Independent Samples T-Test

							95% Confidence Interval	
		Statistic	df	p		Effect Size	Lower	Upper
Primary follicle	**Student's t**	2.785	32.0	0.009	Cohen's d	0.957	0.2376	1.6632
	Mann-Whitney U	68.0		0.007	Rank biserial correlation	-0.5278		
secondary follicle	**Student's t**	1.025	32.0	0.313	Cohen's d	0.352	-0.3293	1.0285
	Mann-Whitney U	100.5		0.132	Rank biserial correlation	-0.3021		
Tertiary follicle	**Student's t**	3.133[a]	32.0	0.004	Cohen's d	1.076	0.3462	1.7918
	Mann-Whitney U	68.5		0.006	Rank biserial correlation	-0.5243		
Graffian follicle	**Student's t**	2.134[a]	32.0	0.041	Cohen's d	0.733	0.0310	1.4245
	Mann-Whitney U	102.0		0.135	Rank biserial correlation	-0.2917		
Atretic follicle	**Student's t**	-2.282	32.0	0.029	Cohen's d	-0.784	-1.4786	-0.0784
	Mann-Whitney U	80.5		0.026	Rank biserial correlation	0.4410		
CL	**Student's t**	-0.665	32.0	0.511	Cohen's d	-0.229	-0.9026	0.4489
	Mann-Whitney U	132.0		0.688	Rank biserial correlation	0.0833		
Duration	**Student's t**	0.000	34.0	1.000	Cohen's d	0.000	-0.6533	0.6533
	Mann-Whitney U	162.0		1.000	Rank biserial correlation	0.0000		

Note. H_a $\mu_{CTL} \neq \mu_{VDD}$

[a] Levene's test is significant ($p < .05$), suggesting a violation of the assumption of equal variances

[3]

Assumptions

Normality Test (Shapiro-Wilk)

	W	p
Primary follicle	0.817	<.001
secondary follicle	0.921	0.018
Tertiary follicle	0.925	0.023
Graffian follicle	0.857	<.001
Atretic follicle	0.904	0.006
CL	0.965	0.335
Duration	0.766	<.001

Note. A low p-value suggests a violation of the assumption of normality

Homogeneity of Variances Test (Levene's)

	F	df	df2	p
Primary follicle	0.625	1	32	0.435
secondary follicle	2.527	1	32	0.122
Tertiary follicle	17.975	1	32	<.001
Graffian follicle	12.052	1	32	0.002
Atretic follicle	1.843	1	32	0.184
CL	0.435	1	32	0.514
Duration	1.49e-30	1	34	1.000

Note. A low p-value suggests a violation of the assumption of equal variances

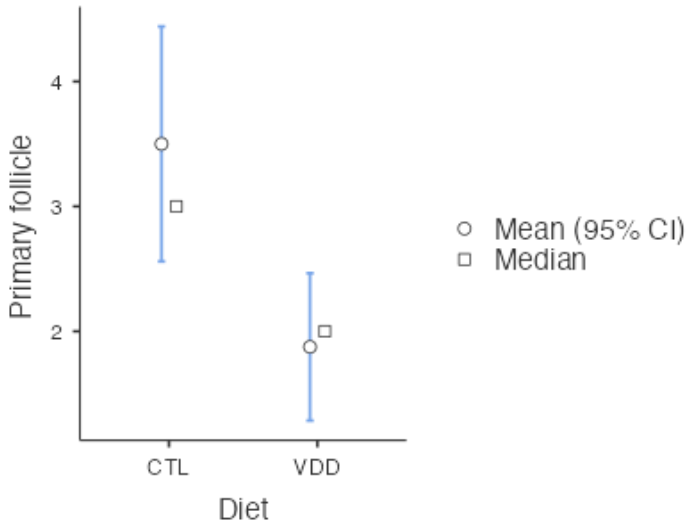
[4]

