

Genuine Anovas

2024-03-07

Genuine Experiment Exploratory analysis

Description: Discrimination task using PEDFE video database

State of the data collection:

pts

```
##          group n
## 1      Control 5
## 2 Experimental 5
```

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Anovas

Genuine Accuracy

```
## Converting to factor: group

## Contrasts set to contr.sum for the following variables: group

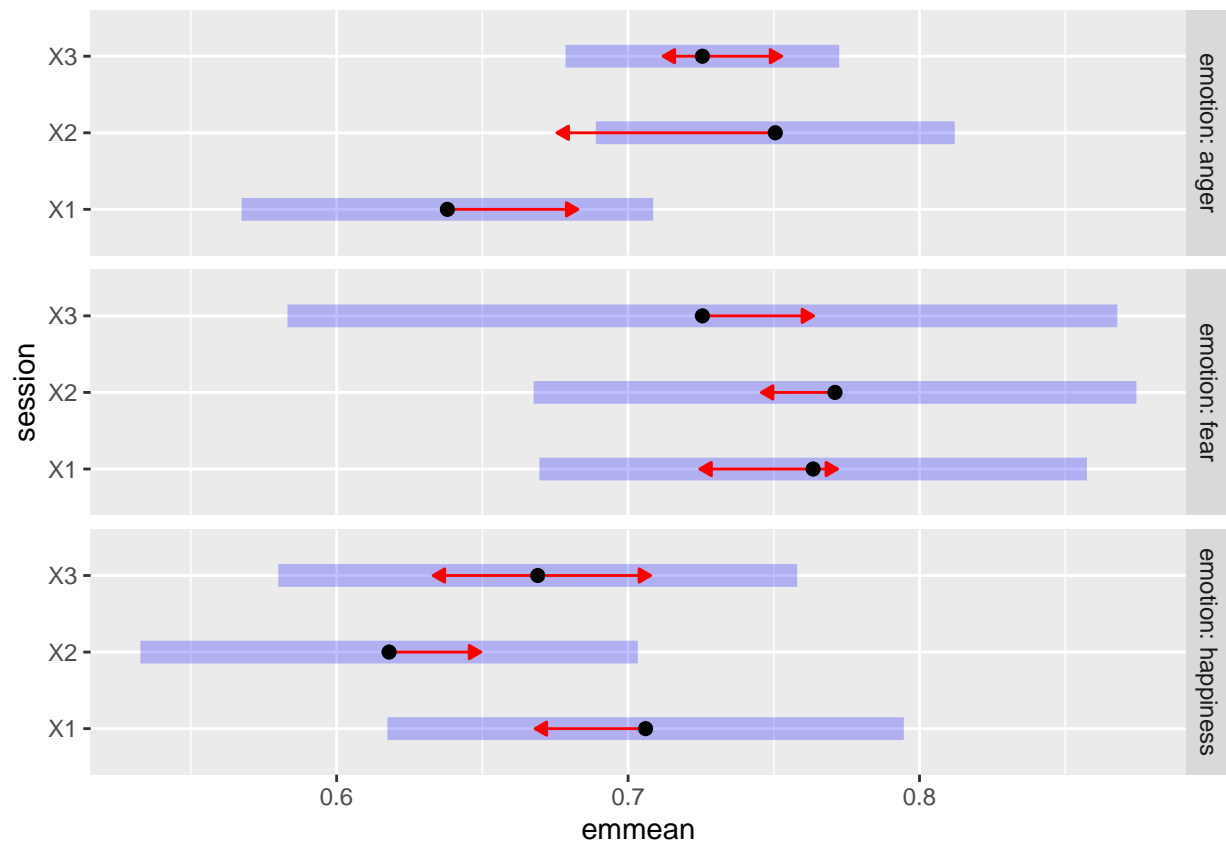
## Anova Table (Type 3 tests)
##
## Response: genuine.acc.mean
##
```

