Crime\_Ind\_analysis

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1. Set up: libraries, directory and dataset
2. TABLES 1 & 3: Summary Statistics

## Table 1: Locality-level  
  
ind <- unique(subset(dat, select = c('participant', 'community',   
 'female', 'age', 'married', 'hs\_degree', 'soc\_aid',  
 'ptsd\_events', 'ptsd', 'conf\_mean')))  
ind <- subset(ind, ind$community!="")  
  
ind <- ind %>%   
 mutate(age\_1839 = ifelse(age < 40, 1, 0),  
 age\_4059 = ifelse(age >=40 & age < 60, 1, 0),  
 age\_60plus = ifelse(age >= 60, 1, 0))  
tab <- ind %>%   
 group\_by(community) %>%  
 summarize(n = length(participant),  
 female = mean(female, na.rm=T),  
 age\_1839 = mean(age\_1839, na.rm=T),  
 age\_4059 = mean(age\_4059, na.rm=T),  
 age\_60plus = mean(age\_60plus, na.rm=T),  
 married = mean(married, na.rm=T),  
 hs\_degree = mean(hs\_degree, na.rm=T),  
 soc\_aid = mean(soc\_aid, na.rm=T),  
 ptsd\_events = mean(ptsd\_events, na.rm=T),  
 ptsd = mean(ptsd, na.rm=T),  
 conf\_mean = mean(as.numeric(conf\_mean), na.rm=T))  
tab <- data.frame(t(tab), stringsAsFactors = F)  
colnames(tab) <- tab[1,]  
rownames <- rownames(tab)  
tab <- sapply(tab, FUN = function(x) as.numeric(x))

## Warning in FUN(X[[i]], ...): NAs introduced by coercion  
  
## Warning in FUN(X[[i]], ...): NAs introduced by coercion  
  
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## Warning in FUN(X[[i]], ...): NAs introduced by coercion

rownames(tab) <- rownames  
xtable(tab, digits = 2)

## % latex table generated in R 4.3.1 by xtable 1.8-4 package  
## % Mon Dec 11 15:29:59 2023  
## \begin{table}[ht]  
## \centering  
## \begin{tabular}{rrrrrrr}  
## \hline  
## & C & E & H & I & M & T \\   
## \hline  
## community & & & & & & \\   
## n & 11.00 & 10.00 & 12.00 & 10.00 & 7.00 & 12.00 \\   
## female & 0.73 & 0.40 & 0.33 & 0.40 & 0.71 & 0.50 \\   
## age\\_1839 & 0.55 & 0.50 & 0.92 & 0.30 & 0.43 & 0.67 \\   
## age\\_4059 & 0.45 & 0.40 & 0.08 & 0.50 & 0.29 & 0.33 \\   
## age\\_60plus & 0.00 & 0.10 & 0.00 & 0.20 & 0.29 & 0.00 \\   
## married & 0.82 & 0.40 & 0.17 & 0.70 & 0.71 & 0.58 \\   
## hs\\_degree & 0.36 & 0.60 & 0.17 & 0.40 & 0.00 & 0.42 \\   
## soc\\_aid & 0.36 & 0.20 & 0.58 & 0.60 & 0.57 & 0.50 \\   
## ptsd\\_events & 0.55 & 0.70 & 0.42 & 0.40 & 1.00 & 0.58 \\   
## ptsd & 0.18 & 0.40 & 0.42 & 0.20 & 0.57 & 0.50 \\   
## conf\\_mean & 1.52 & 1.40 & 1.66 & 1.35 & 1.15 & 1.24 \\   
## \hline  
## \end{tabular}  
## \end{table}

t <- dat %>%  
 group\_by(participant) %>%  
 summarize(crimes = length(unique(uniq\_crime)))  
mean(t$crimes)

## [1] 8.90625

## Table 3: Crime event level  
  
se <- function(x, na.rm=T) {  
 sd(x, na.rm = na.rm)/sqrt(length(na.omit(x)))  
}  
  
tab <- dat %>%   
 select(c("word\_count", "deonto\_uc", "conseq\_uc", "dehuman\_uc", "human\_uc", "personal", "heard", 'hypothetical', 'phy\_cri', 'lethal\_pun', 'let\_phy\_pun')) %>%  
 summarize\_all(list(.mean = mean, .sd = sd, .se = se, .min = min, .max = max), na.rm=T)  
   
tab <- tab %>%  
 pivot\_longer(colnames(tab), names\_to = "variable", values\_to = "value") %>%   
 mutate(var = gsub("\_.[a-z]{2,4}$", "", variable),  
 stat = gsub("^.\*\_.", "", variable))   
  
tab <- tab %>%  
 pivot\_wider(id\_cols = var, names\_from = stat)  
rownames(tab) <- tab$var

## Warning: Setting row names on a tibble is deprecated.

tab$var = NULL; tab$se = NULL  
xtable(tab)

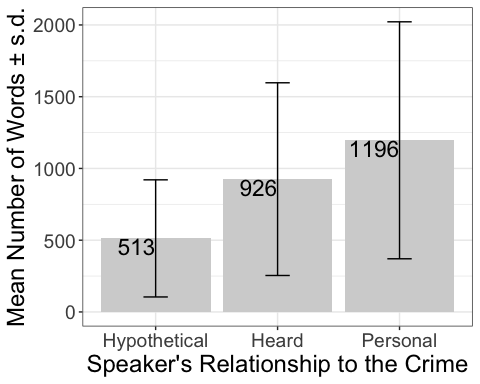
## % latex table generated in R 4.3.1 by xtable 1.8-4 package  
## % Mon Dec 11 15:29:59 2023  
## \begin{table}[ht]  
## \centering  
## \begin{tabular}{rrrrr}  
## \hline  
## & mean & sd & min & max \\   
## \hline  
## 1 & 843.54 & 687.66 & 20.00 & 4820.00 \\   
## 2 & 0.45 & 0.50 & 0.00 & 1.00 \\   
## 3 & 0.21 & 0.41 & 0.00 & 1.00 \\   
## 4 & 0.06 & 0.24 & 0.00 & 1.00 \\   
## 5 & 0.06 & 0.24 & 0.00 & 1.00 \\   
## 6 & 0.23 & 0.42 & 0.00 & 1.00 \\   
## 7 & 0.42 & 0.49 & 0.00 & 1.00 \\   
## 8 & 0.35 & 0.48 & 0.00 & 1.00 \\   
## 9 & 0.58 & 0.49 & 0.00 & 1.00 \\   
## 10 & 0.13 & 0.33 & 0.00 & 1.00 \\   
## 11 & 0.24 & 0.43 & 0.00 & 1.00 \\   
## \hline  
## \end{tabular}  
## \end{table}

1. FIGURE A1: number of words and MR codes by Speaker’s Rel to the Crime

## Relevel factor  
dat$rel\_crime <- as.factor(dat$rel\_crime)  
dat$rel\_crime <- relevel(dat$rel\_crime, ref = 'Hypothetical')  
  
## Words  
tab <- dat %>%  
 group\_by(rel\_crime) %>%  
 summarise(mean\_nw = mean(word\_count),  
 sd\_nw = sd(word\_count),  
 n\_nw = n(),  
 SE\_nw = sd(word\_count/sqrt(n())))  
  
plot <- ggplot(tab, aes(rel\_crime, mean\_nw)) +  
 geom\_col(fill = "lightgray") +  
 geom\_errorbar(aes(ymin= mean\_nw - sd\_nw, ymax = mean\_nw + sd\_nw),  
 width=0.2) +  
 labs(y = "Mean Number of Words ± s.d.", x = "Speaker's Relationship to the Crime") +  
 theme\_bw() +  
 geom\_text(aes(x=rel\_crime, y=mean\_nw, label =round(mean\_nw, digits = 0)), vjust = 1, hjust=1, size = 6) +   
 theme(text = element\_text(size = 18))   
  
pdf("../03\_Figures/n\_words\_relation.pdf")  
plot  
dev.off()

## quartz\_off\_screen   
## 2

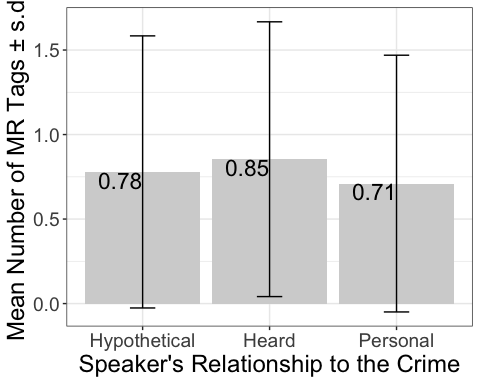
plot



## MR tags  
tab <- dat %>%  
 group\_by(rel\_crime) %>%  
 summarise(mean\_nw = mean(moral\_count\_uc),  
 sd\_nw = sd(moral\_count\_uc),  
 n\_nw = n(),  
 SE\_nw = sd(moral\_count\_uc/sqrt(n())))  
  
plot <- ggplot(tab, aes(rel\_crime, mean\_nw)) +  
 geom\_col(fill = "lightgray") +  
 geom\_errorbar(aes(ymin= mean\_nw - sd\_nw, ymax = mean\_nw + sd\_nw),  
 width=0.2) +  
 labs(y = "Mean Number of MR Tags ± s.d.", x = "Speaker's Relationship to the Crime") +  
 theme\_bw() +  
 theme(text = element\_text(size = 18)) +  
 geom\_text(aes(x=rel\_crime, y=mean\_nw, label =round(mean\_nw, digits = 2)), vjust = 1, hjust=1, size = 6)  
  
pdf("../03\_Figures/n\_mrtags\_relation.pdf")  
plot  
dev.off()

