Nepal flood RCT analysis

```
melt_data_suffix <- function(var_name) {
  new_var <- vector(mode = "numeric", length = nrow(data))
  new_var[data$timePoint_factor == '1'] <- as.numeric(data[[paste0(var_name, '1')]][data$timePoint_facto
  new_var[data$timePoint_factor == '2'] <- as.numeric(data[[paste0(var_name, '2')]][data$timePoint_facto
  new_var[data$timePoint_factor == '3'] <- as.numeric(data[[paste0(var_name, '3')]][data$timePoint_facto
  return(new_var)
}

melt_data_prefix <- function(var_name) {
  var_name <- substr(var_name, 3, nchar(var_name))
  new_var <- vector(mode = "numeric", length = nrow(data))
  new_var <- as.numeric(data[[paste0('T1', var_name)]])
  new_var[data$timePoint_factor == '1'] <- as.numeric(data[[paste0('T1',var_name)]][data$timePoint_facto
  new_var[data$timePoint_factor == '2'] <- as.numeric(data[[paste0('T2',var_name)]][data$timePoint_facto
  new_var[data$timePoint_factor == '3'] <- as.numeric(data[[paste0('T3',var_name)]][data$timePoint_facto
  return(new_var)
}

reverse_melt <- function(data, var_name) {
  data[[paste0(var_name,'1')]][data$timePoint_factor == "1"] <- as.numeric(data[[var_name]][data$timePo
  data[[paste0(var_name,'1')]][data$timePoint_factor == "2"] <- as.numeric(data[[var_name]][data$timePo
  data[[paste0(var_name,'1')]][data$timePoint_factor == "3"] <- as.numeric(data[[var_name]][data$timePo
  data[[paste0(var_name,'2')]][data$timePoint_factor == "1"] <- as.numeric(data[[var_name]][data$timePo
  data[[paste0(var_name,'2')]][data$timePoint_factor == "2"] <- as.numeric(data[[var_name]][data$timePo
  data[[paste0(var_name,'2')]][data$timePoint_factor == "3"] <- as.numeric(data[[var_name]][data$timePo
  data[[paste0(var_name,'3')]][data$timePoint_factor == "1"] <- as.numeric(data[[var_name]][data$timePo
  data[[paste0(var_name,'3')]][data$timePoint_factor == "2"] <- as.numeric(data[[var_name]][data$timePo
  data[[paste0(var_name,'3')]][data$timePoint_factor == "3"] <- as.numeric(data[[var_name]][data$timePo
  return(data)
}

count_nas <- function(df, time) {
  result <- sapply(df[data$timePoint_factor == as.character(time),], function(x) sum(is.na(x)))
  return(result)
}
```

```
library(haven)
library(ggplot2)
library(dplyr)
library(gridExtra)
library(scales)
library(lme4)
library(lsmeans)
library(car)
library(RLRsim)
library(stringr)
library(lmerTest)
library(ordinal)
library(RVAideMemoire)
library(magrittr)
```

```
library(xtable)
library(texreg)
library(reporttools)
setwd("C:/Users/ajame/Dropbox/Alex - Nepal/Flood data")
data <- read_dta("NEPAL T1 T2 T3 partial reshape.dta")

data$interventiongroup <- factor(data$interventiongroup, levels = levels(factor(data$interventiongroup))
data$timePoint_factor <- factor(data$timePointZerod, labels = c('1','2','3'))
#data$interventiongroup[data$timePoint_factor == '3'] <- 'Intervention'
data$gender <- factor(data$T1gender, labels = c('Female','Male'))
data$functioning <- data$FuncFmean6_T
data$functioning[!is.na(data$FuncMmean6_T)] <- data$FuncMmean6_T[!is.na(data$FuncMmean6_T)]
data$ID_factor <- factor(data$PartID)
data$loc_factor <- factor(data$T1loccode)

factor_dvs <- c('SelfEff1timeT', 'SelfEff2affordT', 'SelfEff3infoT', 'Fat1dontworryT', 'Fat2injuredT',
data %<>% mutate_at(factor_dvs, funs(factor(.)))
data$interventPlotting <- data$interventiongroup
data$interventPlotting[data$interventiongroup=="Control" & data$timePoint_factor=='3'] <- 'Intervention
data$interventionLinePlotting <- data$interventPlotting
data$interventionLinePlotting[data$interventiongroup=="Control" & data$timePoint_factor=='2'] <- 'Interv

data$T1DP1Supplykit[is.na(data$T1DP1Supplykit)] <- mean(data$T1DP1Supplykit, na.rm = TRUE)
data$T1DP3Meds[data$T1DP3Meds == 3] <- mean(data$T1DP3Meds[data$T1DP3Meds != 3], na.rm = TRUE)
data$T2DP3Meds[data$T2DP3Meds == 3] <- mean(data$T2DP3Meds[data$T2DP3Meds != 3], na.rm = TRUE)
data$T3DP3Meds[data$T3DP3Meds == 3] <- mean(data$T3DP3Meds[data$T3DP3Meds != 3], na.rm = TRUE)
data$T1DP5Foodanimals[data$T1DP5Foodanimals == 3] <- mean(data$T1DP5Foodanimals[data$T1DP5Foodanimals !=
data$T2DP5Foodanimals[data$T2DP5Foodanimals == 3] <- mean(data$T2DP5Foodanimals[data$T2DP5Foodanimals !=
data$T3DP5Foodanimals[data$T3DP5Foodanimals == 3] <- mean(data$T3DP5Foodanimals[data$T3DP5Foodanimals !=
data$T1DP15Talktochildren[data$T1DP15Talktochildren == 3] <- mean(data$T1DP15Talktochildren[data$T1DP15
data$T2DP15Talktochildren[data$T2DP15Talktochildren == 3] <- mean(data$T2DP15Talktochildren[data$T2DP15
data$T3DP15Talktochildren[data$T3DP15Talktochildren == 3] <- mean(data$T3DP15Talktochildren[data$T3DP15

data %<>% mutate(
  DP_cleaned_T1 = select(., T1DP1Supplykit, T1DP2Itemsinhouse, T1DP3Meds, T1DP4Foodpeople,
    T1DP5Foodanimals, T1DP6Docs, T1DP7Firewood, T1DP8Secureddwelling, T1DP9Raiseitems,
    T1DP10Divertwater, T1DP11Removeblowingobj, T1DP12Famemergplan, T1DP13Evacplan,
    T1DP14Reconnectfamplan, T1DP15Talktochildren, T1DP16RadioTVcomp, T1DP17Firstaid,
    T1DP18Cleanwater, T1DP19Disinfect, T1DP20Sanitation, T1DP21Safeplacewaterrise,
    T1DP22SafeplaceEQ, T1DP23Riskysafeplacemap, T1DP24Helpneighbors) %>% rowSums,

 DP_cleaned_T2 = select(., T2DP1Supplykit, T2DP2Itemsinhouse, T2DP3Meds, T2DP4Foodpeople,
    T2DP5Foodanimals, T2DP6Docs, T2DP7Firewood, T2DP8Secureddwelling, T2DP9Raiseitems,
    T2DP10Divertwater, T2DP11Removeblowingobj, T2DP12Famemergplan, T2DP13Evacplan,
    T2DP14Reconnectfamplan, T2DP15Talktochildren, T2DP16RadioTVcomp, T2DP17Firstaid,
    T2DP18Cleanwater, T2DP19Disinfect, T2DP20Sanitation, T2DP21Safeplacewaterrise,
    T2DP22SafeplaceEQ, T2DP23Riskysafeplacemap, T2DP24Helpneighbors) %>% rowSums,

 DP_cleaned_T3 = select(., T3DP1Supplykit, T3DP2Itemsinhouse, T3DP3Meds, T3DP4Foodpeople,
    T3DP5Foodanimals, T3DP6Docs, T3DP7Firewood, T3DP8Secureddwelling, T3DP9Raiseitems,
    T3DP10Divertwater, T3DP11Removeblowingobj, T3DP12Famemergplan, T3DP13Evacplan,
    T3DP14Reconnectfamplan, T3DP15Talktochildren, T3DP16RadioTVcomp, T3DP17Firstaid,
    T3DP18Cleanwater, T3DP19Disinfect, T3DP20Sanitation, T3DP21Safeplacewaterrise,
```

```
    T3DP22SafeplaceEQ, T3DP23Riskysafeplacemap, T3DP24Helpneighbors) %>% rowSums
 )

data$DP_cleaned_T <- melt_data_suffix('DP_cleaned_T')
to_reverse_melt <- c('BDImean16_T', 'BDIsumT', 'SocCohmean7_T', 'SocCohsum7_T', 'PTSDmean13_T', 'PTSDsu
for(i in to_reverse_melt) {
  data %<>% reverse_melt(i)
}

filtered <- data %>% filter(!is.na(interventiongroup))
#write_dta(filtered, 'C:/Users/ajame/Dropbox/Alex - Nepal/Flood data/Nepal RCT partial reshape DP clean
```

First let's get descriptive statistics on disaster preparedness items.

```
T1_DP_vars <- filtered %>% filter(timePoint_factor == "1") %>% dplyr::select(T1DP1Supplykit, T1DP2Items
    T1DP5Foodanimals, T1DP6Docs, T1DP7Firewood, T1DP8Secureddwelling, T1DP9Raiseitems,
    T1DP10Divertwater, T1DP11Removeblowingobj, T1DP12Famemergplan, T1DP13Evacplan,
    T1DP14Reconnectfamplan, T1DP15Talktochildren, T1DP16RadioTVcomp, T1DP17Firstaid,
    T1DP18Cleanwater, T1DP19Disinfect, T1DP20Sanitation, T1DP21Safeplacewaterrise,
    T1DP22SafeplaceEQ, T1DP23Riskysafeplacemap, T1DP24Helpneighbors, T1loccode)

T2_DP_vars <- filtered %>% filter(timePoint_factor == "2") %>% dplyr::select(T2DP1Supplykit, T2DP2Items
    T2DP5Foodanimals, T2DP6Docs, T2DP7Firewood, T2DP8Secureddwelling, T2DP9Raiseitems,
    T2DP10Divertwater, T2DP11Removeblowingobj, T2DP12Famemergplan, T2DP13Evacplan,
    T2DP14Reconnectfamplan, T2DP15Talktochildren, T2DP16RadioTVcomp, T2DP17Firstaid,
    T2DP18Cleanwater, T2DP19Disinfect, T2DP20Sanitation, T2DP21Safeplacewaterrise,
    T2DP22SafeplaceEQ, T2DP23Riskysafeplacemap, T2DP24Helpneighbors)

T3_DP_vars <- filtered %>% filter(timePoint_factor == "3") %>% dplyr::select(T3DP1Supplykit, T3DP2Items
    T3DP5Foodanimals, T3DP6Docs, T3DP7Firewood, T3DP8Secureddwelling, T3DP9Raiseitems,
    T3DP10Divertwater, T3DP11Removeblowingobj, T3DP12Famemergplan, T3DP13Evacplan,
    T3DP14Reconnectfamplan, T3DP15Talktochildren, T3DP16RadioTVcomp, T3DP17Firstaid,
    T3DP18Cleanwater, T3DP19Disinfect, T3DP20Sanitation, T3DP21Safeplacewaterrise,
    T3DP22SafeplaceEQ, T3DP23Riskysafeplacemap, T3DP24Helpneighbors)
```

First by time point then by community within time point 1.

```
tableNominal(vars = as.data.frame(dplyr::select(T1_DP_vars, -T1loccode)), lab = "tabdp1", longtable = T
```

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Tue Nov 21 16:09:45 2017

Variable	Levels	n	%
T1DP1Supplykit	0	17	4.6
	0.954446854663774	14	3.8
	1	340	91.6
	all	371	100.0
T1DP2Itemsinhouse	0	19	5.1
	1	351	94.9
	all	370	100.0
T1DP3Meds	0	44	11.9
	0.822289156626506	111	29.9
	1	216	58.2
	all	371	100.0
T1DP4Foodpeople	0	17	4.6
	1	353	95.4
	all	370	100.0
T1DP5Foodanimals	0	20	5.4
	0.933628318584071	20	5.4

	1	331	89.2
	all	371	100.0
T1DP6Docs	0	1	0.3
	1	368	99.7
	all	369	100.0
T1DP7Firewood	0	6	1.6
	1	365	98.4
	all	371	100.0
T1DP8Secureddwelling	0	28	7.6
	1	342	92.4
	all	370	100.0
T1DP9Raiseitems	0	2	0.5
	1	368	99.5
	all	370	100.0
T1DP10Divertwater	0	90	24.5
	1	278	75.5
	all	368	100.0
T1DP11Removeblowingobj	0	20	5.4
	1	348	94.6
	all	368	100.0
T1DP12Famemergplan	0	14	3.8
	1	357	96.2
	all	371	100.0
T1DP13Evacplan	0	12	3.2
	1	359	96.8
	all	371	100.0
T1DP14Reconnectfamplan	0	92	25.0
	1	276	75.0
	all	368	100.0
T1DP15Talktochildren	0	34	9.2
	0.902004454342984	19	5.1
	1	317	85.7
	all	370	100.0
T1DP16RadioTVcomp	0	24	6.5
	1	347	93.5
	all	371	100.0
T1DP17Firstaid	0	207	56.0
	1	163	44.0
	all	370	100.0
T1DP18Cleanwater	0	50	13.5
	1	321	86.5
	all	371	100.0
T1DP19Disinfect	0	59	15.9
	1	311	84.0
	all	370	100.0
T1DP20Sanitation	0	15	4.1
	1	354	95.9
	all	369	100.0
T1DP21Safeplacewaterrise	0	9	2.4
	1	359	97.5
	all	368	100.0
T1DP22SafeplaceEQ	0	145	39.5
	1	222	60.5
	all	367	100.0
T1DP23Riskysafeplacemap	0	7	1.9
	1	363	98.1
	all	370	100.0
T1DP24Helpneighbors	0	6	1.6
	1	364	98.4
	all	370	100.0

Table 1: Descriptive statistics of disaster preparation behaviors time 1 questions

```
tableNominal(vars = as.data.frame(T2_DP_vars), lab = "tabdp2", longtable = TRUE, cumsum = FALSE, cap =
```

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Tue Nov 21 16:09:45 2017

Variable	**Levels**	**n**	%
T2DP1Supplykit	0	44	12.9
	1	297	87.1
	all	341	100.0
T2DP2Itemsinhouse	0	15	4.4
	1	326	95.6
	all	341	100.0
T2DP3Meds	0	13	3.8
	0.935897435897436	150	44.0
	1	178	52.2
	all	341	100.0
T2DP4Foodpeople	0	24	7.0
	1	317	93.0
	all	341	100.0
T2DP5Foodanimals	0	25	7.3
	0.922077922077922	19	5.6
	1	297	87.1
	all	341	100.0
T2DP6Docs	1	340	100.0
	all	340	100.0
T2DP7Firewood	0	6	1.8
	1	335	98.2
	all	341	100.0
T2DP8Secureddwelling	0	47	13.8
	1	294	86.2
	all	341	100.0
T2DP9Raiseitems	0	12	3.5
	1	329	96.5
	all	341	100.0
T2DP10Divertwater	0	81	23.8
	1	260	76.2
	all	341	100.0
T2DP11Removeblowingobj	0	6	1.8
	1	335	98.2
	all	341	100.0
T2DP12Famemergplan	0	92	27.0
	1	249	73.0
	all	341	100.0
T2DP13Evacplan	0	34	10.0
	1	307	90.0
	all	341	100.0
T2DP14Reconnectfamplan	0	99	29.0
	1	242	71.0
	all	341	100.0
T2DP15Talktochildren	0	37	10.8
	0.881720430107527	28	8.2
	1	276	80.9
	all	341	100.0
T2DP16RadioTVcomp	0	47	13.8
	1	294	86.2
	all	341	100.0
T2DP17Firstaid	0	145	42.5
	1	196	57.5
	all	341	100.0

T2DP18Cleanwater	0	25	7.3
	1	315	92.7
	all	340	100.0
T2DP19Disinfect	0	44	12.9
	1	297	87.1
	all	341	100.0
T2DP20Sanitation	0	6	1.8
	1	335	98.2
	all	341	100.0
T2DP21Safeplacewaterrise	0	5	1.5
	1	335	98.5
	all	340	100.0
T2DP22SafeplaceEQ	0	44	13.0
	1	295	87.0
	all	339	100.0
T2DP23Riskysafeplacemap	0	4	1.2
	1	336	98.8
	all	340	100.0
T2DP24Helpneighbors	0	16	4.7
	1	325	95.3
	all	341	100.0

Table 2: Descriptive statistics of disaster preparation behaviors time 2 questions

```
tableNominal(vars = as.data.frame(T3_DP_vars), lab = "tabdp3", longtable = TRUE, cumsum = FALSE, cap =
```

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Tue Nov 21 16:09:46 2017

Variable	**Levels**	**n**	%
T3DP1Supplykit	0	105	28.3
	1	266	71.7
	all	371	100.0
T3DP2Itemsinhouse	0	9	2.4
	1	361	97.6
	all	370	100.0
T3DP3Meds	0	5	1.4
	0.979423868312757	159	43.0
	1	206	55.7
	all	370	100.0
T3DP4Foodpeople	0	7	1.9
	1	363	98.1
	all	370	100.0
T3DP5Foodanimals	0	8	2.2
	0.977040816326531	31	8.4
	1	332	89.5
	all	371	100.0
T3DP6Docs	0	1	0.3
	1	370	99.7
	all	371	100.0
T3DP7Firewood	0	19	5.2
	1	350	94.8
	all	369	100.0
T3DP8Secureddwelling	0	79	21.3
	1	292	78.7
	all	371	100.0
T3DP9Raiseitems	0	6	1.6
	1	364	98.4
	all	370	100.0
T3DP10Divertwater	0	107	28.8
	1	264	71.2
	all	371	100.0

T3DP11Removeblowingobj	0	2	0.5
	1	369	99.5
	all	371	100.0
T3DP12Famemergplan	0	103	27.8
	1	268	72.2
	all	371	100.0
T3DP13Evacplan	0	59	15.9
	1	311	84.0
	all	370	100.0
T3DP14Reconnectfamplan	0	101	27.2
	1	270	72.8
	all	371	100.0
T3DP15Talktochildren	0	64	17.2
	0.816326530612245	30	8.1
	1	277	74.7
	all	371	100.0
T3DP16RadioTVcomp	0	53	14.3
	1	318	85.7
	all	371	100.0
T3DP17Firstaid	0	86	23.2
	1	285	76.8
	all	371	100.0
T3DP18Cleanwater	0	16	4.3
	1	354	95.7
	all	370	100.0
T3DP19Disinfect	0	20	5.4
	1	350	94.6
	all	370	100.0
T3DP20Sanitation	0	2	0.5
	1	369	99.5
	all	371	100.0
T3DP21Safeplacewaterrise	0	6	1.6
	1	365	98.4
	all	371	100.0
T3DP22SafeplaceEQ	0	40	10.8
	1	330	89.2
	all	370	100.0
T3DP23Riskysafeplacemap	0	5	1.4
	1	365	98.7
	all	370	100.0
T3DP24Helpneighbors	0	8	2.2
	1	363	97.8
	all	371	100.0

Table 3: Descriptive statistics of disaster preparation behaviors time 3 questions

```
tableNominal(vars = as.data.frame(dplyr::select(T1_DP_vars, -T1loccode)), group = T1_DP_vars$T1loccode,
```

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Tue Nov 21 16:09:46 2017

Variable	**Levels**	$\mathbf{n}_1$	$\%_1$	$\mathbf{n}_2$	$\%_2$	$\mathbf{n}_3$	$\%_3$	$\mathbf{n}_{all}$	$\%_{all}$
T1DP1Supplykit	0	4	3.4	5	3.9	8	6.4	17	4.6
	0.954446854663774	5	4.2	5	3.9	4	3.2	14	3.8
	1	109	92.4	119	92.2	112	90.3	340	91.6
	all	118	100.0	129	100.0	124	100.0	371	100.0
T1DP2Itemsinhouse	0	11	9.3	1	0.8	7	5.6	19	5.1
	1	107	90.7	127	99.2	117	94.3	351	94.9
	all	118	100.0	128	100.0	124	100.0	370	100.0
T1DP3Meds	0	17	14.4	10	7.8	17	13.7	44	11.9
	0.822289156626506	44	37.3	38	29.5	29	23.4	111	29.9
	1	57	48.3	81	62.8	78	62.9	216	58.2

	all	118	100.0	129	100.0	124	100.0	371	100.0
T1DP4Foodpeople	0	8	6.8	1	0.8	8	6.4	17	4.6
	1	110	93.2	127	99.2	116	93.5	353	95.4
	all	118	100.0	128	100.0	124	100.0	370	100.0
T1DP5Foodanimals	0	15	12.7	2	1.6	3	2.4	20	5.4
	0.933628318584071	7	5.9	6	4.6	7	5.6	20	5.4
	1	96	81.4	121	93.8	114	91.9	331	89.2
	all	118	100.0	129	100.0	124	100.0	371	100.0
T1DP6Docs	0	0	0.0	0	0.0	1	0.8	1	0.3
	1	116	100.0	129	100.0	123	99.2	368	99.7
	all	116	100.0	129	100.0	124	100.0	369	100.0
T1DP7Firewood	0	4	3.4	0	0.0	2	1.6	6	1.6
	1	114	96.6	129	100.0	122	98.4	365	98.4
	all	118	100.0	129	100.0	124	100.0	371	100.0
T1DP8Secureddwelling	0	6	5.1	9	7.0	13	10.6	28	7.6
	1	112	94.9	120	93.0	110	89.4	342	92.4
	all	118	100.0	129	100.0	123	100.0	370	100.0
T1DP9Raiseitems	0	0	0.0	2	1.6	0	0.0	2	0.5
	1	118	100.0	126	98.4	124	100.0	368	99.5
	all	118	100.0	128	100.0	124	100.0	370	100.0
T1DP10Divertwater	0	22	19.0	37	28.7	31	25.2	90	24.5
	1	94	81.0	92	71.3	92	74.8	278	75.5
	all	116	100.0	129	100.0	123	100.0	368	100.0
T1DP11Removeblowingobj	0	8	6.9	8	6.2	4	3.2	20	5.4
	1	108	93.1	120	93.8	120	96.8	348	94.6
	all	116	100.0	128	100.0	124	100.0	368	100.0
T1DP12Famemergplan	0	4	3.4	4	3.1	6	4.8	14	3.8
	1	114	96.6	125	96.9	118	95.2	357	96.2
	all	118	100.0	129	100.0	124	100.0	371	100.0
T1DP13Evacplan	0	6	5.1	3	2.3	3	2.4	12	3.2
	1	112	94.9	126	97.7	121	97.6	359	96.8
	all	118	100.0	129	100.0	124	100.0	371	100.0
T1DP14Reconnectfamplan	0	28	24.4	30	23.3	34	27.4	92	25.0
	1	87	75.7	99	76.7	90	72.6	276	75.0
	all	115	100.0	129	100.0	124	100.0	368	100.0
T1DP15Talktochildren	0	10	8.6	12	9.3	12	9.7	34	9.2
	0.902004454342984	3	2.6	8	6.2	8	6.4	19	5.1
	1	104	88.9	109	84.5	104	83.9	317	85.7
	all	117	100.0	129	100.0	124	100.0	370	100.0
T1DP16RadioTVcomp	0	7	5.9	10	7.8	7	5.6	24	6.5
	1	111	94.1	119	92.2	117	94.3	347	93.5
	all	118	100.0	129	100.0	124	100.0	371	100.0
T1DP17Firstaid	0	65	55.6	74	57.4	68	54.8	207	56.0
	1	52	44.4	55	42.6	56	45.2	163	44.0
	all	117	100.0	129	100.0	124	100.0	370	100.0
T1DP18Cleanwater	0	17	14.4	11	8.5	22	17.7	50	13.5
	1	101	85.6	118	91.5	102	82.3	321	86.5
	all	118	100.0	129	100.0	124	100.0	371	100.0
T1DP19Disinfect	0	20	16.9	22	17.1	17	13.8	59	15.9
	1	98	83.0	107	83.0	106	86.2	311	84.0
	all	118	100.0	129	100.0	123	100.0	370	100.0
T1DP20Sanitation	0	1	0.9	11	8.5	3	2.4	15	4.1
	1	115	99.1	118	91.5	121	97.6	354	95.9
	all	116	100.0	129	100.0	124	100.0	369	100.0
T1DP21Safeplacewaterrise	0	6	5.1	2	1.6	1	0.8	9	2.4
	1	112	94.9	127	98.5	120	99.2	359	97.5
	all	118	100.0	129	100.0	121	100.0	368	100.0
T1DP22SafeplaceEQ	0	51	44.0	45	35.2	49	39.8	145	39.5
	1	65	56.0	83	64.8	74	60.2	222	60.5
	all	116	100.0	128	100.0	123	100.0	367	100.0
T1DP23Riskysafeplacemap	0	4	3.4	1	0.8	2	1.6	7	1.9

	1	114	96.6	128	99.2	121	98.4	363	98.1
	all	118	100.0	129	100.0	123	100.0	370	100.0
T1DP24Helpneighbors	0	3	2.6	1	0.8	2	1.6	6	1.6
	1	114	97.4	128	99.2	122	98.4	364	98.4
	all	117	100.0	129	100.0	124	100.0	370	100.0

Table 4: Descriptive statsitics of disaster preparation behaviors time 1 questions by community