	Effect	df	MSE	F	ges	p.value
## 1	group	1, 8	0.17	0.14	.003	.715
## 2	emotion	1.92, 15.37	0.03	4.17 *	.034	.037
## 3	group:emotion	1.92, 15.37	0.03	1.02	.008	.380
## 4	session	1.89, 15.09	0.01	0.20 <.001		.807
## 5	group:session	1.89, 15.09	0.01	0.06 <.001		.934
## 6	elicitation	1, 8	0.16	0.02 <.001		.904
## 7	group:elicitation	1, 8	0.16	1.24	.029	.298
## 8	emotion:session	3.33, 26.60	0.01	6.75 **	.034	.001
## 9	group:emotion:session	3.33, 26.60	0.01	1.71	.009	.185
## 10	emotion:elicitation	1.17, 9.33	0.28	2.42	.102	.152
## 11	group:emotion:elicitation	1.17, 9.33	0.28	0.50	.023	.523
## 12	session:elicitation	1.35, 10.76	0.04	0.82	.006	.422
## 13	group:session:elicitation	1.35, 10.76	0.04	0.21	.001	.727
## 14	emotion:session:elicitation	2.72, 21.74	0.02	0.24	.002	.850
## 15	group:emotion:session:elicitation	2.72, 21.74	0.02	1.46	.010	.254

```
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
##
## Sphericity correction method: GG

## $emmeans
## emotion = anger:
##   session emmean      SE df lower.CL upper.CL
##   X1      0.638 0.0306   8    0.567    0.709
##   X2      0.750 0.0267   8    0.689    0.812
##   X3      0.726 0.0204   8    0.679    0.772
##
## emotion = fear:
##   session emmean      SE df lower.CL upper.CL
##   X1      0.763 0.0407   8    0.670    0.857
##   X2      0.771 0.0448   8    0.668    0.874
##   X3      0.726 0.0617   8    0.583    0.868
##
## emotion = happiness:
##   session emmean      SE df lower.CL upper.CL
##   X1      0.706 0.0384   8    0.617    0.795
##   X2      0.618 0.0370   8    0.533    0.703
##   X3      0.669 0.0386   8    0.580    0.758
##
## Results are averaged over the levels of: group, elicitation
```

```
## Confidence level used: 0.95
##
## $contrasts
## emotion = anger:
## contrast estimate      SE df t.ratio p.value
## X1 - X2    -0.1125 0.0420  8  -2.680  0.0838
## X1 - X3    -0.0875 0.0204  8  -4.295  0.0079
## X2 - X3     0.0250 0.0331  8   0.755  1.0000
##
## emotion = fear:
## contrast estimate      SE df t.ratio p.value
## X1 - X2    -0.0075 0.0309  8  -0.243  1.0000
## X1 - X3     0.0380 0.0349  8   1.089  0.9240
## X2 - X3     0.0455 0.0222  8   2.052  0.2230
##
## emotion = happiness:
## contrast estimate      SE df t.ratio p.value
## X1 - X2     0.0880 0.0243  8   3.623  0.0203
## X1 - X3     0.0370 0.0280  8   1.322  0.6685
## X2 - X3    -0.0510 0.0236  8  -2.161  0.1880
##
## Results are averaged over the levels of: group, elicitation
## P value adjustment: bonferroni method for 3 tests
```