## quartz\_off\_screen   
## 2

plot

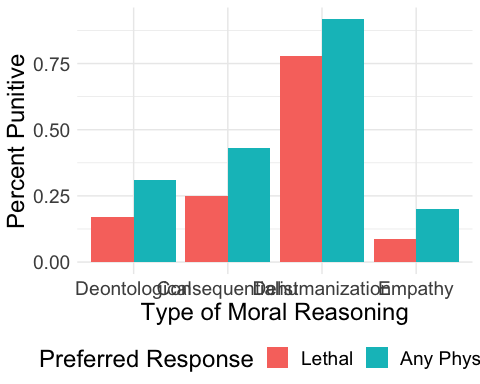


1. FIGURE 1: Relationship between type of MR and punishment prefs

t1 <- melt(dat, na.rm=T, id.vars = 'deonto\_uc',   
 measure.vars = c('lethal\_pun', 'let\_phy\_pun'))  
t1 <- dcast(t1, deonto\_uc ~ variable, mean)  
  
t2 <- melt(dat, na.rm=T, id.vars = 'conseq\_uc',   
 measure.vars = c('lethal\_pun', 'let\_phy\_pun'))  
t2 <- dcast(t2, conseq\_uc ~ variable, mean)  
  
t3 <- melt(dat, na.rm=T, id.vars = 'dehuman\_uc',   
 measure.vars = c('lethal\_pun', 'let\_phy\_pun'))  
t3 <- dcast(t3, dehuman\_uc ~ variable, mean)  
  
t4 <- melt(dat, na.rm=T, id.vars = 'human\_uc',   
 measure.vars = c('lethal\_pun', 'let\_phy\_pun'))  
t4 <- dcast(t4, human\_uc ~ variable, mean)  
  
t <- cbind.data.frame('mr' = c('deonto\_uc', 'conseq\_uc', 'dehuman\_uc', 'human\_uc'),  
 smartbind(t1[2,2:3],  
 t2[2,2:3],  
 t3[2,2:3],  
 t4[2,2:3]))  
t <- melt(t, id.vars = 'mr')  
t$mr <- factor(t$mr, levels = unique(t$mr), ordered = T)  
t$variable <- car::recode(t$variable, "'lethal\_pun'='Lethal';'let\_phy\_pun'='Any Physical'",   
 as.factor = T, levels = c("Lethal", "Any Physical"))  
  
plot <- ggplot(data = t, aes(x = mr, y = value, fill = variable)) +  
 geom\_bar(position = 'dodge', stat = 'identity') +  
 theme\_minimal() +  
 theme(legend.position = 'bottom', text = element\_text(size = 18)) +  
 scale\_x\_discrete(labels = c("Deontological", "Consequentialist", 'Dehumanization', 'Empathy'),  
 breaks = c('deonto\_uc', 'conseq\_uc', 'dehuman\_uc', 'human\_uc'),  
 name = "Type of Moral Reasoning") +  
 ylab("Percent Punitive") +  
 labs(fill = 'Preferred Response')   
  
pdf("../03\_Figures/PctLethalMR.pdf")  
plot  
dev.off()

## quartz\_off\_screen   
## 2

plot



1. FIGURE A2: Degree of variation within the individual in type of MR

t <- melt(dat, na.rm=T, id.vars = 'participant',   
 measure.vars = c('deonto\_uc', 'conseq\_uc', 'dehuman\_uc', 'human\_uc'))  
twide <- dcast(t, participant ~ variable, mean)  
t <- melt(twide)

