

Experiment 3: Ratings Analysis

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Setup

Variable names:

- Experiment: exp3_
- Data (_d_)
 - d = main df
- Models (_m_)
 - like = Likeability ratings
 - acc = Accomplishment ratings
 - imp = Importance ratings
 - ratings = build model with all 3 ratings

Load data and select columns used in model. See data/exp3_data_about.txt for more details.

```
exp3_d <- read.csv("../data/exp3_data.csv", stringsAsFactors = TRUE) %>%
  rename("Participant" = "SubjID", "Item" = "Name") %>%
  select(Participant, Condition, GenderRating, Item,
         He, She, Other,
         Likeable, Accomplished, Important)
str(exp3_d)
```

```
## 'data.frame':   8904 obs. of  10 variables:
## $ Participant : Factor w/ 1272 levels "Exp3_P1","Exp3_P10",...: 974 974 974 974 974 974 974 330 330 ...
## $ Condition   : Factor w/ 3 levels "first","full",...: 1 1 1 1 1 1 1 1 1 ...
## $ GenderRating: num  5.22 1.24 5.86 3.75 6.78 4.34 2.41 6.24 2.61 6.82 ...
```

```
## $ Item      : Factor w/ 63 levels "Ashley Cook",...: 6 9 13 43 47 52 62 2 16 20 ...
## $ He        : int   0 1 0 0 0 0 1 0 1 0 ...
## $ She       : int   0 0 1 0 1 1 0 0 0 1 ...
## $ Other     : int   1 0 0 1 0 0 0 1 0 0 ...
## $ Likeable  : int   2 2 2 2 2 1 2 2 1 2 ...
## $ Accomplished: int   2 1 1 2 1 1 2 3 1 1 ...
## $ Important : int   2 1 2 2 1 1 2 2 1 1 ...
```

Center gender rating for names: Original scale from 1 to 7, with 1 as most masculine and 7 as most feminine. Mean-centered with higher still as more feminine.

```
exp3_d %<>% mutate(GenderRatingCentered =
  scale(GenderRating, scale = FALSE))
```

Set contrasts for name conditions, now weighted to account for uneven sample sizes. This uses Scott Fraundorf's function for weighted contrasts. (The psycholing package version doesn't support doing 2v1 comparisons, only 1v1.) Condition1 is Last vs First+Full. Condition2 is First vs Full.

```
source("centerfactor.R")
contrasts(exp3_d$Condition) <- centerfactor(
  exp3_d$Condition, c("last", "first"))
contrasts(exp3_d$Condition)
```

```
##           [,1]      [,2]
## first  0.4009434 -0.48113208
## full   0.4009434  0.51886792
## last   -0.5990566  0.01886792
```