Genuine Rt

```
## Converting to factor: group

## Contrasts set to contr.sum for the following variables: group

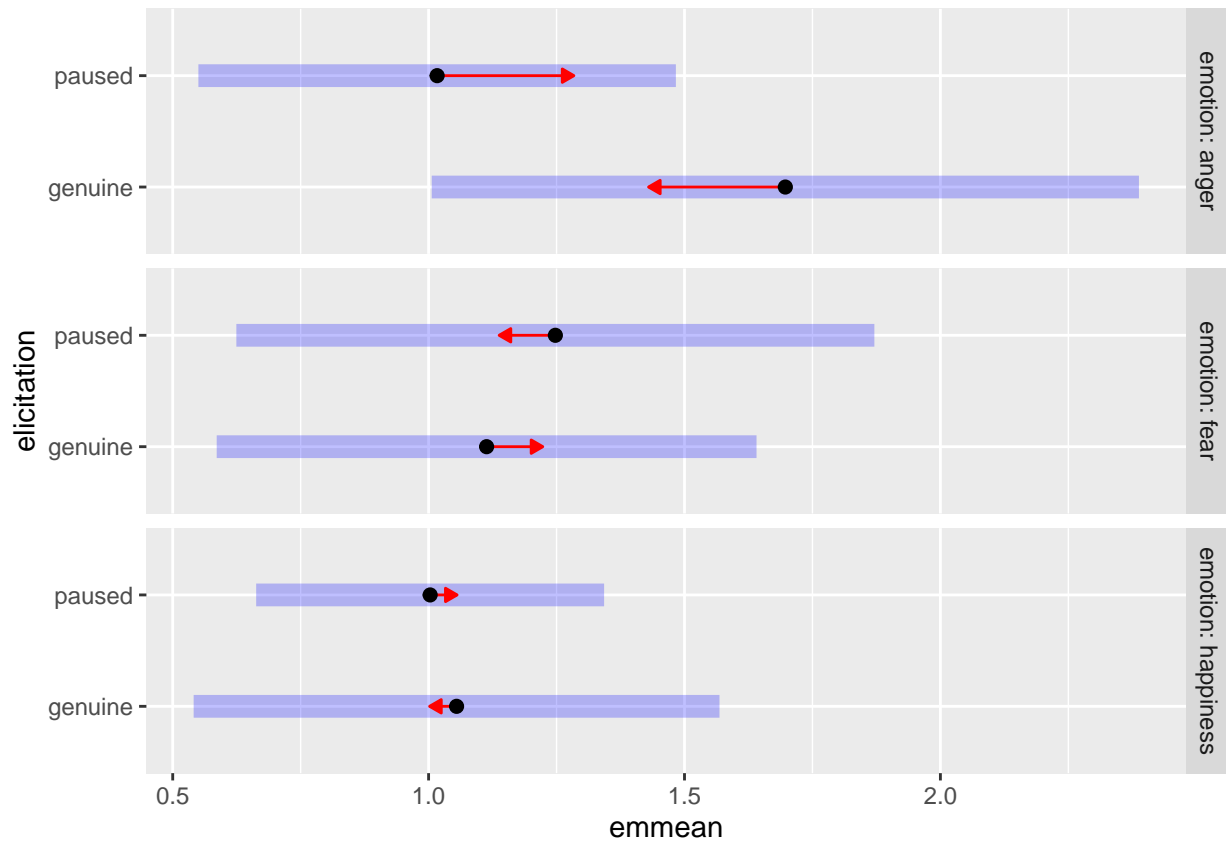
## Anova Table (Type 3 tests)
##
## Response: genuine.rt1.mean
##
```

	Effect	df	MSE	F	ges	p.value
## 1	group	1, 8	7.91	1.68	.115	.231
## 2	emotion	1.90, 15.17	0.38	4.44 *	.031	.032
## 3	group:emotion	1.90, 15.17	0.38	0.13	<.001	.865
## 4	session	1.43, 11.43	0.50	2.51	.017	.134
## 5	group:session	1.43, 11.43	0.50	1.23	.008	.311
## 6	elicitation	1, 8	0.30	5.90 *	.017	.041
## 7	group:elicitation	1, 8	0.30	0.01	<.001	.945
## 8	emotion:session	2.55, 20.43	0.36	0.97	.009	.416
## 9	group:emotion:session	2.55, 20.43	0.36	0.82	.007	.480
## 10	emotion:elicitation	1.73, 13.87	0.51	6.19 *	.051	.014
## 11	group:emotion:elicitation	1.73, 13.87	0.51	0.14	.001	.844
## 12	session:elicitation	1.78, 14.22	0.21	0.93	.003	.406
## 13	group:session:elicitation	1.78, 14.22	0.21	0.88	.003	.425
## 14	emotion:session:elicitation	2.63, 21.07	0.36	1.26	.012	.311
## 15	group:emotion:session:elicitation	2.63, 21.07	0.36	0.61	.006	.597

```
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
##
## Sphericity correction method: GG

## $emmeans
## emotion = anger:
## elicitation emmean    SE df lower.CL upper.CL
## genuine      1.70 0.300  8    1.006    2.39
## paused       1.02 0.202  8    0.550    1.48
##
## emotion = fear:
## elicitation emmean    SE df lower.CL upper.CL
## genuine      1.11 0.229  8    0.586    1.64
## paused       1.25 0.270  8    0.624    1.87
##
## emotion = happiness:
## elicitation emmean    SE df lower.CL upper.CL
## genuine      1.05 0.223  8    0.541    1.57
## paused       1.00 0.147  8    0.663    1.34
##
## Results are averaged over the levels of: group, session
## Confidence level used: 0.95
##
## $contrasts
## emotion = anger:
## contrast      estimate    SE df t.ratio p.value
## genuine - paused  0.6803 0.2318  8    2.935  0.0189
```

```
##
## emotion = fear:
## contrast      estimate      SE df t.ratio p.value
## genuine - paused -0.1343 0.0953 8  -1.410 0.1962
##
## emotion = happiness:
## contrast      estimate      SE df t.ratio p.value
## genuine - paused  0.0517 0.1275 8   0.405 0.6959
##
## Results are averaged over the levels of: group, session
```