Group Descriptives

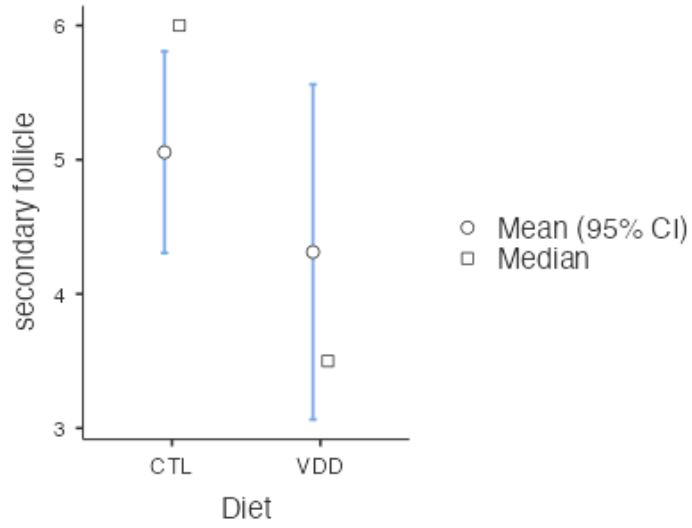
	Group	N	Mean	Median	SD	SE
Primary follicle	**CTL**	18	3.50	3.00	2.04	0.480
	VDD	16	1.875	2.00	1.204	0.301
secondary follicle	**CTL**	18	5.06	6.00	1.63	0.383
	VDD	16	4.313	3.50	2.549	0.637
Tertiary follicle	**CTL**	18	2.67	2.00	1.71	0.404
	VDD	16	1.188	1.00	0.834	0.209
Graffian follicle	**CTL**	18	2.17	1.00	2.55	0.601
	VDD	16	0.750	1.00	0.775	0.194
Atretic follicle	**CTL**	18	1.33	1.00	1.33	0.313
	VDD	16	2.688	2.00	2.089	0.522
CL	**CTL**	18	4.94	5.00	2.69	0.634
	VDD	16	5.500	5.00	2.098	0.524
Duration	**CTL**	18	100.00	90.00	38.50	9.075
	VDD	18	100.000	90.00	38.501	9.075