Now let's perform a Cronbach's alpha analysis on disaster preparedness items - we can use the alphas if item is omitted to detect outliers.

```
psych::alpha(x = T1_DP_vars , cumulative = TRUE)
```

```
## Warning in psych::alpha(x = T1_DP_vars, cumulative = TRUE): Some items were negatively correlated wi
## should be reversed.
## To do this, run the function again with the 'check.keys=TRUE' option
```

```
## Some items ( T1DP1Supplykit T1DP23Riskysafeplacemap ) were negatively correlated with the total scal
## probably should be reversed.
## To do this, run the function again with the 'check.keys=TRUE' option
```

```
##
## Reliability analysis
## Call: psych::alpha(x = T1_DP_vars, cumulative = TRUE)
##
##   raw_alpha std.alpha G6(smc) average_r S/N   ase mean  sd
##       0.61      0.65     0.7     0.068 1.8 0.028   23 2.5
##
##  lower alpha upper     95% confidence boundaries
## 0.56 0.61 0.67
##
##  Reliability if an item is dropped:
##                          raw_alpha std.alpha G6(smc) average_r S/N
## T1DP1Supplykit                0.62      0.66    0.71     0.075 2.0
## T1DP2Itemsinhouse             0.60      0.63    0.69     0.068 1.7
## T1DP3Meds                     0.59      0.64    0.69     0.068 1.7
## T1DP4Foodpeople               0.61      0.65    0.70     0.071 1.8
## T1DP5Foodanimals              0.59      0.63    0.69     0.066 1.7
## T1DP6Docs                     0.61      0.65    0.70     0.073 1.9
## T1DP7Firewood                 0.61      0.64    0.69     0.069 1.8
## T1DP8Secureddwelling          0.60      0.63    0.69     0.066 1.7
## T1DP9Raiseitems               0.61      0.65    0.70     0.071 1.8
## T1DP10Divertwater             0.60      0.64    0.69     0.068 1.7
## T1DP11Removeblowingobj        0.59      0.63    0.68     0.066 1.7
## T1DP12Famemergplan            0.60      0.64    0.69     0.068 1.7
## T1DP13Evacplan                0.61      0.64    0.69     0.069 1.8
## T1DP14Reconnectfamplan        0.56      0.61    0.67     0.062 1.6
## T1DP15Talktochildren          0.61      0.64    0.69     0.069 1.8
## T1DP16RadioTVcomp             0.60      0.64    0.70     0.069 1.8
## T1DP17Firstaid                0.57      0.62    0.68     0.064 1.6
## T1DP18Cleanwater              0.59      0.63    0.68     0.066 1.7
## T1DP19Disinfect               0.57      0.62    0.67     0.063 1.6
## T1DP20Sanitation              0.60      0.63    0.68     0.066 1.7
## T1DP21Safeplacewaterrise      0.61      0.64    0.70     0.070 1.8
## T1DP22SafeplaceEQ             0.59      0.63    0.69     0.066 1.7
```

```
## T1DP23Riskysafeplacemap       0.62      0.66    0.71     0.074 1.9
## T1DP24Helpneighbors           0.61      0.64    0.70     0.070 1.8
## T1loccode                     0.68      0.65    0.71     0.073 1.9
##                            alpha se
## T1DP1Supplykit                0.027
## T1DP2Itemsinhouse             0.029
## T1DP3Meds                     0.029
## T1DP4Foodpeople               0.028
## T1DP5Foodanimals              0.029
## T1DP6Docs                     0.028
## T1DP7Firewood                 0.028
## T1DP8Secureddwelling          0.029
## T1DP9Raiseitems               0.028
## T1DP10Divertwater             0.029
## T1DP11Removeblowingobj        0.029
## T1DP12Famemergplan            0.029
## T1DP13Evacplan                0.029
## T1DP14Reconnectfamplan        0.032
## T1DP15Talktochildren          0.028
## T1DP16RadioTVcomp             0.029
## T1DP17Firstaid                0.031
## T1DP18Cleanwater              0.030
## T1DP19Disinfect               0.031
## T1DP20Sanitation              0.029
## T1DP21Safeplacewaterrise      0.028
## T1DP22SafeplaceEQ             0.030
## T1DP23Riskysafeplacemap       0.028
## T1DP24Helpneighbors           0.028
## T1loccode                     0.022
##
##  Item statistics
##                              n raw.r std.r   r.cor r.drop mean    sd
## T1DP1Supplykit             371 0.040 0.092 -0.0225 -0.038 0.95 0.209
## T1DP2Itemsinhouse          370 0.295 0.352  0.3081  0.218 0.95 0.221
## T1DP3Meds                  371 0.381 0.347  0.2925  0.273 0.83 0.314
## T1DP4Foodpeople            370 0.191 0.230  0.1382  0.113 0.95 0.210
## T1DP5Foodanimals           371 0.398 0.403  0.3644  0.317 0.94 0.226
## T1DP6Docs                  369 0.030 0.163  0.0812  0.010 1.00 0.052
## T1DP7Firewood              371 0.205 0.312  0.2652  0.151 0.98 0.126
## T1DP8Secureddwelling       370 0.334 0.395  0.3534  0.244 0.92 0.265
## T1DP9Raiseitems            370 0.163 0.250  0.1739  0.137 0.99 0.073
## T1DP10Divertwater          368 0.368 0.351  0.3000  0.211 0.76 0.430
## T1DP11Removeblowingobj     368 0.394 0.404  0.3737  0.316 0.95 0.227
## T1DP12Famemergplan         371 0.282 0.342  0.3060  0.203 0.96 0.191
## T1DP13Evacplan             371 0.265 0.320  0.2783  0.185 0.97 0.177
## T1DP14Reconnectfamplan     368 0.566 0.551  0.5681  0.439 0.75 0.434
## T1DP15Talktochildren       370 0.279 0.319  0.2609  0.163 0.90 0.288
## T1DP16RadioTVcomp          371 0.285 0.291  0.2188  0.197 0.94 0.246
## T1DP17Firstaid             370 0.534 0.472  0.4462  0.369 0.44 0.497
## T1DP18Cleanwater           371 0.419 0.414  0.3899  0.301 0.87 0.342
## T1DP19Disinfect            370 0.539 0.502  0.5110  0.425 0.84 0.367
## T1DP20Sanitation           369 0.358 0.389  0.3728  0.292 0.96 0.198
## T1DP21Safeplacewaterrise 368 0.225 0.271  0.1932  0.169 0.98 0.155
## T1DP22SafeplaceEQ          367 0.449 0.390  0.3482  0.274 0.60 0.490
```

```
## T1DP23Riskysafeplacemap  370 0.078 0.118  0.0039  0.012 0.98 0.136
## T1DP24Helpneighbors      370 0.208 0.283  0.2214  0.156 0.98 0.126
## T1loccode                371 0.359 0.164  0.0619  0.024 2.02 0.809
##
## Non missing response frequency for each item
##                              0 0.822289156626506 0.902004454342984
## T1DP1Supplykit            0.05               0.0              0.00
## T1DP2Itemsinhouse         0.05               0.0              0.00
## T1DP3Meds                 0.12               0.3              0.00
## T1DP4Foodpeople           0.05               0.0              0.00
## T1DP5Foodanimals          0.05               0.0              0.00
## T1DP6Docs                 0.00               0.0              0.00
## T1DP7Firewood             0.02               0.0              0.00
## T1DP8Secureddwelling      0.08               0.0              0.00
## T1DP9Raiseitems           0.01               0.0              0.00
## T1DP10Divertwater         0.24               0.0              0.00
## T1DP11Removeblowingobj    0.05               0.0              0.00
## T1DP12Famemergplan        0.04               0.0              0.00
## T1DP13Evacplan            0.03               0.0              0.00
## T1DP14Reconnectfamplan    0.25               0.0              0.00
## T1DP15Talktochildren      0.09               0.0              0.05
## T1DP16RadioTVcomp         0.06               0.0              0.00
## T1DP17Firstaid            0.56               0.0              0.00
## T1DP18Cleanwater          0.13               0.0              0.00
## T1DP19Disinfect           0.16               0.0              0.00
## T1DP20Sanitation          0.04               0.0              0.00
## T1DP21Safeplacewaterrise 0.02               0.0              0.00
## T1DP22SafeplaceEQ         0.40               0.0              0.00
## T1DP23Riskysafeplacemap   0.02               0.0              0.00
## T1DP24Helpneighbors       0.02               0.0              0.00
## T1loccode                 0.00               0.0              0.00
##                          0.933628318584071 0.954446854663774    1    2
## T1DP1Supplykit                        0.00              0.04 0.92 0.00
## T1DP2Itemsinhouse                     0.00              0.00 0.95 0.00
## T1DP3Meds                             0.00              0.00 0.58 0.00
## T1DP4Foodpeople                       0.00              0.00 0.95 0.00
## T1DP5Foodanimals                      0.05              0.00 0.89 0.00
## T1DP6Docs                             0.00              0.00 1.00 0.00
## T1DP7Firewood                         0.00              0.00 0.98 0.00
## T1DP8Secureddwelling                  0.00              0.00 0.92 0.00
## T1DP9Raiseitems                       0.00              0.00 0.99 0.00
## T1DP10Divertwater                     0.00              0.00 0.76 0.00
## T1DP11Removeblowingobj                0.00              0.00 0.95 0.00
## T1DP12Famemergplan                    0.00              0.00 0.96 0.00
## T1DP13Evacplan                        0.00              0.00 0.97 0.00
## T1DP14Reconnectfamplan                0.00              0.00 0.75 0.00
## T1DP15Talktochildren                  0.00              0.00 0.86 0.00
## T1DP16RadioTVcomp                     0.00              0.00 0.94 0.00
## T1DP17Firstaid                        0.00              0.00 0.44 0.00
## T1DP18Cleanwater                      0.00              0.00 0.87 0.00
## T1DP19Disinfect                       0.00              0.00 0.84 0.00
## T1DP20Sanitation                      0.00              0.00 0.96 0.00
## T1DP21Safeplacewaterrise              0.00              0.00 0.98 0.00
## T1DP22SafeplaceEQ                     0.00              0.00 0.60 0.00
```

```
## T1DP23Riskysafeplacemap              0.00              0.00 0.98 0.00
## T1DP24Helpneighbors                  0.00              0.00 0.98 0.00
## T1loccode                            0.00              0.00 0.32 0.35
##                             3 miss
## T1DP1Supplykit           0.00 0.00
## T1DP2Itemsinhouse        0.00 0.00
## T1DP3Meds                0.00 0.00
## T1DP4Foodpeople          0.00 0.00
## T1DP5Foodanimals         0.00 0.00
## T1DP6Docs                0.00 0.01
## T1DP7Firewood            0.00 0.00
## T1DP8Secureddwelling     0.00 0.00
## T1DP9Raiseitems          0.00 0.00
## T1DP10Divertwater        0.00 0.01
## T1DP11Removeblowingobj   0.00 0.01
## T1DP12Famemergplan       0.00 0.00
## T1DP13Evacplan           0.00 0.00
## T1DP14Reconnectfamplan   0.00 0.01
## T1DP15Talktochildren     0.00 0.00
## T1DP16RadioTVcomp        0.00 0.00
## T1DP17Firstaid           0.00 0.00
## T1DP18Cleanwater         0.00 0.00
## T1DP19Disinfect          0.00 0.00
## T1DP20Sanitation         0.00 0.01
## T1DP21Safeplacewaterrise 0.00 0.01
## T1DP22SafeplaceEQ        0.00 0.01
## T1DP23Riskysafeplacemap  0.00 0.00
## T1DP24Helpneighbors      0.00 0.00
## T1loccode                0.33 0.00
```

```
psych::alpha(x = T2_DP_vars, cumulative = TRUE)
```

```
## Warning in psych::alpha(x = T2_DP_vars, cumulative = TRUE): Item =
## T2DP6Docs had no variance and was deleted
```

```
##
## Reliability analysis
## Call: psych::alpha(x = T2_DP_vars, cumulative = TRUE)
##
##   raw_alpha std.alpha G6(smc) average_r S/N   ase mean  sd
##       0.76      0.76    0.79      0.12 3.1 0.017   19 6.1
##
##  lower alpha upper     95% confidence boundaries
## 0.72 0.76 0.79
##
##  Reliability if an item is dropped:
##                          raw_alpha std.alpha G6(smc) average_r S/N
## T2DP1Supplykit                0.76      0.76    0.80      0.13 3.2
## T2DP2Itemsinhouse             0.75      0.75    0.78      0.12 3.0
## T2DP3Meds                     0.75      0.75    0.79      0.12 3.1
## T2DP4Foodpeople               0.74      0.74    0.77      0.11 2.8
## T2DP5Foodanimals              0.75      0.75    0.79      0.12 3.0
## T2DP7Firewood                 0.75      0.76    0.79      0.13 3.2
## T2DP8Secureddwelling          0.74      0.74    0.78      0.12 2.9
## T2DP9Raiseitems               0.74      0.74    0.78      0.12 2.9
```

```
## T2DP10Divertwater             0.75      0.75    0.79      0.12 3.0
## T2DP11Removeblowingobj        0.75      0.76    0.79      0.12 3.1
## T2DP12Famemergplan            0.76      0.75    0.79      0.12 3.1
## T2DP13Evacplan                0.73      0.74    0.77      0.11 2.8
## T2DP14Reconnectfamplan        0.73      0.74    0.77      0.11 2.8
## T2DP15Talktochildren          0.74      0.74    0.78      0.12 2.9
## T2DP16RadioTVcomp             0.75      0.75    0.79      0.12 3.0
## T2DP17Firstaid                0.74      0.74    0.78      0.12 2.9
## T2DP18Cleanwater              0.75      0.75    0.79      0.12 3.1
## T2DP19Disinfect               0.75      0.75    0.78      0.12 2.9
## T2DP20Sanitation              0.75      0.75    0.79      0.12 3.1
## T2DP21Safeplacewaterrise      0.76      0.76    0.80      0.13 3.2
## T2DP22SafeplaceEQ             0.75      0.75    0.79      0.12 3.1
## T2DP23Riskysafeplacemap       0.76      0.76    0.79      0.13 3.1
## T2DP24Helpneighbors           0.74      0.74    0.78      0.12 2.9
##                           alpha se
## T2DP1Supplykit              0.017
## T2DP2Itemsinhouse           0.018
## T2DP3Meds                   0.018
## T2DP4Foodpeople             0.019
## T2DP5Foodanimals            0.018
## T2DP7Firewood               0.017
## T2DP8Secureddwelling        0.018
## T2DP9Raiseitems             0.018
## T2DP10Divertwater           0.018
## T2DP11Removeblowingobj      0.018
## T2DP12Famemergplan          0.017
## T2DP13Evacplan              0.019
## T2DP14Reconnectfamplan      0.020
## T2DP15Talktochildren        0.018
## T2DP16RadioTVcomp           0.018
## T2DP17Firstaid              0.019
## T2DP18Cleanwater            0.018
## T2DP19Disinfect             0.018
## T2DP20Sanitation            0.018
## T2DP21Safeplacewaterrise    0.017
## T2DP22SafeplaceEQ           0.018
## T2DP23Riskysafeplacemap     0.017
## T2DP24Helpneighbors         0.018
##
##  Item statistics
##                             n raw.r std.r r.cor r.drop mean   sd
## T2DP1Supplykit            341  0.21  0.21  0.13  0.089 0.87 0.34
## T2DP2Itemsinhouse         341  0.43  0.44  0.41  0.362 0.96 0.21
## T2DP3Meds                 341  0.32  0.34  0.28  0.252 0.93 0.19
## T2DP4Foodpeople           341  0.55  0.55  0.55  0.473 0.93 0.26
## T2DP5Foodanimals          341  0.36  0.40  0.35  0.278 0.92 0.26
## T2DP7Firewood             341  0.21  0.26  0.19  0.159 0.98 0.13
## T2DP8Secureddwelling      341  0.51  0.49  0.45  0.402 0.86 0.35
## T2DP9Raiseitems           341  0.45  0.48  0.45  0.391 0.96 0.18
## T2DP10Divertwater         341  0.45  0.41  0.37  0.313 0.76 0.43
## T2DP11Removeblowingobj    341  0.25  0.29  0.23  0.207 0.98 0.13
## T2DP12Famemergplan        341  0.39  0.35  0.29  0.237 0.73 0.44
## T2DP13Evacplan            341  0.59  0.57  0.57  0.512 0.90 0.30
```

```
## T2DP14Reconnectfamplan   341  0.63  0.56  0.55  0.517 0.71 0.45
## T2DP15Talktochildren     341  0.52  0.51  0.48  0.422 0.88 0.31
## T2DP16RadioTVcomp        341  0.41  0.38  0.33  0.301 0.86 0.35
## T2DP17Firstaid           341  0.57  0.50  0.48  0.421 0.57 0.50
## T2DP18Cleanwater         340  0.33  0.34  0.28  0.245 0.93 0.26
## T2DP19Disinfect          341  0.43  0.46  0.42  0.324 0.87 0.34
## T2DP20Sanitation         341  0.24  0.33  0.29  0.191 0.98 0.13
## T2DP21Safeplacewaterrise 340  0.10  0.19  0.11  0.057 0.99 0.12
## T2DP22SafeplaceEQ        339  0.38  0.34  0.29  0.267 0.87 0.34
## T2DP23Riskysafeplacemap  340  0.17  0.26  0.21  0.122 0.99 0.11
## T2DP24Helpneighbors      341  0.47  0.48  0.45  0.403 0.95 0.21
##
## Non missing response frequency for each item
##                                0 0.881720430107527 0.922077922077922
## T2DP1Supplykit              0.13              0.00              0.00
## T2DP2Itemsinhouse           0.04              0.00              0.00
## T2DP3Meds                   0.04              0.00              0.00
## T2DP4Foodpeople             0.07              0.00              0.00
## T2DP5Foodanimals            0.07              0.00              0.06
## T2DP7Firewood               0.02              0.00              0.00
## T2DP8Secureddwelling        0.14              0.00              0.00
## T2DP9Raiseitems             0.04              0.00              0.00
## T2DP10Divertwater           0.24              0.00              0.00
## T2DP11Removeblowingobj      0.02              0.00              0.00
## T2DP12Famemergplan          0.27              0.00              0.00
## T2DP13Evacplan              0.10              0.00              0.00
## T2DP14Reconnectfamplan      0.29              0.00              0.00
## T2DP15Talktochildren        0.11              0.08              0.00
## T2DP16RadioTVcomp           0.14              0.00              0.00
## T2DP17Firstaid              0.43              0.00              0.00
## T2DP18Cleanwater            0.07              0.00              0.00
## T2DP19Disinfect             0.13              0.00              0.00
## T2DP20Sanitation            0.02              0.00              0.00
## T2DP21Safeplacewaterrise    0.01              0.00              0.00
## T2DP22SafeplaceEQ           0.13              0.00              0.00
## T2DP23Riskysafeplacemap     0.01              0.00              0.00
## T2DP24Helpneighbors         0.05              0.00              0.00
##                           0.935897435897436    1 miss
## T2DP1Supplykit                         0.00 0.87 0.08
## T2DP2Itemsinhouse                      0.00 0.96 0.08
## T2DP3Meds                              0.44 0.52 0.08
## T2DP4Foodpeople                        0.00 0.93 0.08
## T2DP5Foodanimals                       0.00 0.87 0.08
## T2DP7Firewood                          0.00 0.98 0.08
## T2DP8Secureddwelling                   0.00 0.86 0.08
## T2DP9Raiseitems                        0.00 0.96 0.08
## T2DP10Divertwater                      0.00 0.76 0.08
## T2DP11Removeblowingobj                 0.00 0.98 0.08
## T2DP12Famemergplan                     0.00 0.73 0.08
## T2DP13Evacplan                         0.00 0.90 0.08
## T2DP14Reconnectfamplan                 0.00 0.71 0.08
## T2DP15Talktochildren                   0.00 0.81 0.08
## T2DP16RadioTVcomp                      0.00 0.86 0.08
## T2DP17Firstaid                         0.00 0.57 0.08
```

```
## T2DP18Cleanwater                      0.00 0.93 0.08
## T2DP19Disinfect                       0.00 0.87 0.08
## T2DP20Sanitation                      0.00 0.98 0.08
## T2DP21Safeplacewaterrise              0.00 0.99 0.08
## T2DP22SafeplaceEQ                     0.00 0.87 0.09
## T2DP23Riskysafeplacemap               0.00 0.99 0.08
## T2DP24Helpneighbors                   0.00 0.95 0.08
```

```
psych::alpha(x = T3_DP_vars, cumulative = TRUE)
```

```
## Warning in psych::alpha(x = T3_DP_vars, cumulative = TRUE): Some items were negatively correlated wi
## should be reversed.
## To do this, run the function again with the 'check.keys=TRUE' option
```

```
## Some items ( T3DP3Meds T3DP6Docs ) were negatively correlated with the total scale and
## probably should be reversed.
## To do this, run the function again with the 'check.keys=TRUE' option
```

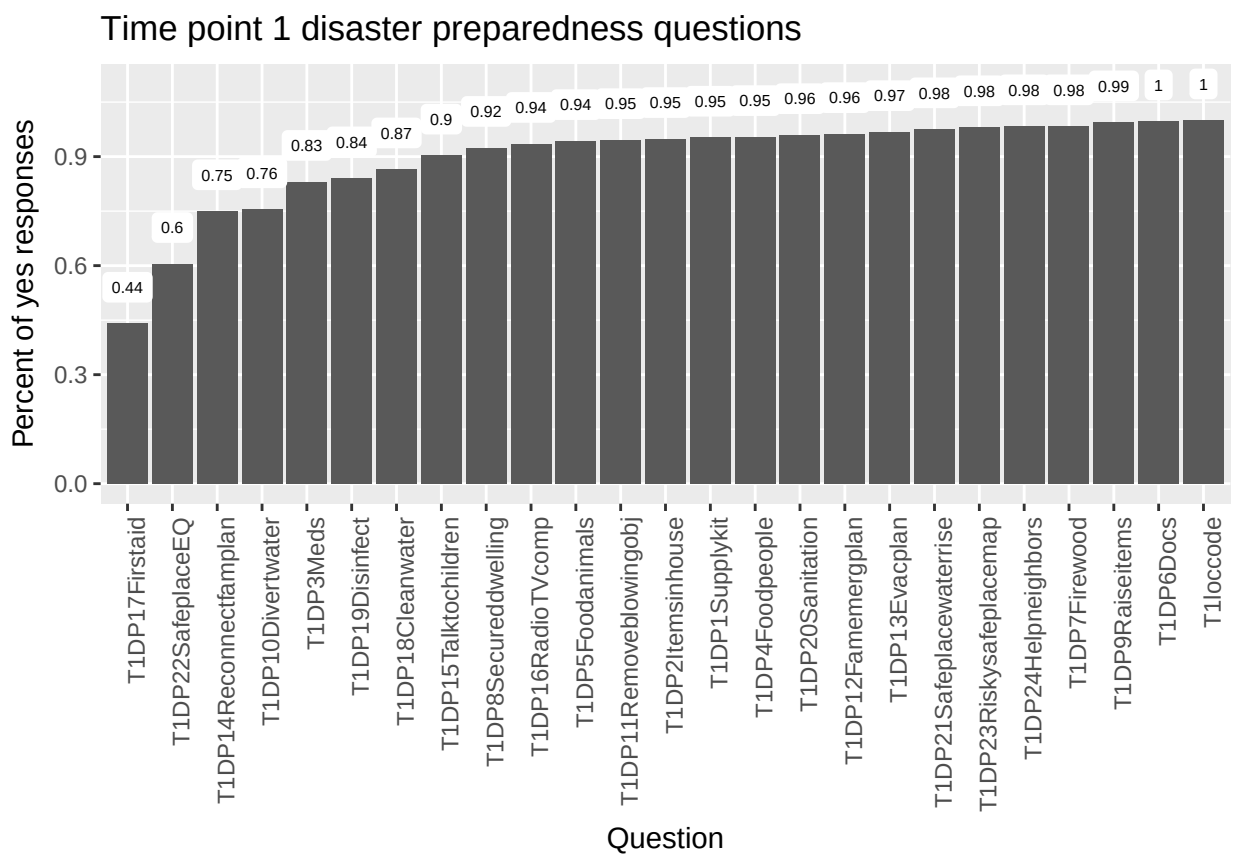
```
##
## Reliability analysis
## Call: psych::alpha(x = T3_DP_vars, cumulative = TRUE)
##
##   raw_alpha std.alpha G6(smc) average_r S/N   ase mean  sd
##       0.79      0.75     0.8      0.11 3.1 0.014   21 2.8
##
##  lower alpha upper     95% confidence boundaries
## 0.76 0.79 0.81
##
##  Reliability if an item is dropped:
##                          raw_alpha std.alpha G6(smc) average_r S/N
## T3DP1Supplykit                0.79      0.75    0.79      0.11 3.0
## T3DP2Itemsinhouse             0.78      0.75    0.79      0.11 3.0
## T3DP3Meds                     0.79      0.76    0.81      0.12 3.2
## T3DP4Foodpeople               0.79      0.76    0.80      0.12 3.1
## T3DP5Foodanimals              0.79      0.75    0.79      0.12 3.0
## T3DP6Docs                     0.79      0.76    0.80      0.12 3.2
## T3DP7Firewood                 0.78      0.74    0.79      0.11 2.9
## T3DP8Secureddwelling          0.78      0.74    0.79      0.11 2.9
## T3DP9Raiseitems               0.79      0.76    0.80      0.12 3.1
## T3DP10Divertwater             0.76      0.73    0.78      0.11 2.7
## T3DP11Removeblowingobj        0.79      0.76    0.80      0.12 3.1
## T3DP12Famemergplan            0.76      0.73    0.78      0.11 2.7
## T3DP13Evacplan                0.76      0.73    0.77      0.11 2.7
## T3DP14Reconnectfamplan        0.76      0.73    0.78      0.10 2.7
## T3DP15Talktochildren          0.77      0.74    0.78      0.11 2.8
## T3DP16RadioTVcomp             0.78      0.74    0.79      0.11 2.9
## T3DP17Firstaid                0.78      0.74    0.79      0.11 2.8
## T3DP18Cleanwater              0.78      0.74    0.79      0.11 2.9
## T3DP19Disinfect               0.78      0.74    0.79      0.11 2.9
## T3DP20Sanitation              0.79      0.75    0.79      0.12 3.0
## T3DP21Safeplacewaterrise      0.78      0.75    0.79      0.11 3.0
## T3DP22SafeplaceEQ             0.78      0.74    0.79      0.11 2.9
## T3DP23Riskysafeplacemap       0.79      0.75    0.79      0.12 3.0
## T3DP24Helpneighbors           0.78      0.75    0.79      0.11 2.9
##                          alpha se
## T3DP1Supplykit             0.014
```

```
## T3DP2Itemsinhouse           0.014
## T3DP3Meds                   0.014
## T3DP4Foodpeople             0.014
## T3DP5Foodanimals            0.014
## T3DP6Docs                   0.014
## T3DP7Firewood               0.014
## T3DP8Secureddwelling        0.014
## T3DP9Raiseitems             0.014
## T3DP10Divertwater           0.015
## T3DP11Removeblowingobj      0.014
## T3DP12Famemergplan          0.015
## T3DP13Evacplan              0.015
## T3DP14Reconnectfamplan      0.016
## T3DP15Talktochildren        0.015
## T3DP16RadioTVcomp           0.014
## T3DP17Firstaid              0.014
## T3DP18Cleanwater            0.014
## T3DP19Disinfect             0.014
## T3DP20Sanitation            0.014
## T3DP21Safeplacewaterrise    0.014
## T3DP22SafeplaceEQ           0.014
## T3DP23Riskysafeplacemap     0.014
## T3DP24Helpneighbors         0.014
##
##  Item statistics
##                              n raw.r std.r r.cor  r.drop mean    sd
## T3DP1Supplykit             371 0.433  0.37 0.307  0.2903 0.72 0.451
## T3DP2Itemsinhouse          370 0.294  0.34 0.281  0.2451 0.98 0.154
## T3DP3Meds                  370 0.042  0.11 0.013  0.0023 0.98 0.115
## T3DP4Foodpeople            370 0.140  0.21 0.122  0.0930 0.98 0.136
## T3DP5Foodanimals           371 0.206  0.29 0.234  0.1581 0.98 0.145
## T3DP6Docs                  371 0.009  0.12 0.033 -0.0089 1.00 0.052
## T3DP7Firewood              369 0.439  0.45 0.418  0.3761 0.95 0.221
## T3DP8Secureddwelling       371 0.501  0.45 0.414  0.3818 0.79 0.410
## T3DP9Raiseitems            370 0.185  0.24 0.163  0.1426 0.98 0.126
## T3DP10Divertwater          371 0.648  0.58 0.569  0.5398 0.71 0.454
## T3DP11Removeblowingobj     371 0.184  0.24 0.165  0.1591 0.99 0.073
## T3DP12Famemergplan         371 0.652  0.57 0.578  0.5438 0.72 0.448
## T3DP13Evacplan             370 0.659  0.60 0.617  0.5757 0.84 0.367
## T3DP14Reconnectfamplan     371 0.717  0.62 0.634  0.6263 0.73 0.446
## T3DP15Talktochildren       371 0.585  0.49 0.474  0.4909 0.81 0.375
## T3DP16RadioTVcomp          371 0.499  0.46 0.418  0.3939 0.86 0.350
## T3DP17Firstaid             371 0.522  0.48 0.448  0.3987 0.77 0.423
## T3DP18Cleanwater           370 0.352  0.41 0.383  0.2877 0.96 0.204
## T3DP19Disinfect            370 0.357  0.41 0.384  0.2872 0.95 0.226
## T3DP20Sanitation           371 0.170  0.31 0.265  0.1461 0.99 0.073
## T3DP21Safeplacewaterrise   371 0.273  0.37 0.327  0.2329 0.98 0.126
## T3DP22SafeplaceEQ          370 0.459  0.46 0.432  0.3662 0.89 0.311
## T3DP23Riskysafeplacemap    370 0.213  0.33 0.277  0.1751 0.99 0.116
## T3DP24Helpneighbors        371 0.306  0.40 0.356  0.2603 0.98 0.145
##
## Non missing response frequency for each item
##                               0 0.816326530612245 0.977040816326531
## T3DP1Supplykit             0.28              0.00               0.00
```

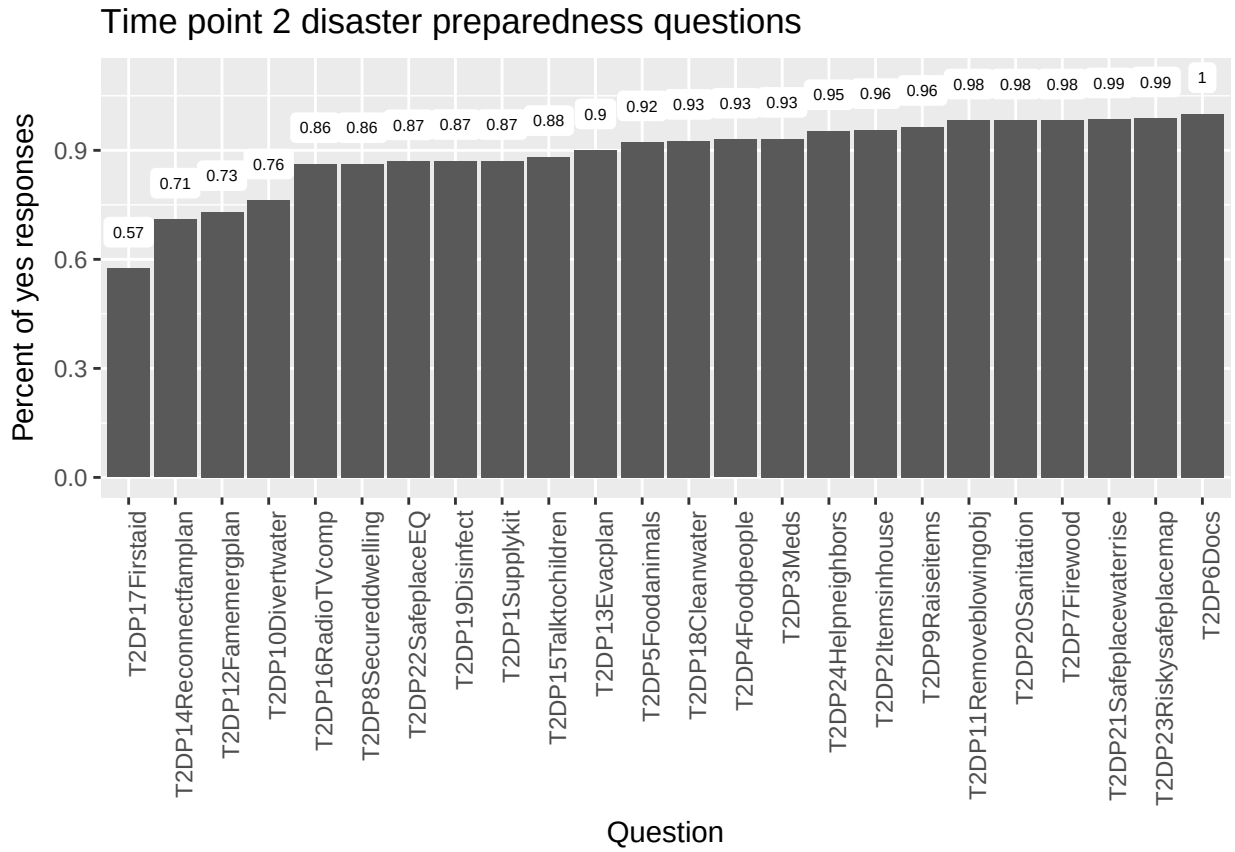
```
## T3DP2Itemsinhouse        0.02              0.00              0.00
## T3DP3Meds                0.01              0.00              0.00
## T3DP4Foodpeople          0.02              0.00              0.00
## T3DP5Foodanimals         0.02              0.00              0.08
## T3DP6Docs                0.00              0.00              0.00
## T3DP7Firewood            0.05              0.00              0.00
## T3DP8Secureddwelling     0.21              0.00              0.00
## T3DP9Raiseitems          0.02              0.00              0.00
## T3DP10Divertwater        0.29              0.00              0.00
## T3DP11Removeblowingobj   0.01              0.00              0.00
## T3DP12Famemergplan       0.28              0.00              0.00
## T3DP13Evacplan           0.16              0.00              0.00
## T3DP14Reconnectfamplan   0.27              0.00              0.00
## T3DP15Talktochildren     0.17              0.08              0.00
## T3DP16RadioTVcomp        0.14              0.00              0.00
## T3DP17Firstaid           0.23              0.00              0.00
## T3DP18Cleanwater         0.04              0.00              0.00
## T3DP19Disinfect          0.05              0.00              0.00
## T3DP20Sanitation         0.01              0.00              0.00
## T3DP21Safeplacewaterrise 0.02              0.00              0.00
## T3DP22SafeplaceEQ        0.11              0.00              0.00
## T3DP23Riskysafeplacemap  0.01              0.00              0.00
## T3DP24Helpneighbors      0.02              0.00              0.00
##                          0.979423868312757    1 miss
## T3DP1Supplykit                        0.00 0.72 0.00
## T3DP2Itemsinhouse                     0.00 0.98 0.00
## T3DP3Meds                             0.43 0.56 0.00
## T3DP4Foodpeople                       0.00 0.98 0.00
## T3DP5Foodanimals                      0.00 0.89 0.00
## T3DP6Docs                             0.00 1.00 0.00
## T3DP7Firewood                         0.00 0.95 0.01
## T3DP8Secureddwelling                  0.00 0.79 0.00
## T3DP9Raiseitems                       0.00 0.98 0.00
## T3DP10Divertwater                     0.00 0.71 0.00
## T3DP11Removeblowingobj                0.00 0.99 0.00
## T3DP12Famemergplan                    0.00 0.72 0.00
## T3DP13Evacplan                        0.00 0.84 0.00
## T3DP14Reconnectfamplan                0.00 0.73 0.00
## T3DP15Talktochildren                  0.00 0.75 0.00
## T3DP16RadioTVcomp                     0.00 0.86 0.00
## T3DP17Firstaid                        0.00 0.77 0.00
## T3DP18Cleanwater                      0.00 0.96 0.00
## T3DP19Disinfect                       0.00 0.95 0.00
## T3DP20Sanitation                      0.00 0.99 0.00
## T3DP21Safeplacewaterrise              0.00 0.98 0.00
## T3DP22SafeplaceEQ                     0.00 0.89 0.00
## T3DP23Riskysafeplacemap               0.00 0.99 0.00
## T3DP24Helpneighbors                   0.00 0.98 0.00
```

```
per_yes_T1 <-  t(summarise_all(T1_DP_vars, funs(sum(. == 1, na.rm = T) / (sum(. == 0, na.rm = T) + sum(
per_yes_T2 <-  t(summarise_all(T2_DP_vars, funs(sum(. == 1, na.rm = T) / (sum(. == 0, na.rm = T) + sum(
per_yes_T3 <-  t(summarise_all(T3_DP_vars, funs(sum(. == 1, na.rm = T) / (sum(. == 0, na.rm = T) + sum(
per_yes_T1 <- data.frame(percent_yes = per_yes_T1[,1], question = row.names(per_yes_T1))
per_yes_T2 <- data.frame(percent_yes = per_yes_T2[,1], question = row.names(per_yes_T2))
```