Genuine slider

```
## Converting to factor: group

## Contrasts set to contr.sum for the following variables: group

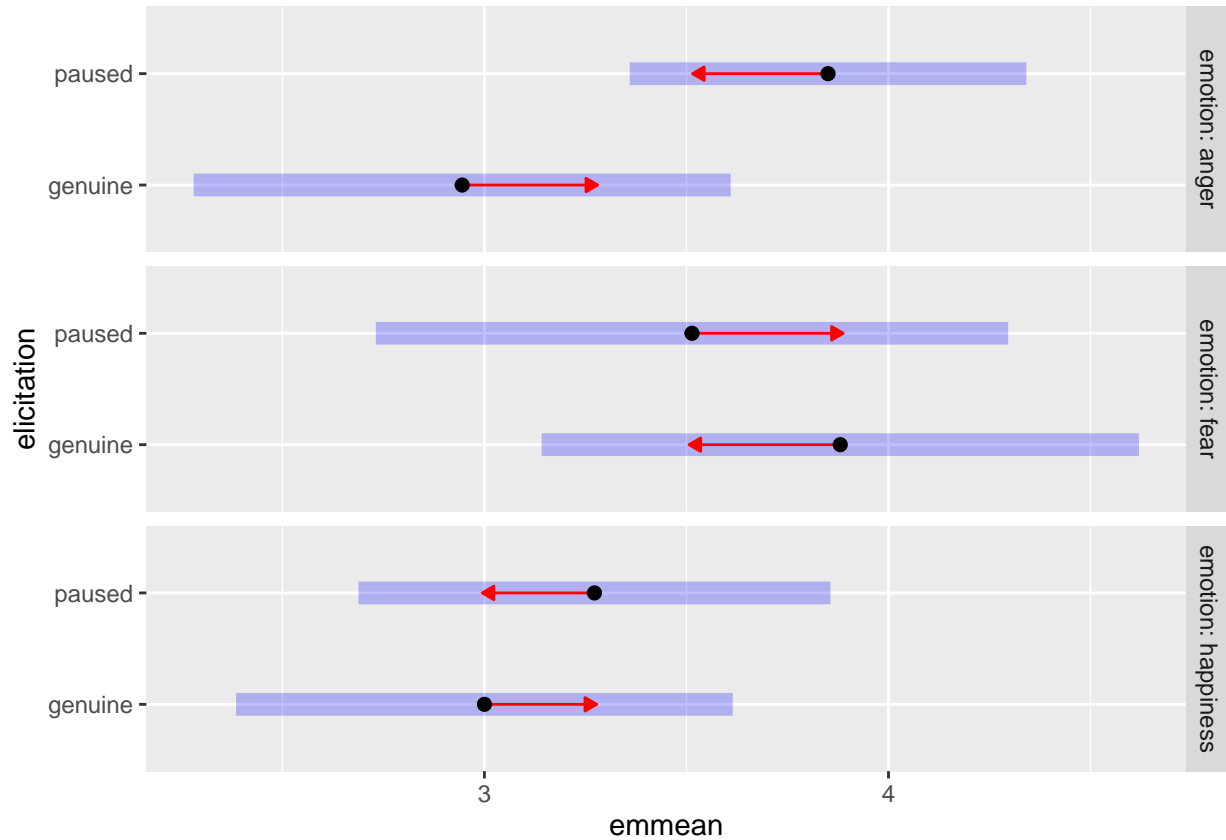
## Anova Table (Type 3 tests)
##
## Response: slider
##
```