Plots

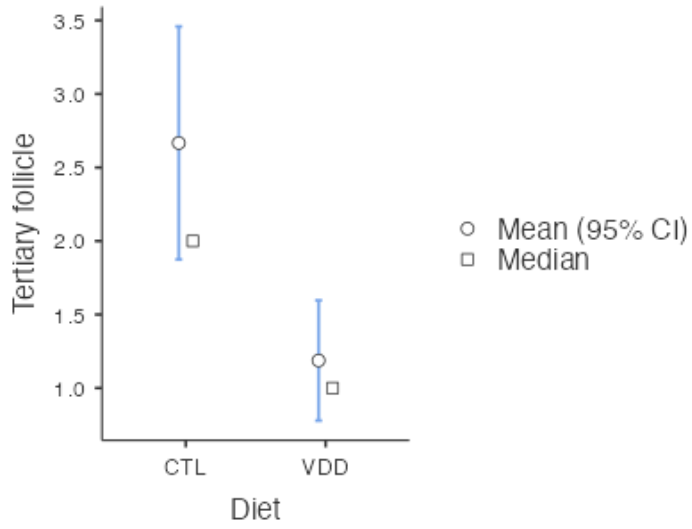
Primary follicle



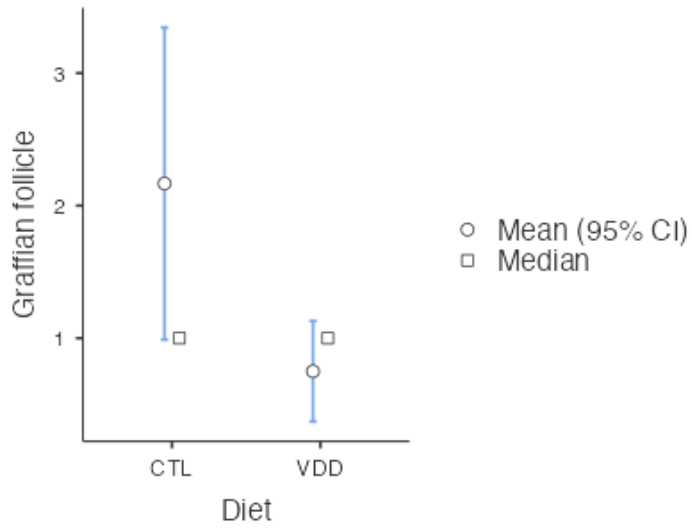
secondary follicle



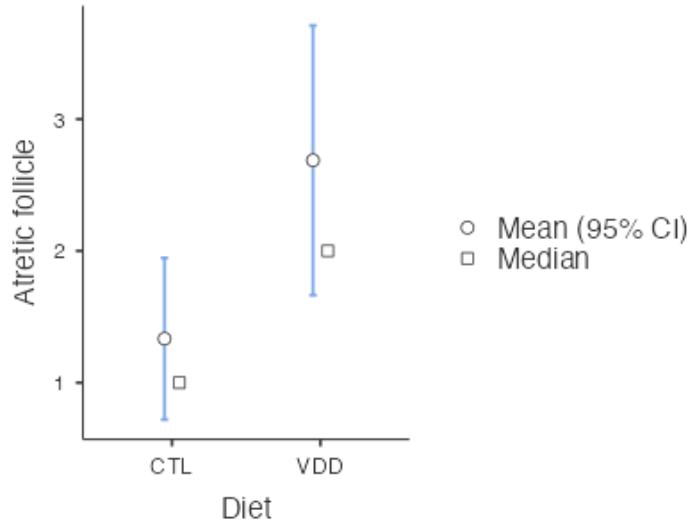
Tertiary follicle



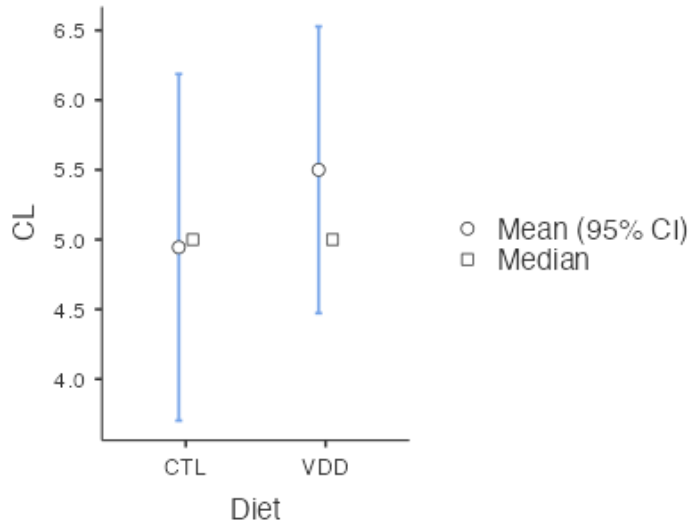
Graffian follicle



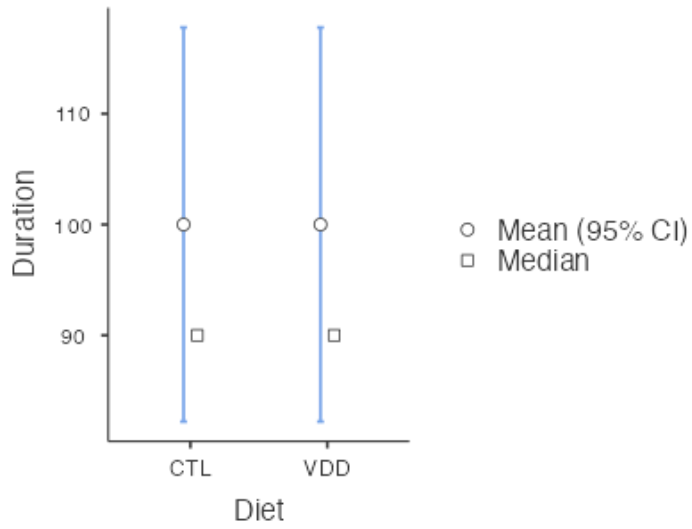
Atretic follicle


Atretic follicle
3
2
1
CTL
VDD
Diet
Mean (95% CI)
Median

CL


CL
6.5
6.0
5.5
5.0
4.5
4.0
CTL
VDD
Diet
Mean (95% CI)
Median

Duration


Duration
110
100
90
CTL
VDD
Diet
Mean (95% CI)
Median

ANOVA

ANOVA - Primary follicle

	Sum of Squares	df	Mean Square	F	p	η²
Overall model	46.21	5	9.24	3.91	0.008	
Diet	22.51	1	22.51	9.34	0.005	0.198
Duration	17.23	2	8.62	3.57	0.041	0.152
Diet ✻ Duration	6.47	2	3.23	1.34	0.278	0.057
Residuals	67.50	28	2.41			

Assumption Checks

Homogeneity of Variances Test (Levene's)