Flip ratings from 1=most likeable/accomplished/important to 7=most L/A/I, to make interpreting models easier, then mean-center.

```
exp3_d %<>% mutate(
  LikeableFlip = recode(Likeable,
    '1' = 7, '2' = 6, '3' = 5, '4' = 4, '5' = 3, '6' = 2, '7' = 1),
  AccomplishedFlip = recode(Accomplished,
    '1' = 7, '2' = 6, '3' = 5, '4' = 4, '5' = 3, '6' = 2, '7' = 1),
  ImportantFlip = recode(Important,
    '1' = 7, '2' = 6, '3' = 5, '4' = 4, '5' = 3, '6' = 2, '7' = 1),
  LikeableCentered = scale(LikeableFlip, scale = FALSE),
  AccomplishedCentered = scale(AccomplishedFlip, scale = FALSE),
  ImportantCentered = scale(ImportantFlip, scale = FALSE))
str(exp3_d)
```

```
## 'data.frame':   8904 obs. of  17 variables:
## $ Participant   : Factor w/ 1272 levels "Exp3_P1","Exp3_P10",...: 974 974 974 974 974 974 974 ...
## $ Condition     : Factor w/ 3 levels "first","full",...: 1 1 1 1 1 1 1 1 1 ...
## ..- attr(*, "contrasts")= num [1:3, 1:2] 0.401 0.401 -0.599 -0.481 0.519 ...
## ..- attr(*, "dimnames")=List of 2
## .. ..$ : chr [1:3] "first" "full" "last"
## .. ..$ : NULL
## $ GenderRating  : num  5.22 1.24 5.86 3.75 6.78 4.34 2.41 6.24 2.61 6.82 ...
## $ Item          : Factor w/ 63 levels "Ashley Cook",...: 6 9 13 43 47 52 62 2 16 20 ...
```

```
## $ He : int 0 1 0 0 0 0 1 0 1 0 ...
## $ She : int 0 0 1 0 1 1 0 0 0 1 ...
## $ Other : int 1 0 0 1 0 0 0 1 0 0 ...
## $ Likeable : int 2 2 2 2 2 1 2 2 1 2 ...
## $ Accomplished : int 2 1 1 2 1 1 2 3 1 1 ...
## $ Important : int 2 1 2 2 1 1 2 2 1 1 ...
## $ GenderRatingCentered: num [1:8904, 1] 1.014 -2.966 1.654 -0.456 2.574 ...
## ..- attr(*, "scaled:center")= num 4.21
## $ LikeableFlip : num 6 6 6 6 6 7 6 6 7 6 ...
## $ AccomplishedFlip : num 6 7 7 6 7 7 6 5 7 7 ...
## $ ImportantFlip : num 6 7 6 6 7 7 6 6 7 7 ...
## $ LikeableCentered : num [1:8904, 1] 0.271 0.271 0.271 0.271 0.271 ...
## ..- attr(*, "scaled:center")= num 5.73
## $ AccomplishedCentered: num [1:8904, 1] 0.147 1.147 1.147 0.147 1.147 ...
## ..- attr(*, "scaled:center")= num 5.85
## $ ImportantCentered : num [1:8904, 1] 0.585 1.585 0.585 0.585 1.585 ...
## ..- attr(*, "scaled:center")= num 5.42
```

Likeability

Summary statistics:

```
summary(exp3_d$Likeable)
```

```
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      1.000   1.000   2.000   2.271   3.000   7.000
```

```
summary(exp3_d$LikeableFlip)
```

```
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      1.000   5.000   6.000   5.729   7.000   7.000
```

```
sd(exp3_d$Likeable)
```

```
## [1] 1.316101
```

Does the Likeability rating of the character predict the likelihood of *she* as opposed to *he* and *other* responses? The maximal model includes all interactions, then random intercepts by item but not by participant.

```
exp3_m_like <- buildmer(
  formula = She ~ Condition * GenderRatingCentered *
    LikeableCentered + (1|Participant) + (1|Item),
  data = exp3_d, family = binomial,
  buildmerControl(direction = "order", quiet = TRUE))

summary(exp3_m_like)
```

```
## Generalized linear mixed model fit by maximum likelihood (Laplace
## Approximation) (p-values based on Wald z-scores) [glmerMod]
```

```

## Family: binomial ( logit )
## Formula: She ~ 1 + GenderRatingCentered + LikeableCentered + Condition +
##      GenderRatingCentered:Condition + GenderRatingCentered:LikeableCentered +
##      LikeableCentered:Condition + GenderRatingCentered:LikeableCentered:Condition +
##      (1 | Item)
## Data: exp3_d
##
##      AIC      BIC    logLik deviance df.resid
##  7977.9   8070.1  -3975.9   7951.9     8891
##
## Scaled residuals:
##      Min       1Q   Median       3Q      Max
## -2.6061 -0.5430 -0.1465  0.6311 10.0732
##
## Random effects:
##   Groups Name      Variance Std.Dev.
##   Item   (Intercept) 0.3524   0.5936
## Number of obs: 8904, groups: Item, 63
##
## Fixed effects:
##
##                                     Estimate Std. Error   z value
## (Intercept)                       -1.37455    0.08926 -15.39978
## GenderRatingCentered                 1.03162    0.05487  18.80241
## LikeableCentered                     0.08004    0.02805   2.85361
## Condition1                          0.13853    0.07103   1.95029
## Condition2                          0.06855    0.08957   0.76530
## GenderRatingCentered:Condition1      0.08800    0.04529   1.94319
## GenderRatingCentered:Condition2     -0.06416    0.05848  -1.09717
## GenderRatingCentered:LikeableCentered 0.02698    0.01736   1.55386
## LikeableCentered:Condition1        -0.06365    0.05656  -1.12521
## LikeableCentered:Condition2         0.06998    0.06931   1.00957
## GenderRatingCentered:LikeableCentered:Condition1 0.06193    0.03485   1.77725
## GenderRatingCentered:LikeableCentered:Condition2 -0.03563    0.04395  -0.81076
##
##                                     Pr(>|z|) Pr(>|t|)
## (Intercept)                       0.000 < 2e-16 ***
## GenderRatingCentered                 0.000 < 2e-16 ***
## LikeableCentered                     0.004 0.00432 **
## Condition1                          0.051 0.05114 .
## Condition2                          0.444 0.44409
## GenderRatingCentered:Condition1      0.052 0.05199 .
## GenderRatingCentered:Condition2      0.273 0.27257
## GenderRatingCentered:LikeableCentered 0.120 0.12022
## LikeableCentered:Condition1          0.261 0.26050
## LikeableCentered:Condition2          0.313 0.31270
## GenderRatingCentered:LikeableCentered:Condition1 0.076 0.07553 .
## GenderRatingCentered:LikeableCentered:Condition2 0.418 0.41750
##
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##      (Intr) GndrRC LkblCn Cndtn1 Cndtn2 GRC:C1 GRC:C2 GnRC:LC LkC:C1
## GndrRtngCnt -0.287
## LikeblCntrd -0.005 -0.003
## Condition1  0.000 -0.005 0.051