	Effect	df	MSE	F	ges	p.value
## 1	group	1, 8	6.48	0.42	.017	.537
## 2	emotion	1.97, 15.79	1.66	2.89	+	.057
## 3	group:emotion	1.97, 15.79	1.66	1.33	.027	.293
## 4	session	1.72, 13.80	0.52	0.56	.003	.559
## 5	group:session	1.72, 13.80	0.52	0.54	.003	.567
## 6	elicitation	1, 8	2.60	1.26	.021	.294
## 7	group:elicitation	1, 8	2.60	0.08	.001	.785
## 8	emotion:session	2.90, 23.20	0.43	1.54	.012	.232
## 9	group:emotion:session	2.90, 23.20	0.43	1.09	.009	.373
## 10	emotion:elicitation	1.69, 13.48	1.24	5.83	*	.072
## 11	group:emotion:elicitation	1.69, 13.48	1.24	1.17	.015	.331
## 12	session:elicitation	1.59, 12.72	0.96	0.41	.004	.624
## 13	group:session:elicitation	1.59, 12.72	0.96	0.23	.002	.750
## 14	emotion:session:elicitation	3.12, 24.96	0.44	0.61	.005	.618
## 15	group:emotion:session:elicitation	3.12, 24.96	0.44	1.19	.010	.334

```
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
##
## Sphericity correction method: GG

## $emmeans
## emotion = anger:
## elicitation emmean    SE df lower.CL upper.CL
## genuine      2.94 0.288  8      2.28      3.61
## paused       3.85 0.213  8      3.36      4.34
##
## emotion = fear:
## elicitation emmean    SE df lower.CL upper.CL
## genuine      3.88 0.321  8      3.14      4.62
## paused       3.51 0.339  8      2.73      4.30
##
## emotion = happiness:
## elicitation emmean    SE df lower.CL upper.CL
## genuine      3.00 0.267  8      2.39      3.61
## paused       3.27 0.253  8      2.69      3.86
##
## Results are averaged over the levels of: group, session
## Confidence level used: 0.95
##
## $contrasts
## emotion = anger:
## contrast      estimate    SE df t.ratio p.value
## genuine - paused  -0.905 0.291  8   -3.113  0.0144
```

```
##
## emotion = fear:
## contrast      estimate    SE df t.ratio p.value
## genuine - paused    0.367 0.375  8   0.980  0.3560
##
## emotion = happiness:
## contrast      estimate    SE df t.ratio p.value
## genuine - paused   -0.272 0.296  8  -0.921  0.3839
##
## Results are averaged over the levels of: group, session
```



Emotion Accuracy

```
## Converting to factor: group

## Contrasts set to contr.sum for the following variables: group

## Anova Table (Type 3 tests)
##
## Response: emotion.acc.mean
##
```