## Using participant as id variables

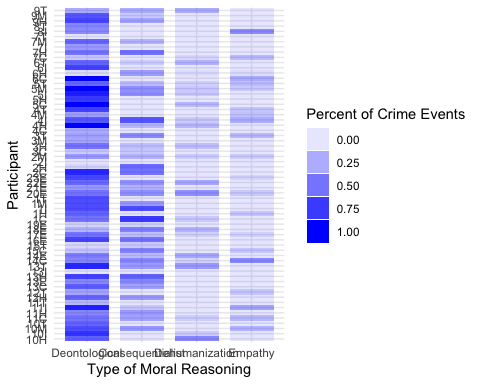
t

## participant variable value  
## 1 10H deonto\_uc 0.58333333  
## 2 10I deonto\_uc 0.77777778  
## 3 10M deonto\_uc 0.66666667  
## 4 10T deonto\_uc 0.57142857  
## 5 11C deonto\_uc 0.50000000  
## 6 11H deonto\_uc 0.41666667  
## 7 11I deonto\_uc 0.85714286  
## 8 11T deonto\_uc 0.20000000  
## 9 12H deonto\_uc 0.55555556  
## 10 12T deonto\_uc 0.28571429  
## 11 13C deonto\_uc 0.60000000  
## 12 13E deonto\_uc 0.40000000  
## 13 13H deonto\_uc 0.71428571  
## 14 13I deonto\_uc 0.00000000  
## 15 13T deonto\_uc 0.83333333  
## 16 14C deonto\_uc 0.41666667  
## 17 14E deonto\_uc 0.45454545  
## 18 15C deonto\_uc 0.14285714  
## 19 15T deonto\_uc 0.06250000  
## 20 16E deonto\_uc 0.70000000  
## 21 17E deonto\_uc 0.50000000  
## 22 18E deonto\_uc 0.22222222  
## 23 19E deonto\_uc 0.08333333  
## 24 1C deonto\_uc 0.50000000  
## 25 1H deonto\_uc 0.57142857  
## 26 1I deonto\_uc 0.66666667  
## 27 1M deonto\_uc 0.66666667  
## 28 1T deonto\_uc 0.66666667  
## 29 20E deonto\_uc 0.50000000  
## 30 21E deonto\_uc 0.33333333  
## 31 22E deonto\_uc 0.54545455  
## 32 23E deonto\_uc 0.69230769  
## 33 2C deonto\_uc 0.83333333  
## 34 2H deonto\_uc 0.06666667  
## 35 2I deonto\_uc 0.00000000  
## 36 2M deonto\_uc 0.33333333  
## 37 3C deonto\_uc 0.12500000  
## 38 3H deonto\_uc 0.50000000  
## 39 3M deonto\_uc 0.27777778  
## 40 3T deonto\_uc 0.30000000  
## 41 4C deonto\_uc 0.25000000  
## 42 4H deonto\_uc 1.00000000  
## 43 4I deonto\_uc 0.62500000  
## 44 4M deonto\_uc 0.30769231  
## 45 4T deonto\_uc 0.71428571  
## 46 5C deonto\_uc 1.00000000  
## 47 5H deonto\_uc 0.75000000  
## 48 5I deonto\_uc 0.87500000  
## 49 5M deonto\_uc 1.00000000  
## 50 5T deonto\_uc 0.54545455  
## 51 6C deonto\_uc 1.00000000  
## 52 6H deonto\_uc 0.04000000  
## 53 6I deonto\_uc 0.71428571  
## 54 6T deonto\_uc 0.55555556  
## 55 7C deonto\_uc 0.12500000  
## 56 7H deonto\_uc 0.50000000  
## 57 7I deonto\_uc 0.33333333  
## 58 7M deonto\_uc 0.55555556  
## 59 7T deonto\_uc 0.00000000  
## 60 8I deonto\_uc 0.40000000  
## 61 8T deonto\_uc 0.41666667  
## 62 9H deonto\_uc 0.70000000  
## 63 9M deonto\_uc 0.62500000  
## 64 9T deonto\_uc 0.25000000  
## 65 10H conseq\_uc 0.00000000  
## 66 10I conseq\_uc 0.00000000  
## 67 10M conseq\_uc 0.33333333  
## 68 10T conseq\_uc 0.00000000  
## 69 11C conseq\_uc 0.30000000  
## 70 11H conseq\_uc 0.33333333  
## 71 11I conseq\_uc 0.14285714  
## 72 11T conseq\_uc 0.00000000  
## 73 12H conseq\_uc 0.33333333  
## 74 12T conseq\_uc 0.00000000  
## 75 13C conseq\_uc 0.30000000  
## 76 13E conseq\_uc 0.40000000  
## 77 13H conseq\_uc 0.57142857  
## 78 13I conseq\_uc 0.00000000  
## 79 13T conseq\_uc 0.33333333  
## 80 14C conseq\_uc 0.41666667  
## 81 14E conseq\_uc 0.18181818  
## 82 15C conseq\_uc 0.42857143  
## 83 15T conseq\_uc 0.12500000  
## 84 16E conseq\_uc 0.50000000  
## 85 17E conseq\_uc 0.16666667  
## 86 18E conseq\_uc 0.44444444  
## 87 19E conseq\_uc 0.08333333  
## 88 1C conseq\_uc 0.75000000  
## 89 1H conseq\_uc 0.00000000  
## 90 1I conseq\_uc 0.66666667  
## 91 1M conseq\_uc 0.33333333  
## 92 1T conseq\_uc 0.00000000  
## 93 20E conseq\_uc 0.37500000  
## 94 21E conseq\_uc 0.22222222  
## 95 22E conseq\_uc 0.36363636  
## 96 23E conseq\_uc 0.00000000  
## 97 2C conseq\_uc 0.50000000  
## 98 2H conseq\_uc 0.53333333  
## 99 2I conseq\_uc 0.00000000  
## 100 2M conseq\_uc 0.22222222  
## 101 3C conseq\_uc 0.12500000  
## 102 3H conseq\_uc 0.16666667  
## 103 3M conseq\_uc 0.00000000  
## 104 3T conseq\_uc 0.40000000  
## 105 4C conseq\_uc 0.00000000  
## 106 4H conseq\_uc 0.20000000  
## 107 4I conseq\_uc 0.62500000  
## 108 4M conseq\_uc 0.00000000  
## 109 4T conseq\_uc 0.00000000  
## 110 5C conseq\_uc 0.00000000  
## 111 5H conseq\_uc 0.00000000  
## 112 5I conseq\_uc 0.37500000  
## 113 5M conseq\_uc 0.37500000  
## 114 5T conseq\_uc 0.18181818  
## 115 6C conseq\_uc 0.00000000  
## 116 6H conseq\_uc 0.32000000  
## 117 6I conseq\_uc 0.00000000  
## 118 6T conseq\_uc 0.11111111  
## 119 7C conseq\_uc 0.00000000  
## 120 7H conseq\_uc 0.50000000  
## 121 7I conseq\_uc 0.00000000  
## 122 7M conseq\_uc 0.22222222  
## 123 7T conseq\_uc 0.00000000  
## 124 8I conseq\_uc 0.00000000  
## 125 8T conseq\_uc 0.00000000  
## 126 9H conseq\_uc 0.30000000  
## 127 9M conseq\_uc 0.12500000  
## 128 9T conseq\_uc 0.25000000  
## 129 10H dehuman\_uc 0.41666667  
## 130 10I dehuman\_uc 0.11111111  
## 131 10M dehuman\_uc 0.00000000  
## 132 10T dehuman\_uc 0.00000000  
## 133 11C dehuman\_uc 0.10000000  
## 134 11H dehuman\_uc 0.00000000  
## 135 11I dehuman\_uc 0.00000000  
## 136 11T dehuman\_uc 0.00000000  
## 137 12H dehuman\_uc 0.00000000  
## 138 12T dehuman\_uc 0.00000000  
## 139 13C dehuman\_uc 0.00000000  
## 140 13E dehuman\_uc 0.00000000  
## 141 13H dehuman\_uc 0.00000000  
## 142 13I dehuman\_uc 0.00000000  
## 143 13T dehuman\_uc 0.33333333  
## 144 14C dehuman\_uc 0.08333333  
## 145 14E dehuman\_uc 0.27272727  
## 146 15C dehuman\_uc 0.00000000  
## 147 15T dehuman\_uc 0.00000000  
## 148 16E dehuman\_uc 0.00000000  
## 149 17E dehuman\_uc 0.08333333  
## 150 18E dehuman\_uc 0.22222222  
## 151 19E dehuman\_uc 0.00000000  
## 152 1C dehuman\_uc 0.12500000  
## 153 1H dehuman\_uc 0.00000000  
## 154 1I dehuman\_uc 0.00000000  
## 155 1M dehuman\_uc 0.00000000  
## 156 1T dehuman\_uc 0.00000000  
## 157 20E dehuman\_uc 0.37500000  
## 158 21E dehuman\_uc 0.00000000  
## 159 22E dehuman\_uc 0.27272727  
## 160 23E dehuman\_uc 0.00000000  
## 161 2C dehuman\_uc 0.00000000  
## 162 2H dehuman\_uc 0.00000000  
## 163 2I dehuman\_uc 0.00000000  
## 164 2M dehuman\_uc 0.11111111  
## 165 3C dehuman\_uc 0.00000000  
## 166 3H dehuman\_uc 0.16666667  
## 167 3M dehuman\_uc 0.00000000  
## 168 3T dehuman\_uc 0.00000000  
## 169 4C dehuman\_uc 0.00000000  
## 170 4H dehuman\_uc 0.20000000  
## 171 4I dehuman\_uc 0.12500000  
## 172 4M dehuman\_uc 0.00000000  
## 173 4T dehuman\_uc 0.00000000  
## 174 5C dehuman\_uc 0.20000000  
## 175 5H dehuman\_uc 0.00000000  
## 176 5I dehuman\_uc 0.12500000  
## 177 5M dehuman\_uc 0.12500000  
## 178 5T dehuman\_uc 0.09090909  
## 179 6C dehuman\_uc 0.00000000  
## 180 6H dehuman\_uc 0.04000000  
## 181 6I dehuman\_uc 0.00000000  
## 182 6T dehuman\_uc 0.22222222  
## 183 7C dehuman\_uc 0.06250000  
## 184 7H dehuman\_uc 0.00000000  
## 185 7I dehuman\_uc 0.00000000  
## 186 7M dehuman\_uc 0.00000000  
## 187 7T dehuman\_uc 0.00000000  
## 188 8I dehuman\_uc 0.00000000  
## 189 8T dehuman\_uc 0.00000000  
## 190 9H dehuman\_uc 0.00000000  
## 191 9M dehuman\_uc 0.00000000  
## 192 9T dehuman\_uc 0.25000000  
## 193 10H human\_uc 0.00000000  
## 194 10I human\_uc 0.00000000  
## 195 10M human\_uc 0.22222222  
## 196 10T human\_uc 0.00000000  
## 197 11C human\_uc 0.20000000  
## 198 11H human\_uc 0.00000000  
## 199 11I human\_uc 0.28571429  
## 200 11T human\_uc 0.00000000  
## 201 12H human\_uc 0.00000000  
## 202 12T human\_uc 0.14285714  
## 203 13C human\_uc 0.00000000  
## 204 13E human\_uc 0.00000000  
## 205 13H human\_uc 0.00000000  
## 206 13I human\_uc 0.00000000  
## 207 13T human\_uc 0.00000000  
## 208 14C human\_uc 0.41666667  
## 209 14E human\_uc 0.00000000  
## 210 15C human\_uc 0.14285714  
## 211 15T human\_uc 0.00000000  
## 212 16E human\_uc 0.00000000  
## 213 17E human\_uc 0.08333333  
## 214 18E human\_uc 0.00000000  
## 215 19E human\_uc 0.00000000  
## 216 1C human\_uc 0.00000000  
## 217 1H human\_uc 0.14285714  
## 218 1I human\_uc 0.00000000  
## 219 1M human\_uc 0.00000000  
## 220 1T human\_uc 0.00000000  
## 221 20E human\_uc 0.12500000  
## 222 21E human\_uc 0.00000000  
## 223 22E human\_uc 0.00000000  
## 224 23E human\_uc 0.07692308  
## 225 2C human\_uc 0.00000000  
## 226 2H human\_uc 0.00000000  
## 227 2I human\_uc 0.00000000  
## 228 2M human\_uc 0.11111111  
## 229 3C human\_uc 0.00000000  
## 230 3H human\_uc 0.00000000  
## 231 3M human\_uc 0.00000000  
## 232 3T human\_uc 0.20000000  
## 233 4C human\_uc 0.00000000  
## 234 4H human\_uc 0.00000000  
## 235 4I human\_uc 0.25000000  
## 236 4M human\_uc 0.15384615  
## 237 4T human\_uc 0.14285714  
## 238 5C human\_uc 0.00000000  
## 239 5H human\_uc 0.00000000  
## 240 5I human\_uc 0.00000000  
## 241 5M human\_uc 0.12500000  
## 242 5T human\_uc 0.18181818  
## 243 6C human\_uc 0.25000000  
## 244 6H human\_uc 0.04000000  
## 245 6I human\_uc 0.00000000  
## 246 6T human\_uc 0.00000000  
## 247 7C human\_uc 0.18750000  
## 248 7H human\_uc 0.00000000  
## 249 7I human\_uc 0.00000000  
## 250 7M human\_uc 0.00000000  
## 251 7T human\_uc 0.00000000  
## 252 8I human\_uc 0.40000000  
## 253 8T human\_uc 0.00000000  
## 254 9H human\_uc 0.00000000  
## 255 9M human\_uc 0.00000000  
## 256 9T human\_uc 0.00000000

plot <- ggplot(data = t, aes(y = participant, x = variable, alpha = value)) +  
 geom\_tile(width = 0.8, fill = 'blue') +  
 xlab('Type of Moral Reasoning') + ylab('Participant') +  
 scale\_x\_discrete(labels = c("Deontological", "Consequentialist", 'Dehumanization', 'Empathy'),  
 breaks = c('deonto\_uc', 'conseq\_uc', 'dehuman\_uc', 'human\_uc')) +  
 theme\_minimal() +  
 labs(alpha = 'Percent of Crime Events')  
  
pdf("../03\_Figures/MRParticipant.pdf")  
plot  
dev.off()

## quartz\_off\_screen   
## 2

plot



cor(twide[,c('deonto\_uc', 'conseq\_uc', 'dehuman\_uc', 'human\_uc')])

## deonto\_uc conseq\_uc dehuman\_uc human\_uc  
## deonto\_uc 1.00000000 0.130323461 0.20334316 0.071365151  
## conseq\_uc 0.13032346 1.000000000 0.12836977 -0.002040844  
## dehuman\_uc 0.20334316 0.128369771 1.00000000 -0.075720859  
## human\_uc 0.07136515 -0.002040844 -0.07572086 1.000000000

prop.table(table(twide$deonto\_uc>0 & twide$conseq\_uc>0))

##   
## FALSE TRUE   
## 0.359375 0.640625

prop.table(table(twide$dehuman\_uc>0 & twide$human\_uc>0))

##   
## FALSE TRUE   
## 0.84375 0.15625

table(twide$deonto\_uc>=quantile(twide$deonto\_uc, .75) & twide$conseq\_uc<=quantile(twide$conseq\_uc, .25))

##   
## FALSE TRUE   
## 57 7

table(twide$conseq\_uc>=quantile(twide$conseq\_uc, .75) & twide$deonto\_uc<=quantile(twide$deonto\_uc, .25))

##   
## FALSE TRUE   
## 61 3

1. TABLE A2: Analysis: multilevel logistic regression, varying intercepts. Punishment prefs on type of MR

## clean up some variables  
dat$conf\_mean <- as.numeric(dat$conf\_mean)  
dat$word\_count\_st <- (dat$word\_count - mean(dat$word\_count, na.rm=T))/sd(dat$word\_count, na.rm=T)  
dat$age\_st <- (dat$age - mean(dat$age, na.rm=T))/sd(dat$age, na.rm=T)  
dat$kids\_st <- (dat$kids - mean(dat$kids, na.rm=T))/sd(dat$kids, na.rm=T)  
  
## create ind-level means of event-level predictors  
dat <- dat %>%  
 group\_by(participant) %>%  
 mutate(deonto\_gmean = mean(deonto\_uc, na.rm=T),  
 conseq\_gmean = mean(conseq\_uc, na.rm=T),  
 human\_gmean = mean(human\_uc, na.rm=T),  
 dehuman\_gmean = mean(dehuman\_uc, na.rm=T),  
 phy\_cri\_gmean = mean(phy\_cri, na.rm=T),  
 rel\_crime\_hyp\_gmean = mean(rel\_crime=="Hypothetical", na.rm=T),  
 rel\_crime\_heard\_gmean = mean(rel\_crime=="Heard", na.rm=T),  
 rel\_crime\_pers\_gmean = mean(rel\_crime=="Personal", na.rm=T))  
  
