

Analysis

Crowd Vs. Single

dPrime ANOVA

Error: ParticipantNumber

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Residuals	82	513.3	6.26		

Error: ParticipantNumber:Intensity

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity	4	270.7	67.68	178.4	<2e-16 ***
Residuals	328	124.5	0.38		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
GroupSize	1	38.94	38.94	119.2	<2e-16 ***
Residuals	82	26.79	0.33		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:Intensity:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity:GroupSize	4	6.71	1.6771	9.509	2.77e-07 ***
Residuals	328	57.85	0.1764		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Criterion ANOVA

Error: ParticipantNumber

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Residuals	82	86.13	1.05		

Error: ParticipantNumber:Intensity

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity	4	8.867	2.2169	25.84	<2e-16 ***
Residuals	328	28.144	0.0858		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
--	----	--------	---------	---------	--------

```

GroupSize 1 2.232 2.2324 16.57 0.000107 ***
Residuals 82 11.044 0.1347

```

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:Intensity:GroupSize

```

          Df Sum Sq Mean Sq F value Pr(>F)
Intensity:GroupSize 4 0.698 0.17440 3.822 0.00473 **
Residuals          328 14.968 0.04563

```

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

dPrime eta Squared

	stratum	term	df	sumsq	meansq
1	ParticipantNumber	Residuals	82	513.296	6.260
2	ParticipantNumber:Intensity	Intensity	4	270.710	67.678
3	ParticipantNumber:Intensity	Residuals	328	124.453	0.379
4	ParticipantNumber:GroupSize	GroupSize	1	38.940	38.940
5	ParticipantNumber:GroupSize	Residuals	82	26.794	0.327
6	ParticipantNumber:Intensity:GroupSize	Intensity:GroupSize	4	6.708	1.677
7	ParticipantNumber:Intensity:GroupSize	Residuals	328	57.852	0.176

	statistic	p.value	etasq	partial.etasq	omegasq	partial.omegasq	epsilonsq
1	NA	NA	0.494	0.899	0.480	0.773	0.480
2	178.366	0	0.261	0.824	0.260	0.648	0.260
3	NA	NA	0.120	0.683	0.064	0.313	0.064
4	119.173	0	0.037	0.402	0.037	0.209	0.037
5	NA	NA	0.026	0.317	0.012	0.078	0.012
6	9.509	0	0.006	0.104	0.006	0.039	0.006
7	NA	NA	NA	NA	NA	NA	NA

	cohens.f	power
1	2.979	1
2	2.163	1
3	1.467	1
4	0.820	1
5	0.681	1
6	0.341	1
7	NA	NA

Criterion eta Squared

	stratum	term	df	sumsq	meansq
1	ParticipantNumber	Residuals	82	86.126	1.050
2	ParticipantNumber:Intensity	Intensity	4	8.867	2.217
3	ParticipantNumber:Intensity	Residuals	328	28.144	0.086
4	ParticipantNumber:GroupSize	GroupSize	1	2.232	2.232
5	ParticipantNumber:GroupSize	Residuals	82	11.044	0.135
6	ParticipantNumber:Intensity:GroupSize	Intensity:GroupSize	4	0.698	0.174
7	ParticipantNumber:Intensity:GroupSize	Residuals	328	14.968	0.046

	statistic	p.value	etasq	partial.etasq	omegasq	partial.omegasq	epsilonsq
1	NA	NA	0.566	0.852	0.542	0.685	0.542
2	25.836	0.000	0.058	0.372	0.057	0.187	0.057
3	NA	NA	0.185	0.653	0.087	0.258	0.087

4	16.575	0.000	0.015	0.130	0.014	0.055	0.014
5	NA	NA	0.073	0.425	0.048	0.162	0.048
6	3.822	0.005	0.005	0.045	0.003	0.013	0.003
7	NA	NA	NA	NA	NA	NA	NA

	cohens.f	power
1	2.399	1.000
2	0.770	1.000
3	1.371	1.000
4	0.386	1.000
5	0.859	1.000
6	0.216	0.898
7	NA	NA

T-Tests & Cohen's Ds

One Sample t-test

```
data: single$meanCriterion
t = -4.2839, df = 82, p-value = 4.964e-05
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 -0.24999858 -0.09144292
sample estimates:
mean of x
-0.1707207

[1] 0.4702186
```

One Sample t-test

```
data: single$meanDprime
t = 16.712, df = 82, p-value < 2.2e-16
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 1.189591 1.511061
sample estimates:
mean of x
 1.350326

[1] 1.8344
```

One Sample t-test

```
data: crowd$meanCriterion
t = -7.7094, df = 82, p-value = 2.622e-11
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 -0.3452612 -0.2036267
sample estimates:
mean of x
-0.2744439
```

```
[1] 2.02539
```