	Effect	df	MSE	F	ges	p.value
## 1	group	1, 8	0.03	1.08	.022	.329
## 2	emotion	1.33, 10.67	0.05	1.71	.086	.224
## 3	group:emotion	1.33, 10.67	0.05	0.39	.021	.604
## 4	session	1.85, 14.76	0.00	0.51	.001	.598
## 5	group:session	1.85, 14.76	0.00	2.32	.006	.135
## 6	elicitation	1, 8	0.01	5.34 *	.054	.050
## 7	group:elicitation	1, 8	0.01	0.10	.001	.755
## 8	emotion:session	2.70, 21.60	0.00	3.57 *	.024	.034
## 9	group:emotion:session	2.70, 21.60	0.00	2.57 +	.017	.086
## 10	emotion:elicitation	1.94, 15.49	0.01	1.83	.025	.194
## 11	group:emotion:elicitation	1.94, 15.49	0.01	0.01	<.001	.984
## 12	session:elicitation	1.86, 14.87	0.00	0.03	<.001	.960
## 13	group:session:elicitation	1.86, 14.87	0.00	2.86 +	.015	.092
## 14	emotion:session:elicitation	2.63, 21.06	0.00	0.25	.002	.837
## 15	group:emotion:session:elicitation	2.63, 21.06	0.00	1.44	.014	.261

```
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
##
## Sphericity correction method: GG

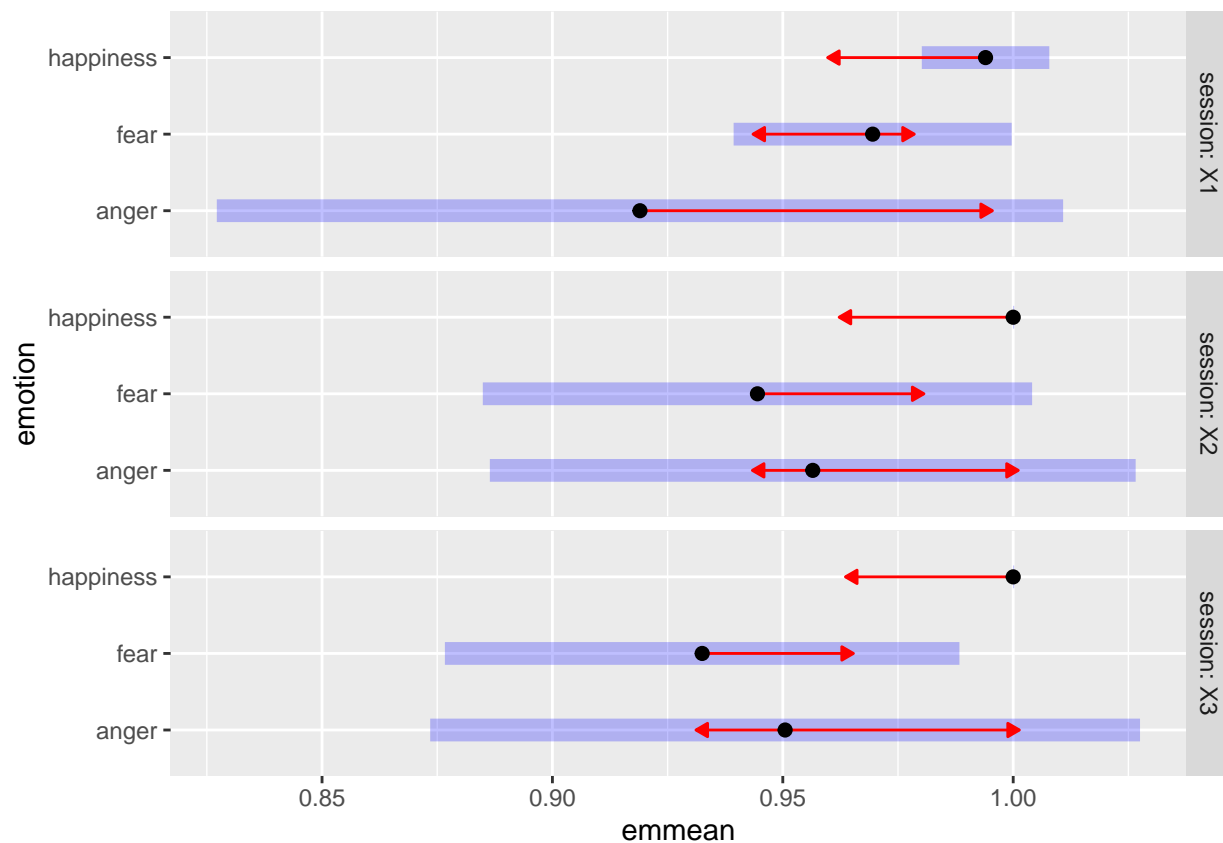
## $emmeans
## session = X1:
## emotion    emmean      SE df lower.CL upper.CL
## anger      0.919 0.0398   8    0.827    1.011
## fear       0.970 0.0131   8    0.939    1.000
## happiness  0.994 0.0060   8    0.980    1.008
##
## session = X2:
## emotion    emmean      SE df lower.CL upper.CL
## anger      0.957 0.0304   8    0.886    1.027
## fear       0.945 0.0258   8    0.885    1.004
## happiness  1.000 0.0000   8    1.000    1.000
##
## session = X3:
## emotion    emmean      SE df lower.CL upper.CL
## anger      0.951 0.0334   8    0.873    1.028
## fear       0.932 0.0242   8    0.877    0.988
## happiness  1.000 0.0000   8    1.000    1.000
##
## Results are averaged over the levels of: group, elicitation
## Confidence level used: 0.95
##
## $contrasts
```



```

## session = X1:
## contrast      estimate      SE df t.ratio p.value
## anger - fear   -0.0505 0.0393  8  -1.284  0.7056
## anger - happiness -0.0750 0.0423  8  -1.773  0.3426
## fear - happiness -0.0245 0.0150  8  -1.632  0.4237
##
## session = X2:
## contrast      estimate      SE df t.ratio p.value
## anger - fear    0.0120 0.0470  8   0.255  1.0000
## anger - happiness -0.0435 0.0304  8  -1.431  0.5706
## fear - happiness -0.0555 0.0258  8  -2.147  0.1922
##
## session = X3:
## contrast      estimate      SE df t.ratio p.value
## anger - fear    0.0180 0.0447  8   0.403  1.0000
## anger - happiness -0.0495 0.0334  8  -1.482  0.5299
## fear - happiness -0.0675 0.0242  8  -2.788  0.0709
##
## Results are averaged over the levels of: group, elicitation
## P value adjustment: bonferroni method for 3 tests

```



Emotion slider

```
## Converting to factor: group

## Contrasts set to contr.sum for the following variables: group

## Anova Table (Type 3 tests)
##
## Response: emotion.slider1.mean
##
```

