, !!!mapping.list3),
MFQ3_5 = recode(MFQ3_5, !!!mapping.list3), MFQ3_6 = recode(MFQ3_6,
!!!mapping.list3), MFQ3_7 = recode(MFQ3_7, !!!mapping.list3), MFQ3_8 =
recode(MFQ3_8, !!!mapping.list3), MFQ4_1 = recode(MFQ4_1, !!!mapping.list3), MFQ4_2
= recode(MFQ4_2, !!!mapping.list3), MFQ4_3 = recode(MFQ4_3, !!!mapping.list3),
MFQ4_4 = recode(MFQ4_4, !!!mapping.list3), MFQ4_5 = recode(MFQ4_5,
!!!mapping.list3),

MFQ4_6 = recode(MFQ4_6, !!!mapping.list3), MFQ4_7 = recode(MFQ4_7,
!!!mapping.list3), MFQ4_8 = recode(MFQ4_8, !!!mapping.list3))

#Selecting columns TriPM Boldness TriPM.boldness <- survey.recode %>%

select (id, TriPM1_1, TriPM1_4, TriPM1_7, TriPM2_2, TriPM2_5, TriPM2_8,
TriPM3_3,TriPM3_6, TriPM4_1, TriPM4_4, TriPM4_8,

TriPM5_3, TriPM5_6, TriPM6_1, TriPM6_4, TriPM6_7, TriPM7_2, TriPM7_5, TriPM7_8)
%>%

pivot_longer(TriPM1_1:TriPM7_8) %>% group_by(id) %>%
summarise(boldness=mean(value, na.rm=T))

#Selecting columns TriPM Meanness TriPM.meanness <- survey.recode %>%

select (id, TriPM1_2, TriPM1_6, TriPM1_8, TriPM2_3, TriPM2_6, TriPM3_1, TriPM3_4,
TriPM3_7, TriPM4_2, TriPM4_5, TriPM5_1,

TriPM5_4, TriPM5_7, TriPM5_8, TriPM6_2, TriPM6_5, TriPM6_8, TriPM7_4, TriPM7_6)
%>%

pivot_longer(TriPM1_2:TriPM7_6) %>% group_by(id) %>%
summarise(meanness=mean(value, na.rm=T))

#Selecting columns TriPM Disinhibition TriPM.disinhibition <- survey.recode %>%

select (id, TriPM1_3, TriPM1_5, TriPM2_1, TriPM2_4, TriPM2_7, TriPM3_2, TriPM3_5,
TriPM3_8, TriPM4_3, TriPM4_6, TriPM4_7,

TriPM5_2, TriPM5_5, TriPM6_3, TriPM6_6, TriPM7_1, TriPM7_3, TriPM7_7) %>%
pivot_longer(TriPM1_3:TriPM7_7) %>%
group_by(id) %>%
summarise(disinhibition=mean(value))

# Joining all TriPM columns together
TriPM <- left_join(TriPM.boldness, TriPM.meanness) TriPM <- left_join(TriPM,
TriPM.disinhibition)
```

```
#Selecting columns MFQ Harm MFQ.harm <- survey.recode %>%

select (id, MFQ1_1, MFQ1_7, MFQ2_4, MFQ3_1, MFQ3_7, MFQ4_4) %>%
pivot_longer(MFQ1_1:MFQ4_4) %>%

group_by(id) %>% summarise(harm=mean(value))

#Selecting columns MFQ Fairness MFQ.fairness <- survey.recode %>%

select (id, MFQ1_2, MFQ1_8, MFQ2_5, MFQ3_2, MFQ3_8, MFQ4_5) %>%
pivot_longer(MFQ1_2:MFQ4_5) %>%

group_by(id) %>% summarise(fairness=mean(value))

#Selecting columns MFQ Ingroup MFQ.ingroup <- survey.recode %>%

select (id, MFQ1_3, MFQ2_1, MFQ2_6, MFQ3_3, MFQ4_1, MFQ4_6) %>%
pivot_longer(MFQ1_3:MFQ4_6) %>%

group_by(id) %>% summarise(ingroup=mean(value))

#Selecting columns MFQ Authority MFQ.authority <- survey.recode %>%

select (id, MFQ1_4, MFQ2_2, MFQ2_7, MFQ3_4, MFQ4_2, MFQ4_7) %>%
pivot_longer(MFQ1_4:MFQ4_7) %>%

group_by(id) %>% summarise(authority=mean(value))

#Selecting columns MFQ Purity MFQ.purity <- survey.recode %>%

select (id, MFQ1_5, MFQ2_3, MFQ2_8, MFQ3_5, MFQ4_3, MFQ4_8) %>%
pivot_longer(MFQ1_5:MFQ4_8) %>%

group_by(id) %>% summarise(purity=mean(value))

# Joining all MFQ columns together
MFQ1 <- left_join(MFQ.harm, MFQ.fairness, by="id")

MFQ2 <- left_join(MFQ1, MFQ.ingroup, by="id") MFQ3 <- left_join(MFQ2,
MFQ.authority, by="id") MFQ <- left_join(MFQ3, MFQ.purity, by="id")

TriPM <- TriPM %>% filter(!id==23490) %>% filter(!id==23316) MFQ <- MFQ %>%
filter(!id==23490) %>% filter(!id==23316) TriPMMFQ <- left_join(TriPM, MFQ, by="id")
#correlation matrix

pairs.panels(TriPM %>% select(-id),lm=TRUE,stars=T)

pairs.panels(MFQ %>% select(-id),lm=TRUE,stars=T) corr.test(MFQ$harm,MFQ$fairness)
```

```
corr.test(MFQ$authority,MFQ$purity) pairs.panels(TriPMMFQ %>% select(-
id),lm=TRUE,stars=T)

TriPM.total<-TriPM %>% pivot_longer(boldness:disinhibition) %>% group_by(id) %>%
summarise(TriPM=sum(value))

MFQ.total<-MFQ %>% pivot_longer(harm:purity) %>% group_by(id) %>%
summarise(MFQ=sum(value))

Totals <- left_join(MFQ.total, TriPM.total, by="id") corr.test(Totals$MFQ, Totals$TriPM)
pairs.panels(Totals %>% select(-id),lm=TRUE,stars=T)

mean(Totals$TriPM) median(Totals$TriPM) SD(Totals$TriPM)

median(TriPM$boldness) mean(TriPM$boldness) SD(TriPM$boldness)

median(TriPM$meanness) mean(TriPM$meanness) SD(TriPM$meanness)

median(TriPM$disinhibition) mean(TriPM$disinhibition) SD(TriPM$disinhibition)

mean(Totals$MFQ) median(Totals$MFQ) SD(Totals$MFQ)

median(MFQ$harm) mean(MFQ$harm) SD(MFQ$harm)

median(MFQ$fairness) mean(MFQ$fairness) SD(MFQ$fairness)

median(MFQ$ingroup) mean(MFQ$ingroup) SD(MFQ$ingroup)

median(MFQ$authority) mean(MFQ$authority) SD(MFQ$authority)

median(MFQ$purity) mean(MFQ$purity) SD(MFQ$purity)
```