One Sample t-test

```
data: crowd$meanDprime
t = 18.452, df = 82, p-value < 2.2e-16
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 1.591246 1.975808
sample estimates:
mean of x
 1.783527
```

```
[1] 2.02539
```

R Squared

```
[1] 0.6046796
```

Fear

dPrime ANOVA

Error: ParticipantNumber

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Residuals	29	77.17	2.661		

Error: ParticipantNumber:Intensity

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity	5	148.45	29.690	97.69	<2e-16 ***
Residuals	145	44.07	0.304		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
GroupSize	1	8.013	8.013	54.61	3.84e-08 ***
Residuals	29	4.255	0.147		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:Intensity:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity:GroupSize	5	5.37	1.0740	10.12	2.47e-08 ***
Residuals	145	15.38	0.1061		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Criterion ANOVA

Error: ParticipantNumber

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Residuals	29	36.82	1.27		

Error: ParticipantNumber:Intensity

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity	5	4.433	0.8865	11.25	3.54e-09 ***
Residuals	145	11.426	0.0788		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
GroupSize	1	2.215	2.2153	23.46	3.91e-05 ***
Residuals	29	2.738	0.0944		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:Intensity:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity:GroupSize	5	0.286	0.05720	2.332	0.0453 *
Residuals	145	3.557	0.02453		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

dPrime eta Squared

		stratum		term	df	sumsq	meansq
1		ParticipantNumber		Residuals	29	77.167	2.661
2		ParticipantNumber:Intensity		Intensity	5	148.448	29.690
3		ParticipantNumber:Intensity		Residuals	145	44.069	0.304
4		ParticipantNumber:GroupSize		GroupSize	1	8.013	8.013
5		ParticipantNumber:GroupSize		Residuals	29	4.255	0.147
6		ParticipantNumber:Intensity:GroupSize		Intensity:GroupSize	5	5.370	1.074
7		ParticipantNumber:Intensity:GroupSize		Residuals	145	15.381	0.106
	statistic	p.value	etasq	partial.etasq	omegasq	partial.omegasq	epsilonsq
1	NA	NA	0.255	0.834	0.245	0.660	0.245
2	97.687	0	0.490	0.906	0.488	0.795	0.489
3	NA	NA	0.146	0.741	0.095	0.429	0.095
4	54.609	0	0.026	0.343	0.026	0.172	0.026
5	NA	NA	0.014	0.217	0.004	0.030	0.004
6	10.125	0	0.018	0.259	0.016	0.112	0.016
7	NA	NA	NA	NA	NA	NA	NA
	cohens.f	power					
1	2.240	1.000					
2	3.107	1.000					
3	1.693	1.000					
4	0.722	1.000					
5	0.526	0.983					
6	0.591	1.000					

7 NA NA

Criterion eta Squared

	stratum	term	df	sumsq	meansq
1	ParticipantNumber	Residuals	29	36.821	1.270
2	ParticipantNumber:Intensity	Intensity	5	4.433	0.887
3	ParticipantNumber:Intensity	Residuals	145	11.426	0.079
4	ParticipantNumber:GroupSize	GroupSize	1	2.215	2.215
5	ParticipantNumber:GroupSize	Residuals	29	2.738	0.094
6	ParticipantNumber:Intensity:GroupSize	Intensity:GroupSize	5	0.286	0.057
7	ParticipantNumber:Intensity:GroupSize	Residuals	145	3.557	0.025

	statistic	p.value	etasq	partial.etasq	omegasq	partial.omegasq	epsilonsq
1	NA	NA	0.599	0.912	0.587	0.803	0.587
2	11.250	0.000	0.072	0.555	0.070	0.328	0.070
3	NA	NA	0.186	0.763	0.128	0.471	0.128
4	23.465	0.000	0.036	0.384	0.036	0.199	0.036
5	NA	NA	0.045	0.435	0.033	0.187	0.033
6	2.332	0.045	0.005	0.074	0.003	0.018	0.003
7	NA	NA	NA	NA	NA	NA	NA

	cohens.f	power
1	3.217	1.000
2	1.116	1.000
3	1.792	1.000
4	0.789	1.000
5	0.877	1.000
6	0.284	0.756
7	NA	NA

T Tests & Cohen's D

One Sample t-test

```
data: single$meanCriterion
t = -4.9551, df = 29, p-value = 2.874e-05
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
-0.3849591 -0.1600191
sample estimates:
mean of x
-0.2724891
```

[1] 0.9046779

One Sample t-test

```
data: single$meanDprime
t = 10.098, df = 29, p-value = 5.288e-11
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
```

```
0.6396206 0.9645227
sample estimates:
mean of x
0.8020716
```

```
[1] 1.843623
```

One Sample t-test

```
data: crowd$meanCriterion
t = -6.3626, df = 29, p-value = 5.921e-07
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
-0.5674005 -0.2913553
sample estimates:
mean of x
-0.4293779
```

```
[1] 1.161638
```