  
## Pref for lethal punishment only  
lethal\_1 <- glmer(lethal\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 (1 | participant), data = dat, family = binomial(link = 'logit'))   
  
lethal\_2 <- glmer(lethal\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean + (1 | participant),   
 data = dat, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
lethal\_3 <- glmer(lethal\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime +   
 phy\_cri +  
 (1 | participant),   
 data = dat, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
lethal\_4 <- glmer(lethal\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime +   
 phy\_cri +   
 word\_count\_st +  
 (1 | participant),   
 data = dat, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
lethal\_5 <- glmer(lethal\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 deonto\_gmean + conseq\_gmean + human\_gmean + dehuman\_gmean +   
 phy\_cri\_gmean + rel\_crime\_hyp\_gmean + rel\_crime\_heard\_gmean +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime +   
 phy\_cri +   
 word\_count\_st +  
 (1 | participant),   
 data = dat, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
## Pref for any physical punishment  
let\_phys\_1 <- glmer(let\_phy\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +  
 (1 | participant), data = dat, family = binomial(link = 'logit'))   
  
let\_phys\_2 <- glmer(let\_phy\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean + (1 | participant),   
 data = dat, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
let\_phys\_3 <- glmer(let\_phy\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +  
 rel\_crime +   
 phy\_cri +  
 (1 | participant),   
 data = dat, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
let\_phys\_4 <- glmer(let\_phy\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime +   
 phy\_cri +  
 word\_count\_st +  
 (1 | participant),   
 data = dat, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
let\_phys\_5 <- glmer(let\_phy\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 deonto\_gmean + conseq\_gmean + human\_gmean + dehuman\_gmean +   
 phy\_cri\_gmean + rel\_crime\_hyp\_gmean + rel\_crime\_heard\_gmean +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime +   
 phy\_cri +  
 word\_count\_st +  
 (1 | participant),   
 data = dat, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))

## boundary (singular) fit: see help('isSingular')

## Put models into a latex table  
stargazer(lethal\_1, lethal\_2, lethal\_3, lethal\_4, lethal\_5,   
 no.space = T,   
 digits = 2,  
 type = 'latex',  
 omit = "\_gmean",  
 covariate.labels = c('MR: Deontological', 'MR: Consequentialist', 'MR: Dehumanization', 'MR: Empathy', 'Age', 'Female', 'Married', 'HS Degree', 'Kids', 'Social Aid', 'PTSD', 'Confidence in the State', 'Crime: Heard', 'Crime: Personal', 'Crime: Violent', 'Word Count', 'Constant'),  
 add.lines = list(c('Group Means', '', '', '', '', '\\checkmark')))

##   
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com  
## % Date and time: Mon, Dec 11, 2023 - 15:30:08  
## \begin{table}[!htbp] \centering   
## \caption{}   
## \label{}   
## \begin{tabular}{@{\extracolsep{5pt}}lccccc}   
## \\[-1.8ex]\hline   
## \hline \\[-1.8ex]   
## & \multicolumn{5}{c}{\textit{Dependent variable:}} \\   
## \cline{2-6}   
## \\[-1.8ex] & \multicolumn{5}{c}{lethal\\_pun} \\   
## \\[-1.8ex] & (1) & (2) & (3) & (4) & (5)\\   
## \hline \\[-1.8ex]   
## MR: Deontological & 0.79$^{\*\*}$ & 0.58 & 0.99$^{\*\*}$ & 1.15$^{\*\*}$ & 1.34$^{\*\*}$ \\   
## & (0.40) & (0.41) & (0.50) & (0.54) & (0.53) \\   
## MR: Consequentialist & 1.36$^{\*\*\*}$ & 1.41$^{\*\*\*}$ & 1.45$^{\*\*\*}$ & 1.54$^{\*\*\*}$ & 1.25$^{\*\*\*}$ \\   
## & (0.38) & (0.38) & (0.42) & (0.44) & (0.47) \\   
## MR: Dehumanization & 4.90$^{\*\*\*}$ & 4.91$^{\*\*\*}$ & 4.87$^{\*\*\*}$ & 4.98$^{\*\*\*}$ & 4.48$^{\*\*\*}$ \\   
## & (0.75) & (0.75) & (0.82) & (0.85) & (0.87) \\   
## MR: Empathy & $-$0.51 & $-$0.55 & $-$0.59 & $-$0.53 & $-$0.09 \\   
## & (0.82) & (0.83) & (0.89) & (0.91) & (0.93) \\   
## Age & & $-$0.23 & $-$0.12 & $-$0.06 & 0.32 \\   
## & & (0.35) & (0.39) & (0.41) & (0.39) \\   
## Female & & 0.12 & 0.12 & 0.16 & 0.42 \\   
## & & (0.54) & (0.61) & (0.63) & (0.54) \\   
## Married & & $-$0.81 & $-$0.87 & $-$0.88 & $-$0.79 \\   
## & & (0.60) & (0.67) & (0.69) & (0.59) \\   
## HS Degree & & $-$1.18$^{\*\*}$ & $-$1.47$^{\*\*}$ & $-$1.47$^{\*\*}$ & $-$1.62$^{\*\*\*}$ \\   
## & & (0.59) & (0.67) & (0.69) & (0.60) \\   
## Kids & & $-$0.25 & $-$0.25 & $-$0.28 & $-$0.48 \\   
## & & (0.41) & (0.46) & (0.48) & (0.42) \\   
## Social Aid & & $-$0.45 & $-$0.55 & $-$0.50 & 0.53 \\   
## & & (0.56) & (0.64) & (0.66) & (0.61) \\   
## PTSD & & $-$0.51 & $-$0.46 & $-$0.50 & $-$1.04$^{\*}$ \\   
## & & (0.56) & (0.62) & (0.64) & (0.62) \\   
## Confidence in the State & & $-$0.97$^{\*}$ & $-$0.89 & $-$0.89 & $-$1.91$^{\*\*\*}$ \\   
## & & (0.50) & (0.55) & (0.57) & (0.57) \\   
## Crime: Heard & & & $-$0.64 & $-$0.49 & $-$0.55 \\   
## & & & (0.41) & (0.44) & (0.45) \\   
## Crime: Personal & & & $-$2.04$^{\*\*\*}$ & $-$1.83$^{\*\*}$ & $-$1.85$^{\*\*}$ \\   
## & & & (0.76) & (0.80) & (0.78) \\   
## Crime: Violent & & & 1.91$^{\*\*\*}$ & 1.97$^{\*\*\*}$ & 1.97$^{\*\*\*}$ \\   
## & & & (0.50) & (0.51) & (0.50) \\   
## Word Count & & & & $-$0.22 & $-$0.07 \\   
## & & & & (0.26) & (0.26) \\   
## Constant & $-$4.05$^{\*\*\*}$ & $-$1.34 & $-$2.52$^{\*\*}$ & $-$2.83$^{\*\*}$ & 0.90 \\   
## & (0.54) & (1.05) & (1.29) & (1.37) & (2.07) \\   
## \hline \\[-1.8ex]   
## Group Means & & & & & \checkmark \\   
## Observations & 570 & 550 & 550 & 550 & 550 \\   
## Log Likelihood & $-$152.43 & $-$142.63 & $-$126.20 & $-$125.82 & $-$117.28 \\   
## Akaike Inf. Crit. & 316.86 & 313.26 & 286.41 & 287.65 & 284.56 \\   
## Bayesian Inf. Crit. & 342.93 & 373.60 & 359.68 & 365.22 & 392.31 \\   
## \hline   
## \hline \\[-1.8ex]   
## \textit{Note:} & \multicolumn{5}{r}{$^{\*}$p$<$0.1; $^{\*\*}$p$<$0.05; $^{\*\*\*}$p$<$0.01} \\   
## \end{tabular}   
## \end{table}

stargazer(let\_phys\_1, let\_phys\_2, let\_phys\_3, let\_phys\_4, let\_phys\_5,   
 no.space = T,   
 digits = 2,  
 type = 'latex',  
 omit = "\_gmean",  
 covariate.labels = c('MR: Deontological', 'MR: Consequentialist', 'MR: Dehumanization', 'MR: Empathy', 'Age', 'Female', 'Married', 'HS Degree', 'Kids', 'Social Aid', 'PTSD', 'Confidence in the State', 'Crime: Heard', 'Crime: Personal', 'Crime: Violent', 'Word Count', 'Constant'),  
 add.lines = list(c('Group Means', '', '', '', '', '\\checkmark')))