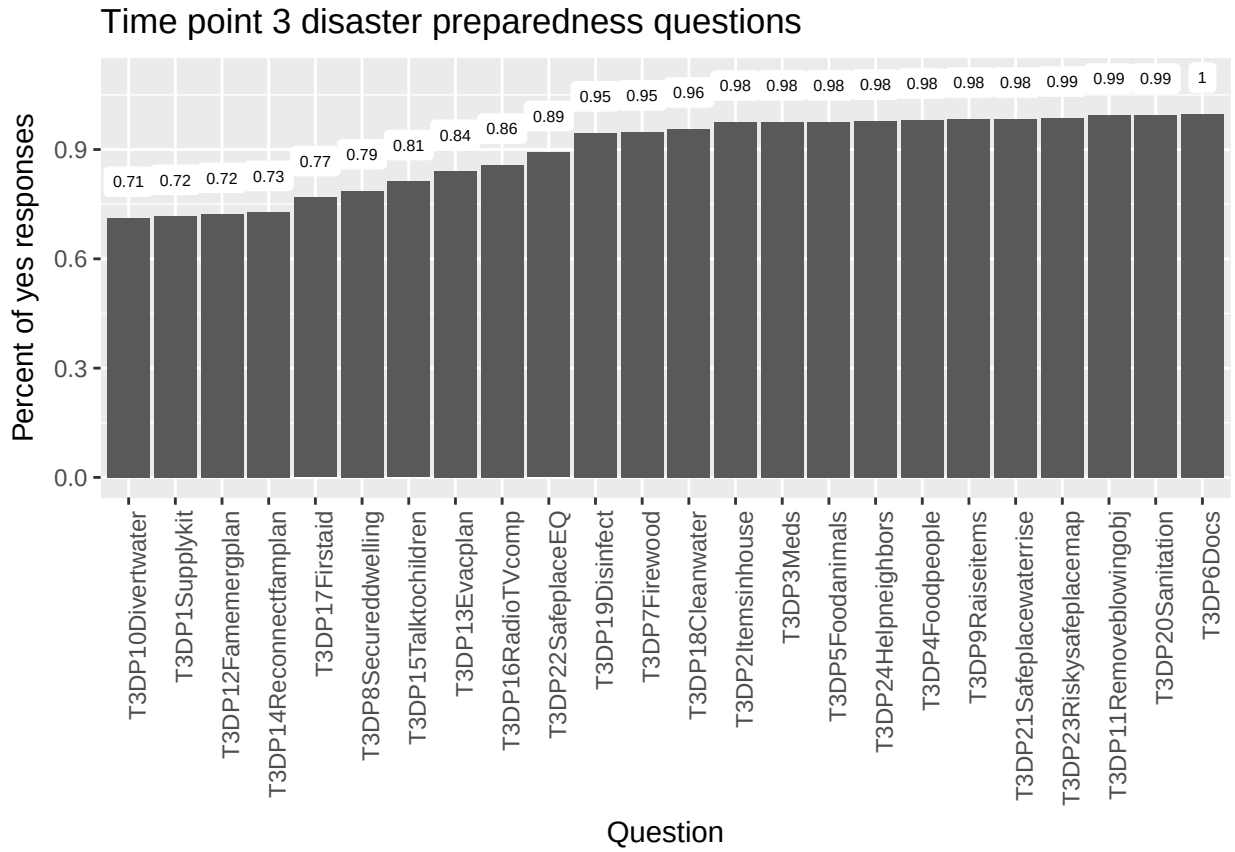
```
per_yes_T3 <- data.frame(percent_yes = per_yes_T3[,1], question = row.names(per_yes_T3))

ggplot(per_yes_T1, aes(x=reorder(question, percent_yes), y=percent_yes)) + geom_bar(stat = "identity") +
```




```
ggplot(per_yes_T2, aes(x=reorder(question, percent_yes), y=percent_yes)) + geom_bar(stat = "identity") +
```




```
ggplot(per_yes_T3, aes(x=reorder(question, percent_yes), y=percent_yes)) + geom_bar(stat = "identity") +
```



Many of the disaster preparation questions are answered 'yes' at an extremely high rate. Let's make a new variable that includes only questions where less than 95% of respondants said yes at time 1.

```
per_yes_T1$question <- as.character(per_yes_T1$question)
vars_95_less <- per_yes_T1$question[per_yes_T1$percent_yes < .95]
vars_95_less <- substr(vars_95_less, 3, nchar(vars_95_less))
data %<>% mutate(DP_95_T1 = select(., paste0('T1', vars_95_less)) %>% rowSums,

                 DP_95_T2 = select(., paste0('T2', vars_95_less)) %>% rowSums,

                 DP_95_T3 = select(., paste0('T3', vars_95_less)) %>% rowSums)

data$DP_95_T <- melt_data_suffix('DP_95_T')

filtered <- data %>% filter(!is.na(interventiongroup))
write_dta(filtered, 'C:/Users/ajame/Dropbox/Alex - Nepal/Flood data/Nepal RCT partial reshape DP cleane
```

Having done that, we can ask whether disaster preparedness is correlated with our mental health measures (a primary assumption of the intervention). We'll run it on the overall disaster preparedness measure and our cut-down version with only items with 95% or less 'yes' respondents.

```
cor.test( ~ DP_cleaned_T  + BDImean16_T, data = filtered, subset = timePoint_factor == "1" )
```

```
##
##  Pearson's product-moment correlation
##
## data:  DP_cleaned_T and BDImean16_T
## t = 0.62554, df = 341, p-value = 0.532
```

```
## alternative hypothesis: true correlation is not equal to 0
## 95 percent confidence interval:
##  -0.07229941  0.13925147
## sample estimates:
##        cor
## 0.03385525
```

```
cor.test( ~ DP_cleaned_T  + PTSDmean13_T, data = filtered, subset = timePoint_factor == "1" )
```

```
##
##  Pearson's product-moment correlation
##
## data:  DP_cleaned_T and PTSDmean13_T
## t = 3.2456, df = 341, p-value = 0.001288
## alternative hypothesis: true correlation is not equal to 0
## 95 percent confidence interval:
##  0.06846665 0.27398008
## sample estimates:
##      cor
## 0.173107
```

```
cor.test( ~ DP_95_T  + BDImean16_T, data = filtered, subset = timePoint_factor == "1" )
```

```
##
##  Pearson's product-moment correlation
##
## data:  DP_95_T and BDImean16_T
## t = 0.5685, df = 350, p-value = 0.5701
## alternative hypothesis: true correlation is not equal to 0
## 95 percent confidence interval:
##  -0.0743938  0.1344779
## sample estimates:
##        cor
## 0.03037362
```

```
cor.test( ~ DP_95_T  + PTSDmean13_T, data = filtered, subset = timePoint_factor == "1" )
```

```
##
##  Pearson's product-moment correlation
##
## data:  DP_95_T and PTSDmean13_T
## t = 3.6201, df = 350, p-value = 0.0003379
## alternative hypothesis: true correlation is not equal to 0
## 95 percent confidence interval:
##  0.0871809 0.2887772
## sample estimates:
##       cor
## 0.1899808
```

Now we'll create a figure of disaster preparedness means + standard errors across intervention groups and time points.

```
plot_line_bar <- function(dv, limits, theme_style = theme_grey(), title = "", position=c(.8825, .25), by


  if(is.factor(filtered[[dv]])) {
    filtered[[paste0(dv, '_numeric')]] <- as.numeric(filtered[[dv]])
```

```
    dv <- paste0(dv, '_numeric')
  }

  breaks <- seq(limits[1], limits[2], by=by)
  wrap_113 <- wrap_format(113)

  line <- ggplot(filtered, aes_string(x="timePoint_factor", y=dv, group="interventiongroup", shape="inte
        stat_summary(geom="errorbar", fun.data=mean_se, fun.args=list(mult=1), width=.09, size=1, alpha=
        stat_summary(aes(color=interventionLinePlotting), geom="line", fun.y="mean", size=1, alpha=.8, l
        stat_summary(geom="point", fun.y="mean", size=4, aes(color=interventPlotting))  +
        coord_cartesian(ylim=limits) +
        scale_shape_discrete("") +
        scale_color_discrete("",labels=c('Control', 'Intervention')) +
        labs(color="Condition", shape="Condition", x="Time point", y=title, caption = wrap_113(sprintf(c
        theme_style +
        theme(
            legend.position=position,
            plot.caption=element_text(hjust=0),
            legend.box.just="left",
            legend.background = element_rect(color = "transparent", fill = "transparent"),
            legend.key = element_rect(color = "transparent", fill = "transparent"),
            legend.title = element_blank()
        )   + guides(shape = guide_legend(override.aes = list(shape=c(19,17))),
              colour = guide_legend(override.aes = list(linetype = c(1,1), shape=NA)))
  line
  if(save) {
    ggsave(paste0(title, '.pdf'), device=cairo_pdf, width = 7.5, height = 5)
  }
  print(line)
}
```

{r} # limits <- c(18,20) # theme <- theme_minimal() # rnge <- range(filtered$DPsum21_T, na.rm = TRUE) # caption = "21-item yes/no scale (range %d - %d), with greater values indicating greater engagement in disaster preparation behaviors" # plot_line_bar("D limits, theme, "Disaster Preparation Behaviors", logit=FALSE, rnge = rnge, by = 1, position=c(.8825, .8), caption = caption, save = TRUE) #

```
limits <- c(20, 23)
theme <- theme_minimal()
rnge <- round(range(filtered$DP_cleaned_T, na.rm = TRUE),0)
caption = "24-item yes/no scale (range %d - %d), with greater values indicating greater engagement in di
plot_line_bar("DP_cleaned_T", limits, theme, "Disaster Preparation Behaviors", logit=FALSE, rnge = rnge
```

```
## Warning: Removed 73 rows containing non-finite values (stat_summary).
```

```
## Warning: Removed 73 rows containing non-finite values (stat_summary).
```

```
## Warning: Removed 73 rows containing non-finite values (stat_summary).
```

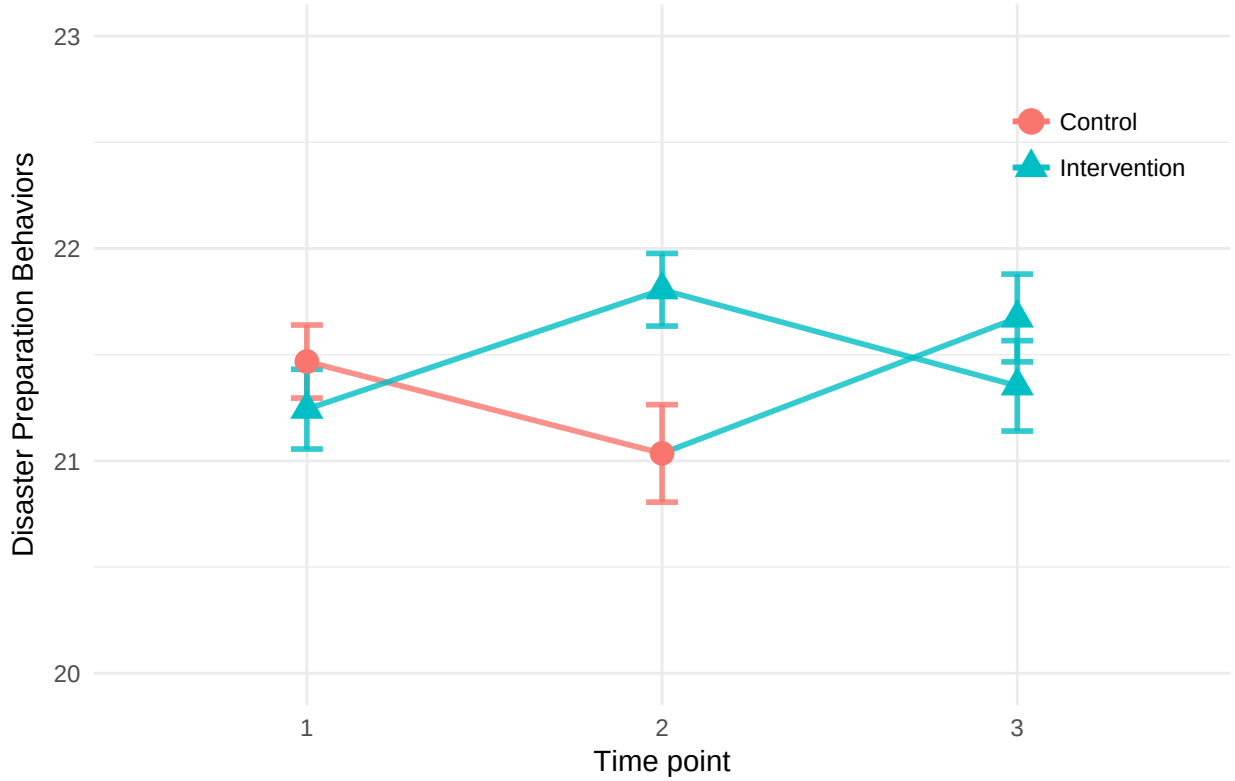
```
## Warning in guide_merge.legend(init, x[[i]]): Duplicated override.aes is
## ignored.
```

```
## Warning: Removed 73 rows containing non-finite values (stat_summary).
```

```
## Warning: Removed 73 rows containing non-finite values (stat_summary).
```

```
## Warning: Removed 73 rows containing non-finite values (stat_summary).
```

```
## Warning in guide_merge.legend(init, x[[i]]): Duplicated override.aes is
## ignored.
```



24−item yes/no scale (range 10 − 24), with greater values indicating greater engagement in disast behaviors

{r, cache = TRUE} # DP_model <- lmer(DPsum21_T ~ interventiongroup * timePoint_factor * gender + (1|loc_factor/ID_factor), data = filtered) # summary(DP_model) #

```
DP_model <- lmer(DP_cleaned_T ~ interventiongroup * timePoint_factor * gender + (1|loc_factor/ID_factor)
summary(DP_model)
```

```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
##   to degrees of freedom [lmerMod]
## Formula: DP_cleaned_T ~ interventiongroup * timePoint_factor * gender +
```

```
##     (1 | loc_factor/ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 4805.6
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -3.9768 -0.4383  0.2085  0.6115  1.9173
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 1.99039  1.4108
##  loc_factor           (Intercept) 0.06355  0.2521
##  Residual                         4.67226  2.1615
## Number of obs: 1032, groups:  ID_factor:loc_factor, 368; loc_factor, 3
##
## Fixed effects:
##                                                              Estimate
## (Intercept)                                                   21.5214
## interventiongroupIntervention                                 -0.5079
## timePoint_factor2                                             -0.7062
## timePoint_factor3                                             -0.3024
## genderMale                                                    -0.4076
## interventiongroupIntervention:timePoint_factor2                1.3825
## interventiongroupIntervention:timePoint_factor3                0.4349
## interventiongroupIntervention:genderMale                       1.2954
## timePoint_factor2:genderMale                                   1.2691
## timePoint_factor3:genderMale                                   2.2919
## interventiongroupIntervention:timePoint_factor2:genderMale    -1.6727
## interventiongroupIntervention:timePoint_factor3:genderMale    -2.3740
##                                                             Std. Error
## (Intercept)                                                     0.2652
## interventiongroupIntervention                                   0.3216
## timePoint_factor2                                               0.2675
## timePoint_factor3                                               0.2612
## genderMale                                                      0.4551
## interventiongroupIntervention:timePoint_factor2                 0.3849
## interventiongroupIntervention:timePoint_factor3                 0.3805
## interventiongroupIntervention:genderMale                        0.6423
## timePoint_factor2:genderMale                                    0.5556
## timePoint_factor3:genderMale                                    0.5367
## interventiongroupIntervention:timePoint_factor2:genderMale      0.7986
## interventiongroupIntervention:timePoint_factor3:genderMale      0.7584
##                                                                     df
## (Intercept)                                                    10.2000
## interventiongroupIntervention                                 903.9000
## timePoint_factor2                                             682.2000
## timePoint_factor3                                             667.0000
## genderMale                                                    897.2000
## interventiongroupIntervention:timePoint_factor2               683.2000
## interventiongroupIntervention:timePoint_factor3               676.0000
## interventiongroupIntervention:genderMale                      893.7000
## timePoint_factor2:genderMale                                  690.1000
## timePoint_factor3:genderMale                                  671.0000
```

```
## interventiongroupIntervention:timePoint_factor2:genderMale 695.0000
## interventiongroupIntervention:timePoint_factor3:genderMale 669.2000
##                                                             t value
## (Intercept)                                                  81.156
## interventiongroupIntervention                                -1.580
## timePoint_factor2                                            -2.640
## timePoint_factor3                                            -1.158
## genderMale                                                   -0.896
## interventiongroupIntervention:timePoint_factor2               3.592
## interventiongroupIntervention:timePoint_factor3               1.143
## interventiongroupIntervention:genderMale                      2.017
## timePoint_factor2:genderMale                                  2.284
## timePoint_factor3:genderMale                                  4.271
## interventiongroupIntervention:timePoint_factor2:genderMale   -2.095
## interventiongroupIntervention:timePoint_factor3:genderMale   -3.130
##                                                             Pr(>|t|)
## (Intercept)                                                 1.33e-15 ***
## interventiongroupIntervention                               0.114568
## timePoint_factor2                                           0.008473 **
## timePoint_factor3                                           0.247281
## genderMale                                                  0.370713
## interventiongroupIntervention:timePoint_factor2             0.000352 ***
## interventiongroupIntervention:timePoint_factor3             0.253477
## interventiongroupIntervention:genderMale                    0.044006 *
## timePoint_factor2:genderMale                                0.022671 *
## timePoint_factor3:genderMale                                2.23e-05 ***
## interventiongroupIntervention:timePoint_factor2:genderMale 0.036567 *
## interventiongroupIntervention:timePoint_factor3:genderMale 0.001823 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.576
## tmPnt_fctr2 -0.495  0.408
## tmPnt_fctr3 -0.506  0.417  0.502
## genderMale  -0.409  0.337  0.288  0.295
## intrvnI:P_2  0.344 -0.603 -0.695 -0.349 -0.200
## intrvnI:P_3  0.347 -0.610 -0.344 -0.686 -0.202  0.510
## intrvntnI:M  0.290 -0.502 -0.204 -0.209 -0.709  0.302   0.305
## tmPnt_fc2:M  0.238 -0.196 -0.481 -0.241 -0.586  0.335   0.166   0.415
## tmPnt_fc3:M  0.246 -0.203 -0.244 -0.487 -0.606  0.170   0.334   0.429
## intrI:P_2:M -0.165  0.290  0.335  0.168  0.407 -0.482  -0.246  -0.574
## intrI:P_3:M -0.174  0.306  0.173  0.344  0.429 -0.256  -0.502  -0.604
##             tP_2:M tP_3:M iI:P_2:
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.497
```

```
## intrI:P_2:M -0.696 -0.346
## intrI:P_3:M -0.352 -0.708  0.487
```

```
DP_95_model <- lmer(DP_95_T ~ interventiongroup * timePoint_factor * gender + (1|loc_factor/ID_factor),
summary(DP_95_model)
```

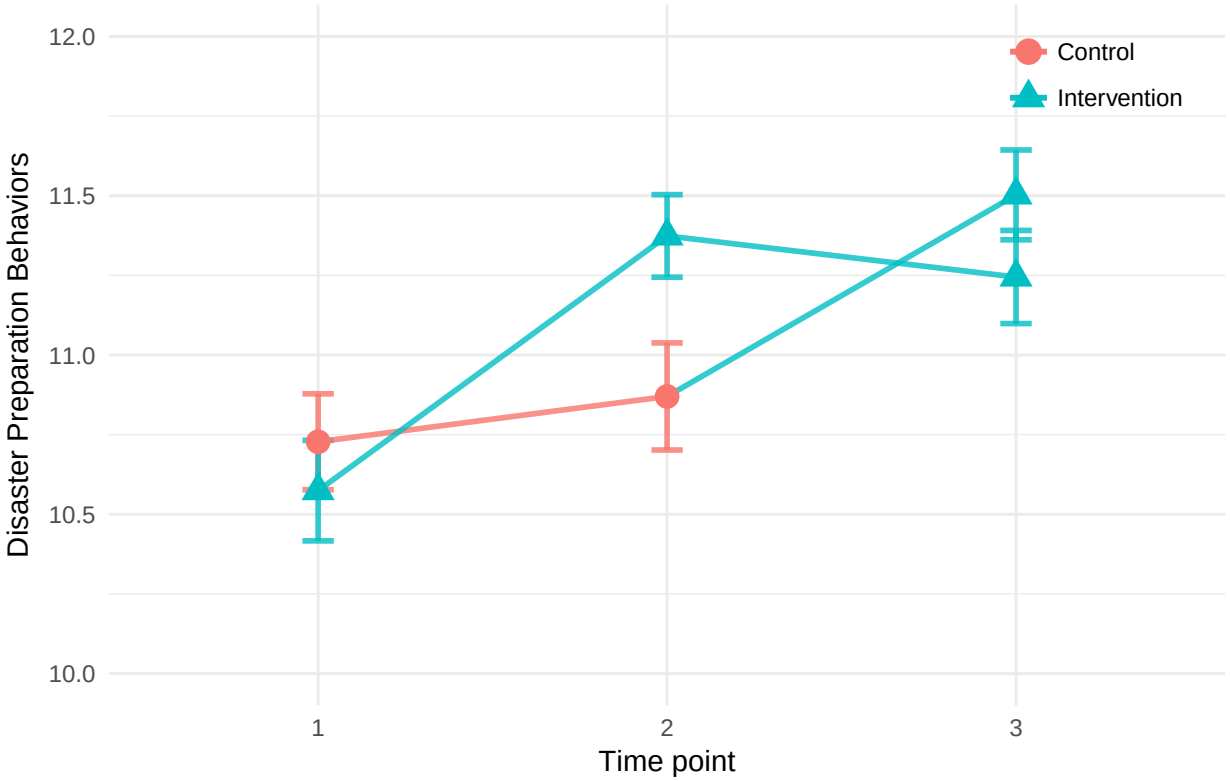
```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
##   to degrees of freedom [lmerMod]
## Formula: DP_95_T ~ interventiongroup * timePoint_factor * gender + (1 |
##     loc_factor/ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 4300.4
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -3.2489 -0.4726  0.2109  0.6258  1.8371
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 1.28130  1.1319
##  loc_factor           (Intercept) 0.01187  0.1089
##  Residual                         2.59933  1.6122
## Number of obs: 1048, groups:  ID_factor:loc_factor, 368; loc_factor, 3
##
## Fixed effects:
##                                                          Estimate
## (Intercept)                                              10.79700
## interventiongroupIntervention                            -0.39740
## timePoint_factor2                                        -0.07054
## timePoint_factor3                                         0.38241
## genderMale                                               -0.31967
## interventiongroupIntervention:timePoint_factor2           1.00256
## interventiongroupIntervention:timePoint_factor3           0.30055
## interventiongroupIntervention:genderMale                  0.95277
## timePoint_factor2:genderMale                              0.88623
## timePoint_factor3:genderMale                              1.66229
## interventiongroupIntervention:timePoint_factor2:genderMale -1.32526
## interventiongroupIntervention:timePoint_factor3:genderMale -1.66756
##                                                          Std. Error
## (Intercept)                                                 0.17878
## interventiongroupIntervention                               0.24222
## timePoint_factor2                                           0.19727
## timePoint_factor3                                           0.19323
## genderMale                                                  0.34338
## interventiongroupIntervention:timePoint_factor2             0.28411
## interventiongroupIntervention:timePoint_factor3             0.28024
## interventiongroupIntervention:genderMale                    0.48630
## timePoint_factor2:genderMale                                0.40870
## timePoint_factor3:genderMale                                0.39525
## interventiongroupIntervention:timePoint_factor2:genderMale  0.59129
## interventiongroupIntervention:timePoint_factor3:genderMale  0.56089
##                                                                 df
## (Intercept)                                                 20.30000
## interventiongroupIntervention                              883.60000
```

```
## timePoint_factor2                                           691.70000
## timePoint_factor3                                           681.70000
## genderMale                                                  876.80000
## interventiongroupIntervention:timePoint_factor2             693.50000
## interventiongroupIntervention:timePoint_factor3             686.80000
## interventiongroupIntervention:genderMale                    877.00000
## timePoint_factor2:genderMale                                698.20000
## timePoint_factor3:genderMale                                682.00000
## interventiongroupIntervention:timePoint_factor2:genderMale 706.50000
## interventiongroupIntervention:timePoint_factor3:genderMale 682.00000
##                                                             t value
## (Intercept)                                                  60.391
## interventiongroupIntervention                                -1.641
## timePoint_factor2                                            -0.358
## timePoint_factor3                                             1.979
## genderMale                                                   -0.931
## interventiongroupIntervention:timePoint_factor2               3.529
## interventiongroupIntervention:timePoint_factor3               1.072
## interventiongroupIntervention:genderMale                      1.959
## timePoint_factor2:genderMale                                  2.168
## timePoint_factor3:genderMale                                  4.206
## interventiongroupIntervention:timePoint_factor2:genderMale  -2.241
## interventiongroupIntervention:timePoint_factor3:genderMale  -2.973
##                                                             Pr(>|t|)
## (Intercept)                                                  < 2e-16 ***
## interventiongroupIntervention                               0.101227
## timePoint_factor2                                           0.720770
## timePoint_factor3                                           0.048215 *
## genderMale                                                  0.352133
## interventiongroupIntervention:timePoint_factor2             0.000445 ***
## interventiongroupIntervention:timePoint_factor3             0.283898
## interventiongroupIntervention:genderMale                    0.050402 .
## timePoint_factor2:genderMale                                0.030464 *
## timePoint_factor3:genderMale                                2.95e-05 ***
## interventiongroupIntervention:timePoint_factor2:genderMale 0.025315 *
## interventiongroupIntervention:timePoint_factor3:genderMale 0.003052 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.647
## tmPnt_fctr2 -0.539  0.398
## tmPnt_fctr3 -0.550  0.406  0.499
## genderMale  -0.457  0.337  0.281  0.286
## intrvnI:P_2  0.374 -0.584 -0.694 -0.346 -0.195
## intrvnI:P_3  0.379 -0.592 -0.344 -0.690 -0.197  0.505
## intrvntnI:M  0.323 -0.499 -0.198 -0.202 -0.706  0.291   0.295
## tmPnt_fc2:M  0.260 -0.192 -0.483 -0.241 -0.571  0.335   0.166   0.403
## tmPnt_fc3:M  0.269 -0.198 -0.244 -0.489 -0.590  0.169   0.337   0.417
## intrI:P_2:M -0.179  0.281  0.334  0.166  0.395 -0.481  -0.243  -0.559
## intrI:P_3:M -0.189  0.296  0.172  0.345  0.416 -0.252  -0.500  -0.589
##             tP_2:M tP_3:M iI:P_2:
## intrvntngrI
```

```
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.497
## intrI:P_2:M -0.691 -0.343
## intrI:P_3:M -0.350 -0.705  0.485
```

```
limits <- c(10, 12)
theme <- theme_minimal()
rnge <- round(range(filtered$DP_95_T, na.rm = TRUE),0)
caption = "13-item yes/no scale (range %d - %d), with greater values indicating greater engagement in di
plot_line_bar("DP_95_T", limits, theme, "Disaster Preparation Behaviors", logit=FALSE, rnge = rnge, by =
```

```
## Warning: Removed 56 rows containing non-finite values (stat_summary).

## Warning: Removed 56 rows containing non-finite values (stat_summary).

## Warning: Removed 56 rows containing non-finite values (stat_summary).

## Warning in guide_merge.legend(init, x[[i]]): Duplicated override.aes is
## ignored.

## Warning: Removed 56 rows containing non-finite values (stat_summary).

## Warning: Removed 56 rows containing non-finite values (stat_summary).

## Warning: Removed 56 rows containing non-finite values (stat_summary).

## Warning in guide_merge.legend(init, x[[i]]): Duplicated override.aes is
## ignored.
```