One Sample t-test

```
data: crowd$meanDprime
t = 11.418, df = 29, p-value = 3.003e-12
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
0.9033289 1.2975650
sample estimates:
mean of x
1.100447
```

```
[1] 2.084606
```

R Squared

```
[1] 0.7738742
```

Noise

dPrime ANOVA

```
Error: ParticipantNumber
      Df Sum Sq Mean Sq F value Pr(>F)
Residuals 29 127.1 4.382
```

```
Error: ParticipantNumber:Noise
      Df Sum Sq Mean Sq F value Pr(>F)
Noise 6 222.12 37.02 130 <2e-16 ***
```

```

Residuals 174 49.55 0.28
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:GroupSize
      Df Sum Sq Mean Sq F value Pr(>F)
GroupSize 1 45.85 45.85 92.63 1.56e-10 ***
Residuals 29 14.35 0.49
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:Noise:GroupSize
      Df Sum Sq Mean Sq F value Pr(>F)
Noise:GroupSize 6 6.478 1.0796 9.879 2.26e-09 ***
Residuals 174 19.015 0.1093
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Criterion ANOVA

```

Error: ParticipantNumber
      Df Sum Sq Mean Sq F value Pr(>F)
Residuals 29 42.22 1.456

Error: ParticipantNumber:Noise
      Df Sum Sq Mean Sq F value Pr(>F)
Noise 6 4.837 0.8062 11.73 4.98e-11 ***
Residuals 174 11.953 0.0687
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:GroupSize
      Df Sum Sq Mean Sq F value Pr(>F)
GroupSize 1 0.11 0.1102 0.745 0.395
Residuals 29 4.29 0.1479

Error: ParticipantNumber:Noise:GroupSize
      Df Sum Sq Mean Sq F value Pr(>F)
Noise:GroupSize 6 0.553 0.09224 3.099 0.00657 **
Residuals 174 5.178 0.02976
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

dPrime eta Squared

	stratum	term	df	sumsq	meansq
1	ParticipantNumber	Residuals	29	127.084	4.382
2	ParticipantNumber:Noise	Noise	6	222.121	37.020
3	ParticipantNumber:Noise	Residuals	174	49.549	0.285
4	ParticipantNumber:GroupSize	GroupSize	1	45.849	45.849
5	ParticipantNumber:GroupSize	Residuals	29	14.354	0.495
6	ParticipantNumber:Noise:GroupSize	Noise:GroupSize	6	6.478	1.080


```

7 ParticipantNumber:Noise:GroupSize      Residuals 174 19.015 0.109
  statistic p.value etasq partial.etasq omegasq partial.omegasq epsilonsq
1      NA      NA 0.262      0.870 0.256      0.730 0.256
2 130.004      0 0.459      0.921 0.457      0.828 0.457
3      NA      NA 0.102      0.723 0.063      0.399 0.063
4  92.630      0 0.095      0.707 0.094      0.499 0.094
5      NA      NA 0.030      0.430 0.023      0.196 0.023
6   9.879      0 0.013      0.254 0.012      0.113 0.012
7      NA      NA  NA      NA      NA      NA      NA
  cohens.f power
1   2.585      1
2   3.418      1
3   1.614      1
4   1.553      1
5   0.869      1
6   0.584      1
7      NA      NA

```

Criterion eta Squared

```

              stratum      term df  sumsq meansq statistic
1      ParticipantNumber Residuals 29 42.217 1.456      NA
2      ParticipantNumber:Noise Noise 6 4.837 0.806 11.735
3      ParticipantNumber:Noise Residuals 174 11.953 0.069      NA
4      ParticipantNumber:GroupSize GroupSize 1 0.110 0.110 0.745
5      ParticipantNumber:GroupSize Residuals 29 4.290 0.148      NA
6 ParticipantNumber:Noise:GroupSize Noise:GroupSize 6 0.553 0.092 3.099
7 ParticipantNumber:Noise:GroupSize Residuals 174 5.178 0.030      NA
  p.value etasq partial.etasq omegasq partial.omegasq epsilonsq cohens.f power
1      NA 0.611      0.891 0.598      0.768 0.598 2.855 1.000
2 0.000 0.070      0.483 0.067      0.272 0.067 0.967 1.000
3      NA 0.173      0.698 0.098      0.352 0.098 1.519 1.000
4 0.395 0.002      0.021 0.001      0.006 0.001 0.146 0.486
5      NA 0.062      0.453 0.050      0.215 0.050 0.910 1.000
6 0.007 0.008      0.097 0.005      0.029 0.005 0.327 0.922
7      NA  NA      NA      NA      NA      NA      NA  NA

```

T Tests & Cohen's D

One Sample t-test

```

data: single$meanCriterion
t = -3.8927, df = 29, p-value = 0.0005349
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 -0.3726436 -0.1159417
sample estimates:
mean of x
-0.2442926