	Effect	df	MSE	F	ges	p.value
## 1	group	1, 8	26.39	0.00	<.001	.974
## 2	emotion	1.68, 13.40	1.66	16.73 ***	.146	<.001
## 3	group:emotion	1.68, 13.40	1.66	0.20	.002	.786
## 4	session	1.50, 11.98	0.67	0.44	.002	.601
## 5	group:session	1.50, 11.98	0.67	0.47	.002	.584
## 6	elicitation	1, 8	0.83	0.12	<.001	.743
## 7	group:elicitation	1, 8	0.83	0.00	<.001	.994
## 8	emotion:session	2.62, 21.00	0.37	0.86	.003	.464
## 9	group:emotion:session	2.62, 21.00	0.37	0.55	.002	.633
## 10	emotion:elicitation	1.94, 15.48	0.58	32.71 ***	.119	<.001
## 11	group:emotion:elicitation	1.94, 15.48	0.58	0.33	.001	.716
## 12	session:elicitation	1.33, 10.60	0.50	0.06	<.001	.869
## 13	group:session:elicitation	1.33, 10.60	0.50	0.11	<.001	.818
## 14	emotion:session:elicitation	2.13, 17.07	0.21	1.87	.003	.183
## 15	group:emotion:session:elicitation	2.13, 17.07	0.21	4.21 *	.007	.031

```
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1
##
## Sphericity correction method: GG

## $emmeans
## group = Control, emotion = anger, elicitation = genuine:
## session emmean SE df lower.CL upper.CL
## X1      3.24 0.405 8      2.31      4.18
## X2      3.23 0.515 8      2.04      4.41
## X3      3.02 0.508 8      1.85      4.19
##
## group = Experimental, emotion = anger, elicitation = genuine:
## session emmean SE df lower.CL upper.CL
## X1      2.95 0.405 8      2.02      3.89
## X2      2.66 0.515 8      1.47      3.85
## X3      3.25 0.508 8      2.08      4.42
##
## group = Control, emotion = fear, elicitation = genuine:
## session emmean SE df lower.CL upper.CL
## X1      5.02 0.472 8      3.93      6.11
## X2      4.90 0.638 8      3.43      6.37
## X3      5.35 0.558 8      4.07      6.64
##
## group = Experimental, emotion = fear, elicitation = genuine:
## session emmean SE df lower.CL upper.CL
## X1      5.31 0.472 8      4.22      6.40
## X2      5.26 0.638 8      3.79      6.73
```

```

## X3          5.18 0.558 8      3.89      6.47
##
## group = Control, emotion = happiness, elicitation = genuine:
## session emmean      SE df lower.CL upper.CL
## X1          4.30 0.636 8      2.83      5.77
## X2          4.10 0.627 8      2.65      5.55
## X3          3.70 0.676 8      2.14      5.26
##
## group = Experimental, emotion = happiness, elicitation = genuine:
## session emmean      SE df lower.CL upper.CL
## X1          3.96 0.636 8      2.50      5.43
## X2          4.12 0.627 8      2.68      5.57
## X3          3.93 0.676 8      2.37      5.48
##
## group = Control, emotion = anger, elicitation = paused:
## session emmean      SE df lower.CL upper.CL
## X1          4.50 0.665 8      2.97      6.03
## X2          4.23 0.746 8      2.51      5.95
## X3          4.35 0.575 8      3.03      5.68
##
## group = Experimental, emotion = anger, elicitation = paused:
## session emmean      SE df lower.CL upper.CL
## X1          4.69 0.665 8      3.16      6.22
## X2          4.35 0.746 8      2.63      6.07
## X3          4.16 0.575 8      2.84      5.49
##
## group = Control, emotion = fear, elicitation = paused:
## session emmean      SE df lower.CL upper.CL
## X1          4.42 0.601 8      3.04      5.81
## X2          4.47 0.694 8      2.87      6.07
## X3          4.40 0.668 8      2.86      5.94
##
## group = Experimental, emotion = fear, elicitation = paused:
## session emmean      SE df lower.CL upper.CL
## X1          4.38 0.601 8      2.99      5.76
## X2          4.41 0.694 8      2.81      6.01
## X3          4.81 0.668 8      3.27      6.35
##
## group = Control, emotion = happiness, elicitation = paused:
## session emmean      SE df lower.CL upper.CL
## X1          3.75 0.547 8      2.49      5.01
## X2          3.70 0.730 8      2.02      5.38
## X3          3.45 0.717 8      1.80      5.10
##
## group = Experimental, emotion = happiness, elicitation = paused:
## session emmean      SE df lower.CL upper.CL
## X1          3.48 0.547 8      2.21      4.74
## X2          3.13 0.730 8      1.45      4.81
## X3          3.65 0.717 8      2.00      5.31
##
## Confidence level used: 0.95
##
## $contrasts
## group = Control, emotion = anger, elicitation = genuine:

```

```

## contrast estimate SE df t.ratio p.value
## X1 - X2 0.018 0.272 8 0.066 1.0000
## X1 - X3 0.222 0.225 8 0.989 1.0000
## X2 - X3 0.204 0.130 8 1.564 0.4690
##
## group = Experimental, emotion = anger, elicitation = genuine:
## contrast estimate SE df t.ratio p.value
## X1 - X2 0.292 0.272 8 1.073 0.9443
## X1 - X3 -0.298 0.225 8 -1.327 0.6632
## X2 - X3 -0.590 0.130 8 -4.525 0.0058
##
## group = Control, emotion = fear, elicitation = genuine:
## contrast estimate SE df t.ratio p.value
## X1 - X2 0.120 0.365 8 0.329 1.0000
## X1 - X3 -0.334 0.477 8 -0.700 1.0000
## X2 - X3 -0.454 0.477 8 -0.952 1.0000
##
## group = Experimental, emotion = fear, elicitation = genuine:
## contrast estimate SE df t.ratio p.value
## X1 - X2 0.052 0.365 8 0.142 1.0000
## X1 - X3 0.128 0.477 8 0.268 1.0000
## X2 - X3 0.076 0.477 8 0.159 1.0000
##
## group = Control, emotion = happiness, elicitation = genuine:
## contrast estimate SE df t.ratio p.value
## X1 - X2 0.200 0.238 8 0.840 1.0000
## X1 - X3 0.600 0.419 8 1.432 0.5702
## X2 - X3 0.400 0.250 8 1.597 0.4468
##
## group = Experimental, emotion = happiness, elicitation = genuine:
## contrast estimate SE df t.ratio p.value
## X1 - X2 -0.160 0.238 8 -0.672 1.0000
## X1 - X3 0.038 0.419 8 0.091 1.0000
## X2 - X3 0.198 0.250 8 0.791 1.0000
##
## group = Control, emotion = anger, elicitation = paused:
## contrast estimate SE df t.ratio p.value
## X1 - X2 0.274 0.296 8 0.926 1.0000
## X1 - X3 0.146 0.333 8 0.438 1.0000
## X2 - X3 -0.128 0.341 8 -0.376 1.0000
##
## group = Experimental, emotion = anger, elicitation = paused:
## contrast estimate SE df t.ratio p.value
## X1 - X2 0.342 0.296 8 1.155 0.8440
## X1 - X3 0.526 0.333 8 1.579 0.4590
## X2 - X3 0.184 0.341 8 0.540 1.0000
##
## group = Control, emotion = fear, elicitation = paused:
## contrast estimate SE df t.ratio p.value
## X1 - X2 -0.050 0.321 8 -0.156 1.0000
## X1 - X3 0.026 0.425 8 0.061 1.0000
## X2 - X3 0.076 0.249 8 0.305 1.0000
##
## group = Experimental, emotion = fear, elicitation = paused:

```

```
## contrast estimate SE df t.ratio p.value
## X1 - X2 -0.034 0.321 8 -0.106 1.0000
## X1 - X3 -0.430 0.425 8 -1.011 1.0000
## X2 - X3 -0.396 0.249 8 -1.588 0.4526
##
## group = Control, emotion = happiness, elicitation = paused:
## contrast estimate SE df t.ratio p.value
## X1 - X2 0.050 0.257 8 0.194 1.0000
## X1 - X3 0.300 0.278 8 1.077 0.9383
## X2 - X3 0.250 0.164 8 1.529 0.4943
##
## group = Experimental, emotion = happiness, elicitation = paused:
## contrast estimate SE df t.ratio p.value
## X1 - X2 0.348 0.257 8 1.352 0.6403
## X1 - X3 -0.176 0.278 8 -0.632 1.0000
## X2 - X3 -0.524 0.164 8 -3.205 0.0376
##
## P value adjustment: bonferroni method for 3 tests
```