##   
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com  
## % Date and time: Mon, Dec 11, 2023 - 15:30:08  
## \begin{table}[!htbp] \centering   
## \caption{}   
## \label{}   
## \begin{tabular}{@{\extracolsep{5pt}}lccccc}   
## \\[-1.8ex]\hline   
## \hline \\[-1.8ex]   
## & \multicolumn{5}{c}{\textit{Dependent variable:}} \\   
## \cline{2-6}   
## \\[-1.8ex] & \multicolumn{5}{c}{let\\_phy\\_pun} \\   
## \\[-1.8ex] & (1) & (2) & (3) & (4) & (5)\\   
## \hline \\[-1.8ex]   
## MR: Deontological & 0.59$^{\*\*}$ & 0.44$^{\*}$ & 0.57$^{\*\*}$ & 0.61$^{\*\*}$ & 0.91$^{\*\*\*}$ \\   
## & (0.26) & (0.27) & (0.28) & (0.30) & (0.31) \\   
## MR: Consequentialist & 1.22$^{\*\*\*}$ & 1.21$^{\*\*\*}$ & 1.17$^{\*\*\*}$ & 1.18$^{\*\*\*}$ & 1.11$^{\*\*\*}$ \\   
## & (0.27) & (0.27) & (0.28) & (0.28) & (0.31) \\   
## MR: Dehumanization & 3.97$^{\*\*\*}$ & 3.99$^{\*\*\*}$ & 3.74$^{\*\*\*}$ & 3.75$^{\*\*\*}$ & 3.46$^{\*\*\*}$ \\   
## & (0.66) & (0.66) & (0.66) & (0.67) & (0.68) \\   
## MR: Empathy & $-$0.23 & $-$0.34 & $-$0.25 & $-$0.22 & 0.25 \\   
## & (0.52) & (0.51) & (0.53) & (0.53) & (0.56) \\   
## Age & & $-$0.30 & $-$0.23 & $-$0.22 & 0.01 \\   
## & & (0.19) & (0.21) & (0.21) & (0.20) \\   
## Female & & $-$0.40 & $-$0.44 & $-$0.43 & $-$0.04 \\   
## & & (0.30) & (0.32) & (0.32) & (0.29) \\   
## Married & & $-$0.17 & $-$0.15 & $-$0.15 & $-$0.02 \\   
## & & (0.34) & (0.36) & (0.36) & (0.32) \\   
## HS Degree & & $-$1.08$^{\*\*\*}$ & $-$1.10$^{\*\*\*}$ & $-$1.09$^{\*\*\*}$ & $-$1.41$^{\*\*\*}$ \\   
## & & (0.34) & (0.36) & (0.36) & (0.33) \\   
## Kids & & $-$0.01 & 0.01 & 0.005 & $-$0.28 \\   
## & & (0.22) & (0.23) & (0.23) & (0.22) \\   
## Social Aid & & $-$0.21 & $-$0.20 & $-$0.19 & 0.47 \\   
## & & (0.31) & (0.33) & (0.33) & (0.33) \\   
## PTSD & & $-$0.04 & 0.02 & 0.02 & $-$0.41 \\   
## & & (0.30) & (0.32) & (0.32) & (0.30) \\   
## Confidence in the State & & $-$0.62$^{\*\*}$ & $-$0.61$^{\*\*}$ & $-$0.61$^{\*\*}$ & $-$1.32$^{\*\*\*}$ \\   
## & & (0.28) & (0.29) & (0.29) & (0.30) \\   
## Crime: Heard & & & $-$0.61$^{\*\*}$ & $-$0.58$^{\*\*}$ & $-$0.62$^{\*\*}$ \\   
## & & & (0.28) & (0.29) & (0.30) \\   
## Crime: Personal & & & $-$0.82$^{\*\*}$ & $-$0.76$^{\*}$ & $-$0.78$^{\*}$ \\   
## & & & (0.36) & (0.39) & (0.40) \\   
## Crime: Violent & & & 0.53$^{\*\*}$ & 0.54$^{\*\*}$ & 0.69$^{\*\*}$ \\   
## & & & (0.26) & (0.26) & (0.27) \\   
## Word Count & & & & $-$0.07 & $-$0.06 \\   
## & & & & (0.15) & (0.15) \\   
## Constant & $-$2.20$^{\*\*\*}$ & $-$0.45 & $-$0.46 & $-$0.53 & 2.19$^{\*}$ \\   
## & (0.25) & (0.59) & (0.66) & (0.68) & (1.14) \\   
## \hline \\[-1.8ex]   
## Group Means & & & & & \checkmark \\   
## Observations & 570 & 550 & 550 & 550 & 550 \\   
## Log Likelihood & $-$255.98 & $-$241.31 & $-$234.76 & $-$234.66 & $-$220.69 \\   
## Akaike Inf. Crit. & 523.95 & 510.62 & 503.52 & 505.32 & 491.38 \\   
## Bayesian Inf. Crit. & 550.03 & 570.96 & 576.78 & 582.90 & 599.13 \\   
## \hline   
## \hline \\[-1.8ex]   
## \textit{Note:} & \multicolumn{5}{r}{$^{\*}$p$<$0.1; $^{\*\*}$p$<$0.05; $^{\*\*\*}$p$<$0.01} \\   
## \end{tabular}   
## \end{table}

## Proportion of dehumanization cases that involve pref for lethal punishment  
prop.table(table(dat$dehuman\_uc, dat$lethal\_pun==1), 1)

##   
## FALSE TRUE  
## 0 0.9176030 0.0823970  
## 1 0.2222222 0.7777778

1. Substantive interpretation: Predicted probs

ggpredict(lethal\_5, c('deonto\_uc'), type = 're')

## # Predicted probabilities of lethal\_pun  
##   
## deonto\_uc | Predicted | 95% CI  
## ------------------------------------  
## 0 | 0.03 | [0.00, 0.24]  
## 1 | 0.10 | [0.01, 0.50]  
##   
## Adjusted for:  
## \* conseq\_uc = 0.22  
## \* dehuman\_uc = 0.07  
## \* human\_uc = 0.06  
## \* deonto\_gmean = 0.46  
## \* conseq\_gmean = 0.22  
## \* human\_gmean = 0.06  
## \* dehuman\_gmean = 0.07  
## \* phy\_cri\_gmean = 0.57  
## \* rel\_crime\_hyp\_gmean = 0.35  
## \* rel\_crime\_heard\_gmean = 0.42  
## \* age\_st = 0.00  
## \* female = 0.48  
## \* married = 0.55  
## \* hs\_degree = 0.31  
## \* kids\_st = 0.00  
## \* soc\_aid = 0.49  
## \* ptsd = 0.39  
## \* conf\_mean = 1.43  
## \* rel\_crime = Hypothetical  
## \* phy\_cri = 0.57  
## \* word\_count\_st = 0.01  
## \* participant = 0 (population-level)

##   
## Intervals are prediction intervals. Use `interval = "confidence"` to  
## return regular confidence intervals.

ggpredict(lethal\_5, c('conseq\_uc'), type = 're')

## # Predicted probabilities of lethal\_pun  
##   
## conseq\_uc | Predicted | 95% CI  
## ------------------------------------  
## 0 | 0.04 | [0.00, 0.28]  
## 1 | 0.13 | [0.02, 0.57]  
##   
## Adjusted for:  
## \* deonto\_uc = 0.46  
## \* dehuman\_uc = 0.07  
## \* human\_uc = 0.06  
## \* deonto\_gmean = 0.46  
## \* conseq\_gmean = 0.22  
## \* human\_gmean = 0.06  
## \* dehuman\_gmean = 0.07  
## \* phy\_cri\_gmean = 0.57  
## \* rel\_crime\_hyp\_gmean = 0.35  
## \* rel\_crime\_heard\_gmean = 0.42  
## \* age\_st = 0.00  
## \* female = 0.48  
## \* married = 0.55  
## \* hs\_degree = 0.31  
## \* kids\_st = 0.00  
## \* soc\_aid = 0.49  
## \* ptsd = 0.39  
## \* conf\_mean = 1.43  
## \* rel\_crime = Hypothetical  
## \* phy\_cri = 0.57  
## \* word\_count\_st = 0.01  
## \* participant = 0 (population-level)

##   
## Intervals are prediction intervals. Use `interval = "confidence"` to  
## return regular confidence intervals.

ggpredict(lethal\_5, c('dehuman\_uc'), type = 're')

## # Predicted probabilities of lethal\_pun  
##   
## dehuman\_uc | Predicted | 95% CI  
## -------------------------------------  
## 0 | 0.04 | [0.00, 0.28]  
## 1 | 0.79 | [0.25, 0.98]  
##   
## Adjusted for:  
## \* deonto\_uc = 0.46  
## \* conseq\_uc = 0.22  
## \* human\_uc = 0.06  
## \* deonto\_gmean = 0.46  
## \* conseq\_gmean = 0.22  
## \* human\_gmean = 0.06  
## \* dehuman\_gmean = 0.07  
## \* phy\_cri\_gmean = 0.57  
## \* rel\_crime\_hyp\_gmean = 0.35  
## \* rel\_crime\_heard\_gmean = 0.42  
## \* age\_st = 0.00  
## \* female = 0.48  
## \* married = 0.55  
## \* hs\_degree = 0.31  
## \* kids\_st = 0.00  
## \* soc\_aid = 0.49  
## \* ptsd = 0.39  
## \* conf\_mean = 1.43  
## \* rel\_crime = Hypothetical  
## \* phy\_cri = 0.57  
## \* word\_count\_st = 0.01  
## \* participant = 0 (population-level)

##   
## Intervals are prediction intervals. Use `interval = "confidence"` to  
## return regular confidence intervals.

ggpredict(lethal\_5, c('human\_uc'), type = 're')

## # Predicted probabilities of lethal\_pun  
##   
## human\_uc | Predicted | 95% CI  
## -----------------------------------  
## 0 | 0.05 | [0.01, 0.33]  
## 1 | 0.05 | [0.00, 0.48]  
##   
## Adjusted for:  
## \* deonto\_uc = 0.46  
## \* conseq\_uc = 0.22  
## \* dehuman\_uc = 0.07  
## \* deonto\_gmean = 0.46  
## \* conseq\_gmean = 0.22  
## \* human\_gmean = 0.06  
## \* dehuman\_gmean = 0.07  
## \* phy\_cri\_gmean = 0.57  
## \* rel\_crime\_hyp\_gmean = 0.35  
## \* rel\_crime\_heard\_gmean = 0.42  
## \* age\_st = 0.00  
## \* female = 0.48  
## \* married = 0.55  
## \* hs\_degree = 0.31  
## \* kids\_st = 0.00  
## \* soc\_aid = 0.49  
## \* ptsd = 0.39  
## \* conf\_mean = 1.43  
## \* rel\_crime = Hypothetical  
## \* phy\_cri = 0.57  
## \* word\_count\_st = 0.01  
## \* participant = 0 (population-level)

##   
## Intervals are prediction intervals. Use `interval = "confidence"` to  
## return regular confidence intervals.

ggpredict(let\_phys\_5, c('deonto\_uc'), type = 're')

## # Predicted probabilities of let\_phy\_pun  
##   
## deonto\_uc | Predicted | 95% CI  
## ------------------------------------  
## 0 | 0.19 | [0.03, 0.65]  
## 1 | 0.37 | [0.07, 0.82]  
##   
## Adjusted for:  
## \* conseq\_uc = 0.22  
## \* dehuman\_uc = 0.07  
## \* human\_uc = 0.06  
## \* deonto\_gmean = 0.46  
## \* conseq\_gmean = 0.22  
## \* human\_gmean = 0.06  
## \* dehuman\_gmean = 0.07  
## \* phy\_cri\_gmean = 0.57  
## \* rel\_crime\_hyp\_gmean = 0.35  
## \* rel\_crime\_heard\_gmean = 0.42  
## \* age\_st = 0.00  
## \* female = 0.48  
## \* married = 0.55  
## \* hs\_degree = 0.31  
## \* kids\_st = 0.00  
## \* soc\_aid = 0.49  
## \* ptsd = 0.39  
## \* conf\_mean = 1.43  
## \* rel\_crime = Hypothetical  
## \* phy\_cri = 0.57  
## \* word\_count\_st = 0.01  
## \* participant = 0 (population-level)