```

```
[1] 0.7107106
```

One Sample t-test

```
data: single$meanDprime
t = 13.055, df = 29, p-value = 1.139e-13
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 1.008519 1.383216
sample estimates:
mean of x
 1.195867

[1] 2.383499
```

One Sample t-test

```
data: crowd$meanCriterion
t = -4.5498, df = 29, p-value = 8.847e-05
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 -0.4010714 -0.1523139
sample estimates:
mean of x
 -0.2766926

[1] 0.8306784
```

One Sample t-test

```
data: crowd$meanDprime
t = 15.244, df = 29, p-value = 2.212e-15
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 1.607572 2.105763
sample estimates:
mean of x
 1.856667

[1] 2.783232
```

R Squared

```
[1] 0.6656999
```

Crowd Size (Intensity Collapsed)

dPrime ANOVA

```
Error: ParticipantNumber
      Df Sum Sq Mean Sq F value Pr(>F)
Residuals 29  29.68   1.024

Error: ParticipantNumber:GroupSize
      Df Sum Sq Mean Sq F value Pr(>F)
GroupSize  5  12.06   2.4111   27.54 <2e-16 ***
Residuals 145  12.70   0.0876
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Criterion ANOVA

```
Error: ParticipantNumber
      Df Sum Sq Mean Sq F value Pr(>F)
Residuals 29  27.85   0.9605

Error: ParticipantNumber:GroupSize
      Df Sum Sq Mean Sq F value Pr(>F)
GroupSize  5   0.409 0.08180   3.953 0.00217 **
Residuals 145   3.000 0.02069
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

dPrime eta Squared

	stratum	term	df	sumsq	meansq	statistic	p.value
1	ParticipantNumber	Residuals	29	29.683	1.024	NA	NA
2	ParticipantNumber:GroupSize	GroupSize	5	12.056	2.411	27.535	0
3	ParticipantNumber:GroupSize	Residuals	145	12.697	0.088	NA	NA
	etasq	partial.etasq	omegasq	partial.omegasq	epsilonsq	cohens.f	power
1	0.545	0.700	0.498	0.633	0.499	1.529	1
2	0.221	0.487	0.213	0.424	0.213	0.974	1
3	NA	NA	NA	NA	NA	NA	NA

Criterion eta Squared

	stratum	term	df	sumsq	meansq	statistic	p.value
1	ParticipantNumber	Residuals	29	27.854	0.960	NA	NA
2	ParticipantNumber:GroupSize	GroupSize	5	0.409	0.082	3.953	0.002
3	ParticipantNumber:GroupSize	Residuals	145	3.000	0.021	NA	NA
	etasq	partial.etasq	omegasq	partial.omegasq	epsilonsq	cohens.f	power
1	0.891	0.903	0.871	0.880	0.872	3.047	1.00
2	0.013	0.120	0.010	0.076	0.010	0.369	0.95
3	NA	NA	NA	NA	NA	NA	NA

Crowd Size (Group Collapsed)

dPrime ANOVA

```
Error: ParticipantNumber
      Df Sum Sq Mean Sq F value Pr(>F)
Residuals 29  43.46   1.499

Error: ParticipantNumber:Intensity
      Df Sum Sq Mean Sq F value Pr(>F)
Intensity  5 208.15   41.63  187.4 <2e-16 ***
Residuals 145  32.21    0.22
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Criterion ANOVA

```
Error: ParticipantNumber
      Df Sum Sq Mean Sq F value Pr(>F)
Residuals 29  31.53   1.087

Error: ParticipantNumber:Intensity
      Df Sum Sq Mean Sq F value Pr(>F)
Intensity  5 14.220  2.8441  59.74 <2e-16 ***
Residuals 145  6.903  0.0476
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

dPrime eta Squared

	stratum	term	df	sumsq	meansq	statistic	p.value
1	ParticipantNumber	Residuals	29	43.459	1.499	NA	NA
2	ParticipantNumber:Intensity	Intensity	5	208.154	41.631	187.409	0
3	ParticipantNumber:Intensity	Residuals	145	32.210	0.222	NA	NA
	etasq	partial.etasq	omegasq	partial.omegasq	epsilonsq	cohens.f	power
1	0.153	0.574	0.130	0.481	0.130	1.162	1
2	0.733	0.866	0.729	0.838	0.729	2.542	1
3	NA	NA	NA	NA	NA	NA	NA

Criterion eta Squared

	stratum	term	df	sumsq	meansq	statistic	p.value
1	ParticipantNumber	Residuals	29	31.531	1.087	NA	NA
2	ParticipantNumber:Intensity	Intensity	5	14.220	2.844	59.745	0
3	ParticipantNumber:Intensity	Residuals	145	6.903	0.048	NA	NA
	etasq	partial.etasq	omegasq	partial.omegasq	epsilonsq	cohens.f	power
1	0.599	0.820	0.572	0.779	0.573	2.137	1
2	0.270	0.673	0.265	0.620	0.266	1.435	1
3	NA	NA	NA	NA	NA	NA	NA