13−item yes/no scale (range 4 − 13), with greater values indicating greater engagement in disas
behaviors

```
BDI_model <- lmer(BDImean16_T ~ interventiongroup * timePoint_factor * gender + (1|ID_factor), data = f
summary(BDI_model)
```

```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
##   to degrees of freedom [lmerMod]
## Formula: BDImean16_T ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 882.2
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -3.5340 -0.5427 -0.1037  0.4815  5.5442
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 0.10936  0.3307
##  Residual              0.07167  0.2677
## Number of obs: 1073, groups:  ID_factor, 368
##
## Fixed effects:
##                                                    Estimate
## (Intercept)                                         1.67546
## interventiongroupIntervention                      -0.03494
## timePoint_factor2                                  -0.07192
```

```
## timePoint_factor3                                            -0.22624
## genderMale                                                   -0.23424
## interventiongroupIntervention:timePoint_factor2               0.03064
## interventiongroupIntervention:timePoint_factor3               0.06985
## interventiongroupIntervention:genderMale                      0.07521
## timePoint_factor2:genderMale                                  0.08353
## timePoint_factor3:genderMale                                  0.09296
## interventiongroupIntervention:timePoint_factor2:genderMale   -0.15856
## interventiongroupIntervention:timePoint_factor3:genderMale   -0.08472
##                                                             Std. Error
## (Intercept)                                                    0.03558
## interventiongroupIntervention                                  0.05111
## timePoint_factor2                                              0.03238
## timePoint_factor3                                              0.03166
## genderMale                                                     0.07273
## interventiongroupIntervention:timePoint_factor2                0.04637
## interventiongroupIntervention:timePoint_factor3                0.04549
## interventiongroupIntervention:genderMale                       0.10324
## timePoint_factor2:genderMale                                   0.06669
## timePoint_factor3:genderMale                                   0.06471
## interventiongroupIntervention:timePoint_factor2:genderMale     0.09718
## interventiongroupIntervention:timePoint_factor3:genderMale     0.09187
##                                                                    df
## (Intercept)                                                 624.00000
## interventiongroupIntervention                               625.70000
## timePoint_factor2                                           703.10000
## timePoint_factor3                                           698.00000
## genderMale                                                  624.00000
## interventiongroupIntervention:timePoint_factor2             702.70000
## interventiongroupIntervention:timePoint_factor3             698.30000
## interventiongroupIntervention:genderMale                    624.40000
## timePoint_factor2:genderMale                                704.80000
## timePoint_factor3:genderMale                                698.00000
## interventiongroupIntervention:timePoint_factor2:genderMale 710.40000
## interventiongroupIntervention:timePoint_factor3:genderMale 698.10000
##                                                             t value
## (Intercept)                                                  47.089
## interventiongroupIntervention                                -0.684
## timePoint_factor2                                            -2.221
## timePoint_factor3                                            -7.146
## genderMale                                                   -3.221
## interventiongroupIntervention:timePoint_factor2               0.661
## interventiongroupIntervention:timePoint_factor3               1.535
## interventiongroupIntervention:genderMale                      0.728
## timePoint_factor2:genderMale                                  1.252
## timePoint_factor3:genderMale                                  1.437
## interventiongroupIntervention:timePoint_factor2:genderMale   -1.632
## interventiongroupIntervention:timePoint_factor3:genderMale   -0.922
##                                                             Pr(>|t|)
## (Intercept)                                                  < 2e-16 ***
## interventiongroupIntervention                                0.49451
## timePoint_factor2                                            0.02668 *
## timePoint_factor3                                           2.26e-12 ***
## genderMale                                                   0.00134 **
```

```
## interventiongroupIntervention:timePoint_factor2             0.50897
## interventiongroupIntervention:timePoint_factor3             0.12516
## interventiongroupIntervention:genderMale                    0.46661
## timePoint_factor2:genderMale                                0.21080
## timePoint_factor3:genderMale                                0.15130
## interventiongroupIntervention:timePoint_factor2:genderMale  0.10321
## interventiongroupIntervention:timePoint_factor3:genderMale  0.35678
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.696
## tmPnt_fctr2 -0.435  0.303
## tmPnt_fctr3 -0.445  0.310  0.489
## genderMale  -0.489  0.341  0.213  0.218
## intrvnI:P_2  0.304 -0.438 -0.698 -0.341 -0.149
## intrvnI:P_3  0.310 -0.446 -0.340 -0.696 -0.151  0.492
## intrvntnI:M  0.345 -0.495 -0.150 -0.153 -0.704  0.217   0.221
## tmPnt_fc2:M  0.211 -0.147 -0.486 -0.237 -0.432  0.339   0.165   0.304
## tmPnt_fc3:M  0.218 -0.152 -0.239 -0.489 -0.445  0.167   0.340   0.313
## intrI:P_2:M -0.145  0.209  0.333  0.163  0.296 -0.477  -0.235  -0.421
## intrI:P_3:M -0.153  0.221  0.168  0.345  0.313 -0.244  -0.495  -0.445
##             tP_2:M tP_3:M iI:P_2:
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.485
## intrI:P_2:M -0.686 -0.333
## intrI:P_3:M -0.342 -0.704  0.473
```

```
self_eff_model <- lmer(selfeffmeanT ~ interventiongroup * timePoint_factor * gender + (1|loc_factor/ID_
summary(self_eff_model)
```

```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
##   to degrees of freedom [lmerMod]
## Formula: selfeffmeanT ~ interventiongroup * timePoint_factor * gender +
##     (1 | loc_factor/ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 2004.7
##
## Scaled residuals:
##      Min       1Q   Median       3Q      Max
## -2.76084 -0.61343 -0.01161  0.56268  2.87982
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 0.169638 0.41187
##  loc_factor           (Intercept) 0.002463 0.04963
```

```
##  Residual                        0.254520 0.50450
## Number of obs: 1073, groups:  ID_factor:loc_factor, 368; loc_factor, 3
##
## Fixed effects:
##                                                                Estimate
## (Intercept)                                                     3.13656
## interventiongroupIntervention                                  -0.10867
## timePoint_factor2                                              -0.03626
## timePoint_factor3                                               0.28973
## genderMale                                                      0.17226
## interventiongroupIntervention:timePoint_factor2                 0.17000
## interventiongroupIntervention:timePoint_factor3                -0.16504
## interventiongroupIntervention:genderMale                       -0.10975
## timePoint_factor2:genderMale                                   -0.07175
## timePoint_factor3:genderMale                                   -0.03417
## interventiongroupIntervention:timePoint_factor2:genderMale      0.14732
## interventiongroupIntervention:timePoint_factor3:genderMale      0.07244
##                                                               Std. Error
## (Intercept)                                                      0.06173
## interventiongroupIntervention                                    0.07831
## timePoint_factor2                                                0.06108
## timePoint_factor3                                                0.05980
## genderMale                                                       0.11167
## interventiongroupIntervention:timePoint_factor2                  0.08726
## interventiongroupIntervention:timePoint_factor3                  0.08571
## interventiongroupIntervention:genderMale                         0.15827
## timePoint_factor2:genderMale                                     0.12551
## timePoint_factor3:genderMale                                     0.12202
## interventiongroupIntervention:timePoint_factor2:genderMale       0.18249
## interventiongroupIntervention:timePoint_factor3:genderMale       0.17312
##                                                                      df
## (Intercept)                                                    12.50000
## interventiongroupIntervention                                 809.70000
## timePoint_factor2                                             706.20000
## timePoint_factor3                                             697.70000
## genderMale                                                    807.60000
## interventiongroupIntervention:timePoint_factor2               704.30000
## interventiongroupIntervention:timePoint_factor3               697.20000
## interventiongroupIntervention:genderMale                      808.50000
## timePoint_factor2:genderMale                                  708.10000
## timePoint_factor3:genderMale                                  697.00000
## interventiongroupIntervention:timePoint_factor2:genderMale    717.10000
## interventiongroupIntervention:timePoint_factor3:genderMale    696.90000
##                                                               t value
## (Intercept)                                                    50.813
## interventiongroupIntervention                                  -1.388
## timePoint_factor2                                              -0.594
## timePoint_factor3                                               4.845
## genderMale                                                      1.543
## interventiongroupIntervention:timePoint_factor2                 1.948
## interventiongroupIntervention:timePoint_factor3                -1.925
## interventiongroupIntervention:genderMale                       -0.693
## timePoint_factor2:genderMale                                   -0.572
## timePoint_factor3:genderMale                                   -0.280
```

```
## interventiongroupIntervention:timePoint_factor2:genderMale   0.807
## interventiongroupIntervention:timePoint_factor3:genderMale   0.418
##                                                            Pr(>|t|)
## (Intercept)                                                6.66e-16 ***
## interventiongroupIntervention                                0.1656
## timePoint_factor2                                            0.5529
## timePoint_factor3                                          1.56e-06 ***
## genderMale                                                   0.1233
## interventiongroupIntervention:timePoint_factor2              0.0518 .
## interventiongroupIntervention:timePoint_factor3              0.0546 .
## interventiongroupIntervention:genderMale                     0.4882
## timePoint_factor2:genderMale                                 0.5677
## timePoint_factor3:genderMale                                 0.7795
## interventiongroupIntervention:timePoint_factor2:genderMale   0.4198
## interventiongroupIntervention:timePoint_factor3:genderMale   0.6757
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.619
## tmPnt_fctr2 -0.476  0.376
## tmPnt_fctr3 -0.487  0.384  0.492
## genderMale  -0.435  0.343  0.263  0.269
## intrvnI:P_2  0.333 -0.539 -0.700 -0.344 -0.184
## intrvnI:P_3  0.339 -0.548 -0.343 -0.698 -0.188  0.492
## intrvntnI:M  0.307 -0.496 -0.186 -0.190 -0.706  0.266   0.271
## tmPnt_fc2:M  0.232 -0.183 -0.487 -0.239 -0.531  0.341   0.167   0.375
## tmPnt_fc3:M  0.238 -0.188 -0.241 -0.490 -0.547  0.169   0.342   0.386
## intrI:P_2:M -0.159  0.257  0.335  0.165  0.365 -0.478  -0.235  -0.519
## intrI:P_3:M -0.168  0.272  0.170  0.345  0.386 -0.244  -0.495  -0.547
##             tP_2:M tP_3:M iI:P_2:
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.487
## intrI:P_2:M -0.688 -0.335
## intrI:P_3:M -0.343 -0.705  0.475
```

```
SelfEff1timeT_model <- clmm(SelfEff1timeT ~ interventiongroup * timePoint_factor * gender + (1|loc_facto
summary(SelfEff1timeT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: SelfEff1timeT ~ interventiongroup * timePoint_factor * gender +
##     (1 | loc_factor/ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1046 -1343.69 2721.38 1776(5331) 6.55e-04 3.3e+02
```

```
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 1.62322  1.2741
##  loc_factor           (Intercept) 0.01306  0.1143
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                             -0.4644
## timePoint_factor2                                         -0.3122
## timePoint_factor3                                          0.2515
## genderMale                                                 0.7724
## interventiongroupIntervention:timePoint_factor2            0.1918
## interventiongroupIntervention:timePoint_factor3           -0.2408
## interventiongroupIntervention:genderMale                  -0.6718
## timePoint_factor2:genderMale                              -0.7311
## timePoint_factor3:genderMale                              -0.2364
## interventiongroupIntervention:timePoint_factor2:genderMale  1.5399
## interventiongroupIntervention:timePoint_factor3:genderMale  0.2080
##                                                          Std. Error
## interventiongroupIntervention                                0.2904
## timePoint_factor2                                            0.2377
## timePoint_factor3                                            0.2317
## genderMale                                                   0.4144
## interventiongroupIntervention:timePoint_factor2              0.3411
## interventiongroupIntervention:timePoint_factor3              0.3341
## interventiongroupIntervention:genderMale                     0.5817
## timePoint_factor2:genderMale                                 0.4901
## timePoint_factor3:genderMale                                 0.4787
## interventiongroupIntervention:timePoint_factor2:genderMale   0.7104
## interventiongroupIntervention:timePoint_factor3:genderMale   0.6710
##                                                          z value
## interventiongroupIntervention                             -1.599
## timePoint_factor2                                         -1.313
## timePoint_factor3                                          1.085
## genderMale                                                 1.864
## interventiongroupIntervention:timePoint_factor2            0.562
## interventiongroupIntervention:timePoint_factor3           -0.721
## interventiongroupIntervention:genderMale                  -1.155
## timePoint_factor2:genderMale                              -1.492
## timePoint_factor3:genderMale                              -0.494
## interventiongroupIntervention:timePoint_factor2:genderMale  2.168
## interventiongroupIntervention:timePoint_factor3:genderMale  0.310
##                                                          Pr(>|z|)
## interventiongroupIntervention                              0.1098
## timePoint_factor2                                          0.1890
## timePoint_factor3                                          0.2777
## genderMale                                                 0.0623 .
## interventiongroupIntervention:timePoint_factor2            0.5739
## interventiongroupIntervention:timePoint_factor3            0.4710
## interventiongroupIntervention:genderMale                   0.2481
## timePoint_factor2:genderMale                               0.1357
## timePoint_factor3:genderMale                               0.6214
```

```
## interventiongroupIntervention:timePoint_factor2:genderMale   0.0302 *
## interventiongroupIntervention:timePoint_factor3:genderMale   0.7565
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -5.7569     0.4132 -13.933
## 2|3  -2.0457     0.2299  -8.898
## 3|4   0.2345     0.2155   1.088
## 4|5   2.4026     0.2367  10.151
## (67 observations deleted due to missingness)
```

```
SelfEff2affordT_model <- clmm(SelfEff2affordT  ~ interventiongroup * timePoint_factor * gender + (1|ID_
summary(SelfEff2affordT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
## SelfEff2affordT ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1072 -1220.56 2473.11 1641(4926) 7.43e-04 3.5e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 1.224    1.106
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                            -0.17552
## timePoint_factor2                                        -0.12900
## timePoint_factor3                                         0.56237
## genderMale                                                0.36736
## interventiongroupIntervention:timePoint_factor2           0.63875
## interventiongroupIntervention:timePoint_factor3          -0.51191
## interventiongroupIntervention:genderMale                 -0.36483
## timePoint_factor2:genderMale                              0.07438
## timePoint_factor3:genderMale                             -0.21929
## interventiongroupIntervention:timePoint_factor2:genderMale -0.38294
## interventiongroupIntervention:timePoint_factor3:genderMale  0.55338
##                                                          Std. Error
## interventiongroupIntervention                               0.28067
## timePoint_factor2                                           0.24419
## timePoint_factor3                                           0.24032
## genderMale                                                  0.40226
## interventiongroupIntervention:timePoint_factor2             0.34980
## interventiongroupIntervention:timePoint_factor3             0.34278
## interventiongroupIntervention:genderMale                    0.56393
## timePoint_factor2:genderMale                                0.50406
## timePoint_factor3:genderMale                                0.49109
## interventiongroupIntervention:timePoint_factor2:genderMale  0.73033
```

```
## interventiongroupIntervention:timePoint_factor3:genderMale    0.68889
##                                                            z value
## interventiongroupIntervention                               -0.625
## timePoint_factor2                                           -0.528
## timePoint_factor3                                            2.340
## genderMale                                                   0.913
## interventiongroupIntervention:timePoint_factor2              1.826
## interventiongroupIntervention:timePoint_factor3             -1.493
## interventiongroupIntervention:genderMale                    -0.647
## timePoint_factor2:genderMale                                 0.148
## timePoint_factor3:genderMale                                -0.447
## interventiongroupIntervention:timePoint_factor2:genderMale  -0.524
## interventiongroupIntervention:timePoint_factor3:genderMale   0.803
##                                                            Pr(>|z|)
## interventiongroupIntervention                                0.5317
## timePoint_factor2                                            0.5973
## timePoint_factor3                                            0.0193 *
## genderMale                                                   0.3611
## interventiongroupIntervention:timePoint_factor2              0.0678 .
## interventiongroupIntervention:timePoint_factor3              0.1353
## interventiongroupIntervention:genderMale                     0.5177
## timePoint_factor2:genderMale                                 0.8827
## timePoint_factor3:genderMale                                 0.6552
## interventiongroupIntervention:timePoint_factor2:genderMale   0.6000
## interventiongroupIntervention:timePoint_factor3:genderMale   0.4218
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -4.3058     0.2997 -14.366
## 2|3  -1.4594     0.2073  -7.041
## 3|4   1.8489     0.2135   8.661
## 4|5   3.2366     0.2427  13.334
## (41 observations deleted due to missingness)
```

```
SelfEff3infoT_model <- clmm(SelfEff3infoT  ~ interventiongroup * timePoint_factor * gender + (1|loc_fac
summary(SelfEff3infoT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: SelfEff3infoT ~ interventiongroup * timePoint_factor * gender +
##     (1 | loc_factor/ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1073 -1306.55 2647.09 1912(5739) 1.14e-03 3.3e+02
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 1.459676 1.2082
##  loc_factor           (Intercept) 0.004597 0.0678
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
## Coefficients:
```

```
##                                                           Estimate
## interventiongroupIntervention                             -0.34401
## timePoint_factor2                                         -0.08989
## timePoint_factor3                                          1.22501
## genderMale                                                 0.20536
## interventiongroupIntervention:timePoint_factor2            0.69729
## interventiongroupIntervention:timePoint_factor3           -0.26289
## interventiongroupIntervention:genderMale                   0.18293
## timePoint_factor2:genderMale                               0.36494
## timePoint_factor3:genderMale                               0.24288
## interventiongroupIntervention:timePoint_factor2:genderMale -0.40439
## interventiongroupIntervention:timePoint_factor3:genderMale -0.23507
##                                                           Std. Error
## interventiongroupIntervention                                0.27402
## timePoint_factor2                                            0.23378
## timePoint_factor3                                            0.23095
## genderMale                                                   0.38836
## interventiongroupIntervention:timePoint_factor2              0.33598
## interventiongroupIntervention:timePoint_factor3              0.32564
## interventiongroupIntervention:genderMale                     0.54998
## timePoint_factor2:genderMale                                 0.48082
## timePoint_factor3:genderMale                                 0.46399
## interventiongroupIntervention:timePoint_factor2:genderMale   0.70036
## interventiongroupIntervention:timePoint_factor3:genderMale   0.65498
##                                                           z value
## interventiongroupIntervention                              -1.255
## timePoint_factor2                                          -0.384
## timePoint_factor3                                           5.304
## genderMale                                                  0.529
## interventiongroupIntervention:timePoint_factor2             2.075
## interventiongroupIntervention:timePoint_factor3            -0.807
## interventiongroupIntervention:genderMale                    0.333
## timePoint_factor2:genderMale                                0.759
## timePoint_factor3:genderMale                                0.523
## interventiongroupIntervention:timePoint_factor2:genderMale -0.577
## interventiongroupIntervention:timePoint_factor3:genderMale -0.359
##                                                           Pr(>|z|)
## interventiongroupIntervention                                0.209
## timePoint_factor2                                            0.701
## timePoint_factor3                                        1.13e-07 ***
## genderMale                                                   0.597
## interventiongroupIntervention:timePoint_factor2              0.038 *
## interventiongroupIntervention:timePoint_factor3              0.419
## interventiongroupIntervention:genderMale                     0.739
## timePoint_factor2:genderMale                                 0.448
## timePoint_factor3:genderMale                                 0.601
## interventiongroupIntervention:timePoint_factor2:genderMale   0.564
## interventiongroupIntervention:timePoint_factor3:genderMale   0.720
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -7.4489     1.0245  -7.271
```

```
## 2|3  -1.2445     0.2040  -6.099
## 3|4   1.1232     0.2014   5.576
## 4|5   3.3286     0.2386  13.949
## (40 observations deleted due to missingness)
```

```
DISMHmeanT_model <- lmer(DISMHmeanT ~ interventiongroup * timePoint_factor * gender + (1|ID_factor), da
summary(DISMHmeanT_model)
```

```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
##   to degrees of freedom [lmerMod]
## Formula: DISMHmeanT ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 2059.6
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -3.4162 -0.5657  0.0065  0.6116  2.6270
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 0.09754  0.3123
##  Residual              0.31099  0.5577
## Number of obs: 1073, groups:  ID_factor, 368
##
## Fixed effects:
##                                                          Estimate
## (Intercept)                                               3.13317
## interventiongroupIntervention                             0.05202
## timePoint_factor2                                        -0.32922
## timePoint_factor3                                        -0.53177
## genderMale                                                0.03720
## interventiongroupIntervention:timePoint_factor2          -0.05468
## interventiongroupIntervention:timePoint_factor3          -0.02379
## interventiongroupIntervention:genderMale                 -0.11498
## timePoint_factor2:genderMale                              0.08954
## timePoint_factor3:genderMale                             -0.09786
## interventiongroupIntervention:timePoint_factor2:genderMale  -0.24086
## interventiongroupIntervention:timePoint_factor3:genderMale  -0.12807
##                                                          Std. Error
## (Intercept)                                                 0.05362
## interventiongroupIntervention                               0.07682
## timePoint_factor2                                           0.06740
## timePoint_factor3                                           0.06609
## genderMale                                                  0.10933
## interventiongroupIntervention:timePoint_factor2             0.09632
## interventiongroupIntervention:timePoint_factor3             0.09474
## interventiongroupIntervention:genderMale                    0.15511
## timePoint_factor2:genderMale                                0.13845
## timePoint_factor3:genderMale                                0.13487
## interventiongroupIntervention:timePoint_factor2:genderMale  0.20098
## interventiongroupIntervention:timePoint_factor3:genderMale  0.19136
##                                                                 df
## (Intercept)                                                959.40000
```

```
## interventiongroupIntervention                                    958.30000
## timePoint_factor2                                                715.20000
## timePoint_factor3                                                703.90000
## genderMale                                                       957.80000
## interventiongroupIntervention:timePoint_factor2                  712.80000
## interventiongroupIntervention:timePoint_factor3                  703.30000
## interventiongroupIntervention:genderMale                         957.50000
## timePoint_factor2:genderMale                                     717.90000
## timePoint_factor3:genderMale                                     703.00000
## interventiongroupIntervention:timePoint_factor2:genderMale       730.10000
## interventiongroupIntervention:timePoint_factor3:genderMale       702.90000
##                                                                  t value
## (Intercept)                                                       58.433
## interventiongroupIntervention                                      0.677
## timePoint_factor2                                                 -4.885
## timePoint_factor3                                                 -8.046
## genderMale                                                         0.340
## interventiongroupIntervention:timePoint_factor2                   -0.568
## interventiongroupIntervention:timePoint_factor3                   -0.251
## interventiongroupIntervention:genderMale                          -0.741
## timePoint_factor2:genderMale                                       0.647
## timePoint_factor3:genderMale                                      -0.726
## interventiongroupIntervention:timePoint_factor2:genderMale        -1.198
## interventiongroupIntervention:timePoint_factor3:genderMale        -0.669
##                                                                  Pr(>|t|)
## (Intercept)                                                       < 2e-16 ***
## interventiongroupIntervention                                       0.498
## timePoint_factor2                                                1.28e-06 ***
## timePoint_factor3                                                3.55e-15 ***
## genderMale                                                          0.734
## interventiongroupIntervention:timePoint_factor2                     0.570
## interventiongroupIntervention:timePoint_factor3                     0.802
## interventiongroupIntervention:genderMale                            0.459
## timePoint_factor2:genderMale                                        0.518
## timePoint_factor3:genderMale                                        0.468
## interventiongroupIntervention:timePoint_factor2:genderMale          0.231
## interventiongroupIntervention:timePoint_factor3:genderMale          0.504
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.698
## tmPnt_fctr2 -0.607  0.424
## tmPnt_fctr3 -0.619  0.432  0.492
## genderMale  -0.490  0.342  0.298  0.304
## intrvnI:P_2  0.425 -0.608 -0.700 -0.345 -0.208
## intrvnI:P_3  0.432 -0.618 -0.343 -0.698 -0.212  0.493
## intrvntnI:M  0.346 -0.495 -0.210 -0.214 -0.705  0.301   0.306
## tmPnt_fc2:M  0.295 -0.206 -0.487 -0.240 -0.601  0.341   0.167   0.424
## tmPnt_fc3:M  0.303 -0.212 -0.241 -0.490 -0.617  0.169   0.342   0.435
## intrI:P_2:M -0.204  0.291  0.335  0.165  0.414 -0.479  -0.236  -0.588
## intrI:P_3:M -0.214  0.306  0.170  0.345  0.435 -0.244  -0.495  -0.617
##             tP_2:M tP_3:M iI:P_2:
```

```
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.488
## intrI:P_2:M -0.689 -0.336
## intrI:P_3:M -0.344 -0.705  0.476
```

```
DisMH1anxiousT_model <- clmm(DisMH1anxiousT   ~ interventiongroup * timePoint_factor * gender + (1|ID_fa
summary(DisMH1anxiousT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: DisMH1anxiousT ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1073 -1301.67 2635.34 1654(4964) 8.11e-04 4.4e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 0.8837   0.9401
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                             0.13102
## timePoint_factor2                                        -1.52048
## timePoint_factor3                                        -2.05267
## genderMale                                               -0.14488
## interventiongroupIntervention:timePoint_factor2          -0.21363
## interventiongroupIntervention:timePoint_factor3          -0.04720
## interventiongroupIntervention:genderMale                 -0.29743
## timePoint_factor2:genderMale                              0.05312
## timePoint_factor3:genderMale                             -0.07365
## interventiongroupIntervention:timePoint_factor2:genderMale -0.24261
## interventiongroupIntervention:timePoint_factor3:genderMale -0.40556
##                                                          Std. Error
## interventiongroupIntervention                               0.26680
## timePoint_factor2                                           0.24191
## timePoint_factor3                                           0.23981
## genderMale                                                  0.37502
## interventiongroupIntervention:timePoint_factor2             0.33896
## interventiongroupIntervention:timePoint_factor3             0.33040
## interventiongroupIntervention:genderMale                    0.53259
## timePoint_factor2:genderMale                                0.48204
## timePoint_factor3:genderMale                                0.46618
## interventiongroupIntervention:timePoint_factor2:genderMale  0.70020
## interventiongroupIntervention:timePoint_factor3:genderMale  0.66641
##                                                          z value
```

```
## interventiongroupIntervention                                    0.491
## timePoint_factor2                                               -6.285
## timePoint_factor3                                               -8.560
## genderMale                                                      -0.386
## interventiongroupIntervention:timePoint_factor2                 -0.630
## interventiongroupIntervention:timePoint_factor3                 -0.143
## interventiongroupIntervention:genderMale                        -0.558
## timePoint_factor2:genderMale                                     0.110
## timePoint_factor3:genderMale                                    -0.158
## interventiongroupIntervention:timePoint_factor2:genderMale      -0.346
## interventiongroupIntervention:timePoint_factor3:genderMale      -0.609
##                                                                Pr(>|z|)
## interventiongroupIntervention                                     0.623
## timePoint_factor2                                             3.27e-10 ***
## timePoint_factor3                                              < 2e-16 ***
## genderMale                                                        0.699
## interventiongroupIntervention:timePoint_factor2                   0.529
## interventiongroupIntervention:timePoint_factor3                   0.886
## interventiongroupIntervention:genderMale                          0.577
## timePoint_factor2:genderMale                                      0.912
## timePoint_factor3:genderMale                                      0.874
## interventiongroupIntervention:timePoint_factor2:genderMale        0.729
## interventiongroupIntervention:timePoint_factor3:genderMale        0.543
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -6.3013     0.3521 -17.898
## 2|3  -2.7390     0.2140 -12.797
## 3|4  -1.3223     0.1941  -6.811
## 4|5   1.7975     0.2023   8.884
## (40 observations deleted due to missingness)
```

```
DisMH2depressedT_model  <- clmm(DisMH2depressedT    ~ interventiongroup * timePoint_factor * gender + (
summary(DisMH2depressedT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
## DisMH2depressedT ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1071 -1357.62 2747.24 1651(4956) 1.05e-03 4.2e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 1.472    1.213
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                    Estimate
## interventiongroupIntervention                       0.14034
```

```
## timePoint_factor2                                           -1.01278
## timePoint_factor3                                           -1.66804
## genderMale                                                  -0.12407
## interventiongroupIntervention:timePoint_factor2             -0.18003
## interventiongroupIntervention:timePoint_factor3             -0.24893
## interventiongroupIntervention:genderMale                    -0.41704
## timePoint_factor2:genderMale                                 0.48998
## timePoint_factor3:genderMale                                -0.09949
## interventiongroupIntervention:timePoint_factor2:genderMale -0.92930
## interventiongroupIntervention:timePoint_factor3:genderMale -0.76637
##                                                             Std. Error
## interventiongroupIntervention                                  0.27432
## timePoint_factor2                                              0.23190
## timePoint_factor3                                              0.23435
## genderMale                                                     0.40639
## interventiongroupIntervention:timePoint_factor2                0.33022
## interventiongroupIntervention:timePoint_factor3                0.32694
## interventiongroupIntervention:genderMale                       0.57264
## timePoint_factor2:genderMale                                   0.49158
## timePoint_factor3:genderMale                                   0.48146
## interventiongroupIntervention:timePoint_factor2:genderMale     0.71182
## interventiongroupIntervention:timePoint_factor3:genderMale     0.68659
##                                                             z value
## interventiongroupIntervention                                 0.512
## timePoint_factor2                                            -4.367
## timePoint_factor3                                            -7.118
## genderMale                                                   -0.305
## interventiongroupIntervention:timePoint_factor2              -0.545
## interventiongroupIntervention:timePoint_factor3              -0.761
## interventiongroupIntervention:genderMale                     -0.728
## timePoint_factor2:genderMale                                  0.997
## timePoint_factor3:genderMale                                 -0.207
## interventiongroupIntervention:timePoint_factor2:genderMale   -1.306
## interventiongroupIntervention:timePoint_factor3:genderMale   -1.116
##                                                             Pr(>|z|)
## interventiongroupIntervention                                  0.609
## timePoint_factor2                                          1.26e-05 ***
## timePoint_factor3                                          1.10e-12 ***
## genderMale                                                     0.760
## interventiongroupIntervention:timePoint_factor2                0.586
## interventiongroupIntervention:timePoint_factor3                0.446
## interventiongroupIntervention:genderMale                       0.466
## timePoint_factor2:genderMale                                   0.319
## timePoint_factor3:genderMale                                   0.836
## interventiongroupIntervention:timePoint_factor2:genderMale     0.192
## interventiongroupIntervention:timePoint_factor3:genderMale     0.264
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -5.0541     0.2848 -17.745
## 2|3  -1.7955     0.2058  -8.724
## 3|4  -0.1317     0.1938  -0.680
```

```
## 4|5   2.8121     0.2358  11.925
## (42 observations deleted due to missingness)
```

```
DisMH3avoidT_model  <- clmm(DisMH3avoidT ~ interventiongroup * timePoint_factor * gender + (1|loc_factor
summary(DisMH3avoidT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: DisMH3avoidT ~ interventiongroup * timePoint_factor * gender +
##     (1 | loc_factor/ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1073 -1224.39 2482.78 1817(5454) 1.52e-03 3.5e+02
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 0.84588  0.9197
##  loc_factor           (Intercept) 0.01478  0.1216
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                             0.31857
## timePoint_factor2                                         0.17578
## timePoint_factor3                                        -0.05031
## genderMale                                                0.66894
## interventiongroupIntervention:timePoint_factor2          -0.13890
## interventiongroupIntervention:timePoint_factor3          -0.09038
## interventiongroupIntervention:genderMale                 -0.46435
## timePoint_factor2:genderMale                              0.05010
## timePoint_factor3:genderMale                             -0.72151
## interventiongroupIntervention:timePoint_factor2:genderMale -0.26076
## interventiongroupIntervention:timePoint_factor3:genderMale  0.50741
##                                                          Std. Error
## interventiongroupIntervention                               0.26722
## timePoint_factor2                                           0.24313
## timePoint_factor3                                           0.23865
## genderMale                                                  0.38282
## interventiongroupIntervention:timePoint_factor2             0.34488
## interventiongroupIntervention:timePoint_factor3             0.33891
## interventiongroupIntervention:genderMale                    0.54102
## timePoint_factor2:genderMale                                0.48405
## timePoint_factor3:genderMale                                0.48681
## interventiongroupIntervention:timePoint_factor2:genderMale  0.70719
## interventiongroupIntervention:timePoint_factor3:genderMale  0.68632
##                                                          z value
## interventiongroupIntervention                              1.192
## timePoint_factor2                                          0.723
## timePoint_factor3                                         -0.211
## genderMale                                                 1.747
## interventiongroupIntervention:timePoint_factor2           -0.403
## interventiongroupIntervention:timePoint_factor3           -0.267
## interventiongroupIntervention:genderMale                  -0.858
## timePoint_factor2:genderMale                               0.104
```

```
## timePoint_factor3:genderMale                                      -1.482
## interventiongroupIntervention:timePoint_factor2:genderMale  -0.369
## interventiongroupIntervention:timePoint_factor3:genderMale   0.739
##                                                                Pr(>|z|)
## interventiongroupIntervention                                    0.2332
## timePoint_factor2                                                0.4697
## timePoint_factor3                                                0.8330
## genderMale                                                       0.0806 .
## interventiongroupIntervention:timePoint_factor2                  0.6871
## interventiongroupIntervention:timePoint_factor3                  0.7897
## interventiongroupIntervention:genderMale                         0.3907
## timePoint_factor2:genderMale                                     0.9176
## timePoint_factor3:genderMale                                     0.1383
## interventiongroupIntervention:timePoint_factor2:genderMale   0.7123
## interventiongroupIntervention:timePoint_factor3:genderMale   0.4597
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -1.7530     0.2151  -8.149
## 2|3   1.4224     0.2113   6.731
## 3|4   2.9139     0.2354  12.378
## 4|5   5.2435     0.3737  14.033
## (40 observations deleted due to missingness)
```

```
Fatalismmean_T_model <- lmer(Fatalismmean_T ~ interventiongroup * timePoint_factor * gender + (1|loc_fa
summary(Fatalismmean_T_model)
```

```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
##   to degrees of freedom [lmerMod]
## Formula: Fatalismmean_T ~ interventiongroup * timePoint_factor * gender +
##     (1 | loc_factor/ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 3196.8
##
## Scaled residuals:
##      Min       1Q   Median       3Q      Max
## -2.74799 -0.61768  0.00629  0.62333  2.91742
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 0.41500  0.6442
##  loc_factor           (Intercept) 0.01785  0.1336
##  Residual                         0.83212  0.9122
## Number of obs: 1073, groups:  ID_factor:loc_factor, 368; loc_factor, 3
##
## Fixed effects:
##                                                          Estimate
## (Intercept)                                               2.87572
## interventiongroupIntervention                             0.18122
## timePoint_factor2                                        -0.10705
## timePoint_factor3                                        -0.64843
## genderMale                                               -0.05398
```

```
## interventiongroupIntervention:timePoint_factor2             -0.23178
## interventiongroupIntervention:timePoint_factor3             -0.03305
## interventiongroupIntervention:genderMale                    -0.14047
## timePoint_factor2:genderMale                                 0.18054
## timePoint_factor3:genderMale                                 0.08176
## interventiongroupIntervention:timePoint_factor2:genderMale  -0.25626
## interventiongroupIntervention:timePoint_factor3:genderMale   0.04416
##                                                            Std. Error
## (Intercept)                                                   0.12145
## interventiongroupIntervention                                 0.13433
## timePoint_factor2                                             0.11036
## timePoint_factor3                                             0.10812
## genderMale                                                    0.19163
## interventiongroupIntervention:timePoint_factor2               0.15769
## interventiongroupIntervention:timePoint_factor3               0.15497
## interventiongroupIntervention:genderMale                      0.27151
## timePoint_factor2:genderMale                                  0.22676
## timePoint_factor3:genderMale                                  0.22062
## interventiongroupIntervention:timePoint_factor2:genderMale    0.32950
## interventiongroupIntervention:timePoint_factor3:genderMale    0.31302
##                                                                    df
## (Intercept)                                                  7.10000
## interventiongroupIntervention                              870.90000
## timePoint_factor2                                          706.40000
## timePoint_factor3                                          696.70000
## genderMale                                                 869.10000
## interventiongroupIntervention:timePoint_factor2            704.30000
## interventiongroupIntervention:timePoint_factor3            696.20000
## interventiongroupIntervention:genderMale                   869.40000
## timePoint_factor2:genderMale                               708.60000
## timePoint_factor3:genderMale                               696.00000
## interventiongroupIntervention:timePoint_factor2:genderMale 719.00000
## interventiongroupIntervention:timePoint_factor3:genderMale 695.80000
##                                                            t value
## (Intercept)                                                 23.678
## interventiongroupIntervention                                1.349
## timePoint_factor2                                           -0.970
## timePoint_factor3                                           -5.997
## genderMale                                                  -0.282
## interventiongroupIntervention:timePoint_factor2             -1.470
## interventiongroupIntervention:timePoint_factor3             -0.213
## interventiongroupIntervention:genderMale                    -0.517
## timePoint_factor2:genderMale                                 0.796
## timePoint_factor3:genderMale                                 0.371
## interventiongroupIntervention:timePoint_factor2:genderMale  -0.778
## interventiongroupIntervention:timePoint_factor3:genderMale   0.141
##                                                            Pr(>|t|)
## (Intercept)                                                5.29e-08 ***
## interventiongroupIntervention                                 0.178
## timePoint_factor2                                             0.332
## timePoint_factor3                                          3.22e-09 ***
## genderMale                                                    0.778
## interventiongroupIntervention:timePoint_factor2               0.142
## interventiongroupIntervention:timePoint_factor3               0.831
```

```
## interventiongroupIntervention:genderMale                      0.605
## timePoint_factor2:genderMale                                  0.426
## timePoint_factor3:genderMale                                  0.711
## interventiongroupIntervention:timePoint_factor2:genderMale    0.437
## interventiongroupIntervention:timePoint_factor3:genderMale    0.888
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.540
## tmPnt_fctr2 -0.438  0.396
## tmPnt_fctr3 -0.447  0.404  0.492
## genderMale  -0.380  0.344  0.277  0.283
## intrvnI:P_2  0.306 -0.568 -0.700 -0.344 -0.194
## intrvnI:P_3  0.312 -0.578 -0.343 -0.698 -0.198  0.492
## intrvntnI:M  0.269 -0.496 -0.196 -0.200 -0.706  0.281   0.286
## tmPnt_fc2:M  0.213 -0.192 -0.487 -0.239 -0.560  0.341   0.167   0.395
## tmPnt_fc3:M  0.219 -0.198 -0.241 -0.490 -0.576  0.169   0.342   0.407
## intrI:P_2:M -0.146  0.272  0.335  0.165  0.385 -0.479  -0.236  -0.547
## intrI:P_3:M -0.154  0.286  0.170  0.345  0.406 -0.244  -0.495  -0.577
##             tP_2:M tP_3:M iI:P_2:
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.487
## intrI:P_2:M -0.688 -0.335
## intrI:P_3:M -0.343 -0.705  0.475
```

```
Fat1dontworryT_model  <- clmm(Fat1dontworryT ~ interventiongroup * timePoint_factor * gender + (1|loc_fa
summary(Fat1dontworryT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: Fat1dontworryT ~ interventiongroup * timePoint_factor * gender +
##     (1 | loc_factor/ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1073 -1586.02 3206.05 1905(5718) 1.92e-03 5.7e+02
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 1.31329  1.1460
##  loc_factor           (Intercept) 0.08297  0.2881
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
## Coefficients:
##                                                        Estimate
## interventiongroupIntervention                           0.48064
```

```
## timePoint_factor2                                           -0.03465
## timePoint_factor3                                           -0.91698
## genderMale                                                   0.31454
## interventiongroupIntervention:timePoint_factor2             -0.52710
## interventiongroupIntervention:timePoint_factor3             -0.29114
## interventiongroupIntervention:genderMale                    -0.82160
## timePoint_factor2:genderMale                                 0.03865
## timePoint_factor3:genderMale                                -0.45762
## interventiongroupIntervention:timePoint_factor2:genderMale -0.08328
## interventiongroupIntervention:timePoint_factor3:genderMale  0.96302
##                                                            Std. Error
## interventiongroupIntervention                                 0.26880
## timePoint_factor2                                             0.22589
## timePoint_factor3                                             0.22326
## genderMale                                                    0.38726
## interventiongroupIntervention:timePoint_factor2               0.32399
## interventiongroupIntervention:timePoint_factor3               0.31807
## interventiongroupIntervention:genderMale                      0.54138
## timePoint_factor2:genderMale                                  0.46830
## timePoint_factor3:genderMale                                  0.45750
## interventiongroupIntervention:timePoint_factor2:genderMale    0.67197
## interventiongroupIntervention:timePoint_factor3:genderMale    0.64863
##                                                            z value
## interventiongroupIntervention                                1.788
## timePoint_factor2                                           -0.153
## timePoint_factor3                                           -4.107
## genderMale                                                   0.812
## interventiongroupIntervention:timePoint_factor2             -1.627
## interventiongroupIntervention:timePoint_factor3             -0.915
## interventiongroupIntervention:genderMale                    -1.518
## timePoint_factor2:genderMale                                 0.083
## timePoint_factor3:genderMale                                -1.000
## interventiongroupIntervention:timePoint_factor2:genderMale  -0.124
## interventiongroupIntervention:timePoint_factor3:genderMale   1.485
##                                                            Pr(>|z|)
## interventiongroupIntervention                                0.0738 .
## timePoint_factor2                                            0.8781
## timePoint_factor3                                             4e-05 ***
## genderMale                                                   0.4167
## interventiongroupIntervention:timePoint_factor2              0.1038
## interventiongroupIntervention:timePoint_factor3              0.3600
## interventiongroupIntervention:genderMale                     0.1291
## timePoint_factor2:genderMale                                 0.9342
## timePoint_factor3:genderMale                                 0.3172
## interventiongroupIntervention:timePoint_factor2:genderMale   0.9014
## interventiongroupIntervention:timePoint_factor3:genderMale   0.1376
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -1.9367     0.2621  -7.390