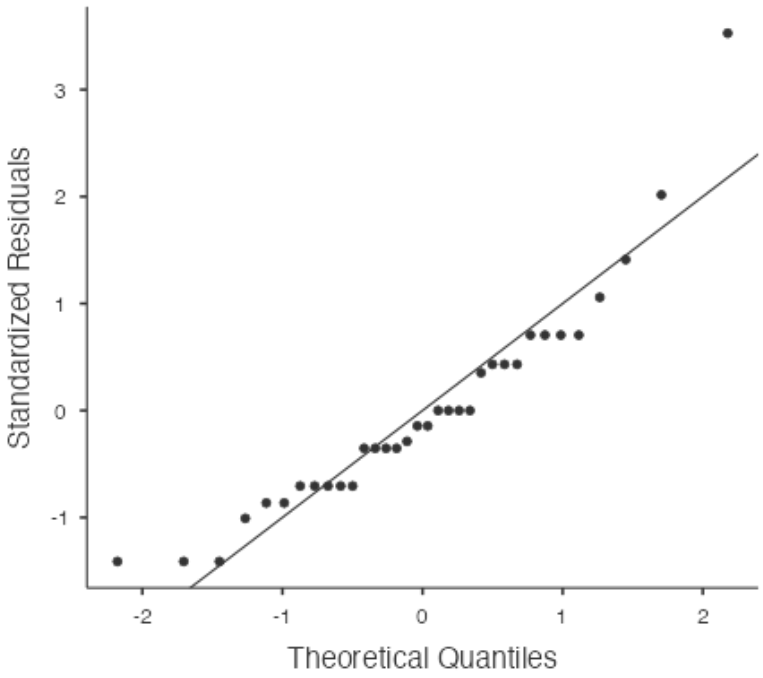
F	df1	df2	p
4.08	5	28	0.007

Normality Test (Shapiro-Wilk)

Statistic	p
0.901	0.005

Overall, there was a difference [F0.5(5,28)=3.91, p=0.008]
with diet [F0.5(2,28)=9.34, p=0.005] and
duration [F0.5(2,28)=3.57, p=0.041] alone had effects
Post hoc tests show diet had a significant effect (p=0.005, d=1.05)
CTL60 vs VDD60 had no effect while both diet & duration affected
CTL60 vs VDD90 (p=0.026, d=1.9322) &
CTL60 vs VDD150 (p=0.005, d=2.4474)

Q-Q Plot



Post Hoc Tests

Post Hoc Comparisons - Diet

Comparison										95% Confidence Interval	
Diet		Diet	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
CTL	-	VDD	1.63	0.535	28.0	3.06	0.005	0.005	1.05	0.290	1.81

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Duration

Comparison										95% Confidence Interval	
Duration		Duration	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
60	-	90	1.450	0.650	28.0	2.232	0.083	0.101	0.9339	0.0397	1.828
	-	150	1.600	0.665	28.0	2.407	0.058	0.069	1.0305	0.1092	1.952
90	-	150	0.150	0.650	28.0	0.231	0.971	1.000	0.0966	-0.7607	0.954

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Diet ✻ Duration

Comparison											95% Confidence Interval	
Diet	Duration		Diet	Duration	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
CTL	60	-	CTL	90	2.5000	0.896	28.0	2.789	0.089	0.141	1.6102	0.3480	2.872
		-	CTL	150	2.0000	0.896	28.0	2.231	0.256	0.508	1.2881	0.0540	2.522
		-	VDD	60	2.6000	0.940	28.0	2.765	0.094	0.149	1.6746	0.3522	2.997
		-	VDD	90	3.0000	0.896	28.0	3.347	0.026	0.035	1.9322	0.6367	3.228
		-	VDD	150	3.8000	0.940	28.0	4.042	0.005	0.006	2.4474	1.0377	3.857
	90	-	CTL	150	-0.5000	0.896	28.0	-0.558	0.993	1.000	-0.3220	-1.5080	0.864
		-	VDD	60	0.1000	0.940	28.0	0.106	1.000	1.000	-0.0644	-1.3049	1.176
		-	VDD	90	0.5000	0.896	28.0	0.558	0.993	1.000	0.3220	-0.8639	1.508
		-	VDD	150	1.3000	0.940	28.0	1.383	0.737	1.000	0.8373	-0.4241	2.099
	150	-	VDD	60	0.6000	0.940	28.0	0.638	0.987	1.000	-0.3864	-1.6313	0.858
		-	VDD	90	1.0000	0.896	28.0	1.116	0.871	1.000	-0.6441	-1.8398	0.552
		-	VDD	150	1.8000	0.940	28.0	1.915	0.415	0.987	1.1593	-0.1210	2.440
VDD	60	-	VDD	90	0.4000	0.940	28.0	0.425	0.998	1.000	0.2576	-0.9848	1.500
		-	VDD	150	1.2000	0.982	28.0	1.222	0.822	1.000	0.7729	-0.5398	2.086
	90	-	VDD	150	0.8000	0.940	28.0	0.851	0.955	1.000	0.5152	-0.7331	1.764