Identity

dPrime ANOVA

Error: ParticipantNumber

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Residuals	29	205.8	7.097		

Error: ParticipantNumber:Intensity

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity	5	485.9	97.18	157.1	<2e-16 ***
Residuals	145	89.7	0.62		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:IdentityCondition

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
IdentityCondition	2	58.04	29.018	59.81	8.02e-15 ***
Residuals	58	28.14	0.485		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:Intensity:IdentityCondition

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity:IdentityCondition	10	21.75	2.1746	13.96	<2e-16 ***
Residuals	290	45.18	0.1558		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Criterion ANOVA

Error: ParticipantNumber

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Residuals	29	70.36	2.426		

Error: ParticipantNumber:Intensity

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity	5	44.41	8.882	50.47	<2e-16 ***
Residuals	145	25.52	0.176		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:IdentityCondition

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
IdentityCondition	2	0.007	0.00362	0.044	0.957
Residuals	58	4.829	0.08326		

Error: ParticipantNumber:Intensity:IdentityCondition

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity:IdentityCondition	10	3.819	0.3819	10.79	1.39e-15 ***
Residuals	290	10.265	0.0354		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

dPrime eta Squared

	stratum					term	df	
1	ParticipantNumber					Residuals	29	
2	ParticipantNumber:Intensity					Intensity	5	
3	ParticipantNumber:Intensity					Residuals	145	
4	ParticipantNumber:IdentityCondition					IdentityCondition	2	
5	ParticipantNumber:IdentityCondition					Residuals	58	
6	ParticipantNumber:Intensity:IdentityCondition				Intensity:IdentityCondition		10	
7	ParticipantNumber:Intensity:IdentityCondition					Residuals	290	
	sumsq	meansq	statistic	p.value	etasq	partial.etasq	omegasq	partial.omegasq
1	205.807	7.097	NA	NA	0.220	0.820	0.215	0.705
2	485.921	97.184	157.121	0	0.520	0.915	0.519	0.852
3	89.687	0.619	NA	NA	0.096	0.665	0.072	0.444
4	58.036	29.018	59.811	0	0.062	0.562	0.062	0.407
5	28.139	0.485	NA	NA	0.030	0.384	0.020	0.185
6	21.746	2.175	13.957	0	0.023	0.325	0.022	0.194
7	45.184	0.156	NA	NA	NA	NA	NA	NA
	epsilonsq	cohens.f	power					
1	0.215	2.134	1					
2	0.519	3.279	1					
3	0.072	1.409	1					
4	0.062	1.133	1					
5	0.020	0.789	1					
6	0.022	0.694	1					
7	NA	NA	NA					

Criterion eta Squared

	stratum					term	df	
1	ParticipantNumber					Residuals	29	
2	ParticipantNumber:Intensity					Intensity	5	
3	ParticipantNumber:Intensity					Residuals	145	
4	ParticipantNumber:IdentityCondition					IdentityCondition	2	
5	ParticipantNumber:IdentityCondition					Residuals	58	
6	ParticipantNumber:Intensity:IdentityCondition				Intensity:IdentityCondition		10	
7	ParticipantNumber:Intensity:IdentityCondition					Residuals	290	
	sumsq	meansq	statistic	p.value	etasq	partial.etasq	omegasq	partial.omegasq
1	70.357	2.426	NA	NA	0.442	0.873	0.435	0.784
2	44.410	8.882	50.465	0.000	0.279	0.812	0.278	0.698
3	25.521	0.176	NA	NA	0.160	0.713	0.128	0.516
4	0.007	0.004	0.044	0.957	0.000	0.001	0.000	-0.003
5	4.829	0.083	NA	NA	0.030	0.320	0.017	0.127
6	3.819	0.382	10.788	0.000	0.024	0.271	0.022	0.153
7	10.265	0.035	NA	NA	NA	NA	NA	NA
	epsilonsq	cohens.f	power					
1	0.435	2.618	1.000					
2	0.278	2.080	1.000					
3	0.128	1.577	1.000					
4	0.000	0.027	0.066					
5	0.017	0.686	1.000					
6	0.022	0.610	1.000					
7	NA	NA	NA					

T Tests & Cohen's D

One Sample t-test

```
data: single$meanCriterion
t = -5.7778, df = 29, p-value = 2.935e-06
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 -0.6000798 -0.2863137
sample estimates:
 mean of x
-0.4431968

[1] 1.054877
```

One Sample t-test

```
data: single$meanDprime
t = 11.049, df = 29, p-value = 6.546e-12
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 0.8958371 1.3028068
sample estimates:
 mean of x
 1.099322

[1] 2.017317
```