## 2|3  -0.9592     0.2554  -3.755
## 3|4   0.6389     0.2541   2.514
```

```
## 4|5   2.6806     0.2759   9.715
## (40 observations deleted due to missingness)
```

```
Fat2injuredT_model  <- clmm(Fat2injuredT ~ interventiongroup * timePoint_factor * gender + (1|ID_factor)
summary(Fat2injuredT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: Fat2injuredT ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1073 -1560.98 3153.95 1759(5280) 1.62e-03 5.7e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 1.399    1.183
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                        Estimate
## interventiongroupIntervention                           0.2094
## timePoint_factor2                                      -0.3144
## timePoint_factor3                                      -1.2990
## genderMale                                             -0.5202
## interventiongroupIntervention:timePoint_factor2        -0.3694
## interventiongroupIntervention:timePoint_factor3         0.1115
## interventiongroupIntervention:genderMale                0.3866
## timePoint_factor2:genderMale                            0.6189
## timePoint_factor3:genderMale                            0.4582
## interventiongroupIntervention:timePoint_factor2:genderMale  -0.8819
## interventiongroupIntervention:timePoint_factor3:genderMale  -0.7749
##                                                        Std. Error
## interventiongroupIntervention                              0.2673
## timePoint_factor2                                          0.2235
## timePoint_factor3                                          0.2254
## genderMale                                                 0.3968
## interventiongroupIntervention:timePoint_factor2            0.3210
## interventiongroupIntervention:timePoint_factor3            0.3178
## interventiongroupIntervention:genderMale                   0.5543
## timePoint_factor2:genderMale                               0.4829
## timePoint_factor3:genderMale                               0.4814
## interventiongroupIntervention:timePoint_factor2:genderMale    0.6941
## interventiongroupIntervention:timePoint_factor3:genderMale    0.6744
##                                                        z value
## interventiongroupIntervention                            0.783
## timePoint_factor2                                       -1.407
## timePoint_factor3                                       -5.763
## genderMale                                              -1.311
## interventiongroupIntervention:timePoint_factor2         -1.151
## interventiongroupIntervention:timePoint_factor3          0.351
## interventiongroupIntervention:genderMale                 0.697
## timePoint_factor2:genderMale                             1.282
## timePoint_factor3:genderMale                             0.952
```

```
## interventiongroupIntervention:timePoint_factor2:genderMale  -1.271
## interventiongroupIntervention:timePoint_factor3:genderMale  -1.149
##                                                            Pr(>|z|)
## interventiongroupIntervention                                 0.433
## timePoint_factor2                                             0.160
## timePoint_factor3                                          8.24e-09 ***
## genderMale                                                    0.190
## interventiongroupIntervention:timePoint_factor2               0.250
## interventiongroupIntervention:timePoint_factor3               0.726
## interventiongroupIntervention:genderMale                      0.486
## timePoint_factor2:genderMale                                  0.200
## timePoint_factor3:genderMale                                  0.341
## interventiongroupIntervention:timePoint_factor2:genderMale    0.204
## interventiongroupIntervention:timePoint_factor3:genderMale    0.251
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -1.6557     0.1996  -8.295
## 2|3  -0.3790     0.1913  -1.981
## 3|4   1.0202     0.1944   5.248
## 4|5   2.7873     0.2265  12.308
## (40 observations deleted due to missingness)
```

```
DisAt1NaturalT_model  <- clmm(DisAt1NaturalT ~ interventiongroup * timePoint_factor * gender + (1|ID_fa
summary(DisAt1NaturalT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: DisAt1NaturalT ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1072 -1112.44 2254.88 1519(3139) 3.46e-04 5.7e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 0.2778   0.5271
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                            Estimate
## interventiongroupIntervention                               0.1036
## timePoint_factor2                                          -0.7017
## timePoint_factor3                                          -0.7740
## genderMale                                                  0.5201
## interventiongroupIntervention:timePoint_factor2             0.1184
## interventiongroupIntervention:timePoint_factor3            -0.3122
## interventiongroupIntervention:genderMale                   -0.4504
## timePoint_factor2:genderMale                                0.7544
## timePoint_factor3:genderMale                               -0.4103
## interventiongroupIntervention:timePoint_factor2:genderMale -0.4294
## interventiongroupIntervention:timePoint_factor3:genderMale  0.9285
```

```
##                                                          Std. Error
## interventiongroupIntervention                                0.2652
## timePoint_factor2                                            0.2426
## timePoint_factor3                                            0.2359
## genderMale                                                   0.3978
## interventiongroupIntervention:timePoint_factor2              0.3512
## interventiongroupIntervention:timePoint_factor3              0.3387
## interventiongroupIntervention:genderMale                     0.5510
## timePoint_factor2:genderMale                                 0.5621
## timePoint_factor3:genderMale                                 0.4968
## interventiongroupIntervention:timePoint_factor2:genderMale   0.7761
## interventiongroupIntervention:timePoint_factor3:genderMale   0.7001
##                                                          z value
## interventiongroupIntervention                              0.391
## timePoint_factor2                                         -2.892
## timePoint_factor3                                         -3.281
## genderMale                                                 1.307
## interventiongroupIntervention:timePoint_factor2            0.337
## interventiongroupIntervention:timePoint_factor3           -0.922
## interventiongroupIntervention:genderMale                  -0.817
## timePoint_factor2:genderMale                               1.342
## timePoint_factor3:genderMale                              -0.826
## interventiongroupIntervention:timePoint_factor2:genderMale -0.553
## interventiongroupIntervention:timePoint_factor3:genderMale  1.326
##                                                          Pr(>|z|)
## interventiongroupIntervention                             0.69606
## timePoint_factor2                                         0.00383 **
## timePoint_factor3                                         0.00104 **
## genderMale                                                0.19105
## interventiongroupIntervention:timePoint_factor2           0.73606
## interventiongroupIntervention:timePoint_factor3           0.35678
## interventiongroupIntervention:genderMale                  0.41365
## timePoint_factor2:genderMale                              0.17960
## timePoint_factor3:genderMale                              0.40896
## interventiongroupIntervention:timePoint_factor2:genderMale 0.58002
## interventiongroupIntervention:timePoint_factor3:genderMale 0.18479
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -4.1774     0.2689 -15.534
## 2|3  -2.1982     0.2023 -10.866
## 3|4  -0.5138     0.1830  -2.807
## (41 observations deleted due to missingness)
```

```
DisAt2GodswillT_model  <- clmm(DisAt2GodswillT ~ interventiongroup * timePoint_factor * gender + (1|loc
summary(DisAt2GodswillT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
## DisAt2GodswillT ~ interventiongroup * timePoint_factor * gender +
##     (1 | loc_factor/ID_factor)
## data:    filtered
```

```
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1072 -1303.74 2639.49 1441(7088) 1.74e-03 4.5e+02
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 2.920    1.709
##  loc_factor           (Intercept) 0.241    0.491
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                              0.5324
## timePoint_factor2                                          0.1259
## timePoint_factor3                                         -0.9558
## genderMale                                                 0.3588
## interventiongroupIntervention:timePoint_factor2           -0.5815
## interventiongroupIntervention:timePoint_factor3           -0.0845
## interventiongroupIntervention:genderMale                  -0.7286
## timePoint_factor2:genderMale                              -0.3553
## timePoint_factor3:genderMale                              -0.6355
## interventiongroupIntervention:timePoint_factor2:genderMale  0.6543
## interventiongroupIntervention:timePoint_factor3:genderMale  0.9297
##                                                          Std. Error
## interventiongroupIntervention                                0.3232
## timePoint_factor2                                            0.2440
## timePoint_factor3                                            0.2444
## genderMale                                                   0.4648
## interventiongroupIntervention:timePoint_factor2              0.3524
## interventiongroupIntervention:timePoint_factor3              0.3493
## interventiongroupIntervention:genderMale                     0.6536
## timePoint_factor2:genderMale                                 0.5202
## timePoint_factor3:genderMale                                 0.5165
## interventiongroupIntervention:timePoint_factor2:genderMale   0.7475
## interventiongroupIntervention:timePoint_factor3:genderMale   0.7224
##                                                          z value
## interventiongroupIntervention                              1.647
## timePoint_factor2                                          0.516
## timePoint_factor3                                         -3.911
## genderMale                                                 0.772
## interventiongroupIntervention:timePoint_factor2           -1.650
## interventiongroupIntervention:timePoint_factor3           -0.242
## interventiongroupIntervention:genderMale                  -1.115
## timePoint_factor2:genderMale                              -0.683
## timePoint_factor3:genderMale                              -1.230
## interventiongroupIntervention:timePoint_factor2:genderMale  0.875
## interventiongroupIntervention:timePoint_factor3:genderMale  1.287
##                                                          Pr(>|z|)
## interventiongroupIntervention                              0.0995 .
## timePoint_factor2                                          0.6058
## timePoint_factor3                                        9.21e-05 ***
## genderMale                                                 0.4401
## interventiongroupIntervention:timePoint_factor2            0.0989 .
## interventiongroupIntervention:timePoint_factor3            0.8088
```

```
## interventiongroupIntervention:genderMale                     0.2650
## timePoint_factor2:genderMale                                 0.4947
## timePoint_factor3:genderMale                                 0.2185
## interventiongroupIntervention:timePoint_factor2:genderMale   0.3814
## interventiongroupIntervention:timePoint_factor3:genderMale   0.1981
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -0.7208     0.3651  -1.974
## 2|3   0.7410     0.3658   2.026
## 3|4   2.4691     0.3772   6.545
## (41 observations deleted due to missingness)
```

```
DisAt3OthersupernaT_model  <- clmm(DisAt3OthersupernaT ~ interventiongroup * timePoint_factor * gender +
summary(DisAt3OthersupernaT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: DisAt3OthersupernaT ~ interventiongroup * timePoint_factor *
##     gender + (1 | loc_factor/ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik  AIC     niter      max.grad cond.H
##  logit flexible  1073 -761.59 1555.17 1406(5628) 6.23e-04 4.2e+02
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 1.7032   1.3051
##  loc_factor           (Intercept) 0.0958   0.3095
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                             0.5407
## timePoint_factor2                                         0.1929
## timePoint_factor3                                        -0.3892
## genderMale                                               -0.5167
## interventiongroupIntervention:timePoint_factor2          -0.7765
## interventiongroupIntervention:timePoint_factor3          -0.2193
## interventiongroupIntervention:genderMale                 -0.2497
## timePoint_factor2:genderMale                              0.1116
## timePoint_factor3:genderMale                             -0.4370
## interventiongroupIntervention:timePoint_factor2:genderMale  -0.2387
## interventiongroupIntervention:timePoint_factor3:genderMale   0.1930
##                                                          Std. Error
## interventiongroupIntervention                                0.3375
## timePoint_factor2                                            0.2999
## timePoint_factor3                                            0.3032
## genderMale                                                   0.5396
## interventiongroupIntervention:timePoint_factor2              0.4301
## interventiongroupIntervention:timePoint_factor3              0.4275
## interventiongroupIntervention:genderMale                     0.7343
## timePoint_factor2:genderMale                                 0.6836
```

```
## timePoint_factor3:genderMale                                        0.7383
## interventiongroupIntervention:timePoint_factor2:genderMale     1.0246
## interventiongroupIntervention:timePoint_factor3:genderMale     1.0015
##                                                                z value
## interventiongroupIntervention                                    1.602
## timePoint_factor2                                                0.643
## timePoint_factor3                                               -1.284
## genderMale                                                      -0.958
## interventiongroupIntervention:timePoint_factor2                 -1.805
## interventiongroupIntervention:timePoint_factor3                 -0.513
## interventiongroupIntervention:genderMale                        -0.340
## timePoint_factor2:genderMale                                     0.163
## timePoint_factor3:genderMale                                    -0.592
## interventiongroupIntervention:timePoint_factor2:genderMale      -0.233
## interventiongroupIntervention:timePoint_factor3:genderMale       0.193
##                                                                Pr(>|z|)
## interventiongroupIntervention                                     0.109
## timePoint_factor2                                                 0.520
## timePoint_factor3                                                 0.199
## genderMale                                                        0.338
## interventiongroupIntervention:timePoint_factor2                   0.071 .
## interventiongroupIntervention:timePoint_factor3                   0.608
## interventiongroupIntervention:genderMale                          0.734
## timePoint_factor2:genderMale                                      0.870
## timePoint_factor3:genderMale                                      0.554
## interventiongroupIntervention:timePoint_factor2:genderMale        0.816
## interventiongroupIntervention:timePoint_factor3:genderMale        0.847
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2   1.5048     0.3116   4.829
## 2|3   3.0780     0.3409   9.030
## 3|4   4.4986     0.3918  11.482
## (40 observations deleted due to missingness)
```

```
DisAt4KarmaT_model  <- clmm(DisAt4KarmaT ~ interventiongroup * timePoint_factor * gender + (1|loc_factor
summary(DisAt4KarmaT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: DisAt4KarmaT ~ interventiongroup * timePoint_factor * gender +
##     (1 | loc_factor/ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1073 -1048.58 2129.16 1421(5687) 9.06e-04 4.5e+02
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 1.37693  1.1734
##  loc_factor           (Intercept) 0.06257  0.2501
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
```

```
## Coefficients:
##                                                           Estimate
## interventiongroupIntervention                              0.4170
## timePoint_factor2                                         -0.5977
## timePoint_factor3                                         -0.4032
## genderMale                                                 0.3558
## interventiongroupIntervention:timePoint_factor2           -0.3217
## interventiongroupIntervention:timePoint_factor3           -0.1255
## interventiongroupIntervention:genderMale                  -0.6184
## timePoint_factor2:genderMale                               0.3210
## timePoint_factor3:genderMale                              -0.6411
## interventiongroupIntervention:timePoint_factor2:genderMale -0.3679
## interventiongroupIntervention:timePoint_factor3:genderMale -0.3069
##                                                           Std. Error
## interventiongroupIntervention                                 0.2903
## timePoint_factor2                                             0.2656
## timePoint_factor3                                             0.2551
## genderMale                                                    0.4248
## interventiongroupIntervention:timePoint_factor2               0.3797
## interventiongroupIntervention:timePoint_factor3               0.3606
## interventiongroupIntervention:genderMale                      0.5989
## timePoint_factor2:genderMale                                  0.5503
## timePoint_factor3:genderMale                                  0.5367
## interventiongroupIntervention:timePoint_factor2:genderMale    0.8077
## interventiongroupIntervention:timePoint_factor3:genderMale    0.7843
##                                                           z value
## interventiongroupIntervention                               1.437
## timePoint_factor2                                          -2.250
## timePoint_factor3                                          -1.581
## genderMale                                                  0.838
## interventiongroupIntervention:timePoint_factor2            -0.847
## interventiongroupIntervention:timePoint_factor3            -0.348
## interventiongroupIntervention:genderMale                   -1.033
## timePoint_factor2:genderMale                                0.583
## timePoint_factor3:genderMale                               -1.195
## interventiongroupIntervention:timePoint_factor2:genderMale -0.455
## interventiongroupIntervention:timePoint_factor3:genderMale -0.391
##                                                           Pr(>|z|)
## interventiongroupIntervention                               0.1508
## timePoint_factor2                                           0.0244 *
## timePoint_factor3                                           0.1139
## genderMale                                                  0.4023
## interventiongroupIntervention:timePoint_factor2             0.3969
## interventiongroupIntervention:timePoint_factor3             0.7278
## interventiongroupIntervention:genderMale                    0.3018
## timePoint_factor2:genderMale                                0.5596
## timePoint_factor3:genderMale                                0.2323
## interventiongroupIntervention:timePoint_factor2:genderMale  0.6488
## interventiongroupIntervention:timePoint_factor3:genderMale  0.6956
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
```

```
## 1|2   0.4528     0.2521   1.796
## 2|3   1.8732     0.2656   7.054
## 3|4   3.4884     0.3028  11.521
## (40 observations deleted due to missingness)
```

```
DisAt5NeppeopT_model  <- clmm(DisAt5NeppeopT ~ interventiongroup * timePoint_factor * gender + (1|ID_fa
summary(DisAt5NeppeopT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: DisAt5NeppeopT ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1073 -1316.19 2662.39 1502(5927) 6.50e-04 5.0e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 1.642    1.282
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                    Estimate
## interventiongroupIntervention                      -0.20417
## timePoint_factor2                                  -0.69491
## timePoint_factor3                                  -0.99068
## genderMale                                          0.02062
## interventiongroupIntervention:timePoint_factor2     0.28784
## interventiongroupIntervention:timePoint_factor3     0.77356
## interventiongroupIntervention:genderMale            0.20983
## timePoint_factor2:genderMale                        0.07046
## timePoint_factor3:genderMale                        0.11421
## interventiongroupIntervention:timePoint_factor2:genderMale  0.35850
## interventiongroupIntervention:timePoint_factor3:genderMale -0.04729
##                                                    Std. Error
## interventiongroupIntervention                         0.28168
## timePoint_factor2                                     0.24435
## timePoint_factor3                                     0.24137
## genderMale                                            0.39776
## interventiongroupIntervention:timePoint_factor2       0.34732
## interventiongroupIntervention:timePoint_factor3       0.33817
## interventiongroupIntervention:genderMale              0.55742
## timePoint_factor2:genderMale                          0.50070
## timePoint_factor3:genderMale                          0.48382
## interventiongroupIntervention:timePoint_factor2:genderMale    0.70734
## interventiongroupIntervention:timePoint_factor3:genderMale    0.66443
##                                                    z value
## interventiongroupIntervention                       -0.725
## timePoint_factor2                                   -2.844
## timePoint_factor3                                   -4.104
## genderMale                                           0.052
## interventiongroupIntervention:timePoint_factor2      0.829
## interventiongroupIntervention:timePoint_factor3      2.287
## interventiongroupIntervention:genderMale             0.376
```

```
## timePoint_factor2:genderMale                                    0.141
## timePoint_factor3:genderMale                                    0.236
## interventiongroupIntervention:timePoint_factor2:genderMale      0.507
## interventiongroupIntervention:timePoint_factor3:genderMale     -0.071
##                                                               Pr(>|z|)
## interventiongroupIntervention                                  0.46856
## timePoint_factor2                                              0.00446 **
## timePoint_factor3                                             4.05e-05 ***
## genderMale                                                     0.95865
## interventiongroupIntervention:timePoint_factor2                0.40725
## interventiongroupIntervention:timePoint_factor3                0.02217 *
## interventiongroupIntervention:genderMale                       0.70659
## timePoint_factor2:genderMale                                   0.88808
## timePoint_factor3:genderMale                                   0.81339
## interventiongroupIntervention:timePoint_factor2:genderMale     0.61228
## interventiongroupIntervention:timePoint_factor3:genderMale     0.94326
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -0.7776     0.2018  -3.854
## 2|3   0.5425     0.2009   2.701
## 3|4   2.3025     0.2226  10.343
## (40 observations deleted due to missingness)
```

```
DisAt6GovtsT_model  <- clmm(DisAt6GovtsT ~ interventiongroup * timePoint_factor * gender + (1|ID_factor)
summary(DisAt6GovtsT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: DisAt6GovtsT ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1073 -1291.48 2612.97 1321(5205) 1.13e-03 5.7e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 1.636    1.279
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                               Estimate
## interventiongroupIntervention                                  -0.1755
## timePoint_factor2                                              -0.1922
## timePoint_factor3                                               0.2136
## genderMale                                                     -0.3488
## interventiongroupIntervention:timePoint_factor2                 0.3948
## interventiongroupIntervention:timePoint_factor3                 0.3857
## interventiongroupIntervention:genderMale                        1.2105
## timePoint_factor2:genderMale                                    0.7390
## timePoint_factor3:genderMale                                    0.9157
## interventiongroupIntervention:timePoint_factor2:genderMale     -0.9046
```

```
## interventiongroupIntervention:timePoint_factor3:genderMale  -1.3635
##                                                           Std. Error
## interventiongroupIntervention                                 0.2873
## timePoint_factor2                                             0.2450
## timePoint_factor3                                             0.2367
## genderMale                                                    0.4222
## interventiongroupIntervention:timePoint_factor2               0.3519
## interventiongroupIntervention:timePoint_factor3               0.3404
## interventiongroupIntervention:genderMale                      0.5821
## timePoint_factor2:genderMale                                  0.5146
## timePoint_factor3:genderMale                                  0.4926
## interventiongroupIntervention:timePoint_factor2:genderMale    0.7290
## interventiongroupIntervention:timePoint_factor3:genderMale    0.6846
##                                                           z value
## interventiongroupIntervention                              -0.611
## timePoint_factor2                                          -0.784
## timePoint_factor3                                           0.902
## genderMale                                                 -0.826
## interventiongroupIntervention:timePoint_factor2             1.122
## interventiongroupIntervention:timePoint_factor3             1.133
## interventiongroupIntervention:genderMale                    2.080
## timePoint_factor2:genderMale                                1.436
## timePoint_factor3:genderMale                                1.859
## interventiongroupIntervention:timePoint_factor2:genderMale  -1.241
## interventiongroupIntervention:timePoint_factor3:genderMale  -1.992
##                                                           Pr(>|z|)
## interventiongroupIntervention                               0.5413
## timePoint_factor2                                           0.4328
## timePoint_factor3                                           0.3670
## genderMale                                                  0.4088
## interventiongroupIntervention:timePoint_factor2             0.2619
## interventiongroupIntervention:timePoint_factor3             0.2571
## interventiongroupIntervention:genderMale                    0.0376 *
## timePoint_factor2:genderMale                                0.1509
## timePoint_factor3:genderMale                                0.0631 .
## interventiongroupIntervention:timePoint_factor2:genderMale  0.2146
## interventiongroupIntervention:timePoint_factor3:genderMale  0.0464 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2 -0.02191    0.20043  -0.109
## 2|3  1.20496    0.20619   5.844
## 3|4  2.87899    0.23458  12.273
## (40 observations deleted due to missingness)
```

```
Relig1PrivateactivT_model  <- clmm(Relig1PrivateactivT ~ interventiongroup * timePoint_factor * gender +
summary(Relig1PrivateactivT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula: Relig1PrivateactivT ~ interventiongroup * timePoint_factor *
##     gender + (1 | loc_factor/ID_factor)
## data:    filtered
```

```
##
##  link  threshold nobs logLik   AIC     niter       max.grad cond.H
##  logit flexible  1050 -1543.91 3125.82 2040(12341) 1.25e-03 4.5e+02
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 4.5796   2.1400
##  loc_factor           (Intercept) 0.1606   0.4007
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                            -0.03169
## timePoint_factor2                                         0.73498
## timePoint_factor3                                         0.62306
## genderMale                                               -0.35332
## interventiongroupIntervention:timePoint_factor2          -0.37087
## interventiongroupIntervention:timePoint_factor3          -0.52925
## interventiongroupIntervention:genderMale                 -0.31939
## timePoint_factor2:genderMale                             -1.55145
## timePoint_factor3:genderMale                             -0.26558
## interventiongroupIntervention:timePoint_factor2:genderMale  1.86934
## interventiongroupIntervention:timePoint_factor3:genderMale  0.68434
##                                                          Std. Error
## interventiongroupIntervention                               0.36089
## timePoint_factor2                                           0.24340
## timePoint_factor3                                           0.23598
## genderMale                                                  0.52057
## interventiongroupIntervention:timePoint_factor2             0.34820
## interventiongroupIntervention:timePoint_factor3             0.34036
## interventiongroupIntervention:genderMale                    0.73078
## timePoint_factor2:genderMale                                0.51658
## timePoint_factor3:genderMale                                0.49515
## interventiongroupIntervention:timePoint_factor2:genderMale  0.73906
## interventiongroupIntervention:timePoint_factor3:genderMale  0.69542
##                                                          z value
## interventiongroupIntervention                             -0.088
## timePoint_factor2                                          3.020
## timePoint_factor3                                          2.640
## genderMale                                                -0.679
## interventiongroupIntervention:timePoint_factor2           -1.065
## interventiongroupIntervention:timePoint_factor3           -1.555
## interventiongroupIntervention:genderMale                  -0.437
## timePoint_factor2:genderMale                              -3.003
## timePoint_factor3:genderMale                              -0.536
## interventiongroupIntervention:timePoint_factor2:genderMale  2.529
## interventiongroupIntervention:timePoint_factor3:genderMale  0.984
##                                                          Pr(>|z|)
## interventiongroupIntervention                             0.93003
## timePoint_factor2                                         0.00253 **
## timePoint_factor3                                         0.00828 **
## genderMale                                                0.49732
## interventiongroupIntervention:timePoint_factor2           0.28683
## interventiongroupIntervention:timePoint_factor3           0.11995
```

```
## interventiongroupIntervention:genderMale                    0.66207
## timePoint_factor2:genderMale                                0.00267 **
## timePoint_factor3:genderMale                                0.59171
## interventiongroupIntervention:timePoint_factor2:genderMale  0.01143 *
## interventiongroupIntervention:timePoint_factor3:genderMale  0.32508
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -4.7148     0.4017 -11.736
## 2|3  -0.5683     0.3469  -1.638
## 3|4   1.2490     0.3489   3.579
## 4|5   2.8763     0.3643   7.895
## 5|6   3.6176     0.3766   9.607
## 6|7   5.7819     0.4415  13.097
## (63 observations deleted due to missingness)
```

```
Relig2PublicactivT_model  <- clmm(Relig2PublicactivT ~ interventiongroup * timePoint_factor * gender +
summary(Relig2PublicactivT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
## Relig2PublicactivT ~ interventiongroup * timePoint_factor * gender +
##     (1 | loc_factor/ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter       max.grad cond.H
##  logit flexible  1073 -1246.35 2530.69 2147(19171) 3.15e-04 2.8e+02
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 3.5276   1.8782
##  loc_factor           (Intercept) 0.2929   0.5412
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                            -1.24302
## timePoint_factor2                                        -0.65719
## timePoint_factor3                                        -0.65249
## genderMale                                               -0.93282
## interventiongroupIntervention:timePoint_factor2           0.69859
## interventiongroupIntervention:timePoint_factor3           0.43667
## interventiongroupIntervention:genderMale                  1.38003
## timePoint_factor2:genderMale                             -0.11259
## timePoint_factor3:genderMale                             -0.13905
## interventiongroupIntervention:timePoint_factor2:genderMale -0.02125
## interventiongroupIntervention:timePoint_factor3:genderMale -0.52798
##                                                          Std. Error
## interventiongroupIntervention                               0.34102
## timePoint_factor2                                           0.24758
## timePoint_factor3                                           0.23985
## genderMale                                                  0.47556
```

```
## interventiongroupIntervention:timePoint_factor2               0.35884
## interventiongroupIntervention:timePoint_factor3               0.35097
## interventiongroupIntervention:genderMale                      0.67553
## timePoint_factor2:genderMale                                  0.50375
## timePoint_factor3:genderMale                                  0.48923
## interventiongroupIntervention:timePoint_factor2:genderMale    0.73043
## interventiongroupIntervention:timePoint_factor3:genderMale    0.69487
##                                                              z value
## interventiongroupIntervention                                 -3.645
## timePoint_factor2                                             -2.654
## timePoint_factor3                                             -2.720
## genderMale                                                    -1.962
## interventiongroupIntervention:timePoint_factor2                1.947
## interventiongroupIntervention:timePoint_factor3                1.244
## interventiongroupIntervention:genderMale                       2.043
## timePoint_factor2:genderMale                                  -0.224
## timePoint_factor3:genderMale                                  -0.284
## interventiongroupIntervention:timePoint_factor2:genderMale    -0.029
## interventiongroupIntervention:timePoint_factor3:genderMale    -0.760
##                                                              Pr(>|z|)
## interventiongroupIntervention                                0.000267 ***
## timePoint_factor2                                            0.007944 **
## timePoint_factor3                                            0.006521 **
## genderMale                                                   0.049820 *
## interventiongroupIntervention:timePoint_factor2              0.051560 .
## interventiongroupIntervention:timePoint_factor3              0.213428
## interventiongroupIntervention:genderMale                     0.041063 *
## timePoint_factor2:genderMale                                 0.823138
## timePoint_factor3:genderMale                                 0.776248
## interventiongroupIntervention:timePoint_factor2:genderMale   0.976792
## interventiongroupIntervention:timePoint_factor3:genderMale   0.447359
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -3.2875     0.4116  -7.987
## 2|3   0.3497     0.3937   0.888
## 3|4   2.2889     0.4067   5.629
## 4|5   5.0286     0.4930  10.199
## 5|6   6.3813     0.6044  10.557
## 6|7   8.4071     1.1132   7.552
## (40 observations deleted due to missingness)
```

```
func_model <- lmer(functioning ~ interventiongroup * timePoint_factor * gender + (1|ID_factor), data = f
summary(func_model)
```

```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
##   to degrees of freedom [lmerMod]
## Formula: functioning ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 949.1
##
```

```
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -2.7148 -0.4428 -0.1913  0.3030  5.9243
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 0.07296  0.2701
##  Residual              0.09013  0.3002
## Number of obs: 1072, groups:  ID_factor, 368
##
## Fixed effects:
##                                                                 Estimate
## (Intercept)                                                     1.336254
## interventiongroupIntervention                                   0.029962
## timePoint_factor2                                               0.014885
## timePoint_factor3                                              -0.096938
## genderMale                                                     -0.099217
## interventiongroupIntervention:timePoint_factor2                -0.031736
## interventiongroupIntervention:timePoint_factor3                 0.003150
## interventiongroupIntervention:genderMale                        0.003063
## timePoint_factor2:genderMale                                    0.016359
## timePoint_factor3:genderMale                                    0.033357
## interventiongroupIntervention:timePoint_factor2:genderMale      0.018614
## interventiongroupIntervention:timePoint_factor3:genderMale     -0.019508
##                                                                Std. Error
## (Intercept)                                                     0.033857
## interventiongroupIntervention                                   0.048589
## timePoint_factor2                                               0.036360
## timePoint_factor3                                               0.035586
## genderMale                                                      0.069069
## interventiongroupIntervention:timePoint_factor2                 0.052007
## interventiongroupIntervention:timePoint_factor3                 0.051070
## interventiongroupIntervention:genderMale                        0.098027
## timePoint_factor2:genderMale                                    0.074724
## timePoint_factor3:genderMale                                    0.072610
## interventiongroupIntervention:timePoint_factor2:genderMale      0.108722
## interventiongroupIntervention:timePoint_factor3:genderMale      0.103053
##                                                                       df
## (Intercept)                                                   772.600000
## interventiongroupIntervention                                 772.700000
## timePoint_factor2                                             709.600000
## timePoint_factor3                                             702.000000
## genderMale                                                    769.800000
## interventiongroupIntervention:timePoint_factor2               708.500000
## interventiongroupIntervention:timePoint_factor3               702.000000
## interventiongroupIntervention:genderMale                      769.900000
## timePoint_factor2:genderMale                                  711.300000
## timePoint_factor3:genderMale                                  701.300000
## interventiongroupIntervention:timePoint_factor2:genderMale    719.600000
## interventiongroupIntervention:timePoint_factor3:genderMale    701.400000
##                                                                t value
## (Intercept)                                                     39.467
## interventiongroupIntervention                                    0.617
## timePoint_factor2                                                0.409
```

```
## timePoint_factor3                                            -2.724
## genderMale                                                   -1.436
## interventiongroupIntervention:timePoint_factor2              -0.610
## interventiongroupIntervention:timePoint_factor3               0.062
## interventiongroupIntervention:genderMale                      0.031
## timePoint_factor2:genderMale                                  0.219
## timePoint_factor3:genderMale                                  0.459
## interventiongroupIntervention:timePoint_factor2:genderMale    0.171
## interventiongroupIntervention:timePoint_factor3:genderMale   -0.189
##                                                             Pr(>|t|)
## (Intercept)                                                  < 2e-16 ***
## interventiongroupIntervention                                0.53765
## timePoint_factor2                                            0.68238
## timePoint_factor3                                            0.00661 **
## genderMale                                                   0.15127
## interventiongroupIntervention:timePoint_factor2              0.54190
## interventiongroupIntervention:timePoint_factor3              0.95084
## interventiongroupIntervention:genderMale                     0.97509
## timePoint_factor2:genderMale                                 0.82677
## timePoint_factor3:genderMale                                 0.64609
## interventiongroupIntervention:timePoint_factor2:genderMale   0.86411
## interventiongroupIntervention:timePoint_factor3:genderMale   0.84991
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.697
## tmPnt_fctr2 -0.517  0.360
## tmPnt_fctr3 -0.528  0.368  0.492
## genderMale  -0.490  0.342  0.253  0.259
## intrvnI:P_2  0.361 -0.519 -0.699 -0.344 -0.177
## intrvnI:P_3  0.368 -0.528 -0.343 -0.697 -0.180  0.493
## intrvntnI:M  0.345 -0.496 -0.178 -0.182 -0.705  0.257   0.262
## tmPnt_fc2:M  0.251 -0.175 -0.487 -0.239 -0.511  0.340   0.167   0.360
## tmPnt_fc3:M  0.259 -0.180 -0.241 -0.490 -0.526  0.168   0.342   0.371
## intrI:P_2:M -0.173  0.248  0.334  0.164  0.351 -0.478  -0.236  -0.499
## intrI:P_3:M -0.182  0.262  0.170  0.345  0.371 -0.245  -0.496  -0.526
##             tP_2:M tP_3:M iI:P_2:
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.486
## intrI:P_2:M -0.687 -0.334
## intrI:P_3:M -0.343 -0.705  0.474
```

```
cope_model <- lmer(Copemean9_T ~ interventiongroup * timePoint_factor * gender + (1|ID_factor), data = 
summary(cope_model)
```

```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
```

```
##   to degrees of freedom [lmerMod]
## Formula: Copemean9_T ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 423.1
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -3.3926 -0.5864 -0.0468  0.5461  4.0065
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 0.02834  0.1683
##  Residual              0.06220  0.2494
## Number of obs: 1073, groups:  ID_factor, 368
##
## Fixed effects:
##                                                                 Estimate
## (Intercept)                                                     2.119835
## interventiongroupIntervention                                  -0.008690
## timePoint_factor2                                              -0.020727
## timePoint_factor3                                              -0.067440
## genderMale                                                      0.036899
## interventiongroupIntervention:timePoint_factor2                 0.003561
## interventiongroupIntervention:timePoint_factor3                 0.003602
## interventiongroupIntervention:genderMale                       -0.038953
## timePoint_factor2:genderMale                                   -0.002293
## timePoint_factor3:genderMale                                    0.034780
## interventiongroupIntervention:timePoint_factor2:genderMale      0.130391
## interventiongroupIntervention:timePoint_factor3:genderMale     -0.048551
##                                                                Std. Error
## (Intercept)                                                      0.025162
## interventiongroupIntervention                                    0.036166
## timePoint_factor2                                                0.030102
## timePoint_factor3                                                0.029495
## genderMale                                                       0.051430
## interventiongroupIntervention:timePoint_factor2                  0.043110
## interventiongroupIntervention:timePoint_factor3                  0.042375
## interventiongroupIntervention:genderMale                         0.073019
## timePoint_factor2:genderMale                                     0.061948
## timePoint_factor3:genderMale                                     0.060286
## interventiongroupIntervention:timePoint_factor2:genderMale       0.090046
## interventiongroupIntervention:timePoint_factor3:genderMale       0.085584
##                                                                        df
## (Intercept)                                                    891.900000
## interventiongroupIntervention                                  893.600000
## timePoint_factor2                                              707.800000
## timePoint_factor3                                              697.900000
## genderMale                                                     891.900000
## interventiongroupIntervention:timePoint_factor2                706.900000
## interventiongroupIntervention:timePoint_factor3                698.500000
## interventiongroupIntervention:genderMale                       892.300000
## timePoint_factor2:genderMale                                   711.000000
```

```
## timePoint_factor3:genderMale                                    697.900000
## interventiongroupIntervention:timePoint_factor2:genderMale 722.100000
## interventiongroupIntervention:timePoint_factor3:genderMale 698.100000
##                                                                 t value
## (Intercept)                                                      84.248
## interventiongroupIntervention                                    -0.240
## timePoint_factor2                                                -0.689
## timePoint_factor3                                                -2.287
## genderMale                                                        0.717
## interventiongroupIntervention:timePoint_factor2                   0.083
## interventiongroupIntervention:timePoint_factor3                   0.085
## interventiongroupIntervention:genderMale                         -0.533
## timePoint_factor2:genderMale                                     -0.037
## timePoint_factor3:genderMale                                      0.577
## interventiongroupIntervention:timePoint_factor2:genderMale        1.448
## interventiongroupIntervention:timePoint_factor3:genderMale       -0.567
##                                                                 Pr(>|t|)
## (Intercept)                                                       <2e-16 ***
## interventiongroupIntervention                                     0.8102
## timePoint_factor2                                                 0.4913
## timePoint_factor3                                                 0.0225 *
## genderMale                                                        0.4733
## interventiongroupIntervention:timePoint_factor2                   0.9342
## interventiongroupIntervention:timePoint_factor3                   0.9323
## interventiongroupIntervention:genderMale                          0.5938
## timePoint_factor2:genderMale                                      0.9705
## timePoint_factor3:genderMale                                      0.5642
## interventiongroupIntervention:timePoint_factor2:genderMale        0.1480
## interventiongroupIntervention:timePoint_factor3:genderMale        0.5707
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.696
## tmPnt_fctr2 -0.574  0.400
## tmPnt_fctr3 -0.586  0.408  0.490
## genderMale  -0.489  0.340  0.281  0.287
## intrvnI:P_2  0.401 -0.577 -0.698 -0.342 -0.196
## intrvnI:P_3  0.408 -0.587 -0.341 -0.696 -0.200  0.493
## intrvntnI:M  0.345 -0.495 -0.198 -0.202 -0.704  0.286   0.291
## tmPnt_fc2:M  0.279 -0.194 -0.486 -0.238 -0.570  0.339   0.166   0.402
## tmPnt_fc3:M  0.287 -0.199 -0.240 -0.489 -0.586  0.167   0.341   0.413
## intrI:P_2:M -0.192  0.276  0.334  0.164  0.392 -0.479  -0.236  -0.557
## intrI:P_3:M -0.202  0.291  0.169  0.345  0.413 -0.244  -0.495  -0.586
##             tP_2:M tP_3:M iI:P_2:
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
```

```
## tmPnt_fc3:M  0.487
## intrI:P_2:M -0.688 -0.335
## intrI:P_3:M -0.343 -0.704  0.476
```

```
soc_coh_model <- lmer(SocCohmean7_T ~ interventiongroup * timePoint_factor * gender + (1|loc_factor/ID_
summary(soc_coh_model)
```

```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
##   to degrees of freedom [lmerMod]
## Formula: SocCohmean7_T ~ interventiongroup * timePoint_factor * gender +
##     (1 | loc_factor/ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 1795.3
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -3.9341 -0.4977  0.0507  0.5748  2.8434
##
## Random effects:
##  Groups               Name        Variance  Std.Dev.
##  ID_factor:loc_factor (Intercept) 1.155e-01 0.339818
##  loc_factor           (Intercept) 5.737e-05 0.007574
##  Residual                         2.204e-01 0.469481
## Number of obs: 1073, groups:  ID_factor:loc_factor, 368; loc_factor, 3
##
## Fixed effects:
##                                                              Estimate
## (Intercept)                                                   3.71628
## interventiongroupIntervention                                -0.11552
## timePoint_factor2                                            -0.14660
## timePoint_factor3                                             0.01449
## genderMale                                                    0.06393
## interventiongroupIntervention:timePoint_factor2               0.27846
## interventiongroupIntervention:timePoint_factor3               0.15514
## interventiongroupIntervention:genderMale                     -0.13510
## timePoint_factor2:genderMale                                  0.17139
## timePoint_factor3:genderMale                                  0.02626
## interventiongroupIntervention:timePoint_factor2:genderMale   -0.09782
## interventiongroupIntervention:timePoint_factor3:genderMale   -0.09376
##                                                             Std. Error
## (Intercept)                                                    0.04867
## interventiongroupIntervention                                  0.06966
## timePoint_factor2                                              0.05668
## timePoint_factor3                                              0.05552
## genderMale                                                     0.09908
## interventiongroupIntervention:timePoint_factor2                0.08117
## interventiongroupIntervention:timePoint_factor3                0.07977
## interventiongroupIntervention:genderMale                       0.14066
## timePoint_factor2:genderMale                                   0.11666
## timePoint_factor3:genderMale                                   0.11348
## interventiongroupIntervention:timePoint_factor2:genderMale     0.16962
## interventiongroupIntervention:timePoint_factor3:genderMale     0.16111
##                                                                    df
## (Intercept)                                                 37.60000
```