```

```
## Condition2 -0.017  0.018 -0.072  0.017
## GndrRtnC:C1  0.001  0.016 -0.044 -0.601  0.000
## GndrRtnC:C2  0.016 -0.023  0.048  0.001 -0.586  0.008
## GndrRtnC:LC  0.002  0.005 -0.623 -0.044  0.050  0.044 -0.090
## LkblCntr:C1  0.029 -0.030 -0.054 -0.073 -0.055  0.052  0.037  0.044
## LkblCntr:C2 -0.034  0.028  0.077 -0.056 -0.013  0.038  0.000 -0.042  0.094
## GndRC:LC:C1 -0.029  0.032  0.044  0.053  0.039 -0.047 -0.071 -0.006 -0.626
## GndRC:LC:C2  0.023 -0.042 -0.041  0.038  0.001 -0.073  0.003  0.093 -0.051
##           LkC:C2 GRC:LC:C1
## GndrRtnGnt
## LikeblCntrd
## Condition1
## Condition2
## GndrRtnC:C1
## GndrRtnC:C2
## GndrRtnC:LC
## LkblCntr:C1
## LkblCntr:C2
## GndRC:LC:C1 -0.052
## GndRC:LC:C2 -0.594  0.108
```

- Characters who are rated as more Likeable are more likely to be referred to with *she*

Accomplishment

Summary statistics:

```
summary(exp3_d$Accomplished)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      1.000   1.000   2.000   2.147   3.000   7.000
```

```
summary(exp3_d$AccomplishedFlip)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      1.000   5.000   6.000   5.853   7.000   7.000
```

```
sd(exp3_d$Accomplished)
```

```
## [1] 1.27504
```