One Sample t-test

```
data: crowd$meanCriterion
t = -4.5498, df = 29, p-value = 8.847e-05
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 -0.4010714 -0.1523139
sample estimates:
 mean of x
-0.2766926

[1] 0.8306784
```

One Sample t-test

```
data: crowd$meanDprime
t = 15.244, df = 29, p-value = 2.212e-15
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 1.607572 2.105763
```

```
sample estimates:
mean of x
1.856667
```

```
[1] 2.783232
```

Gender By Group Size (No Mixed Group)

dPrime ANOVA

```
Error: ParticipantNumber
```

```
      Df Sum Sq Mean Sq F value Pr(>F)
Residuals 37  171.2    4.626
```

```
Error: ParticipantNumber:Intensity
```

```
      Df Sum Sq Mean Sq F value Pr(>F)
Intensity  5  796.7  159.33  332.6 <2e-16 ***
Residuals 185   88.6    0.48
```

```
---
```

```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Error: ParticipantNumber:Gender
```

```
      Df Sum Sq Mean Sq F value    Pr(>F)
Gender   1  7.357    7.357   16.99 0.000204 ***
Residuals 37 16.024    0.433
```

```
---
```

```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Error: ParticipantNumber:GroupSize
```

```
      Df Sum Sq Mean Sq F value    Pr(>F)
GroupSize 1  88.16   88.16  165.8 3.08e-15 ***
Residuals 37  19.68    0.53
```

```
---
```

```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Error: ParticipantNumber:Intensity:Gender
```

```
      Df Sum Sq Mean Sq F value    Pr(>F)
Intensity:Gender  5    5.1  1.0191   4.738 0.000427 ***
Residuals        185   39.8  0.2151
```

```
---
```

```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Error: ParticipantNumber:Intensity:GroupSize
```

```
      Df Sum Sq Mean Sq F value    Pr(>F)
Intensity:GroupSize  5  26.39   5.277  22.37 <2e-16 ***
Residuals          185  43.64   0.236
```

```
---
```

```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Error: ParticipantNumber:Gender:GroupSize
```

```
      Df Sum Sq Mean Sq F value    Pr(>F)
Gender:GroupSize  1  0.208  0.2078   0.75  0.392
```


Residuals 37 10.257 0.2772

Error: ParticipantNumber:Intensity:Gender:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity:Gender:GroupSize	5	2.06	0.4122	2.063	0.0719 .
Residuals	185	36.96	0.1998		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Criterion ANOVA

Error: ParticipantNumber

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Residuals	37	135	3.649		

Error: ParticipantNumber:Intensity

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity	5	65.31	13.062	45.68	<2e-16 ***
Residuals	185	52.90	0.286		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:Gender

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Gender	1	34.50	34.5	85.58	3.66e-11 ***
Residuals	37	14.91	0.4		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
GroupSize	1	1.022	1.0216	4.118	0.0497 *
Residuals	37	9.179	0.2481		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:Intensity:Gender

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity:Gender	5	4.504	0.9008	13.02	7.34e-11 ***
Residuals	185	12.799	0.0692		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:Intensity:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Intensity:GroupSize	5	5.422	1.0845	23.24	<2e-16 ***
Residuals	185	8.633	0.0467		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:Gender:GroupSize