```
## interventiongroupIntervention                                    865.90000
## timePoint_factor2                                                708.60000
## timePoint_factor3                                                699.20000
## genderMale                                                       855.50000
## interventiongroupIntervention:timePoint_factor2                  707.70000
## interventiongroupIntervention:timePoint_factor3                  699.80000
## interventiongroupIntervention:genderMale                         864.00000
## timePoint_factor2:genderMale                                     711.60000
## timePoint_factor3:genderMale                                     699.20000
## interventiongroupIntervention:timePoint_factor2:genderMale       722.00000
## interventiongroupIntervention:timePoint_factor3:genderMale       699.40000
##                                                                  t value
## (Intercept)                                                       76.364
## interventiongroupIntervention                                     -1.658
## timePoint_factor2                                                 -2.586
## timePoint_factor3                                                  0.261
## genderMale                                                         0.645
## interventiongroupIntervention:timePoint_factor2                    3.430
## interventiongroupIntervention:timePoint_factor3                    1.945
## interventiongroupIntervention:genderMale                          -0.961
## timePoint_factor2:genderMale                                       1.469
## timePoint_factor3:genderMale                                       0.231
## interventiongroupIntervention:timePoint_factor2:genderMale        -0.577
## interventiongroupIntervention:timePoint_factor3:genderMale        -0.582
##                                                                  Pr(>|t|)
## (Intercept)                                                       < 2e-16 ***
## interventiongroupIntervention                                    0.097620 .
## timePoint_factor2                                                0.009896 **
## timePoint_factor3                                                0.794249
## genderMale                                                       0.518928
## interventiongroupIntervention:timePoint_factor2                  0.000638 ***
## interventiongroupIntervention:timePoint_factor3                  0.052201 .
## interventiongroupIntervention:genderMale                         0.337064
## timePoint_factor2:genderMale                                     0.142225
## timePoint_factor3:genderMale                                     0.817107
## interventiongroupIntervention:timePoint_factor2:genderMale       0.564330
## interventiongroupIntervention:timePoint_factor3:genderMale       0.560768
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.693
## tmPnt_fctr2 -0.559  0.390
## tmPnt_fctr3 -0.570  0.399  0.490
## genderMale  -0.487  0.340  0.274  0.280
## intrvnI:P_2  0.390 -0.564 -0.698 -0.342 -0.192
## intrvnI:P_3  0.397 -0.574 -0.341 -0.696 -0.195  0.493
## intrvntnI:M  0.343 -0.495 -0.193 -0.197 -0.704  0.279   0.284
## tmPnt_fc2:M  0.271 -0.190 -0.486 -0.238 -0.557  0.339   0.166   0.392
## tmPnt_fc3:M  0.279 -0.195 -0.240 -0.489 -0.573  0.167   0.341   0.403
## intrI:P_2:M -0.187  0.270  0.334  0.164  0.383 -0.479  -0.236  -0.544
## intrI:P_3:M -0.197  0.284  0.169  0.345  0.403 -0.244  -0.495  -0.573
##             tP_2:M tP_3:M iI:P_2:
```

```
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.486
## intrI:P_2:M -0.688 -0.335
## intrI:P_3:M -0.343 -0.704  0.475
```

```
ptsd_model <- lmer(PTSDmean13_T ~ interventiongroup * timePoint_factor * gender + (1|ID_factor), data =
summary(ptsd_model)
```

```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
##   to degrees of freedom [lmerMod]
## Formula: PTSDmean13_T ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 2024.4
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -3.0401 -0.5628 -0.1624  0.4091  4.3354
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 0.2069   0.4548
##  Residual              0.2458   0.4958
## Number of obs: 1073, groups:  ID_factor, 368
##
## Fixed effects:
##                                                          Estimate
## (Intercept)                                               1.93845
## interventiongroupIntervention                             0.07779
## timePoint_factor2                                        -0.13604
## timePoint_factor3                                        -0.39730
## genderMale                                               -0.27660
## interventiongroupIntervention:timePoint_factor2          -0.11904
## interventiongroupIntervention:timePoint_factor3          -0.08299
## interventiongroupIntervention:genderMale                 -0.19176
## timePoint_factor2:genderMale                             -0.02578
## timePoint_factor3:genderMale                              0.04265
## interventiongroupIntervention:timePoint_factor2:genderMale  0.11983
## interventiongroupIntervention:timePoint_factor3:genderMale  0.14990
##                                                         Std. Error
## (Intercept)                                                0.05626
## interventiongroupIntervention                              0.08085
## timePoint_factor2                                          0.05992
## timePoint_factor3                                          0.05864
## genderMale                                                 0.11500
## interventiongroupIntervention:timePoint_factor2            0.08580
## interventiongroupIntervention:timePoint_factor3            0.08425
```

```
## interventiongroupIntervention:genderMale                     0.16327
## timePoint_factor2:genderMale                                 0.12336
## timePoint_factor3:genderMale                                 0.11985
## interventiongroupIntervention:timePoint_factor2:genderMale   0.17954
## interventiongroupIntervention:timePoint_factor3:genderMale   0.17015
##                                                                 df
## (Intercept)                                                759.50000
## interventiongroupIntervention                              761.50000
## timePoint_factor2                                          708.50000
## timePoint_factor3                                          701.10000
## genderMale                                                 759.50000
## interventiongroupIntervention:timePoint_factor2            707.90000
## interventiongroupIntervention:timePoint_factor3            701.60000
## interventiongroupIntervention:genderMale                   760.00000
## timePoint_factor2:genderMale                               710.90000
## timePoint_factor3:genderMale                               701.10000
## interventiongroupIntervention:timePoint_factor2:genderMale 719.10000
## interventiongroupIntervention:timePoint_factor3:genderMale 701.20000
##                                                            t value
## (Intercept)                                                 34.452
## interventiongroupIntervention                                0.962
## timePoint_factor2                                           -2.270
## timePoint_factor3                                           -6.776
## genderMale                                                  -2.405
## interventiongroupIntervention:timePoint_factor2             -1.387
## interventiongroupIntervention:timePoint_factor3             -0.985
## interventiongroupIntervention:genderMale                    -1.174
## timePoint_factor2:genderMale                                -0.209
## timePoint_factor3:genderMale                                 0.356
## interventiongroupIntervention:timePoint_factor2:genderMale   0.667
## interventiongroupIntervention:timePoint_factor3:genderMale   0.881
##                                                            Pr(>|t|)
## (Intercept)                                                 < 2e-16 ***
## interventiongroupIntervention                                0.3363
## timePoint_factor2                                            0.0235 *
## timePoint_factor3                                          2.63e-11 ***
## genderMale                                                   0.0164 *
## interventiongroupIntervention:timePoint_factor2              0.1658
## interventiongroupIntervention:timePoint_factor3              0.3250
## interventiongroupIntervention:genderMale                     0.2406
## timePoint_factor2:genderMale                                 0.8345
## timePoint_factor3:genderMale                                 0.7221
## interventiongroupIntervention:timePoint_factor2:genderMale   0.5047
## interventiongroupIntervention:timePoint_factor3:genderMale   0.3786
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.696
## tmPnt_fctr2 -0.510  0.355
## tmPnt_fctr3 -0.521  0.363  0.489
## genderMale  -0.489  0.340  0.249  0.255
## intrvnI:P_2  0.356 -0.513 -0.698 -0.342 -0.174
```

```
## intrvnI:P_3  0.363 -0.522 -0.341 -0.696 -0.177  0.492
## intrvntnI:M  0.345 -0.495 -0.176 -0.180 -0.704  0.254   0.259
## tmPnt_fc2:M  0.248 -0.172 -0.486 -0.238 -0.506  0.339   0.165   0.357
## tmPnt_fc3:M  0.255 -0.177 -0.239 -0.489 -0.521  0.167   0.341   0.367
## intrI:P_2:M -0.170  0.245  0.334  0.163  0.348 -0.478  -0.235  -0.494
## intrI:P_3:M -0.180  0.259  0.169  0.345  0.367 -0.244  -0.495  -0.521
##             tP_2:M tP_3:M iI:P_2:
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.486
## intrI:P_2:M -0.687 -0.334
## intrI:P_3:M -0.342 -0.704  0.474
```

```
pmhp_model <- lmer(PMHPmean13_T ~ interventiongroup * timePoint_factor * gender + (1|ID_factor), data =
summary(pmhp_model)
```

```
## Linear mixed model fit by REML t-tests use Satterthwaite approximations
##   to degrees of freedom [lmerMod]
## Formula: PMHPmean13_T ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
##    Data: filtered
##
## REML criterion at convergence: 665.8
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -2.7695 -0.5046 -0.1530  0.4227  5.8873
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 0.07650  0.2766
##  Residual              0.06193  0.2489
## Number of obs: 1073, groups:  ID_factor, 368
##
## Fixed effects:
##                                                          Estimate
## (Intercept)                                              1.466732
## interventiongroupIntervention                            0.010406
## timePoint_factor2                                       -0.021553
## timePoint_factor3                                       -0.122429
## genderMale                                              -0.160604
## interventiongroupIntervention:timePoint_factor2          0.028560
## interventiongroupIntervention:timePoint_factor3          0.039627
## interventiongroupIntervention:genderMale                 0.022437
## timePoint_factor2:genderMale                            -0.003625
## timePoint_factor3:genderMale                             0.063769
## interventiongroupIntervention:timePoint_factor2:genderMale -0.071772
## interventiongroupIntervention:timePoint_factor3:genderMale -0.079414
##                                                         Std. Error
```

```
## (Intercept)                                                  0.031113
## interventiongroupIntervention                                0.044700
## timePoint_factor2                                            0.030093
## timePoint_factor3                                            0.029430
## genderMale                                                   0.063595
## interventiongroupIntervention:timePoint_factor2              0.043091
## interventiongroupIntervention:timePoint_factor3              0.042288
## interventiongroupIntervention:genderMale                     0.090280
## timePoint_factor2:genderMale                                 0.061968
## timePoint_factor3:genderMale                                 0.060155
## interventiongroupIntervention:timePoint_factor2:genderMale   0.090263
## interventiongroupIntervention:timePoint_factor3:genderMale   0.085400
##                                                                    df
## (Intercept)                                                669.400000
## interventiongroupIntervention                              671.400000
## timePoint_factor2                                          704.700000
## timePoint_factor3                                          698.800000
## genderMale                                                 669.400000
## interventiongroupIntervention:timePoint_factor2            704.200000
## interventiongroupIntervention:timePoint_factor3            699.200000
## interventiongroupIntervention:genderMale                   669.900000
## timePoint_factor2:genderMale                               706.600000
## timePoint_factor3:genderMale                               698.800000
## interventiongroupIntervention:timePoint_factor2:genderMale 713.100000
## interventiongroupIntervention:timePoint_factor3:genderMale 698.900000
##                                                            t value
## (Intercept)                                                 47.142
## interventiongroupIntervention                                0.233
## timePoint_factor2                                           -0.716
## timePoint_factor3                                           -4.160
## genderMale                                                  -2.525
## interventiongroupIntervention:timePoint_factor2              0.663
## interventiongroupIntervention:timePoint_factor3              0.937
## interventiongroupIntervention:genderMale                     0.249
## timePoint_factor2:genderMale                                -0.059
## timePoint_factor3:genderMale                                 1.060
## interventiongroupIntervention:timePoint_factor2:genderMale  -0.795
## interventiongroupIntervention:timePoint_factor3:genderMale  -0.930
##                                                            Pr(>|t|)
## (Intercept)                                                 < 2e-16 ***
## interventiongroupIntervention                                0.8160
## timePoint_factor2                                            0.4741
## timePoint_factor3                                          3.58e-05 ***
## genderMale                                                   0.0118 *
## interventiongroupIntervention:timePoint_factor2              0.5077
## interventiongroupIntervention:timePoint_factor3              0.3490
## interventiongroupIntervention:genderMale                     0.8038
## timePoint_factor2:genderMale                                 0.9534
## timePoint_factor3:genderMale                                 0.2895
## interventiongroupIntervention:timePoint_factor2:genderMale   0.4268
## interventiongroupIntervention:timePoint_factor3:genderMale   0.3527
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
```

```
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.696
## tmPnt_fctr2 -0.463  0.322
## tmPnt_fctr3 -0.473  0.329  0.489
## genderMale  -0.489  0.341  0.226  0.231
## intrvnI:P_2  0.323 -0.465 -0.698 -0.341 -0.158
## intrvnI:P_3  0.329 -0.474 -0.340 -0.696 -0.161  0.492
## intrvntnI:M  0.345 -0.495 -0.159 -0.163 -0.704  0.230   0.235
## tmPnt_fc2:M  0.225 -0.156 -0.486 -0.237 -0.459  0.339   0.165   0.323
## tmPnt_fc3:M  0.231 -0.161 -0.239 -0.489 -0.473  0.167   0.340   0.333
## intrI:P_2:M -0.154  0.222  0.333  0.163  0.315 -0.477  -0.235  -0.448
## intrI:P_3:M -0.163  0.235  0.169  0.345  0.333 -0.244  -0.495  -0.473
##             tP_2:M tP_3:M iI:P_2:
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.485
## intrI:P_2:M -0.687 -0.333
## intrI:P_3:M -0.342 -0.704  0.473
```

```
HSMH2aComfortseekhelpfutureT_model  <- clmm(HSMH2aComfortseekhelpfutureT  ~ interventiongroup * timePoi
summary(HSMH2aComfortseekhelpfutureT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
## HSMH2aComfortseekhelpfutureT ~ interventiongroup * timePoint_factor *
##     gender + (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1072 -1138.91 2307.81 1444(4373) 3.34e-04 3.1e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 1.542    1.242
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                      Estimate
## interventiongroupIntervention                         0.24488
## timePoint_factor2                                     0.08743
## timePoint_factor3                                     0.38552
## genderMale                                            0.31529
## interventiongroupIntervention:timePoint_factor2       0.01304
## interventiongroupIntervention:timePoint_factor3      -0.51288
## interventiongroupIntervention:genderMale             -0.45174
## timePoint_factor2:genderMale                          0.74342
## timePoint_factor3:genderMale                          0.48428
```

```
## interventiongroupIntervention:timePoint_factor2:genderMale -1.15371
## interventiongroupIntervention:timePoint_factor3:genderMale -0.32769
##                                                            Std. Error
## interventiongroupIntervention                                 0.28836
## timePoint_factor2                                             0.24598
## timePoint_factor3                                             0.23937
## genderMale                                                    0.41030
## interventiongroupIntervention:timePoint_factor2               0.35243
## interventiongroupIntervention:timePoint_factor3               0.34600
## interventiongroupIntervention:genderMale                      0.57947
## timePoint_factor2:genderMale                                  0.50301
## timePoint_factor3:genderMale                                  0.48641
## interventiongroupIntervention:timePoint_factor2:genderMale    0.74289
## interventiongroupIntervention:timePoint_factor3:genderMale    0.68775
##                                                            z value
## interventiongroupIntervention                                0.849
## timePoint_factor2                                            0.355
## timePoint_factor3                                            1.611
## genderMale                                                   0.768
## interventiongroupIntervention:timePoint_factor2              0.037
## interventiongroupIntervention:timePoint_factor3             -1.482
## interventiongroupIntervention:genderMale                    -0.780
## timePoint_factor2:genderMale                                 1.478
## timePoint_factor3:genderMale                                 0.996
## interventiongroupIntervention:timePoint_factor2:genderMale  -1.553
## interventiongroupIntervention:timePoint_factor3:genderMale  -0.476
##                                                            Pr(>|z|)
## interventiongroupIntervention                                 0.396
## timePoint_factor2                                             0.722
## timePoint_factor3                                             0.107
## genderMale                                                    0.442
## interventiongroupIntervention:timePoint_factor2               0.970
## interventiongroupIntervention:timePoint_factor3               0.138
## interventiongroupIntervention:genderMale                      0.436
## timePoint_factor2:genderMale                                  0.139
## timePoint_factor3:genderMale                                  0.319
## interventiongroupIntervention:timePoint_factor2:genderMale    0.120
## interventiongroupIntervention:timePoint_factor3:genderMale    0.634
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -3.3070     0.2522 -13.113
## 2|3   0.5689     0.2062   2.759
## 3|4   2.9858     0.2391  12.488
## (41 observations deleted due to missingness)
```

```
HSDis2ComfortseekinghelpT_model  <- clmm(HSDis2ComfortseekinghelpT ~ interventiongroup * timePoint_facto
summary(HSDis2ComfortseekinghelpT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
## HSDis2ComfortseekinghelpT ~ interventiongroup * timePoint_factor *
##     gender + (1 | ID_factor)
## data:    filtered
```

```
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1073 -1114.95 2259.91 1428(5632) 7.99e-04 3.5e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 1.783    1.335
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                            -0.32976
## timePoint_factor2                                        -0.34402
## timePoint_factor3                                         0.03730
## genderMale                                                0.81746
## interventiongroupIntervention:timePoint_factor2           0.47531
## interventiongroupIntervention:timePoint_factor3          -0.06216
## interventiongroupIntervention:genderMale                 -0.81090
## timePoint_factor2:genderMale                              0.39830
## timePoint_factor3:genderMale                             -0.10473
## interventiongroupIntervention:timePoint_factor2:genderMale -0.33037
## interventiongroupIntervention:timePoint_factor3:genderMale  0.09022
##                                                          Std. Error
## interventiongroupIntervention                               0.29692
## timePoint_factor2                                           0.25044
## timePoint_factor3                                           0.24287
## genderMale                                                  0.42456
## interventiongroupIntervention:timePoint_factor2             0.35697
## interventiongroupIntervention:timePoint_factor3             0.34972
## interventiongroupIntervention:genderMale                    0.59865
## timePoint_factor2:genderMale                                0.50524
## timePoint_factor3:genderMale                                0.49759
## interventiongroupIntervention:timePoint_factor2:genderMale  0.74335
## interventiongroupIntervention:timePoint_factor3:genderMale  0.70206
##                                                          z value
## interventiongroupIntervention                             -1.111
## timePoint_factor2                                         -1.374
## timePoint_factor3                                          0.154
## genderMale                                                 1.925
## interventiongroupIntervention:timePoint_factor2            1.331
## interventiongroupIntervention:timePoint_factor3           -0.178
## interventiongroupIntervention:genderMale                  -1.355
## timePoint_factor2:genderMale                               0.788
## timePoint_factor3:genderMale                              -0.210
## interventiongroupIntervention:timePoint_factor2:genderMale -0.444
## interventiongroupIntervention:timePoint_factor3:genderMale  0.129
##                                                          Pr(>|z|)
## interventiongroupIntervention                              0.2667
## timePoint_factor2                                          0.1695
## timePoint_factor3                                          0.8779
## genderMale                                                 0.0542 .
## interventiongroupIntervention:timePoint_factor2            0.1830
## interventiongroupIntervention:timePoint_factor3            0.8589
## interventiongroupIntervention:genderMale                   0.1756
```

```
## timePoint_factor2:genderMale                                    0.4305
## timePoint_factor3:genderMale                                    0.8333
## interventiongroupIntervention:timePoint_factor2:genderMale   0.6567
## interventiongroupIntervention:timePoint_factor3:genderMale   0.8977
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2 -4.06525    0.28179 -14.427
## 2|3  0.09738    0.21289   0.457
## 3|4  2.65015    0.23901  11.088
## (40 observations deleted due to missingness)
```

```
HGMH3KnowhowhelpT_model  <- glmer(HGMH3KnowhowhelpT ~ interventiongroup * timePoint_factor * gender + (
```

```
## Warning in checkConv(attr(opt, "derivs"), opt$par, ctrl = control
## $checkConv, : Model failed to converge with max|grad| = 0.135248 (tol =
## 0.001, component 1)
```

```
summary(HGMH3KnowhowhelpT_model)
```

```
## Generalized linear mixed model fit by maximum likelihood (Laplace
##   Approximation) [glmerMod]
##  Family: binomial  ( logit )
## Formula:
## HGMH3KnowhowhelpT ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
##    Data: filtered
##
##      AIC      BIC   logLik deviance df.resid
##   1117.3   1181.9   -545.6   1091.3     1054
##
## Scaled residuals:
##     Min      1Q  Median      3Q     Max
## -3.0570  0.1765  0.3791  0.4323  1.1164
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 1.743    1.32
## Number of obs: 1067, groups:  ID_factor, 368
##
## Fixed effects:
##                                                          Estimate
## (Intercept)                                               1.22139
## interventiongroupIntervention                            -0.29631
## timePoint_factor2                                        -0.14743
## timePoint_factor3                                         1.12036
## genderMale                                                0.64119
## interventiongroupIntervention:timePoint_factor2           0.38770
## interventiongroupIntervention:timePoint_factor3          -0.01892
## interventiongroupIntervention:genderMale                 -0.41063
## timePoint_factor2:genderMale                             -0.42415
## timePoint_factor3:genderMale                              0.02159
## interventiongroupIntervention:timePoint_factor2:genderMale  1.63103
```

```
## interventiongroupIntervention:timePoint_factor3:genderMale  0.63876
##                                                           Std. Error
## (Intercept)                                                  0.25423
## interventiongroupIntervention                                0.34625
## timePoint_factor2                                            0.30652
## timePoint_factor3                                            0.34641
## genderMale                                                   0.53007
## interventiongroupIntervention:timePoint_factor2              0.43537
## interventiongroupIntervention:timePoint_factor3              0.47484
## interventiongroupIntervention:genderMale                     0.72439
## timePoint_factor2:genderMale                                 0.65435
## timePoint_factor3:genderMale                                 0.77706
## interventiongroupIntervention:timePoint_factor2:genderMale   1.00187
## interventiongroupIntervention:timePoint_factor3:genderMale   1.07809
##                                                           z value
## (Intercept)                                                 4.804
## interventiongroupIntervention                              -0.856
## timePoint_factor2                                          -0.481
## timePoint_factor3                                           3.234
## genderMale                                                  1.210
## interventiongroupIntervention:timePoint_factor2             0.890
## interventiongroupIntervention:timePoint_factor3            -0.040
## interventiongroupIntervention:genderMale                   -0.567
## timePoint_factor2:genderMale                               -0.648
## timePoint_factor3:genderMale                                0.028
## interventiongroupIntervention:timePoint_factor2:genderMale  1.628
## interventiongroupIntervention:timePoint_factor3:genderMale  0.592
##                                                           Pr(>|z|)
## (Intercept)                                               1.55e-06 ***
## interventiongroupIntervention                              0.39212
## timePoint_factor2                                          0.63053
## timePoint_factor3                                          0.00122 **
## genderMale                                                 0.22642
## interventiongroupIntervention:timePoint_factor2            0.37320
## interventiongroupIntervention:timePoint_factor3            0.96821
## interventiongroupIntervention:genderMale                   0.57081
## timePoint_factor2:genderMale                               0.51685
## timePoint_factor3:genderMale                               0.97784
## interventiongroupIntervention:timePoint_factor2:genderMale 0.10353
## interventiongroupIntervention:timePoint_factor3:genderMale 0.55352
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##             (Intr) intrvI tmPn_2 tmPn_3 gndrMl inI:P_2 inI:P_3 intI:M
## intrvntngrI -0.694
## tmPnt_fctr2 -0.603  0.442
## tmPnt_fctr3 -0.482  0.381  0.440
## genderMale  -0.424  0.325  0.288  0.268
## intrvnI:P_2  0.431 -0.614 -0.704 -0.306 -0.201
## intrvnI:P_3  0.383 -0.558 -0.322 -0.709 -0.185  0.448
## intrvntnI:M  0.315 -0.475 -0.211 -0.193 -0.730  0.292   0.267
## tmPnt_fc2:M  0.274 -0.206 -0.468 -0.212 -0.640  0.329   0.151   0.468
## tmPnt_fc3:M  0.230 -0.172 -0.197 -0.436 -0.528  0.138   0.316   0.386
```

```
## intrI:P_2:M -0.165  0.264  0.306  0.147  0.423 -0.432  -0.195  -0.563
## intrI:P_3:M -0.162  0.245  0.142  0.316  0.382 -0.196  -0.441  -0.517
##             tP_2:M tP_3:M iI:P_2:
## intrvntngrI
## tmPnt_fctr2
## tmPnt_fctr3
## genderMale
## intrvnI:P_2
## intrvnI:P_3
## intrvntnI:M
## tmPnt_fc2:M
## tmPnt_fc3:M  0.431
## intrI:P_2:M -0.655 -0.283
## intrI:P_3:M -0.311 -0.721  0.382
## convergence code: 0
## Model failed to converge with max|grad| = 0.135248 (tol = 0.001, component 1)
```

```
HSMH3FaultsadnessT_model  <- clmm(HSMH3FaultsadnessT  ~ interventiongroup * timePoint_factor * gender +
summary(HSMH3FaultsadnessT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
## HSMH3FaultsadnessT ~ interventiongroup * timePoint_factor * gender +
##     (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik   AIC     niter      max.grad cond.H
##  logit flexible  1073 -1223.72 2477.43 1411(5550) 1.81e-03 3.8e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 1.659    1.288
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                             0.26315
## timePoint_factor2                                        -0.35326
## timePoint_factor3                                        -0.78894
## genderMale                                                0.53411
## interventiongroupIntervention:timePoint_factor2          -0.03743
## interventiongroupIntervention:timePoint_factor3          -0.03893
## interventiongroupIntervention:genderMale                 -0.44148
## timePoint_factor2:genderMale                             -0.62140
## timePoint_factor3:genderMale                             -0.24103
## interventiongroupIntervention:timePoint_factor2:genderMale  1.07685
## interventiongroupIntervention:timePoint_factor3:genderMale  0.34536
##                                                          Std. Error
## interventiongroupIntervention                               0.28233
## timePoint_factor2                                           0.24137
## timePoint_factor3                                           0.23772
## genderMale                                                  0.41018
## interventiongroupIntervention:timePoint_factor2             0.34008
## interventiongroupIntervention:timePoint_factor3             0.33581
```

```
## interventiongroupIntervention:genderMale                     0.57934
## timePoint_factor2:genderMale                                 0.49870
## timePoint_factor3:genderMale                                 0.48228
## interventiongroupIntervention:timePoint_factor2:genderMale   0.72258
## interventiongroupIntervention:timePoint_factor3:genderMale   0.68001
##                                                             z value
## interventiongroupIntervention                                 0.932
## timePoint_factor2                                            -1.464
## timePoint_factor3                                            -3.319
## genderMale                                                    1.302
## interventiongroupIntervention:timePoint_factor2              -0.110
## interventiongroupIntervention:timePoint_factor3              -0.116
## interventiongroupIntervention:genderMale                     -0.762
## timePoint_factor2:genderMale                                 -1.246
## timePoint_factor3:genderMale                                 -0.500
## interventiongroupIntervention:timePoint_factor2:genderMale    1.490
## interventiongroupIntervention:timePoint_factor3:genderMale    0.508
##                                                             Pr(>|z|)
## interventiongroupIntervention                               0.351306
## timePoint_factor2                                           0.143321
## timePoint_factor3                                           0.000904 ***
## genderMale                                                  0.192870
## interventiongroupIntervention:timePoint_factor2             0.912357
## interventiongroupIntervention:timePoint_factor3             0.907714
## interventiongroupIntervention:genderMale                    0.446040
## timePoint_factor2:genderMale                                0.212748
## timePoint_factor3:genderMale                                0.617229
## interventiongroupIntervention:timePoint_factor2:genderMale 0.136149
## interventiongroupIntervention:timePoint_factor3:genderMale 0.611534
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2  -1.5948     0.2109  -7.562
## 2|3   1.1945     0.2073   5.763
## 3|4   3.2723     0.2473  13.234
## (40 observations deleted due to missingness)
```

```
HSMH1aSeekhelplast6monthsT_model  <- clmm(HSMH1aSeekhelplast6monthsT ~ interventiongroup * timePoint_fa
summary(HSMH1aSeekhelplast6monthsT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
## HSMH1aSeekhelplast6monthsT ~ interventiongroup * timePoint_factor *
##     gender + (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik  AIC    niter     max.grad cond.H
##  logit flexible  706  -330.40 682.80 710(3424) 7.91e-05 1.4e+03
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 20.83    4.564
```

```
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                             0.189264
## timePoint_factor3                                        -0.253372
## genderMale                                               -1.322868
## interventiongroupIntervention:timePoint_factor3           0.002309
## interventiongroupIntervention:genderMale                  0.914087
## timePoint_factor3:genderMale                              1.097024
## interventiongroupIntervention:timePoint_factor3:genderMale -1.382257
##                                                          Std. Error
## interventiongroupIntervention                              0.648100
## timePoint_factor3                                          0.457397
## genderMale                                                 1.189580
## interventiongroupIntervention:timePoint_factor3            0.649890
## interventiongroupIntervention:genderMale                   1.562537
## timePoint_factor3:genderMale                               1.197269
## interventiongroupIntervention:timePoint_factor3:genderMale  1.576539
##                                                          z value
## interventiongroupIntervention                              0.292
## timePoint_factor3                                         -0.554
## genderMale                                                -1.112
## interventiongroupIntervention:timePoint_factor3            0.004
## interventiongroupIntervention:genderMale                   0.585
## timePoint_factor3:genderMale                               0.916
## interventiongroupIntervention:timePoint_factor3:genderMale -0.877
##                                                          Pr(>|z|)
## interventiongroupIntervention                               0.770
## timePoint_factor3                                           0.580
## genderMale                                                  0.266
## interventiongroupIntervention:timePoint_factor3             0.997
## interventiongroupIntervention:genderMale                    0.559
## timePoint_factor3:genderMale                                0.360
## interventiongroupIntervention:timePoint_factor3:genderMale  0.381
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 1|2    5.106      1.000   5.104
## 2|3    7.119      1.168   6.096
## 3|4   11.363      1.772   6.413
## (407 observations deleted due to missingness)
```

```
HSDis1Seekhelplast6monthsT_model  <- clmm(HSDis1Seekhelplast6monthsT ~ interventiongroup * timePoint_fa
summary(HSDis1Seekhelplast6monthsT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
## HSDis1Seekhelplast6monthsT ~ interventiongroup * timePoint_factor *
##     gender + (1 | loc_factor/ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik  AIC     niter     max.grad cond.H
##  logit flexible  706  -510.83 1043.65 817(1054) 9.19e-04 8.4e+02
```

```
##
## Random effects:
##  Groups                Name        Variance  Std.Dev.
##  ID_factor:loc_factor (Intercept) 5.918e-09 7.693e-05
##  loc_factor           (Intercept) 5.214e-13 7.221e-07
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                            -0.05994
## timePoint_factor3                                         1.77821
## genderMale                                                0.71186
## interventiongroupIntervention:timePoint_factor3          -0.00724
## interventiongroupIntervention:genderMale                 -0.24992
## timePoint_factor3:genderMale                             -0.26683
## interventiongroupIntervention:timePoint_factor3:genderMale -0.53928
##                                                          Std. Error
## interventiongroupIntervention                               0.24046
## timePoint_factor3                                           0.28253
## genderMale                                                  0.36728
## interventiongroupIntervention:timePoint_factor3             0.40128
## interventiongroupIntervention:genderMale                    0.51762
## timePoint_factor3:genderMale                                0.64007
## interventiongroupIntervention:timePoint_factor3:genderMale  0.84937
##                                                          z value
## interventiongroupIntervention                             -0.249
## timePoint_factor3                                          6.294
## genderMale                                                 1.938
## interventiongroupIntervention:timePoint_factor3           -0.018
## interventiongroupIntervention:genderMale                  -0.483
## timePoint_factor3:genderMale                              -0.417
## interventiongroupIntervention:timePoint_factor3:genderMale -0.635
##                                                          Pr(>|z|)
## interventiongroupIntervention                              0.8032
## timePoint_factor3                                         3.1e-10 ***
## genderMale                                                 0.0526 .
## interventiongroupIntervention:timePoint_factor3            0.9856
## interventiongroupIntervention:genderMale                   0.6292
## timePoint_factor3:genderMale                               0.6768
## interventiongroupIntervention:timePoint_factor3:genderMale  0.5255
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 0|1  -0.2928     0.1701  -1.722
## 1|2   0.1076     0.1696   0.634
## (407 observations deleted due to missingness)
```

```
HGMH1Helpedsomeonelast6monthsT_model  <- clmm(HGMH1Helpedsomeonelast6monthsT ~ interventiongroup * timel
summary(HGMH1Helpedsomeonelast6monthsT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
```

```
## HGMH1Helpedsomeonelast6monthsT ~ interventiongroup * timePoint_factor *
##     gender + (1 | ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik  AIC     niter     max.grad cond.H
##  logit flexible  705  -573.68 1167.36 616(1269) 3.16e-04 5.1e+02
##
## Random effects:
##  Groups    Name        Variance Std.Dev.
##  ID_factor (Intercept) 0.3698   0.6081
## Number of groups:  ID_factor 368
##
## Coefficients:
##                                                          Estimate
## interventiongroupIntervention                            -0.09803
## timePoint_factor3                                         1.59833
## genderMale                                                0.46103
## interventiongroupIntervention:timePoint_factor3          -0.01488
## interventiongroupIntervention:genderMale                  0.26094
## timePoint_factor3:genderMale                             -0.44276
## interventiongroupIntervention:timePoint_factor3:genderMale -0.06857
##                                                          Std. Error
## interventiongroupIntervention                               0.25928
## timePoint_factor3                                           0.28412
## genderMale                                                  0.38426
## interventiongroupIntervention:timePoint_factor3             0.38308
## interventiongroupIntervention:genderMale                    0.56070
## timePoint_factor3:genderMale                                0.54806
## interventiongroupIntervention:timePoint_factor3:genderMale  0.80027
##                                                          z value
## interventiongroupIntervention                             -0.378
## timePoint_factor3                                          5.625
## genderMale                                                 1.200
## interventiongroupIntervention:timePoint_factor3           -0.039
## interventiongroupIntervention:genderMale                   0.465
## timePoint_factor3:genderMale                              -0.808
## interventiongroupIntervention:timePoint_factor3:genderMale -0.086
##                                                          Pr(>|z|)
## interventiongroupIntervention                               0.705
## timePoint_factor3                                       1.85e-08 ***
## genderMale                                                  0.230
## interventiongroupIntervention:timePoint_factor3             0.969
## interventiongroupIntervention:genderMale                    0.642
## timePoint_factor3:genderMale                                0.419
## interventiongroupIntervention:timePoint_factor3:genderMale  0.932
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Threshold coefficients:
##     Estimate Std. Error z value
## 0|1  -0.4383     0.1869  -2.345
## 1|2   0.1836     0.1849   0.993
## (408 observations deleted due to missingness)
```

```r
HGDis1Helpedlast6monthsT_model  <- clmm(HGDis1Helpedlast6monthsT ~ interventiongroup * timePoint_factor
summary(HGDis1Helpedlast6monthsT_model)
```

```
## Cumulative Link Mixed Model fitted with the Laplace approximation
##
## formula:
## HGDis1Helpedlast6monthsT ~ interventiongroup * timePoint_factor *
##     gender + (1 | loc_factor/ID_factor)
## data:    filtered
##
##  link  threshold nobs logLik  AIC    niter     max.grad cond.H
##  logit flexible  706  -462.82 947.63 722(2168) 2.55e-04 7.5e+02
##
## Random effects:
##  Groups               Name        Variance Std.Dev.
##  ID_factor:loc_factor (Intercept) 0.15897  0.3987
##  loc_factor           (Intercept) 0.07612  0.2759
## Number of groups:  ID_factor:loc_factor 368,  loc_factor 3
##
## Coefficients:
##                                                    Estimate
## interventiongroupIntervention                       0.05547
## timePoint_factor3                                   2.50633
## genderMale                                          0.57064
## interventiongroupIntervention:timePoint_factor3    -0.84637
## interventiongroupIntervention:genderMale           -0.04623
## timePoint_factor3:genderMale                       -0.76678
## interventiongroupIntervention:timePoint_factor3:genderMale  0.75293
##                                                    Std. Error
## interventiongroupIntervention                         0.25611
## timePoint_factor3                                     0.37115
## genderMale                                            0.38526
## interventiongroupIntervention:timePoint_factor3       0.45520
## interventiongroupIntervention:genderMale              0.56394
## timePoint_factor3:genderMale                          0.67944
## interventiongroupIntervention:timePoint_factor3:genderMale    0.95125
##                                                    z value
## interventiongroupIntervention                        0.217
## timePoint_factor3                                    6.753
## genderMale                                           1.481
## interventiongroupIntervention:timePoint_factor3     -1.859
## interventiongroupIntervention:genderMale            -0.082
## timePoint_factor3:genderMale                        -1.129
## interventiongroupIntervention:timePoint_factor3:genderMale   0.792
##                                                    Pr(>|z|)
## interventiongroupIntervention                         0.829
## timePoint_factor3                                 1.45e-11 ***
## genderMale                                            0.139
## interventiongroupIntervention:timePoint_factor3       0.063 .
## interventiongroupIntervention:genderMale              0.935
## timePoint_factor3:genderMale                          0.259
## interventiongroupIntervention:timePoint_factor3:genderMale    0.429
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
##
## Threshold coefficients:
##      Estimate Std. Error z value
## 0|1 -0.445245   0.243472  -1.829
## 1|2  0.007955   0.241634   0.033
## (407 observations deleted due to missingness)
```

```
models <- list(BDI_model, DP_model, DP_95_model, self_eff_model, SelfEff1timeT_model, SelfEff2affordT_mo

models_t2t3_only <- list(HSMH1aSeekhelplast6monthsT_model,  HSDis1Seekhelplast6monthsT_model, HGMH1Help

dv_names <- c('BDI','Disaster preparation','Dis prep 95', 'Self efficacy','Self eff 1 - time', 'Self ef
dv_names_t2t3_only <- c('*HSMH1a - Seek help last 6 months', '*HSDis1 - Seek help last 6mo', '*HGMH1 - 

all_models <- c(models, models_t2t3_only)
all_dv_names <- c(dv_names, dv_names_t2t3_only)

anovas <- lapply(all_models, function(x) Anova(x, type = "III"))
anovas_df <- lapply(anovas, function(x) as.numeric(c(tail(x,1),x['gender',])))
anovas_df <- data.frame(t(sapply(anovas_df, `[`)), row.names = all_dv_names)
names(anovas_df) <- c('tme.int.gen.chisq', 'tme.int.gen.df', 'tme.int.gen.p', 'genr.chisq', 'gen.df','ge
anovas_df %<>% select(-gen.df)

mmeans_df <- lapply(models, function(x) as.numeric(summary(pairs(lsmeans::lsmeans(x, ~ gender, at=list(t
```

```
## NOTE: Results may be misleading due to involvement in interactions
## NOTE: Results may be misleading due to involvement in interactions
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## NOTE: Results may be misleading due to involvement in interactions
## NOTE: Results may be misleading due to involvement in interactions
```

```
## NOTE: Results may be misleading due to involvement in interactions
mmeans_df <-  data.frame(t(sapply(mmeans_df, `[`)), row.names = dv_names)
names(mmeans_df) <- c('Female-Male', 'se', 'df', 't.stat','p.val')

coefs_int_time_t2_df <- data.frame(row.names = dv_names,
                      Coefficient = sapply(models, function(x) coef(summary(x))['interventiongroupInter
                      'Std error' = sapply(models, function(x) coef(summary(x))['interventiongroupInter
                      'P value' = sapply(models, function(x) coef(summary(x))['interventiongroupInterve


coefs_int_time_t2t3_only_df <- data.frame(row.names = dv_names_t2t3_only,
                           Coefficient = sapply(models_t2t3_only, function(x) coef(summary(x))['interve
                           'Std error' = sapply(models_t2t3_only, function(x) coef(summary(x))['interve
                           'P value' = sapply(models_t2t3_only, function(x) coef(summary(x))['interventi

d_int_time_t2 <- vector(mode="numeric", length=nrow(coefs_int_time_t2_df))
for(i in 1:nrow(coefs_int_time_t2_df)){
  if(class(models[[i]]) == "merModLmerTest") {
    y <- getME(models[[i]], name = 'y')
    X <- getME(models[[i]], name = 'X')
    d_int_time_t2[i] <- coefs_int_time_t2_df$Coefficient[i] / sd(y[X[,'timePoint_factor2'] == 0 & X[,'t
  }
  else {
    d_int_time_t2[i] <- NA
  }
}

d_int_time_t2t3 <- vector(mode = "numeric", length = nrow(coefs_int_time_t2t3_only_df))

for(i in 1:nrow(coefs_int_time_t2t3_only_df)){
  if(class(models_t2t3_only[[i]]) == "merModLmerTest") {
    y <- getME(models_t2t3_only[[i]], name = 'y')
    X <- getME(models_t2t3_only[[i]], name = 'X')
    d_int_time_t2t3[i] <- coefs_int_time_t2t3_only_df$Coefficient[i] / sd(y[X[,'timePoint_factor3'] == 
  }
  else {
    d_int_time_t2t3[i] <- NA
  }
}
coefs_int_time_t2_df[,'Cohens d'] <- d_int_time_t2
coefs_int_time_t2t3_only_df[,'Cohens d'] <- d_int_time_t2t3
coefs_int_time_t2_df <- rbind(coefs_int_time_t2_df, coefs_int_time_t2t3_only_df)

coefs_int_time_t3_df <- data.frame(row.names = all_dv_names,
                                   Coefficient = sapply(all_models, function(x) coef(summary(x))['inter
                                   'Std error' = sapply(all_models, function(x) coef(summary(x))['inter
                                   'P value' = sapply(all_models, function(x) coef(summary(x))['interve

models_int_time_df <- data.frame(row.names = all_dv_names, 'Time 1 vs 2' = coefs_int_time_t2_df$Coeffici

models_int_time_df[dv_names_t2t3_only, 1:3] <- NA
```

```
coefs_int_time_gender_t2_df <- data.frame(row.names = dv_names,
                                          Coefficient = sapply(models, function(x) coef(summary(x))['in
```

```
                                          'Std error' = sapply(models, function(x) coef(summary(x))['int
                                          'P value' = sapply(models, function(x) coef(summary(x))['inte


coefs_int_time_gender_t2t3_only_df <- data.frame(row.names = dv_names_t2t3_only,
                           Coefficient = sapply(models_t2t3_only, function(x) coef(summary(x))['interver
                           'Std error' = sapply(models_t2t3_only, function(x) coef(summary(x))['interver
                           'P value' = sapply(models_t2t3_only, function(x) coef(summary(x))['interventi

d_int_time_gender_t2 <- vector(mode="numeric", length=nrow(coefs_int_time_gender_t2_df))

for(i in 1:nrow(coefs_int_time_gender_t2_df)){
  if(class(models[[i]]) == "merModLmerTest") {
    y <- getME(models[[i]], name = 'y')
    X <- getME(models[[i]], name = 'X')
    d_int_time_gender_t2[i] <- coefs_int_time_gender_t2_df$Coefficient[i] / sd(y[X[,'timePoint_factor2']
  }
  else {
    d_int_time_gender_t2[i] <- NA
  }
}

d_int_time_gender_t2t3 <- vector(mode = "numeric", length = nrow(coefs_int_time_gender_t2t3_only_df))

for(i in 1:nrow(coefs_int_time_gender_t2t3_only_df)){
  if(class(models_t2t3_only[[i]]) == "merModLmerTest") {
    y <- getME(models_t2t3_only[[i]], name = 'y')
    X <- getME(models_t2t3_only[[i]], name = 'X')
    d_int_time_gender_t2t3[i] <- coefs_int_time_gender_t2t3_only_df$Coefficient[i] / sd(y[X[,'timePoint_
  }
  else {
    d_int_time_gender_t2t3[i] <- NA
  }
}

coefs_int_time_gender_t2_df[,'Cohens d'] <- d_int_time_gender_t2
coefs_int_time_gender_t2t3_only_df[,'Cohens d'] <- d_int_time_gender_t2t3
coefs_int_time_gender_t2_df <- rbind(coefs_int_time_gender_t2_df, coefs_int_time_gender_t2t3_only_df)

coefs_int_time_gender_t3_df <- data.frame(row.names = all_dv_names,
                                    Coefficient = sapply(all_models, function(x) coef(summary(x))['inter
                                    'Std error' = sapply(all_models, function(x) coef(summary(x))['inter
                                    'P value' = sapply(all_models, function(x) coef(summary(x))['interver

models_coef_int_time_gender_df <- data.frame(row.names = all_dv_names, 'Time 1 vs 2' = coefs_int_time_g

models_coef_int_time_gender_df[dv_names_t2t3_only, 1:3] <- NA
```

```
print(xtable(mmeans_df, "Marginal contrasts for females - males at time 1", auto = TRUE, digits = c(2,2
```