##   
## Intervals are prediction intervals. Use `interval = "confidence"` to  
## return regular confidence intervals.

ggpredict(let\_phys\_5, c('conseq\_uc'), type = 're')

## # Predicted probabilities of let\_phy\_pun  
##   
## conseq\_uc | Predicted | 95% CI  
## ------------------------------------  
## 0 | 0.22 | [0.04, 0.68]  
## 1 | 0.46 | [0.10, 0.87]  
##   
## Adjusted for:  
## \* deonto\_uc = 0.46  
## \* dehuman\_uc = 0.07  
## \* human\_uc = 0.06  
## \* deonto\_gmean = 0.46  
## \* conseq\_gmean = 0.22  
## \* human\_gmean = 0.06  
## \* dehuman\_gmean = 0.07  
## \* phy\_cri\_gmean = 0.57  
## \* rel\_crime\_hyp\_gmean = 0.35  
## \* rel\_crime\_heard\_gmean = 0.42  
## \* age\_st = 0.00  
## \* female = 0.48  
## \* married = 0.55  
## \* hs\_degree = 0.31  
## \* kids\_st = 0.00  
## \* soc\_aid = 0.49  
## \* ptsd = 0.39  
## \* conf\_mean = 1.43  
## \* rel\_crime = Hypothetical  
## \* phy\_cri = 0.57  
## \* word\_count\_st = 0.01  
## \* participant = 0 (population-level)

##   
## Intervals are prediction intervals. Use `interval = "confidence"` to  
## return regular confidence intervals.

ggpredict(let\_phys\_5, c('dehuman\_uc'), type = 're')

## # Predicted probabilities of let\_phy\_pun  
##   
## dehuman\_uc | Predicted | 95% CI  
## -------------------------------------  
## 0 | 0.23 | [0.04, 0.68]  
## 1 | 0.90 | [0.46, 0.99]  
##   
## Adjusted for:  
## \* deonto\_uc = 0.46  
## \* conseq\_uc = 0.22  
## \* human\_uc = 0.06  
## \* deonto\_gmean = 0.46  
## \* conseq\_gmean = 0.22  
## \* human\_gmean = 0.06  
## \* dehuman\_gmean = 0.07  
## \* phy\_cri\_gmean = 0.57  
## \* rel\_crime\_hyp\_gmean = 0.35  
## \* rel\_crime\_heard\_gmean = 0.42  
## \* age\_st = 0.00  
## \* female = 0.48  
## \* married = 0.55  
## \* hs\_degree = 0.31  
## \* kids\_st = 0.00  
## \* soc\_aid = 0.49  
## \* ptsd = 0.39  
## \* conf\_mean = 1.43  
## \* rel\_crime = Hypothetical  
## \* phy\_cri = 0.57  
## \* word\_count\_st = 0.01  
## \* participant = 0 (population-level)

##   
## Intervals are prediction intervals. Use `interval = "confidence"` to  
## return regular confidence intervals.

ggpredict(let\_phys\_5, c('human\_uc'), type = 're')

## # Predicted probabilities of let\_phy\_pun  
##   
## human\_uc | Predicted | 95% CI  
## -----------------------------------  
## 0 | 0.26 | [0.05, 0.73]  
## 1 | 0.32 | [0.05, 0.82]  
##   
## Adjusted for:  
## \* deonto\_uc = 0.46  
## \* conseq\_uc = 0.22  
## \* dehuman\_uc = 0.07  
## \* deonto\_gmean = 0.46  
## \* conseq\_gmean = 0.22  
## \* human\_gmean = 0.06  
## \* dehuman\_gmean = 0.07  
## \* phy\_cri\_gmean = 0.57  
## \* rel\_crime\_hyp\_gmean = 0.35  
## \* rel\_crime\_heard\_gmean = 0.42  
## \* age\_st = 0.00  
## \* female = 0.48  
## \* married = 0.55  
## \* hs\_degree = 0.31  
## \* kids\_st = 0.00  
## \* soc\_aid = 0.49  
## \* ptsd = 0.39  
## \* conf\_mean = 1.43  
## \* rel\_crime = Hypothetical  
## \* phy\_cri = 0.57  
## \* word\_count\_st = 0.01  
## \* participant = 0 (population-level)

##   
## Intervals are prediction intervals. Use `interval = "confidence"` to  
## return regular confidence intervals.

1. TABLE A7: Robustness: same analysis, dataset 2.

## clean up some variables  
dat2$conf\_mean <- as.numeric(dat2$conf\_mean)  
dat2$word\_count\_st <- (dat2$word\_count - mean(dat2$word\_count, na.rm=T))/sd(dat2$word\_count, na.rm=T)  
dat2$age\_st <- (dat2$age - mean(dat2$age, na.rm=T))/sd(dat2$age, na.rm=T)  
dat2$kids\_st <- (dat2$kids - mean(dat2$kids, na.rm=T))/sd(dat2$kids, na.rm=T)  
  
  
## create ind-level means of event-level predictors  
dat2 <- dat2 %>%  
 group\_by(participant) %>%  
 mutate(deonto\_gmean = mean(deonto\_uc, na.rm=T),  
 conseq\_gmean = mean(conseq\_uc, na.rm=T),  
 human\_gmean = mean(human\_uc, na.rm=T),  
 dehuman\_gmean = mean(dehuman\_uc, na.rm=T),  
 phy\_cri\_gmean = mean(phy\_cri, na.rm=T),  
 rel\_crime\_hyp\_gmean = mean(rel\_crime=="Hypothetical", na.rm=T),  
 rel\_crime\_heard\_gmean = mean(rel\_crime=="Heard", na.rm=T),  
 rel\_crime\_pers\_gmean = mean(rel\_crime=="Personal", na.rm=T))  
  
  
## Pref for lethal punishment only  
lethal\_1 <- glmer(lethal\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 (1 | participant), data = dat2, family = binomial(link = 'logit'))   
  
lethal\_2 <- glmer(lethal\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean + (1 | participant),   
 data = dat2, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
lethal\_3 <- glmer(lethal\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime +   
 phy\_cri +  
 (1 | participant),   
 data = dat2, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
lethal\_4 <- glmer(lethal\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime +   
 phy\_cri +   
 word\_count\_st +  
 (1 | participant),   
 data = dat2, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
lethal\_5 <- glmer(lethal\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 deonto\_gmean + conseq\_gmean + human\_gmean + dehuman\_gmean +   
 phy\_cri\_gmean + rel\_crime\_hyp\_gmean + rel\_crime\_heard\_gmean +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime +   
 phy\_cri +   
 word\_count\_st +  
 (1 | participant),   
 data = dat2, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
## Pref for any physical punishment  
let\_phys\_1 <- glmer(let\_phy\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +  
 (1 | participant), data = dat2, family = binomial(link = 'logit'))   
  
let\_phys\_2 <- glmer(let\_phy\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean + (1 | participant),   
 data = dat2, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
let\_phys\_3 <- glmer(let\_phy\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +  
 rel\_crime +   
 phy\_cri +  
 (1 | participant),   
 data = dat2, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))

## Warning in checkConv(attr(opt, "derivs"), opt$par, ctrl = control$checkConv, :  
## Model failed to converge with max|grad| = 0.0274552 (tol = 0.002, component 1)

let\_phys\_4 <- glmer(let\_phy\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime +   
 phy\_cri +  
 word\_count\_st +  
 (1 | participant),   
 data = dat2, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
let\_phys\_5 <- glmer(let\_phy\_pun ~ deonto\_uc + conseq\_uc + dehuman\_uc + human\_uc +   
 deonto\_gmean + conseq\_gmean + human\_gmean + dehuman\_gmean +   
 phy\_cri\_gmean + rel\_crime\_hyp\_gmean + rel\_crime\_heard\_gmean +   
 age\_st + female + married + hs\_degree + kids\_st +  
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime +   
 phy\_cri +  
 word\_count\_st +  
 (1 | participant),   
 data = dat2, family = binomial(link = 'logit'),   
 control = glmerControl(optimizer = 'bobyqa'))   
  
  
## Put models into a latex table  
stargazer(lethal\_1, lethal\_2, lethal\_3, lethal\_4, lethal\_5,   
 no.space = T,   
 digits = 2,  
 type = 'latex',  
 omit = "\_gmean",  
 covariate.labels = c('MR: Deontological', 'MR: Consequentialist', 'MR: Dehumanization', 'MR: Empathy', 'Age', 'Female', 'Married', 'HS Degree', 'Kids', 'Social Aid', 'PTSD', 'Confidence in the State', 'Crime: Heard', 'Crime: Personal', 'Crime: Violent', 'Word Count', 'Constant'),  
 add.lines = list(c('Group Means', '', '', '', '', '\\checkmark')))