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
--	----	--------	---------	---------	--------

```

Gender:GroupSize  1  2.148  2.1484   14.89 0.000441 ***
Residuals        37  5.340  0.1443
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Error: ParticipantNumber:Intensity:Gender:GroupSize
              Df Sum Sq Mean Sq F value Pr(>F)
Intensity:Gender:GroupSize  5  0.574  0.11476   2.289 0.0477 *
Residuals                185  9.276  0.05014
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

dPrime eta Squared

	stratum		term	df
1	ParticipantNumber		Residuals	37
2	ParticipantNumber:Intensity		Intensity	5
3	ParticipantNumber:Intensity		Residuals	185
4	ParticipantNumber:Gender		Gender	1
5	ParticipantNumber:Gender		Residuals	37
6	ParticipantNumber:GroupSize		GroupSize	1
7	ParticipantNumber:GroupSize		Residuals	37
8	ParticipantNumber:Intensity:Gender		Intensity:Gender	5
9	ParticipantNumber:Intensity:Gender		Residuals	185
10	ParticipantNumber:Intensity:GroupSize		Intensity:GroupSize	5
11	ParticipantNumber:Intensity:GroupSize		Residuals	185
12	ParticipantNumber:Gender:GroupSize		Gender:GroupSize	1
13	ParticipantNumber:Gender:GroupSize		Residuals	37
14	ParticipantNumber:Intensity:Gender:GroupSize		Intensity:Gender:GroupSize	5
15	ParticipantNumber:Intensity:Gender:GroupSize		Residuals	185

	sumsq	meansq	statistic	p.value	etasq	partial.etasq	omegasq
1	171.176	4.626	NA	NA	0.127	0.822	0.121
2	796.656	159.331	332.554	0.000	0.589	0.956	0.588
3	88.636	0.479	NA	NA	0.066	0.706	0.038
4	7.357	7.357	16.987	0.000	0.005	0.166	0.005
5	16.024	0.433	NA	NA	0.012	0.302	0.006
6	88.155	88.155	165.768	0.000	0.065	0.705	0.065
7	19.677	0.532	NA	NA	0.015	0.347	0.009
8	5.096	1.019	4.738	0.000	0.004	0.121	0.003
9	39.797	0.215	NA	NA	0.029	0.518	0.002
10	26.385	5.277	22.372	0.000	0.020	0.417	0.019
11	43.637	0.236	NA	NA	0.032	0.541	0.005
12	0.208	0.208	0.750	0.392	0.000	0.006	0.000
13	10.257	0.277	NA	NA	0.008	0.217	0.002
14	2.061	0.412	2.063	0.072	0.002	0.053	0.001
15	36.963	0.200	NA	NA	NA	NA	NA

	partial.omegasq	epsilonsq	cohens.f	power
1	0.473	0.121	2.152	1.000
2	0.814	0.588	4.642	1.000
3	0.221	0.038	1.549	1.000
4	0.038	0.005	0.446	1.000
5	0.045	0.006	0.658	1.000
6	0.326	0.065	1.544	1.000

7	0.063	0.009	0.730	1.000
8	0.022	0.003	0.371	0.987
9	0.015	0.002	1.038	1.000
10	0.122	0.019	0.845	1.000
11	0.035	0.005	1.087	1.000
12	0.000	0.000	0.075	0.175
13	0.015	0.002	0.527	0.995
14	0.006	0.001	0.236	0.694
15	NA	NA	NA	NA

Criterion eta Squared

				stratum			term	df
1	ParticipantNumber				Residuals			37
2	ParticipantNumber:Intensity				Intensity			5
3	ParticipantNumber:Intensity				Residuals			185
4	ParticipantNumber:Gender				Gender			1
5	ParticipantNumber:Gender				Residuals			37
6	ParticipantNumber:GroupSize				GroupSize			1
7	ParticipantNumber:GroupSize				Residuals			37
8	ParticipantNumber:Intensity:Gender				Intensity:Gender			5
9	ParticipantNumber:Intensity:Gender				Residuals			185
10	ParticipantNumber:Intensity:GroupSize				Intensity:GroupSize			5
11	ParticipantNumber:Intensity:GroupSize				Residuals			185
12	ParticipantNumber:Gender:GroupSize				Gender:GroupSize			1
13	ParticipantNumber:Gender:GroupSize				Residuals			37
14	ParticipantNumber:Intensity:Gender:GroupSize				Intensity:Gender:GroupSize			5
15	ParticipantNumber:Intensity:Gender:GroupSize				Residuals			185
	sumsq	meansq	statistic	p.value	etasq	partial.etasq	omegasq	partial.omegasq
1	135.001	3.649	NA	NA	0.373	0.936	0.368	0.744
2	65.311	13.062	45.676	0.000	0.181	0.876	0.180	0.587
3	52.905	0.286	NA	NA	0.146	0.851	0.121	0.488
4	34.499	34.499	85.584	0.000	0.095	0.788	0.095	0.430
5	14.915	0.403	NA	NA	0.041	0.617	0.036	0.222
6	1.022	1.022	4.118	0.050	0.003	0.099	0.003	0.021
7	9.179	0.248	NA	NA	0.025	0.497	0.020	0.138
8	4.504	0.901	13.019	0.000	0.012	0.327	0.012	0.085
9	12.799	0.069	NA	NA	0.035	0.580	0.010	0.072
10	5.422	1.084	23.238	0.000	0.015	0.369	0.014	0.102
11	8.633	0.047	NA	NA	0.024	0.482	-0.002	-0.014
12	2.148	2.148	14.886	0.000	0.006	0.188	0.006	0.044
13	5.340	0.144	NA	NA	0.015	0.365	0.010	0.071
14	0.574	0.115	2.289	0.048	0.002	0.058	0.001	0.007
15	9.276	0.050	NA	NA	NA	NA	NA	NA
	epsilonsq	cohens.f	power					
1	0.368	3.815	1.000					
2	0.180	2.653	1.000					
3	0.121	2.388	1.000					
4	0.095	1.929	1.000					
5	0.036	1.268	1.000					
6	0.003	0.332	0.995					
7	0.020	0.995	1.000					
8	0.012	0.697	1.000					

9	0.010	1.175	1.000
10	0.014	0.765	1.000
11	-0.002	0.965	1.000
12	0.006	0.481	1.000
13	0.010	0.759	1.000
14	0.001	0.249	0.746
15	NA	NA	NA

T Tests & Cohen's D

One Sample t-test