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Tue Nov 21 16:10:42 2017

```
print(xtable(anovas_df, "ANOVA results for time x intervention x gender and gender main effects", auto =
```

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Tue Nov 21 16:10:42 2017

	Female-Male	se	df	t.stat	p.val
BDI	0.20	0.05	624	3.81	0.0002
Disaster preparation	-0.24	0.32	894	-0.75	0.4548
Dis prep 95	-0.16	0.24	877	-0.64	0.5193
Self efficacy	-0.12	0.08	809	-1.48	0.1382
Self eff 1 - time	-0.44	0.29		-1.50	0.1335
Self eff 2 - Afford	-0.18	0.28		-0.66	0.5118
Self eff 3 - info	-0.30	0.27		-1.08	0.2799
Disaster MH	0.02	0.08	958	0.26	0.7937
Dis MH 1 - anxious	0.29	0.27		1.10	0.2708
Dis MH 2 - depression	0.33	0.29		1.16	0.2459
Dis MH 3 - avoid	-0.44	0.27		-1.61	0.1071
Fatalism	0.12	0.14	870	0.92	0.3602
Fat 1 - don't worry	0.10	0.27		0.36	0.7217
Fat 2 - injured	0.33	0.28		1.18	0.2382
Dis attr - natural	-0.29	0.28		-1.07	0.2843
Dis attr - God's will	0.01	0.33		0.02	0.9866
Dis attr - other supernat	0.64	0.37		1.74	0.0819
Dis attr - karma	-0.05	0.30		-0.16	0.8762
Dis attr - Neppeop	-0.13	0.28		-0.45	0.6524
Dis attr - govts	-0.26	0.29		-0.88	0.3771
Relig 1 - private activ	0.51	0.37		1.40	0.1605
Relig 2 - public activ	0.24	0.34		0.72	0.4711
Functioning - all	0.10	0.05	770	1.99	0.0466
Coping	-0.02	0.04	892	-0.48	0.6333
Social cohesion	0.00	0.07	865	0.05	0.9589
PTSD	0.37	0.08	760	4.56	0.0000
PMHP	0.15	0.05	670	3.31	0.0010
HSMH2a - Comfort seek help future	-0.09	0.29		-0.31	0.7575
HSDis2 - Comfort seeking help	-0.41	0.30		-1.38	0.1688
HGMH3 - Know how help	0.65	0.23		-1.20	0.2298
HSMH3 - Faultsadness	-0.31	0.29		-1.08	0.2796