##   
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com  
## % Date and time: Mon, Dec 11, 2023 - 15:30:22  
## \begin{table}[!htbp] \centering   
## \caption{}   
## \label{}   
## \begin{tabular}{@{\extracolsep{5pt}}lccccc}   
## \\[-1.8ex]\hline   
## \hline \\[-1.8ex]   
## & \multicolumn{5}{c}{\textit{Dependent variable:}} \\   
## \cline{2-6}   
## \\[-1.8ex] & \multicolumn{5}{c}{lethal\\_pun} \\   
## \\[-1.8ex] & (1) & (2) & (3) & (4) & (5)\\   
## \hline \\[-1.8ex]   
## MR: Deontological & 1.16$^{\*\*\*}$ & 1.04$^{\*\*}$ & 1.08$^{\*\*}$ & 1.05$^{\*\*}$ & 1.10$^{\*\*}$ \\   
## & (0.38) & (0.41) & (0.43) & (0.43) & (0.46) \\   
## MR: Consequentialist & 0.70$^{\*}$ & 0.77$^{\*}$ & 0.70$^{\*}$ & 0.65 & 1.09$^{\*\*}$ \\   
## & (0.38) & (0.40) & (0.41) & (0.41) & (0.44) \\   
## MR: Dehumanization & 3.78$^{\*\*\*}$ & 3.64$^{\*\*\*}$ & 3.37$^{\*\*\*}$ & 3.39$^{\*\*\*}$ & 3.03$^{\*\*\*}$ \\   
## & (0.45) & (0.47) & (0.50) & (0.49) & (0.53) \\   
## MR: Empathy & 0.30 & 0.29 & 0.23 & 0.17 & 0.18 \\   
## & (0.63) & (0.64) & (0.67) & (0.67) & (0.73) \\   
## Age & & $-$0.42 & $-$0.36 & $-$0.40 & $-$0.42 \\   
## & & (0.30) & (0.33) & (0.32) & (0.33) \\   
## Female & & $-$0.64 & $-$0.59 & $-$0.57 & $-$0.25 \\   
## & & (0.47) & (0.51) & (0.50) & (0.52) \\   
## Married & & 0.27 & 0.27 & 0.27 & $-$0.31 \\   
## & & (0.53) & (0.58) & (0.56) & (0.55) \\   
## HS Degree & & $-$0.13 & $-$0.17 & $-$0.19 & $-$0.02 \\   
## & & (0.49) & (0.52) & (0.51) & (0.51) \\   
## Kids & & 0.20 & 0.20 & 0.21 & 0.60 \\   
## & & (0.34) & (0.37) & (0.36) & (0.38) \\   
## Social Aid & & $-$0.02 & 0.04 & $-$0.03 & $-$0.36 \\   
## & & (0.47) & (0.50) & (0.49) & (0.51) \\   
## PTSD & & 0.43 & 0.60 & 0.60 & 0.28 \\   
## & & (0.48) & (0.51) & (0.50) & (0.56) \\   
## Confidence in the State & & $-$0.31 & $-$0.33 & $-$0.32 & 0.07 \\   
## & & (0.45) & (0.48) & (0.47) & (0.52) \\   
## Crime: Heard & & & 0.68$^{\*}$ & 0.78$^{\*\*}$ & 0.71$^{\*}$ \\   
## & & & (0.37) & (0.38) & (0.40) \\   
## Crime: Personal & & & $-$1.69$^{\*\*}$ & $-$1.89$^{\*\*}$ & $-$2.06$^{\*\*}$ \\   
## & & & (0.85) & (0.90) & (0.90) \\   
## Crime: Violent & & & 1.06$^{\*\*}$ & 1.01$^{\*\*}$ & 1.04$^{\*\*}$ \\   
## & & & (0.42) & (0.43) & (0.44) \\   
## Word Count & & & & 0.20 & 0.27 \\   
## & & & & (0.19) & (0.19) \\   
## Constant & $-$3.83$^{\*\*\*}$ & $-$3.38$^{\*\*\*}$ & $-$4.34$^{\*\*\*}$ & $-$4.29$^{\*\*\*}$ & $-$1.84 \\   
## & (0.40) & (0.91) & (1.06) & (1.05) & (2.11) \\   
## \hline \\[-1.8ex]   
## Group Means & & & & & \checkmark \\   
## Observations & 743 & 702 & 702 & 702 & 702 \\   
## Log Likelihood & $-$156.83 & $-$147.12 & $-$136.58 & $-$136.04 & $-$130.00 \\   
## Akaike Inf. Crit. & 325.66 & 322.23 & 307.16 & 308.08 & 309.99 \\   
## Bayesian Inf. Crit. & 353.32 & 385.99 & 384.57 & 390.05 & 423.84 \\   
## \hline   
## \hline \\[-1.8ex]   
## \textit{Note:} & \multicolumn{5}{r}{$^{\*}$p$<$0.1; $^{\*\*}$p$<$0.05; $^{\*\*\*}$p$<$0.01} \\   
## \end{tabular}   
## \end{table}

stargazer(let\_phys\_1, let\_phys\_2, let\_phys\_3, let\_phys\_4, let\_phys\_5,   
 no.space = T,   
 digits = 2,  
 type = 'latex',  
 omit = "\_gmean",  
 covariate.labels = c('MR: Deontological', 'MR: Consequentialist', 'MR: Dehumanization', 'MR: Empathy', 'Age', 'Female', 'Married', 'HS Degree', 'Kids', 'Social Aid', 'PTSD', 'Confidence in the State', 'Crime: Heard', 'Crime: Personal', 'Crime: Violent', 'Word Count', 'Constant'),  
 add.lines = list(c('Group Means', '', '', '', '', '\\checkmark')))

##   
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com  
## % Date and time: Mon, Dec 11, 2023 - 15:30:23  
## \begin{table}[!htbp] \centering   
## \caption{}   
## \label{}   
## \begin{tabular}{@{\extracolsep{5pt}}lccccc}   
## \\[-1.8ex]\hline   
## \hline \\[-1.8ex]   
## & \multicolumn{5}{c}{\textit{Dependent variable:}} \\   
## \cline{2-6}   
## \\[-1.8ex] & \multicolumn{5}{c}{let\\_phy\\_pun} \\   
## \\[-1.8ex] & (1) & (2) & (3) & (4) & (5)\\   
## \hline \\[-1.8ex]   
## MR: Deontological & 0.86$^{\*\*\*}$ & 0.74$^{\*\*}$ & 0.74$^{\*\*\*}$ & 0.74$^{\*\*}$ & 0.72$^{\*\*}$ \\   
## & (0.28) & (0.30) & (0.003) & (0.30) & (0.32) \\   
## MR: Consequentialist & 0.91$^{\*\*\*}$ & 0.89$^{\*\*\*}$ & 0.87$^{\*\*\*}$ & 0.87$^{\*\*\*}$ & 1.28$^{\*\*\*}$ \\   
## & (0.28) & (0.29) & (0.003) & (0.30) & (0.31) \\   
## MR: Dehumanization & 3.46$^{\*\*\*}$ & 3.46$^{\*\*\*}$ & 3.22$^{\*\*\*}$ & 3.22$^{\*\*\*}$ & 2.93$^{\*\*\*}$ \\   
## & (0.47) & (0.48) & (0.003) & (0.48) & (0.50) \\   
## MR: Empathy & $-$0.57 & $-$0.50 & $-$0.54$^{\*\*\*}$ & $-$0.53 & $-$0.44 \\   
## & (0.55) & (0.55) & (0.003) & (0.55) & (0.58) \\   
## Age & & $-$0.33 & $-$0.32$^{\*\*\*}$ & $-$0.32 & $-$0.42$^{\*\*}$ \\   
## & & (0.20) & (0.003) & (0.20) & (0.20) \\   
## Female & & $-$0.76$^{\*\*}$ & $-$0.72$^{\*\*\*}$ & $-$0.72$^{\*\*}$ & $-$0.62$^{\*}$ \\   
## & & (0.32) & (0.003) & (0.32) & (0.33) \\   
## Married & & 0.58 & 0.57$^{\*\*\*}$ & 0.57 & 0.15 \\   
## & & (0.39) & (0.003) & (0.38) & (0.35) \\   
## HS Degree & & $-$1.03$^{\*\*\*}$ & $-$1.05$^{\*\*\*}$ & $-$1.04$^{\*\*\*}$ & $-$0.86$^{\*\*}$ \\   
## & & (0.38) & (0.003) & (0.38) & (0.35) \\   
## Kids & & $-$0.07 & $-$0.05$^{\*\*\*}$ & $-$0.05 & 0.29 \\   
## & & (0.23) & (0.003) & (0.23) & (0.23) \\   
## Social Aid & & $-$0.001 & $-$0.03$^{\*\*\*}$ & $-$0.03 & $-$0.28 \\   
## & & (0.33) & (0.003) & (0.33) & (0.32) \\   
## PTSD & & 0.34 & 0.33$^{\*\*\*}$ & 0.33 & 0.19 \\   
## & & (0.33) & (0.003) & (0.33) & (0.34) \\   
## Confidence in the State & & $-$0.06 & $-$0.02$^{\*\*\*}$ & $-$0.02 & 0.41 \\   
## & & (0.31) & (0.003) & (0.31) & (0.34) \\   
## Crime: Heard & & & 0.57$^{\*\*\*}$ & 0.57$^{\*\*}$ & 0.57$^{\*\*}$ \\   
## & & & (0.003) & (0.27) & (0.28) \\   
## Crime: Personal & & & 0.26$^{\*\*\*}$ & 0.26 & 0.12 \\   
## & & & (0.003) & (0.35) & (0.36) \\   
## Crime: Violent & & & 0.44$^{\*\*\*}$ & 0.44$^{\*}$ & 0.42 \\   
## & & & (0.003) & (0.25) & (0.27) \\   
## Word Count & & & & 0.0001 & 0.07 \\   
## & & & & (0.13) & (0.13) \\   
## Constant & $-$2.57$^{\*\*\*}$ & $-$2.22$^{\*\*\*}$ & $-$2.76$^{\*\*\*}$ & $-$2.77$^{\*\*\*}$ & $-$0.86 \\   
## & (0.25) & (0.66) & (0.003) & (0.69) & (1.36) \\   
## \hline \\[-1.8ex]   
## Group Means & & & & & \checkmark \\   
## Observations & 743 & 702 & 702 & 702 & 702 \\   
## Log Likelihood & $-$275.15 & $-$255.42 & $-$251.66 & $-$251.66 & $-$242.38 \\   
## Akaike Inf. Crit. & 562.31 & 538.84 & 537.33 & 539.33 & 534.77 \\   
## Bayesian Inf. Crit. & 589.97 & 602.59 & 614.74 & 621.30 & 648.62 \\   
## \hline   
## \hline \\[-1.8ex]   
## \textit{Note:} & \multicolumn{5}{r}{$^{\*}$p$<$0.1; $^{\*\*}$p$<$0.05; $^{\*\*\*}$p$<$0.01} \\   
## \end{tabular}   
## \end{table}