```
data: singleMale
t = -8.8614, df = 37, p-value = 1.111e-10
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 -0.6462908 -0.4057401
sample estimates:
mean of x
-0.5260155

[1] 1.43751
```

One Sample t-test

```
data: crowdMale
t = -5.37, df = 37, p-value = 4.477e-06
alternative hypothesis: true mean is not equal to 0
95 percent confidence interval:
 -0.293135 -0.132525
sample estimates:
mean of x
-0.21283

[1] 0.8711228
```

Paired t-test

```
data: singleMale and crowdMale
t = -7.6201, df = 37, p-value = 4.299e-09
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.3964613 -0.2299096
sample estimates:
mean of the differences
-0.3131855

[1] 1.006644
```

All Gender Combinations & Low-High Intensity Split

dPrime ANOVA

Error: ParticipantNumber

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Residuals	37	88.82	2.4		

Error: ParticipantNumber:IntensityType

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
IntensityType	1	275.75	275.75	469.5	<2e-16 ***
Residuals	37	21.73	0.59		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:GroupType

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
GroupType	4	45.48	11.370	74.33	<2e-16 ***
Residuals	148	22.64	0.153		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:IntensityType:GroupType

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
IntensityType:GroupType	4	9.841	2.4604	24.78	1.02e-15 ***
Residuals	148	14.694	0.0993		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Criterion ANOVA

Error: ParticipantNumber

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Residuals	37	61.62	1.665		

Error: ParticipantNumber:IntensityType

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
IntensityType	1	17.97	17.966	46.5	4.95e-08 ***
Residuals	37	14.30	0.386		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:GroupType

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
GroupType	4	16.02	4.006	49.52	<2e-16 ***
Residuals	148	11.97	0.081		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Error: ParticipantNumber:IntensityType:GroupType

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
--	----	--------	---------	---------	--------

```

IntensityType:GroupType    4  4.261  1.0653  39.75 <2e-16 ***
Residuals                  148  3.966  0.0268
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

dPrime eta Squared

	stratum	term	df	sumsq
1	ParticipantNumber	Residuals	37	88.815
2	ParticipantNumber:IntensityType	IntensityType	1	275.753
3	ParticipantNumber:IntensityType	Residuals	37	21.729
4	ParticipantNumber:GroupType	GroupType	4	45.479
5	ParticipantNumber:GroupType	Residuals	148	22.638
6	ParticipantNumber:IntensityType:GroupType	IntensityType:GroupType	4	9.841
7	ParticipantNumber:IntensityType:GroupType	Residuals	148	14.694

	meansq	statistic	p.value	etasq	partial.etasq	omegasq	partial.omegasq
1	2.400	NA	NA	0.185	0.858	0.178	0.693
2	275.753	469.543	0	0.576	0.949	0.575	0.880
3	0.587	NA	NA	0.045	0.597	0.038	0.324
4	11.370	74.333	0	0.095	0.756	0.094	0.544
5	0.153	NA	NA	0.047	0.606	0.017	0.174
6	2.460	24.782	0	0.021	0.401	0.020	0.200
7	0.099	NA	NA	NA	NA	NA	NA

	epsilonsq	cohens.f	power
1	0.178	2.459	1
2	0.576	4.332	1
3	0.038	1.216	1
4	0.094	1.759	1
5	0.017	1.241	1
6	0.020	0.818	1
7	NA	NA	NA

Criterion eta Squared

	stratum	term	df	sumsq
1	ParticipantNumber	Residuals	37	61.616
2	ParticipantNumber:IntensityType	IntensityType	1	17.966
3	ParticipantNumber:IntensityType	Residuals	37	14.296
4	ParticipantNumber:GroupType	GroupType	4	16.024
5	ParticipantNumber:GroupType	Residuals	148	11.972
6	ParticipantNumber:IntensityType:GroupType	IntensityType:GroupType	4	4.261
7	ParticipantNumber:IntensityType:GroupType	Residuals	148	3.966

	meansq	statistic	p.value	etasq	partial.etasq	omegasq	partial.omegasq
1	1.665	NA	NA	0.474	0.940	0.466	0.856
2	17.966	46.498	0	0.138	0.819	0.138	0.638
3	0.386	NA	NA	0.110	0.783	0.102	0.566
4	4.006	49.522	0	0.123	0.802	0.122	0.610
5	0.081	NA	NA	0.092	0.751	0.062	0.440
6	1.065	39.751	0	0.033	0.518	0.032	0.290
7	0.027	NA	NA	NA	NA	NA	NA

	epsilonsq	cohens.f	power
1	0.466	3.941	1
2	0.138	2.128	1

3	0.102	1.899	1
4	0.122	2.010	1
5	0.062	1.737	1
6	0.032	1.037	1
7	NA	NA	NA