Does the Accomplishment rating of the character predict the likelihood of *she* as opposed to *he* and *other* responses? The maximal model includes all interactions, then random intercepts by item but not by participant.

```
exp3_m_acc <- buildmer(
  formula = She ~ Condition * GenderRatingCentered *
    AccomplishedCentered + (1|Participant) + (1|Item),
  data = exp3_d, family = binomial,
  buildmerControl(direction = "order", quiet = TRUE))
summary(exp3_m_acc)
```

```

## Generalized linear mixed model fit by maximum likelihood (Laplace
## Approximation) (p-values based on Wald z-scores) [glmerMod]
## Family: binomial ( logit )
## Formula: She ~ 1 + GenderRatingCentered + AccomplishedCentered + Condition +
## GenderRatingCentered:Condition + GenderRatingCentered:AccomplishedCentered +
## AccomplishedCentered:Condition + GenderRatingCentered:AccomplishedCentered:Condition +
## (1 | Item)
## Data: exp3_d
##
##      AIC      BIC   logLik deviance df.resid
##  7975.7   8068.0  -3974.9   7949.7     8891
##
## Scaled residuals:
##      Min       1Q   Median       3Q      Max
## -2.6466 -0.5469 -0.1450  0.6222 10.8637
##
## Random effects:
## Groups Name      Variance Std.Dev.
## Item  (Intercept) 0.3595   0.5996
## Number of obs: 8904, groups: Item, 63
##
## Fixed effects:
##
##                                Estimate Std. Error
## (Intercept)                   -1.372294    0.089919
## GenderRatingCentered           1.034110    0.055238
## AccomplishedCentered           0.072453    0.028342
## Condition1                     0.139473    0.070835
## Condition2                     0.073638    0.089326
## GenderRatingCentered:Condition1 0.090036    0.045170
## GenderRatingCentered:Condition2 -0.057030    0.058311
## GenderRatingCentered:AccomplishedCentered 0.029731    0.017426
## AccomplishedCentered:Condition1 -0.083766    0.058528
## AccomplishedCentered:Condition2 -0.069941    0.069994
## GenderRatingCentered:AccomplishedCentered:Condition1 0.084687    0.035961
## GenderRatingCentered:AccomplishedCentered:Condition2 0.002789    0.043500
##
##                                z value Pr(>|z|)
## (Intercept)                   -15.261381    0.000
## GenderRatingCentered           18.720891    0.000
## AccomplishedCentered           2.556329    0.011
## Condition1                     1.968970    0.049
## Condition2                     0.824375    0.410
## GenderRatingCentered:Condition1 1.993281    0.046
## GenderRatingCentered:Condition2 -0.978038    0.328
## GenderRatingCentered:AccomplishedCentered 1.706129    0.088
## AccomplishedCentered:Condition1 -1.431211    0.152
## AccomplishedCentered:Condition2 -0.999249    0.318
## GenderRatingCentered:AccomplishedCentered:Condition1 2.354960    0.019
## GenderRatingCentered:AccomplishedCentered:Condition2 0.064123    0.949
##
##                                Pr(>|t|)
## (Intercept)                   <2e-16 ***
## GenderRatingCentered           <2e-16 ***
## AccomplishedCentered           0.0106 *
## Condition1                     0.0490 *
## Condition2                     0.4097

```

```

## GenderRatingCentered:Condition1          0.0462 *
## GenderRatingCentered:Condition2          0.3281
## GenderRatingCentered:AccomplishedCentered 0.0880 .
## AccomplishedCentered:Condition1          0.1524
## AccomplishedCentered:Condition2          0.3177
## GenderRatingCentered:AccomplishedCentered:Condition1 0.0185 *
## GenderRatingCentered:AccomplishedCentered:Condition2 0.9489
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
##      (Intr) GndrRC AccmpC Cndtn1 Cndtn2 GRC:C1 GRC:C2 GnRC:AC AcC:C1
## GndrRtnGnt -0.284
## AccmplshdCn -0.006  0.003
## Condition1  0.001 -0.006  0.060
## Condition2 -0.017  0.018 -0.013  0.015
## GndrRtnC:C1 -0.001  0.018 -0.054 -0.601  0.001
## GndrRtnC:C2  0.016 -0.023  0.002  0.001 -0.586  0.005
## GndrRtnC:AC  0.006  0.006 -0.623 -0.055  0.002  0.060 -0.022
## AccmplsC:C1  0.041 -0.045 -0.088 -0.045 -0.008  0.031  0.001  0.080
## AccmplsC:C2 -0.001 -0.003  0.021 -0.006  0.026 -0.001 -0.033  0.012  0.055
## GndRC:AC:C1 -0.040  0.048  0.079  0.032  0.001 -0.009 -0.016 -0.069 -0.633
## GndRC:AC:C2 -0.005 -0.002  0.011 -0.001 -0.033 -0.015  0.062  0.023 -0.013
##      AcC:C2 GRC:AC:C1
## GndrRtnGnt
## AccmplshdCn
## Condition1
## Condition2
## GndrRtnC:C1
## GndrRtnC:C2
## GndrRtnC:AC
## AccmplsC:C1
## AccmplsC:C2
## GndRC:AC:C1 -0.013
## GndRC:AC:C2 -0.592  0.056

```

- Characters who are rated as more Accomplished are more likely to be referred to with *she*, but this is n.s. after correction for multiple comparisons.
- Interaction between Accomplishment, Name Gender Rating, and Condition (L vs F+F), but this is n.s. after correction for multiple comparisons, so I'm not going to dig into it.