1. Analysis: multilevel logistic regression. Crime and ind chars on type of MR (varying intercepts)

## Deontological MR  
deonto\_1 <- glmer(deonto\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
deonto\_2 <- glmer(deonto\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime + phy\_cri +  
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
deonto\_3 <- glmer(deonto\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime + phy\_cri + word\_count\_st +  
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
deonto\_4 <- glmer(deonto\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime + phy\_cri + word\_count\_st +  
 deonto\_gmean + conseq\_gmean + human\_gmean + dehuman\_gmean +   
 phy\_cri\_gmean + rel\_crime\_hyp\_gmean + rel\_crime\_heard\_gmean +   
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))

## boundary (singular) fit: see help('isSingular')

## Consequentialist MR  
conseq\_1 <- glmer(conseq\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
conseq\_2 <- glmer(conseq\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime + phy\_cri +  
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
conseq\_3 <- glmer(conseq\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime + phy\_cri + word\_count\_st +  
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
conseq\_4 <- glmer(conseq\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime + phy\_cri + word\_count\_st +  
 deonto\_gmean + conseq\_gmean + human\_gmean + dehuman\_gmean +   
 phy\_cri\_gmean + rel\_crime\_hyp\_gmean + rel\_crime\_heard\_gmean +   
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))

## boundary (singular) fit: see help('isSingular')

## Dehumanization MR  
dehuman\_1 <- glmer(dehuman\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
dehuman\_2 <- glmer(dehuman\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +  
 rel\_crime + phy\_cri +  
 # extort + kidnap + assault + dom\_vio + drug + verbal + sexual + rob + murder +   
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
dehuman\_3 <- glmer(dehuman\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime + phy\_cri + word\_count\_st +  
 # extort + kidnap + assault + dom\_vio + drug + verbal + sexual + rob + murder +   
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
  
## Humanization/Empathy MR  
human\_1 <- glmer(human\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
human\_2 <- glmer(human\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +  
 rel\_crime + phy\_cri +  
 # extort + kidnap + assault + dom\_vio + drug + verbal + sexual + rob + murder +   
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
human\_3 <- glmer(human\_uc ~ age\_st + female + married + kids\_st + hs\_degree +   
 soc\_aid + ptsd + conf\_mean +   
 rel\_crime + phy\_cri + word\_count\_st +  
 # extort + kidnap + assault + dom\_vio + drug + verbal + sexual + rob + murder +   
 (1 | participant), data = dat, family = binomial(link = 'logit'),  
 control = glmerControl(optimizer = 'bobyqa'))   
  
  
## Put models into a latex table  
stargazer(deonto\_1, deonto\_3, conseq\_1, conseq\_3,  
 no.space = T,   
 digits = 2,  
 type = 'latex',  
 covariate.labels = c('Age', 'Female', 'Married', 'HS Degree', 'Kids', 'Social Aid', 'PTSD', 'Confidence in the State', 'Crime: Heard', 'Crime: Personal', 'Crime: Violent', 'Word Count', 'Constant'))

##   
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com  
## % Date and time: Mon, Dec 11, 2023 - 15:30:28  
## \begin{table}[!htbp] \centering   
## \caption{}   
## \label{}   
## \begin{tabular}{@{\extracolsep{5pt}}lcccc}   
## \\[-1.8ex]\hline   
## \hline \\[-1.8ex]   
## & \multicolumn{4}{c}{\textit{Dependent variable:}} \\   
## \cline{2-5}   
## \\[-1.8ex] & \multicolumn{2}{c}{deonto\\_uc} & \multicolumn{2}{c}{conseq\\_uc} \\   
## \\[-1.8ex] & (1) & (2) & (3) & (4)\\   
## \hline \\[-1.8ex]   
## Age & 0.34 & 0.24 & $-$0.33 & $-$0.45 \\   
## & (0.21) & (0.22) & (0.24) & (0.28) \\   
## Female & $-$0.14 & $-$0.34 & $-$0.50 & $-$0.64 \\   
## & (0.32) & (0.33) & (0.37) & (0.42) \\   
## Married & $-$0.19 & $-$0.14 & 0.25 & 0.25 \\   
## & (0.36) & (0.37) & (0.42) & (0.47) \\   
## HS Degree & $-$0.33 & $-$0.38 & 0.23 & 0.33 \\   
## & (0.23) & (0.25) & (0.27) & (0.31) \\   
## Kids & $-$0.25 & $-$0.56 & 0.17 & 0.15 \\   
## & (0.34) & (0.35) & (0.38) & (0.43) \\   
## Social Aid & 0.59$^{\*}$ & 0.45 & $-$0.43 & $-$0.54 \\   
## & (0.34) & (0.35) & (0.39) & (0.44) \\   
## PTSD & $-$0.45 & $-$0.49 & 0.59 & 0.79$^{\*}$ \\   
## & (0.34) & (0.35) & (0.39) & (0.44) \\   
## Confidence in the State & $-$0.39 & $-$0.34 & 0.21 & 0.25 \\   
## & (0.31) & (0.32) & (0.34) & (0.39) \\   
## Crime: Heard & & $-$0.03 & & $-$0.41 \\   
## & & (0.26) & & (0.28) \\   
## Crime: Personal & & $-$0.53 & & $-$1.36$^{\*\*\*}$ \\   
## & & (0.33) & & (0.40) \\   
## Crime: Violent & & 0.24 & & $-$0.17 \\   
## & & (0.22) & & (0.25) \\   
## Word Count & & 1.18$^{\*\*\*}$ & & 0.57$^{\*\*\*}$ \\   
## & & (0.17) & & (0.15) \\   
## Constant & 0.63 & 0.79 & $-$1.80$^{\*\*}$ & $-$1.41$^{\*}$ \\   
## & (0.63) & (0.70) & (0.70) & (0.83) \\   
## \hline \\[-1.8ex]   
## Observations & 550 & 550 & 550 & 550 \\   
## Log Likelihood & $-$352.04 & $-$312.25 & $-$275.33 & $-$264.63 \\   
## Akaike Inf. Crit. & 724.08 & 652.50 & 570.66 & 557.27 \\   
## Bayesian Inf. Crit. & 767.18 & 712.83 & 613.76 & 617.61 \\   
## \hline   
## \hline \\[-1.8ex]   
## \textit{Note:} & \multicolumn{4}{r}{$^{\*}$p$<$0.1; $^{\*\*}$p$<$0.05; $^{\*\*\*}$p$<$0.01} \\   
## \end{tabular}   
## \end{table}

stargazer( dehuman\_1, dehuman\_3, human\_1, human\_3,  
 no.space = T,   
 digits = 2,  
 type = 'latex',  
 covariate.labels = c('Age', 'Female', 'Married', 'HS Degree', 'Kids', 'Social Aid', 'PTSD', 'Confidence in the State', 'Crime: Heard', 'Crime: Personal', 'Crime: Violent', 'Word Count', 'Constant'))

##   
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com  
## % Date and time: Mon, Dec 11, 2023 - 15:30:28  
## \begin{table}[!htbp] \centering   
## \caption{}   
## \label{}   
## \begin{tabular}{@{\extracolsep{5pt}}lcccc}   
## \\[-1.8ex]\hline   
## \hline \\[-1.8ex]   
## & \multicolumn{4}{c}{\textit{Dependent variable:}} \\   
## \cline{2-5}   
## \\[-1.8ex] & \multicolumn{2}{c}{dehuman\\_uc} & \multicolumn{2}{c}{human\\_uc} \\   
## \\[-1.8ex] & (1) & (2) & (3) & (4)\\   
## \hline \\[-1.8ex]   
## Age & $-$0.43 & $-$0.45 & 0.02 & $-$0.14 \\   
## & (0.33) & (0.35) & (0.30) & (0.33) \\   
## Female & $-$1.00$^{\*}$ & $-$1.19$^{\*\*}$ & 0.73 & 0.71 \\   
## & (0.52) & (0.53) & (0.47) & (0.50) \\   
## Married & $-$0.08 & $-$0.03 & 0.67 & 0.63 \\   
## & (0.55) & (0.56) & (0.56) & (0.58) \\   
## HS Degree & 0.44 & 0.49 & $-$0.08 & 0.05 \\   
## & (0.39) & (0.40) & (0.34) & (0.36) \\   
## Kids & 0.40 & 0.43 & $-$0.20 & $-$0.21 \\   
## & (0.51) & (0.52) & (0.49) & (0.52) \\   
## Social Aid & $-$0.45 & $-$0.52 & 0.62 & 0.43 \\   
## & (0.52) & (0.53) & (0.48) & (0.50) \\   
## PTSD & 0.01 & 0.08 & $-$0.68 & $-$0.67 \\   
## & (0.53) & (0.54) & (0.48) & (0.52) \\   
## Confidence in the State & $-$0.32 & $-$0.17 & $-$0.83$^{\*\*}$ & $-$0.78$^{\*}$ \\   
## & (0.49) & (0.49) & (0.42) & (0.46) \\   
## Crime: Heard & & $-$0.70 & & 0.28 \\   
## & & (0.46) & & (0.48) \\   
## Crime: Personal & & $-$0.95 & & $-$0.23 \\   
## & & (0.66) & & (0.60) \\   
## Crime: Violent & & 1.84$^{\*\*\*}$ & & $-$0.13 \\   
## & & (0.57) & & (0.39) \\   
## Word Count & & 0.47$^{\*\*}$ & & 0.43$^{\*\*}$ \\   
## & & (0.20) & & (0.18) \\   
## Constant & $-$2.08$^{\*\*}$ & $-$3.22$^{\*\*\*}$ & $-$2.62$^{\*\*\*}$ & $-$2.74$^{\*\*\*}$ \\   
## & (0.98) & (1.15) & (0.87) & (1.04) \\   
## \hline \\[-1.8ex]   
## Observations & 550 & 550 & 550 & 550 \\   
## Log Likelihood & $-$125.06 & $-$112.93 & $-$120.99 & $-$117.23 \\   
## Akaike Inf. Crit. & 270.12 & 253.85 & 261.98 & 262.46 \\   
## Bayesian Inf. Crit. & 313.22 & 314.19 & 305.08 & 322.80 \\   
## \hline   
## \hline \\[-1.8ex]   
## \textit{Note:} & \multicolumn{4}{r}{$^{\*}$p$<$0.1; $^{\*\*}$p$<$0.05; $^{\*\*\*}$p$<$0.01} \\   
## \end{tabular}   
## \end{table}