Anger variables. t-test and mixed effect models based on a single dataset (will do multiple set combination later)

Group H

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```
## Loading required package: Matrix
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

2. t-test

```
  lm(unexp.3 - unexp.1 ~ treatmgroup_nr, data = data.working.base.anger[[1]]) %>% summary %>% "["("coefi
```

```
## $coefficients
##                   Estimate Std. Error    t value  Pr(>|t|)
## (Intercept)     0.08262108  0.1765513  0.4679721 0.6411987
## treatmgroup_nr -0.10113960  0.1103446 -0.9165799 0.3623810
```

```
  lm(extexp.3 - extexp.1 ~ treatmgroup_nr, data = data.working.base.anger[[1]]) %>% summary %>% "["("coe
```

```
## $coefficients
##                   Estimate Std. Error    t value Pr(>|t|)
## (Intercept)    -0.13431013 0.13609226 -0.9869051 0.326949
## treatmgroup_nr  0.04700855 0.08505766  0.5526668 0.582180
```

```
  lm(emoreg.3 - emoreg.1 ~ treatmgroup_nr, data = data.working.base.anger[[1]]) %>% summary %>% "["("coe
```

```
## $coefficients
##                   Estimate Std. Error    t value  Pr(>|t|)
## (Intercept)    -0.15811966  0.2337832 -0.6763517 0.5009548
## treatmgroup_nr  0.09700855  0.1461145  0.6639214 0.5088321
```

```
  lm(probsol.3 - probsol.1 ~ treatmgroup_nr, data = data.working.base.anger[[1]]) %>% summary %>% "["("
```

```
## $coefficients
##                   Estimate Std. Error    t value  Pr(>|t|)
## (Intercept)    -0.07094017  0.1801429 -0.3937995 0.6948770
## treatmgroup_nr -0.05683761  0.1125893 -0.5048225 0.6152041
```

3. mixed effect models

```
  lmer(unexp ~ treatmgroup_nr * month  + (treatmgroup_nr|id), data = data.working.base.anger.long[[1]])
```

```
## $coefficients
##                         Estimate Std. Error   t value
## (Intercept)           45.586938  18.841434  2.419505
## treatmgroup_nr        20.863634  11.775896  1.771724
## month                 -4.904586   3.062845 -1.601317
## treatmgroup_nr:month -2.367913   1.914278 -1.236974
```

```
lmer(extexp ~ treatmgroup_nr * month + (treatmgroup_nr|id), data = data.working.base.anger.long[[1]])
```

```
## $coefficients
##                          Estimate Std. Error     t value
## (Intercept)           109.475899  25.088437  4.36359988
## treatmgroup_nr          1.833912  15.680273  0.11695667
## month                 -12.139302   4.078352 -2.97652132
## treatmgroup_nr:month  -0.209571   2.548970 -0.08221792
```

```
lmer(emoreg ~ treatmgroup_nr * month + (treatmgroup_nr|id), data = data.working.base.anger.long[[1]])
```

```
## $coefficients
##                         Estimate Std. Error    t value
## (Intercept)           71.372628  21.518263  3.3168396
## treatmgroup_nr        14.318798  13.448915  1.0646805
## month                 -7.807982   3.497988 -2.2321349
## treatmgroup_nr:month -1.636072   2.186243 -0.7483486
```

```
lmer(probsol ~ treatmgroup_nr * month + (treatmgroup_nr|id), data = data.working.base.anger.long[[1]])
```

```
## $coefficients
##                         Estimate Std. Error    t value
## (Intercept)           59.175575  21.090807  2.8057521
## treatmgroup_nr        18.597547  13.181754  1.4108552
## month                 -6.420167   3.428501 -1.8725869
## treatmgroup_nr:month -2.122292   2.142813 -0.9904233
```

4. marginal models (GEE)

```
geeglm(unexp ~ treatmgroup_nr * month, id = id, data = data.working.base.anger.long[[1]]) %>% summary
```

```
## $coefficients
##                         Estimate   Std.err     Wald   Pr(>|W|)
## (Intercept)           45.586938 23.021204 3.921252 0.04767935
## treatmgroup_nr        20.863634 15.410934 1.832829 0.17579375
## month                 -4.904586  2.651532 3.421455 0.06435427
## treatmgroup_nr:month -2.367913  1.775952 1.777744 0.18242662
```

```
geeglm(extexp ~ treatmgroup_nr * month, id = id, data = data.working.base.anger.long[[1]]) %>% summary
```

```
## $coefficients
##                          Estimate   Std.err         Wald     Pr(>|W|)
## (Intercept)           109.475899 32.113789 11.621279659 0.0006520153
## treatmgroup_nr          1.833912 20.446235  0.008045082 0.9285300790
## month                 -12.139302  3.715901 10.672327837 0.0010875017
## treatmgroup_nr:month  -0.209571  2.364570  0.007855217 0.9293762360
```

```
geeglm(emoreg ~ treatmgroup_nr * month, id = id, data = data.working.base.anger.long[[1]]) %>% summary
```

```
## $coefficients
##                         Estimate   Std.err      Wald   Pr(>|W|)
## (Intercept)           71.372628 27.305427 6.8322764 0.00895251
## treatmgroup_nr        14.318798 17.582610 0.6632029 0.41543147
## month                 -7.807982  3.150712 6.1412992 0.01320603
## treatmgroup_nr:month -1.636072  2.030029 0.6495312 0.42028034
```

```
  geeglm(probsol ~ treatmgroup_nr * month, id = id, data = data.working.base.anger.long[[1]]) %>% summa
```

```
## $coefficients
##                         Estimate   Std.err     Wald   Pr(>|W|)
## (Intercept)           59.175575 26.472783 4.996729 0.02539527
## treatmgroup_nr        18.597547 17.285760 1.157536 0.28197722
## month                 -6.420167  3.049212 4.433200 0.03524636
## treatmgroup_nr:month -2.122292  1.992524 1.134496 0.28681828
```