Importance

Summary statistics:

```
summary(exp3_d$Important)
```

```

##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      1.000   1.000   2.000   2.585   3.000   7.000

```

```
summary(exp3_d$ImportantFlip)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      1.000   5.000   6.000   5.415   7.000   7.000
```

```
sd(exp3_d$Important)
```

```
## [1] 1.366153
```

Does the Importance rating of the character predict the likelihood of *she* as opposed to *he* and *other* responses
The maximal model includes all interactions, then random intercepts by item but not by participant.

```
exp3_m_imp <- buildmer(  
  formula = She ~ Condition * GenderRatingCentered *  
    ImportantCentered + (1|Participant) + (1|Item),  
  data = exp3_d, family = binomial,  
  buildmerControl(direction = "order", quiet = TRUE))
```

```
summary(exp3_m_imp)
```

```
## Generalized linear mixed model fit by maximum likelihood (Laplace  
## Approximation) (p-values based on Wald z-scores) [glmerMod]  
## Family: binomial ( logit )  
## Formula: She ~ 1 + GenderRatingCentered + Condition + ImportantCentered +  
##   GenderRatingCentered:Condition + GenderRatingCentered:ImportantCentered +  
##   Condition:ImportantCentered + GenderRatingCentered:Condition:ImportantCentered +  
##   (1 | Item)  
## Data: exp3_d  
##  
##      AIC      BIC   logLik deviance df.resid  
##  7998.6   8090.8  -3986.3   7972.6     8891  
##  
## Scaled residuals:  
##      Min       1Q   Median       3Q      Max  
## -2.4475 -0.5401 -0.1474  0.6287  9.9493  
##  
## Random effects:  
## Groups Name      Variance Std.Dev.  
## Item (Intercept) 0.3588   0.599  
## Number of obs: 8904, groups: Item, 63  
##  
## Fixed effects:  
##  
##              Estimate Std. Error  
## (Intercept)    -1.374939    0.089891  
## GenderRatingCentered    1.033388    0.055223  
## Condition1         0.136688    0.070834  
## Condition2         0.076283    0.089473  
## ImportantCentered    0.041717    0.026130  
## GenderRatingCentered:Condition1    0.087122    0.045131  
## GenderRatingCentered:Condition2   -0.054814    0.058223  
## GenderRatingCentered:ImportantCentered    0.003465    0.016691
```



```

## Condition1:ImportantCentered -0.059863 0.052359
## Condition2:ImportantCentered 0.078479 0.063684
## GenderRatingCentered:Condition1:ImportantCentered 0.065849 0.033480
## GenderRatingCentered:Condition2:ImportantCentered -0.028646 0.041322
## z value Pr(>|z|) Pr(>|t|)
## (Intercept) -15.295564 0.000 <2e-16
## GenderRatingCentered 18.712849 0.000 <2e-16
## Condition1 1.929679 0.054 0.0536
## Condition2 0.852574 0.394 0.3939
## ImportantCentered 1.596514 0.110 0.1104
## GenderRatingCentered:Condition1 1.930431 0.054 0.0536
## GenderRatingCentered:Condition2 -0.941446 0.346 0.3465
## GenderRatingCentered:ImportantCentered 0.207623 0.836 0.8355
## Condition1:ImportantCentered -1.143320 0.253 0.2529
## Condition2:ImportantCentered 1.232319 0.218 0.2178
## GenderRatingCentered:Condition1:ImportantCentered 1.966845 0.049 0.0492
## GenderRatingCentered:Condition2:ImportantCentered -0.693251 0.488 0.4882
##
## (Intercept) ***
## GenderRatingCentered ***
## Condition1 .
## Condition2 .
## ImportantCentered .
## GenderRatingCentered:Condition1 .
## GenderRatingCentered:Condition2 .
## GenderRatingCentered:ImportantCentered .
## Condition1:ImportantCentered .
## Condition2:ImportantCentered .
## GenderRatingCentered:Condition1:ImportantCentered *
## GenderRatingCentered:Condition2:ImportantCentered *
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Correlation of Fixed Effects:
## (Intr) GndrRC Cndtn1 Cndtn2 ImprtC GnRC:C1 GnRC:C2 GRC:IC Cn1:IC
## GndrRtnGnt -0.285
## Condition1 0.002 -0.006
## Condition2 -0.017 0.018 0.014
## ImprtnCntr -0.022 0.026 0.051 -0.053
## GndrRtnC:C1 -0.001 0.017 -0.601 0.001 -0.052
## GndrRtnC:C2 0.015 -0.021 0.002 -0.588 0.030 0.008
## GndrRtnC:IC 0.026 -0.025 -0.052 0.030 -0.585 0.043 -0.059
## Cndtn1:ImpC 0.033 -0.038 -0.042 -0.039 -0.070 0.046 0.021 0.064
## Cndtn2:ImpC -0.027 0.022 -0.041 0.019 0.041 0.023 -0.017 -0.001 0.065
## GndRC:C1:IC -0.036 0.038 0.046 0.022 0.065 -0.030 -0.046 -0.048 -0.590
## GndRC:C2:IC 0.019 -0.035 0.023 -0.017 -0.001 -0.048 0.021 0.048 -0.018
## Cn2:IC GRC:C1:
## GndrRtnGnt
## Condition1
## Condition2
## ImprtnCntr
## GndrRtnC:C1
## GndrRtnC:C2
## GndrRtnC:IC