Note. Comparisons are based on estimated marginal means

ANOVA

ANOVA - secondary follicle

	Sum of Squares	df	Mean Square	F	p	η^2
Overall model	72.77	5	14.55	4.97	0.002	
Diet	3.75	1	3.75	1.35	0.256	0.025
Duration	28.65	2	14.33	5.15	0.012	0.190
Diet ✻ Duration	40.37	2	20.19	7.25	0.003	0.268
Residuals	77.93	28	2.78			

overall, sec follicles are unaffected

Assumption Checks

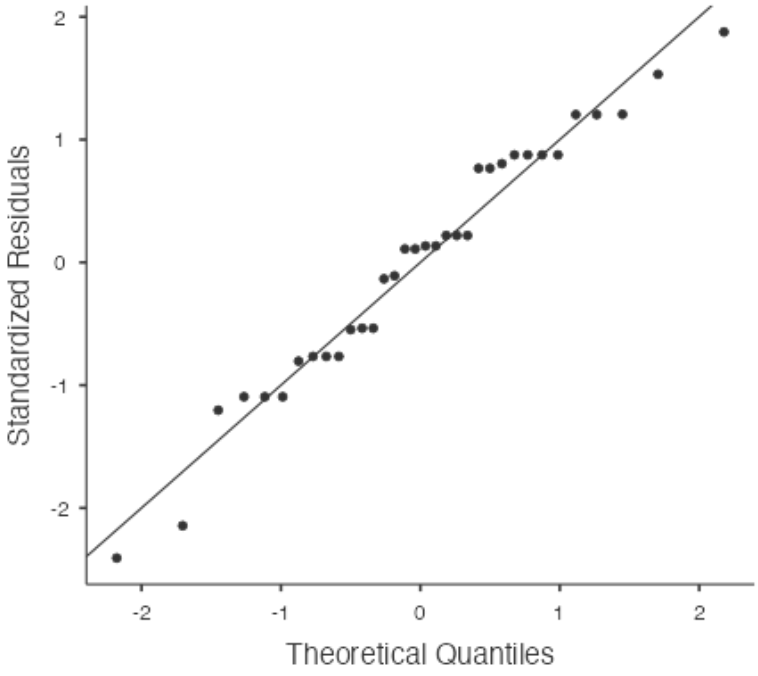
Homogeneity of Variances Test (Levene's)

F	df1	df2	p
1.55	5	28	0.206

Normality Test (Shapiro-Wilk)

Statistic	p
0.968	0.396

Q-Q Plot



Post Hoc Tests

Post Hoc Comparisons - Diet

Comparison										95% Confidence Interval	
Diet		Diet	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
CTL	-	VDD	0.667	0.574	28.0	1.16	0.256	0.256	0.400	-0.314	1.11

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Duration

Comparison										95% Confidence Interval	
Duration		Duration	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
60	-	90	2.100	0.698	28.0	3.009	0.015	0.016	1.259	0.335	2.182
	-	150	1.783	0.714	28.0	2.496	0.048	0.056	1.069	0.144	1.994
90	-	150	-0.317	0.698	28.0	-0.454	0.893	1.000	-0.190	-1.048	0.669