Table 5: Marginal contrasts for females - males at time 1

```
print(xtable(models_int_time_df, auto = TRUE, caption = "Coefficients are intervention x time point = 2
```

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Tue Nov 21 16:10:42 2017

```
print(xtable(models_coef_int_time_gender_df, auto = TRUE, caption = "Coefficients are intervention x ge
```

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Tue Nov 21 16:10:42 2017

```
contrasts <- data.frame()
for(mod in models) {
  MM <- lsmeans::lsmeans(mod, ~ timePoint_factor * interventiongroup)
  contrast_result <- summary(rbind(pairs(MM, by="interventiongroup")[5]))
  if(dim(contrasts)[1] == 0) {
    contrasts <- contrast_result
  }
  else {
    contrasts <- rbind(contrasts, setNames(contrast_result, names(contrasts)))
  }
}
```

	tme.int.gen.chisq	tme.int.gen.df	tme.int.gen.p	genr.chisq	gen.p
BDI	2.69	2	0.2604	10.37	0.0013
Disaster preparation	10.22	2	0.0060	0.80	0.3705
Dis prep 95	9.67	2	0.0079	0.87	0.3519
Self efficacy	0.65	2	0.7213	2.38	0.1229
Self eff 1 - time	5.54	2	0.0626	0.00	0.9999
Self eff 2 - Afford	1.75	2	0.4174	0.00	0.9998
Self eff 3 - info	0.34	2	0.8421	-0.00	1.0000
Disaster MH	1.45	2	0.4846	0.12	0.7336
Dis MH 1 - anxious	0.37	2	0.8299	0.00	0.9998
Dis MH 2 - depression	2.00	2	0.3680	-0.00	1.0000
Dis MH 3 - avoid	1.27	2	0.5311	-0.00	1.0000
Fatalism	0.94	2	0.6244	0.08	0.7782
Fat 1 - don't worry	3.16	2	0.2063	-0.00	1.0000
Fat 2 - injured	1.99	2	0.3697	0.00	0.9999
Dis attr - natural	3.96	2	0.1381	0.00	0.9999
Dis attr - God's will	1.76	2	0.4148	-0.00	1.0000
Dis attr - other supernat	0.15	2	0.9263	-0.00	1.0000
Dis attr - karma	0.25	2	0.8804	0.00	0.9998
Dis attr - Neppeop	0.37	2	0.8297	0.00	0.9998
Dis attr - govts	4.10	2	0.1287	-0.00	1.0000
Relig 1 - private activ	6.53	2	0.0383	-0.00	1.0000
Relig 2 - public activ	0.72	2	0.6977	0.00	0.9999
Functioning - all	0.12	2	0.9400	2.06	0.1509
Coping	4.13	2	0.1265	0.51	0.4731
Social cohesion	0.46	2	0.7965	0.42	0.5188
PTSD	0.86	2	0.6516	5.78	0.0162
PMHP	1.03	2	0.5984	6.38	0.0116
HSMH2a - Comfort seek help future	2.51	2	0.2847	0.00	0.9999
HSDis2 - Comfort seeking help	0.35	2	0.8392	-0.00	1.0000
HGMH3 - Know how help	2.65	2	0.2656	1.46	0.2264
HSMH3 - Faultsadness	2.29	2	0.3185	-0.00	1.0000
*HSMH1a - Seek help last 6 months	0.79	1	0.3749	0.00	1.0000
*HSDis1 - Seek help last 6mo	0.41	1	0.5237	0.00	0.9999
*HGMH1 - Helped someone last 6mo	0.01	1	0.9318	-0.00	1.0000
*HGDis1 - Helped last 6mo	0.63	1	0.4287	0.00	1.0000

Table 6: ANOVA results for time x intervention x gender and gender main effects

```
## NOTE: Results may be misleading due to involvement in interactions
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```

```r
row.names(contrasts) <- dv_names
```

```r
print(xtable(cbind(dv_names, contrasts)[,2:ncol(contrasts)+1], auto = TRUE, caption = "Within subject c
```

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Tue Nov 21 16:10:44 2017

```r
contrasts <- data.frame()
for(mod in models) {
  MM <- lsmeans::lsmeans(mod, ~ timePoint_factor * interventiongroup)
  contrast_result <- summary(rbind(pairs(MM, by="interventiongroup")[3]))
  if(dim(contrasts)[1] == 0) {
    contrasts <- contrast_result
  }
  else {
    contrasts <- rbind(contrasts, setNames(contrast_result, names(contrasts)))
  }
}
```

```
## NOTE: Results may be misleading due to involvement in interactions
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## NOTE: Results may be misleading due to involvement in interactions
```

```
row.names(contrasts) <- dv_names
```

```
print(xtable(cbind(dv_names, contrasts)[,2:ncol(contrasts)+1], auto = TRUE, caption = "Within subject c
```

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Tue Nov 21 16:10:46 2017

```
texreg(all_models, type = "html",  digits = 3, bold = .05, booktabs = TRUE, sideways = TRUE, use.packag
```

Let's generate descriptive stats for the mental health variables.

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Mon Oct 23 13:54:49 2017

Variable	Time point	n	Min	q_1	$\widetilde{x}$	$\bar{x}$	q_3	Max
BDI	1	370	1	1.29	1.52	1.61	1.89	3.10
	2	341	1	1.19	1.48	1.56	1.86	3.52
	3	371	1	1.10	1.33	1.43	1.67	3.14
	all		1	1.19	1.48	1.53	1.81	3.52
PTSD	1	370	1	1.24	1.76	1.88	2.40	4.35
	2	341	1	1.12	1.47	1.71	2.06	4.53
	3	371	1	1.06	1.29	1.47	1.71	4.18
	all		1	1.12	1.47	1.69	2.06	4.53
Functioning	1	366	1	1.00	1.11	1.33	1.56	3.67
	2	341	1	1.00	1.11	1.34	1.56	3.00
	3	371	1	1.00	1.11	1.24	1.33	2.67
	all		1	1.00	1.11	1.30	1.44	3.67
Dis MH - anxious	1	370	1	4.00	4.00	3.83	4.00	5.00
	2	341	1	2.00	3.00	3.18	4.00	5.00
	3	371	1	2.00	3.00	2.95	4.00	5.00
	all		1	2.00	4.00	3.33	4.00	5.00
Dis MH - depressed	1	369	1	3.00	4.00	3.39	4.00	5.00
	2	341	1	2.00	3.00	2.96	4.00	5.00
	3	370	1	2.00	2.00	2.62	3.00	5.00
	all		1	2.00	3.00	2.99	4.00	5.00
Dis MH - avoid	1	370	1	2.00	2.00	2.24	3.00	5.00
	2	341	1	2.00	2.00	2.25	3.00	5.00
	3	371	1	2.00	2.00	2.14	2.00	5.00
	all		1	2.00	2.00	2.21	3.00	5.00

Table 12: Descriptive statistics

Next the data by location across all time points.

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Mon Oct 23 14:10:22 2017

Variable	Location	n	Min	q_1	$\widetilde{x}$	$\bar{x}$	q_3	Max
BDI	1	347	1	1.19	1.43	1.51	1.71	3.52
	2	374	1	1.19	1.43	1.52	1.81	2.95
	3	361	1	1.14	1.48	1.57	1.86	3.19
	all		1	1.19	1.48	1.53	1.81	3.52
PTSD	1	347	1	1.12	1.53	1.70	2.06	4.47
	2	374	1	1.12	1.41	1.68	2.10	4.53

	3	361	1	1.12	1.47	1.69	2.00	4.06
	all		1	1.12	1.47	1.69	2.06	4.53
Functioning	1	346	1	1.00	1.11	1.30	1.44	3.67
	2	373	1	1.00	1.11	1.26	1.33	3.22
	3	359	1	1.00	1.11	1.34	1.56	3.11
	all		1	1.00	1.11	1.30	1.44	3.67
Dis MH - anxious	1	347	1	2.00	3.00	3.33	4.00	5.00
	2	374	1	3.00	4.00	3.32	4.00	5.00
	3	361	1	2.00	4.00	3.34	4.00	5.00
	all		1	2.00	4.00	3.33	4.00	5.00
Dis MH - depressed	1	346	1	2.00	3.00	2.97	4.00	5.00
	2	374	1	2.00	3.00	3.00	4.00	5.00
	3	360	1	2.00	3.00	3.01	4.00	5.00
	all		1	2.00	3.00	2.99	4.00	5.00
Dis MH - avoid	1	347	1	2.00	2.00	2.27	3.00	5.00
	2	374	1	2.00	2.00	2.26	3.00	5.00
	3	361	1	2.00	2.00	2.10	2.00	5.00
	all		1	2.00	2.00	2.21	3.00	5.00

Table 13: Descriptive statistics by location

Next tables for each of the time points, broken down by location (city)

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Mon Oct 23 14:06:08 2017

Variable	**Location**	**n**	**Min**	$\mathbf{q_1}$	$\widetilde{\mathbf{x}}$	$\bar{\mathbf{x}}$	$\mathbf{q_3}$	**Max**
BDI	1	117	1	1.29	1.52	1.61	1.90	2.90
	2	129	1	1.29	1.52	1.59	1.86	2.95
	3	124	1	1.24	1.57	1.63	1.95	3.10
	all		1	1.29	1.52	1.61	1.89	3.10
PTSD	1	117	1	1.24	1.82	1.97	2.47	3.88
	2	129	1	1.18	1.62	1.82	2.29	4.35
	3	124	1	1.29	1.74	1.87	2.24	4.00
	all		1	1.24	1.76	1.88	2.40	4.35
Functioning	1	116	1	1.00	1.22	1.37	1.67	3.67
	2	128	1	1.00	1.11	1.26	1.44	3.22
	3	122	1	1.00	1.11	1.36	1.56	3.11
	all		1	1.00	1.11	1.33	1.56	3.67
Dis MH - anxious	1	117	2	3.00	4.00	3.82	4.00	5.00
	2	129	1	4.00	4.00	3.85	4.00	5.00
	3	124	1	4.00	4.00	3.81	4.00	5.00
	all		1	4.00	4.00	3.83	4.00	5.00
Dis MH - depressed	1	116	1	3.00	3.00	3.34	4.00	5.00
	2	129	1	3.00	4.00	3.40	4.00	5.00
	3	124	1	3.00	4.00	3.44	4.00	5.00
	all		1	3.00	4.00	3.39	4.00	5.00
Dis MH - avoid	1	117	1	2.00	2.00	2.45	3.00	5.00
	2	129	1	2.00	2.00	2.16	3.00	5.00
	3	124	1	2.00	2.00	2.13	2.00	5.00
	all		1	2.00	2.00	2.24	3.00	5.00

Table 14: Descriptive statistics for time point 1 by location

% latex table generated in R 3.4.2 by xtable 1.8-2 package % Mon Oct 23 14:04:55 2017

Variable	**Location**	**n**	**Min**	$\mathbf{q_1}$	$\widetilde{\mathbf{x}}$	$\bar{\mathbf{x}}$	$\mathbf{q_3}$	**Max**
BDI	1	112	1	1.14	1.43	1.52	1.71	3.52
	2	116	1	1.24	1.52	1.58	1.86	2.71
	3	113	1	1.19	1.48	1.59	1.90	3.19
	all		1	1.19	1.48	1.56	1.86	3.52
PTSD	1	112	1	1.12	1.47	1.64	1.94	4.47
	2	116	1	1.18	1.56	1.77	2.18	4.53
	3	113	1	1.12	1.47	1.70	2.12	3.65
	all		1	1.12	1.47	1.71	2.06	4.53

Functioning	1	112	1	1.00	1.22	1.32	1.44	2.89
	2	116	1	1.00	1.11	1.31	1.44	3.00
	3	113	1	1.00	1.22	1.38	1.67	2.89
	all		1	1.00	1.11	1.34	1.56	3.00
Dis MH - anxious	1	112	2	2.00	3.00	3.22	4.00	5.00
	2	116	1	2.00	3.00	3.11	4.00	5.00
	3	113	1	2.00	3.00	3.22	4.00	5.00
	all		1	2.00	3.00	3.18	4.00	5.00
Dis MH - depressed	1	112	1	2.00	3.00	2.97	4.00	5.00
	2	116	1	2.00	3.00	3.00	4.00	5.00
	3	113	1	2.00	3.00	2.89	4.00	5.00
	all		1	2.00	3.00	2.96	4.00	5.00
Dis MH - avoid	1	112	1	2.00	2.00	2.22	3.00	5.00
	2	116	1	2.00	2.00	2.39	3.00	5.00
	3	113	1	2.00	2.00	2.14	2.00	5.00
	all		1	2.00	2.00	2.25	3.00	5.00

Table 15: Descriptive statistics for time point 2 by location

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Variable	**Location**	**n**	**Min**	$\mathbf{q_1}$	$\widetilde{\mathbf{x}}$	$\bar{\mathbf{x}}$	$\mathbf{q_3}$	**Max**
BDI	1	118	1	1.14	1.36	1.41	1.62	2.81
	2	129	1	1.10	1.29	1.40	1.62	2.71
	3	124	1	1.10	1.38	1.48	1.76	3.14
	all		1	1.10	1.33	1.43	1.67	3.14
PTSD	1	118	1	1.06	1.35	1.48	1.69	3.29
	2	129	1	1.06	1.24	1.45	1.65	4.18
	3	124	1	1.06	1.29	1.49	1.72	4.06
	all		1	1.06	1.29	1.47	1.71	4.18
Functioning	1	118	1	1.00	1.11	1.22	1.33	2.56
	2	129	1	1.00	1.11	1.21	1.22	2.67
	3	124	1	1.00	1.11	1.28	1.44	2.67
	all		1	1.00	1.11	1.24	1.33	2.67
Dis MH - anxious	1	118	1	2.00	3.00	2.93	4.00	5.00
	2	129	1	2.00	3.00	2.97	4.00	5.00
	3	124	1	2.00	3.00	2.96	4.00	5.00
	all		1	2.00	3.00	2.95	4.00	5.00
Dis MH - depressed	1	118	1	2.00	2.00	2.59	3.00	5.00
	2	129	1	2.00	2.00	2.60	3.00	5.00
	3	123	1	2.00	2.00	2.67	3.50	5.00
	all		1	2.00	2.00	2.62	3.00	5.00
Dis MH - avoid	1	118	1	2.00	2.00	2.13	2.00	5.00
	2	129	1	2.00	2.00	2.26	2.00	4.00
	3	124	1	2.00	2.00	2.03	2.00	4.00
	all		1	2.00	2.00	2.14	2.00	5.00

Table 16: Descriptive statistics for time point 3 by location

	Time.1.vs.2	Std.error	P.value	Cohens.d	Time.1.vs.3	Std.error.1	P.value
BDI	0.03	0.05	0.5090	0.07	0.07	0.05	0.125
Disaster preparation	1.38	0.38	0.0004	0.59	0.43	0.38	0.253
Dis prep 95	1.00	0.28	0.0004	0.49	0.30	0.28	0.283
Self efficacy	0.17	0.09	0.0518	0.25	-0.17	0.09	0.054
Self eff 1 - time	0.19	0.34	0.5739		-0.24	0.33	0.471
Self eff 2 - Afford	0.64	0.35	0.0678		-0.51	0.34	0.135
Self eff 3 - info	0.70	0.34	0.0380		-0.26	0.33	0.419
Disaster MH	-0.05	0.10	0.5704	-0.08	-0.02	0.09	0.801
Dis MH 1 - anxious	-0.21	0.34	0.5285		-0.05	0.33	0.886
Dis MH 2 - depression	-0.18	0.33	0.5856		-0.25	0.33	0.446
Dis MH 3 - avoid	-0.14	0.34	0.6871		-0.09	0.34	0.789
Fatalism	-0.23	0.16	0.1420	-0.19	-0.03	0.15	0.831
Fat 1 - don't worry	-0.53	0.32	0.1038		-0.29	0.32	0.360
Fat 2 - injured	-0.37	0.32	0.2498		0.11	0.32	0.725
Dis attr - natural	0.12	0.35	0.7361		-0.31	0.34	0.356
Dis attr - God's will	-0.58	0.35	0.0989		-0.08	0.35	0.808
Dis attr - other supernat	-0.78	0.43	0.0710		-0.22	0.43	0.608
Dis attr - karma	-0.32	0.38	0.3969		-0.13	0.36	0.727
Dis attr - Neppeop	0.29	0.35	0.4073		0.77	0.34	0.022
Dis attr - govts	0.39	0.35	0.2619		0.39	0.34	0.257
Relig 1 - private activ	-0.37	0.35	0.2868		-0.53	0.34	0.120
Relig 2 - public activ	0.70	0.36	0.0516		0.44	0.35	0.213
Functioning - all	-0.03	0.05	0.5419	-0.07	0.00	0.05	0.950
Coping	0.00	0.04	0.9342	0.01	0.00	0.04	0.932
Social cohesion	0.28	0.08	0.0006	0.44	0.16	0.08	0.052
PTSD	-0.12	0.09	0.1658	-0.16	-0.08	0.08	0.325
PMHP	0.03	0.04	0.5077	0.08	0.04	0.04	0.349
HSMH2a - Comfort seek help future	0.01	0.35	0.9705		-0.51	0.35	0.138
HSDis2 - Comfort seeking help	0.48	0.36	0.1830		-0.06	0.35	0.858
HGMH3 - Know how help	0.39	0.44	0.3732		-0.02	0.47	0.968
HSMH3 - Faultsadness	-0.04	0.34	0.9124		-0.04	0.34	0.907
*HSMH1a - Seek help last 6 months					0.00	0.65	0.997
*HSDis1 - Seek help last 6mo					-0.01	0.40	0.985
*HGMH1 - Helped someone last 6mo					-0.01	0.38	0.969
*HGDis1 - Helped last 6mo					-0.85	0.46	0.063

Table 7: Coefficients are intervention x time point = 2 and intervention x time point = 3 effects. Asterixes indicate data collected at times 2 and 3 only (coefficient is time 2 vs 3 x group interaction)

	Time.1.vs.2	Std.error	P.value	Cohens.d	Time.1.vs.3	Std.error.1	P.value
BDI	-0.16	0.10	0.1032	-0.36	-0.08	0.09	0.356
Disaster preparation	-1.67	0.80	0.0366	-0.71	-2.37	0.76	0.001
Dis prep 95	-1.33	0.59	0.0253	-0.65	-1.67	0.56	0.003
Self efficacy	0.15	0.18	0.4198	0.21	0.07	0.17	0.675
Self eff 1 - time	1.54	0.71	0.0302		0.21	0.67	0.756
Self eff 2 - Afford	-0.38	0.73	0.6000		0.55	0.69	0.421
Self eff 3 - info	-0.40	0.70	0.5637		-0.24	0.65	0.719
Disaster MH	-0.24	0.20	0.2311	-0.36	-0.13	0.19	0.503
Dis MH 1 - anxious	-0.24	0.70	0.7290		-0.41	0.67	0.542
Dis MH 2 - depression	-0.93	0.71	0.1917		-0.77	0.69	0.264
Dis MH 3 - avoid	-0.26	0.71	0.7123		0.51	0.69	0.459
Fatalism	-0.26	0.33	0.4370	-0.21	0.04	0.31	0.887
Fat 1 - don't worry	-0.08	0.67	0.9014		0.96	0.65	0.137
Fat 2 - injured	-0.88	0.69	0.2039		-0.77	0.67	0.250
Dis attr - natural	-0.43	0.78	0.5800		0.93	0.70	0.184
Dis attr - God's will	0.65	0.75	0.3814		0.93	0.72	0.198
Dis attr - other supernat	-0.24	1.02	0.8158		0.19	1.00	0.847
Dis attr - karma	-0.37	0.81	0.6488		-0.31	0.78	0.695
Dis attr - Neppeop	0.36	0.71	0.6123		-0.05	0.66	0.943
Dis attr - govts	-0.90	0.73	0.2146		-1.36	0.68	0.046
Relig 1 - private activ	1.87	0.74	0.0114		0.68	0.70	0.325
Relig 2 - public activ	-0.02	0.73	0.9768		-0.53	0.69	0.447
Functioning - all	0.02	0.11	0.8641	0.04	-0.02	0.10	0.849
Coping	0.13	0.09	0.1480	0.41	-0.05	0.09	0.570
Social cohesion	-0.10	0.17	0.5643	-0.16	-0.09	0.16	0.560
PTSD	0.12	0.18	0.5047	0.16	0.15	0.17	0.378
PMHP	-0.07	0.09	0.4268	-0.19	-0.08	0.09	0.352
HSMH2a - Comfort seek help future	-1.15	0.74	0.1204		-0.33	0.69	0.633
HSDis2 - Comfort seeking help	-0.33	0.74	0.6567		0.09	0.70	0.897
HGMH3 - Know how help	1.63	1.00	0.1035		0.64	1.08	0.553
HSMH3 - Faultsadness	1.08	0.72	0.1361		0.35	0.68	0.611
*HSMH1a - Seek help last 6 months					-1.38	1.58	0.380
*HSDis1 - Seek help last 6mo					-0.54	0.85	0.525
*HGMH1 - Helped someone last 6mo					-0.07	0.80	0.931
*HGDis1 - Helped last 6mo					0.75	0.95	0.428

Table 8: Coefficients are intervention x gender x time point = 2 and intervention x gender x time point = 3 effects. Asterixes indicate data collected at times 2 and 3 only (coefficient is time 2 vs 3 x group interaction)

	interventiongroup	estimate	SE	df	t.ratio	p.value
BDI	Intervention	0.15	0.03	698.19	4.67	0.000
Disaster preparation	Intervention	-0.09	0.27	667.59	-0.34	0.733
Dis prep 95	Intervention	-0.68	0.20	682.05	-3.42	0.001
Self efficacy	Intervention	-0.14	0.06	696.77	-2.34	0.019
Self eff 1 - time	Intervention	0.00	0.24		0.01	0.988
Self eff 2 - Afford	Intervention	-0.22	0.24		-0.90	0.368
Self eff 3 - info	Intervention	-0.97	0.23		-4.13	0.000
Disaster MH	Intervention	0.67	0.07	702.73	9.85	0.000
Dis MH 1 - anxious	Intervention	2.34	0.25		9.31	0.000
Dis MH 2 - depression	Intervention	2.35	0.26		9.16	0.000
Dis MH 3 - avoid	Intervention	0.25	0.24		1.02	0.307
Fatalism	Intervention	0.62	0.11	695.71	5.57	0.000
Fat 1 - don't worry	Intervention	0.96	0.23		4.12	0.000
Fat 2 - injured	Intervention	1.35	0.24		5.60	0.000
Dis attr - natural	Intervention	0.83	0.25		3.35	0.001
Dis attr - God's will	Intervention	0.89	0.25		3.51	0.000
Dis attr - other supernat	Intervention	0.73	0.34		2.15	0.031
Dis attr - karma	Intervention	1.00	0.29		3.47	0.001
Dis attr - Neppeop	Intervention	0.18	0.23		0.81	0.420
Dis attr - govts	Intervention	-0.38	0.24		-1.58	0.114
Relig 1 - private activ	Intervention	-0.30	0.24		-1.24	0.214
Relig 2 - public activ	Intervention	0.55	0.25		2.22	0.027
Functioning - all	Intervention	0.09	0.04	701.37	2.38	0.018
Coping	Intervention	0.07	0.03	698.20	2.33	0.020
Social cohesion	Intervention	-0.14	0.06	699.51	-2.38	0.018
PTSD	Intervention	0.38	0.06	701.35	6.36	0.000
PMHP	Intervention	0.09	0.03	699.00	2.99	0.003
HSMH2a - Comfort seek help future	Intervention	0.05	0.24		0.20	0.840
HSDis2 - Comfort seeking help	Intervention	0.03	0.25		0.13	0.897
HGMH3 - Know how help	Intervention	-1.43	0.38		-3.78	0.000
HSMH3 - Faultsadness	Intervention	0.78	0.24		3.21	0.001

Table 9: Within subject contrasts for time 1 to 3 for intervention group

	interventiongroup	estimate	SE	df	t.ratio	p.value
BDI	Control	0.15	0.03	704.80	4.49	0.000
Disaster preparation	Control	-0.92	0.27	681.70	-3.34	0.001
Dis prep 95	Control	-0.84	0.20	691.09	-4.17	0.000
Self efficacy	Control	-0.34	0.06	707.85	-5.50	0.000
Self eff 1 - time	Control	-0.81	0.24		-3.41	0.001
Self eff 2 - Afford	Control	-0.54	0.25		-2.19	0.029
Self eff 3 - info	Control	-1.25	0.24		-5.13	0.000
Disaster MH	Control	0.30	0.07	717.54	4.28	0.000
Dis MH 1 - anxious	Control	0.60	0.23		2.53	0.011
Dis MH 2 - depression	Control	0.95	0.24		3.92	0.000
Dis MH 3 - avoid	Control	0.61	0.24		2.53	0.011
Fatalism	Control	0.59	0.11	708.35	5.21	0.000
Fat 1 - don't worry	Control	1.13	0.23		4.86	0.000
Fat 2 - injured	Control	1.06	0.24		4.36	0.000
Dis attr - natural	Control	0.65	0.26		2.55	0.011
Dis attr - God's will	Control	1.22	0.27		4.51	0.000
Dis attr - other supernat	Control	0.86	0.38		2.27	0.023
Dis attr - karma	Control	0.29	0.28		1.02	0.307
Dis attr - Neppeop	Control	0.27	0.26		1.07	0.286
Dis attr - govts	Control	-0.49	0.25		-1.97	0.048
Relig 1 - private activ	Control	-0.53	0.25		-2.13	0.033
Relig 2 - public activ	Control	0.01	0.25		0.03	0.973
Functioning - all	Control	0.10	0.04	711.11	2.77	0.006
Coping	Control	0.03	0.03	711.03	0.91	0.363
Social cohesion	Control	-0.09	0.06	711.61	-1.52	0.130
PTSD	Control	0.23	0.06	710.92	3.68	0.000
PMHP	Control	0.07	0.03	706.62	2.17	0.030
HSMH2a - Comfort seek help future	Control	-0.17	0.25		-0.68	0.494
HSDis2 - Comfort seeking help	Control	-0.13	0.25		-0.52	0.603
HGMH3 - Know how help	Control	-1.49	0.39		-3.82	0.000
HSMH3 - Faultsadness	Control	0.25	0.25		1.00	0.318

Table 10: Within subject contrasts for time 2 to 3 for control group

	BDI	Disaster preparation	Dis prep 95	Self efficacy	Self eff 1 - time	Self eff 2 - Afford	Self eff 3 - info
Time point = 2	**−0.072***	**−0.706****	−0.071	−0.036	−0.312	−0.129	−0.090
	(0.032)	(0.267)	(0.197)	(0.061)	(0.238)	(0.244)	(0.234)
Time point = 3	**−0.226*****	−0.302	**0.382***	**0.290*****	0.252	**0.562***	**1.225*****
	(0.032)	(0.261)	(0.193)	(0.060)	(0.232)	(0.240)	(0.231)
Intervention	−0.035	−0.508	−0.397	−0.109	−0.464	−0.176	−0.344
	(0.051)	(0.322)	(0.242)	(0.078)	(0.290)	(0.281)	(0.274)
Gender (male)	**−0.234****	−0.408	−0.320	0.172	0.772	0.367	0.205
	(0.073)	(0.455)	(0.343)	(0.112)	(0.414)	(0.402)	(0.388)
Intervention x Time = 2	0.031	**1.382*****	**1.003*****	0.170	0.192	0.639	**0.697***
	(0.046)	(0.385)	(0.284)	(0.087)	(0.341)	(0.350)	(0.336)
Intervention x Time = 3	0.070	0.435	0.301	−0.165	−0.241	−0.512	−0.263
	(0.045)	(0.381)	(0.280)	(0.086)	(0.334)	(0.343)	(0.326)
Intervention x Gender (male)	0.075	**1.295***	0.953	−0.110	−0.672	−0.365	0.183
	(0.103)	(0.642)	(0.486)	(0.158)	(0.582)	(0.564)	(0.550)
Gender (male) x Time = 2	0.084	**1.269***	**0.886***	−0.072	−0.731	0.074	0.365
	(0.067)	(0.556)	(0.409)	(0.126)	(0.490)	(0.504)	(0.481)
Gender (male) x Time = 3	0.093	**2.292*****	**1.662*****	−0.034	−0.236	−0.219	0.243
	(0.065)	(0.537)	(0.395)	(0.122)	(0.479)	(0.491)	(0.464)
Intervention x Gender (male) x Time = 2	−0.159	**−1.673***	**−1.325***	0.147	**1.540***	−0.383	−0.404
	(0.097)	(0.799)	(0.591)	(0.182)	(0.710)	(0.730)	(0.700)
Intervention x Gender (male) x Time = 3	−0.085	**−2.374****	**−1.668****	0.072	0.208	0.553	−0.235
	(0.092)	(0.758)	(0.561)	(0.173)	(0.671)	(0.689)	(0.655)
BIC	979.928	4909.710	4404.727	2109.356	2805.579	2552.749	2731.721

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Coefficients with $p < 0.05$ in **bold**. Results are presented as coefficient (standard error).

Table 11: Statistical models