```

```
## Cndtn1:ImpC
## Cndtn2:ImpC
## GndRC:C1:IC -0.018
## GndRC:C2:IC -0.552 0.074
```

- Interaction between Important, Name Gender Rating, and Condition (L vs F+F), but this is way too small to be significant after correction for multiple comparisons

All Ratings

```
exp3_m_ratings <- buildmer(
  formula = She ~ Condition * GenderRatingCentered * LikeableCentered *
    AccomplishedCentered * ImportantCentered +
    (1|Participant) + (1|Item),
  data = exp3_d,
  family = binomial,
  buildmerControl(direction = c("order", "backward"), quiet = TRUE))

summary(exp3_m_ratings)
```

```
##
## Call:
## stats::glm(formula = She ~ 1 + GenderRatingCentered + LikeableCentered +
##   Condition + ImportantCentered + AccomplishedCentered + Condition:AccomplishedCentered +
##   Condition:ImportantCentered + LikeableCentered:Condition +
##   LikeableCentered:AccomplishedCentered + LikeableCentered:ImportantCentered +
##   ImportantCentered:AccomplishedCentered + LikeableCentered:ImportantCentered:AccomplishedCentered +
##   LikeableCentered:Condition:AccomplishedCentered + LikeableCentered:Condition:ImportantCentered +
##   Condition:ImportantCentered:AccomplishedCentered + Condition:LikeableCentered:AccomplishedCentered,
##   family = binomial, data = exp3_d)
##
## Deviance Residuals:
##      Min       1Q   Median       3Q      Max
## -1.9790  -0.7231  -0.3095   0.7728   2.9943
##
## Coefficients:
##                                     Estimate
## (Intercept)                       -1.183679
## GenderRatingCentered                 0.895923
## LikeableCentered                    0.110380
## Condition1                         0.192791
## Condition2                       -0.061019
## ImportantCentered                  -0.070138
## AccomplishedCentered               0.053692
## Condition1:AccomplishedCentered    0.043019
## Condition2:AccomplishedCentered   -0.239237
## Condition1:ImportantCentered      -0.035665
## Condition2:ImportantCentered      0.100167
## LikeableCentered:Condition1      -0.052403
## LikeableCentered:Condition2       0.022351
## LikeableCentered:AccomplishedCentered 0.008091
```

## LikeableCentered:ImportantCentered	0.005932
## ImportantCentered:AccomplishedCentered	0.000364
## LikeableCentered:ImportantCentered:AccomplishedCentered	0.009798
## LikeableCentered:Condition1:AccomplishedCentered	0.007850
## LikeableCentered:Condition2:AccomplishedCentered	0.017325
## LikeableCentered:Condition1:ImportantCentered	0.008035
## LikeableCentered:Condition2:ImportantCentered	0.078234
## Condition1:ImportantCentered:AccomplishedCentered	0.023376
## Condition2:ImportantCentered:AccomplishedCentered	0.029479
## LikeableCentered:Condition1:ImportantCentered:AccomplishedCentered	0.022956
## LikeableCentered:Condition2:ImportantCentered:AccomplishedCentered	0.057829
##	Std. Error
## (Intercept)	0.038223
## GenderRatingCentered	0.021163
## LikeableCentered	0.032207
## Condition1	0.069638
## Condition2	0.087625
## ImportantCentered	0.029469
## AccomplishedCentered	0.034803
## Condition1:AccomplishedCentered	0.071294
## Condition2:AccomplishedCentered	0.089899
## Condition1:ImportantCentered	0.059845
## Condition2:ImportantCentered	0.077861
## LikeableCentered:Condition1	0.065543
## LikeableCentered:Condition2	0.084333
## LikeableCentered:AccomplishedCentered	0.021795
## LikeableCentered:ImportantCentered	0.022602
## ImportantCentered:AccomplishedCentered	0.023053
## LikeableCentered:ImportantCentered:AccomplishedCentered	0.008109
## LikeableCentered:Condition1:AccomplishedCentered	0.043915
## LikeableCentered:Condition2:AccomplishedCentered	0.058238
## LikeableCentered:Condition1:ImportantCentered	0.045577
## LikeableCentered:Condition2:ImportantCentered	0.060974
## Condition1:ImportantCentered:AccomplishedCentered	0.047445
## Condition2:ImportantCentered:AccomplishedCentered	0.058217
## LikeableCentered:Condition1:ImportantCentered:AccomplishedCentered	0.016068
## LikeableCentered:Condition2:ImportantCentered:AccomplishedCentered	0.022892
##	z value
## (Intercept)	-30.968
## GenderRatingCentered	42.335
## LikeableCentered	3.427
## Condition1	2.768
## Condition2	-0.696
## ImportantCentered	-2.380
## AccomplishedCentered	1.543
## Condition1:AccomplishedCentered	0.603
## Condition2:AccomplishedCentered	-2.661
## Condition1:ImportantCentered	-0.596
## Condition2:ImportantCentered	1.286
## LikeableCentered:Condition1	-0.800
## LikeableCentered:Condition2	0.265
## LikeableCentered:AccomplishedCentered	0.371
## LikeableCentered:ImportantCentered	0.262
## ImportantCentered:AccomplishedCentered	0.016

```

## LikeableCentered:ImportantCentered:AccomplishedCentered      1.208
## LikeableCentered:Condition1:AccomplishedCentered             0.179
## LikeableCentered:Condition2:AccomplishedCentered             0.297
## LikeableCentered:Condition1:ImportantCentered                0.176
## LikeableCentered:Condition2:ImportantCentered                1.283
## Condition1:ImportantCentered:AccomplishedCentered            0.493
## Condition2:ImportantCentered:AccomplishedCentered            0.506
## LikeableCentered:Condition1:ImportantCentered:AccomplishedCentered 1.429
## LikeableCentered:Condition2:ImportantCentered:AccomplishedCentered 2.526
##                                                                Pr(>|z|)
## (Intercept)                                                    < 2e-16 ***
## GenderRatingCentered                                           < 2e-16 ***
## LikeableCentered                                               0.00061 ***
## Condition1                                                     0.00563 **
## Condition2                                                     0.48621
## ImportantCentered                                              0.01731 *
## AccomplishedCentered                                           0.12289
## Condition1:AccomplishedCentered                                0.54624
## Condition2:AccomplishedCentered                                0.00779 **
## Condition1:ImportantCentered                                    0.55121
## Condition2:ImportantCentered                                    0.19827
## LikeableCentered:Condition1                                    0.42398
## LikeableCentered:Condition2                                    0.79098
## LikeableCentered:AccomplishedCentered                         0.71047
## LikeableCentered:ImportantCentered                             0.79297
## ImportantCentered:AccomplishedCentered                         0.98740
## LikeableCentered:ImportantCentered:AccomplishedCentered       0.22694
## LikeableCentered:Condition1:AccomplishedCentered             0.85814
## LikeableCentered:Condition2:AccomplishedCentered             0.76610
## LikeableCentered:Condition1:ImportantCentered                0.86006
## LikeableCentered:Condition2:ImportantCentered                0.19947
## Condition1:ImportantCentered:AccomplishedCentered            0.62223
## Condition2:ImportantCentered:AccomplishedCentered            0.61260
## LikeableCentered:Condition1:ImportantCentered:AccomplishedCentered 0.15310
## LikeableCentered:Condition2:ImportantCentered:AccomplishedCentered 0.01153 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##    Null deviance: 11191.3  on 8903  degrees of freedom
## Residual deviance:  8193.3  on 8879  degrees of freedom
## AIC: 8243.3
##
## Number of Fisher Scoring iterations: 5

```