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Diet ✻ Duration

Comparison												95% Confidence Interval	
Diet	Duration		Diet	Duration	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
CTL	60	-	CTL	90	0.167	0.963	28.0	0.173	1.000	1.000	0.0999	-1.0831	1.283
		-	CTL	150	-0.833	0.963	28.0	-0.865	0.952	1.000	-0.4995	-1.6900	0.691
		-	VDD	60	-2.367	1.010	28.0	-2.343	0.211	0.397	-1.4186	-2.7183	-0.119
		-	VDD	90	1.667	0.963	28.0	1.730	0.524	1.000	0.9990	-0.2149	2.213
		-	VDD	150	2.033	1.010	28.0	2.013	0.361	0.808	1.2188	-0.0657	2.503
	90	-	CTL	150	-1.000	0.963	28.0	-1.038	0.901	1.000	-0.5994	-1.7934	0.595
		-	VDD	60	-2.533	1.010	28.0	-2.508	0.156	0.273	1.5185	0.2103	2.827
		-	VDD	90	1.500	0.963	28.0	1.557	0.632	1.000	0.8991	-0.3089	2.107
		-	VDD	150	1.867	1.010	28.0	1.848	0.453	1.000	1.1189	-0.1587	2.397
	150	-	VDD	60	-1.533	1.010	28.0	-1.518	0.656	1.000	0.9191	-0.3465	2.185
		-	VDD	90	2.500	0.963	28.0	2.595	0.132	0.223	-1.4985	-2.7503	-0.247
		-	VDD	150	2.867	1.010	28.0	2.838	0.080	0.125	1.7183	0.3917	3.045
VDD	60	-	VDD	90	4.033	1.010	28.0	3.993	0.005	0.006	2.4176	1.0117	3.823
		-	VDD	150	4.400	1.055	28.0	4.170	0.003	0.004	2.6374	1.1543	4.120
	90	-	VDD	150	0.367	1.010	28.0	0.363	0.999	1.000	0.2198	-1.0220	1.462

Note. Comparisons are based on estimated marginal means

ANOVA

ANOVA - Tertiary follicle

	Sum of Squares	df	Mean Square	F	p	η^2
Overall model	44.91	5	8.98	8.05	<.001	
Diet	18.70	1	18.70	16.16	<.001	0.242
Duration	21.28	2	10.64	9.19	<.001	0.275
Diet ✻ Duration	4.93	2	2.46	2.13	0.138	0.064
Residuals	32.40	28	1.16			

F0.5(1,28)=16.16, p<0.001

Assumption Checks

Homogeneity of Variances Test (Levene's)

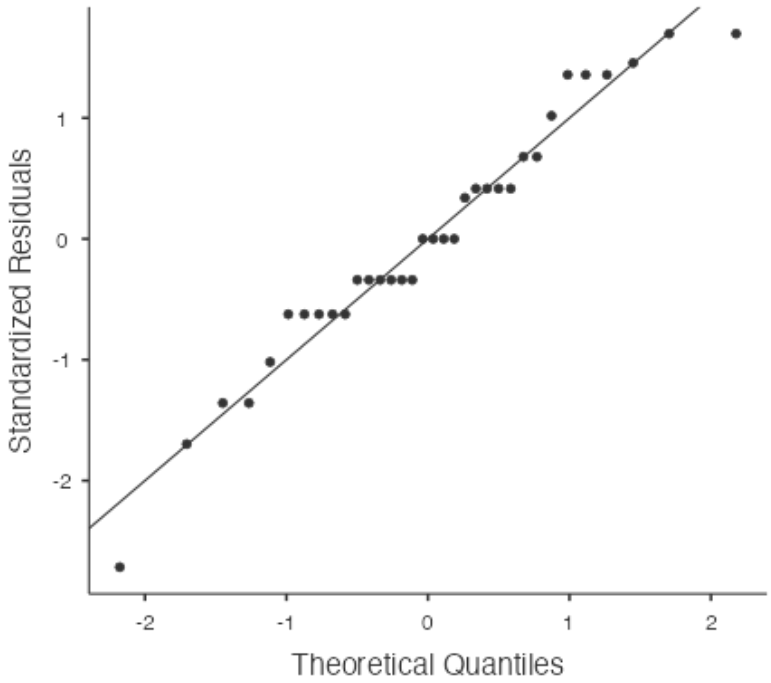
F	df1	df2	p
3.60	5	28	0.012

Both diet & duration don't have a significant effect on tertiary follicle numbers
However, Tukey's post hoc tests show there is a significant difference with duration
CTL60 vs VDD60, p=0.038, d=1.921
CTL90 vs VDD90, p=0.034, d=1,859
CTL60 vs VDD150, p,0.001, d=2.851
CTL90 vs VDD150, p=0.003, d=2.541

Normality Test (Shapiro-Wilk)

Statistic	p
0.963	0.295

Q-Q Plot



Post Hoc Tests

Post Hoc Comparisons - Diet

Comparison										95% Confidence Interval	
Diet		Diet	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
CTL	-	VDD	1.49	0.370	28.0	4.02	<.001	<.001	1.38	0.584	2.18

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Duration

Comparison										95% Confidence Interval	
Duration		Duration	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
60	-	90	0.300	0.450	28.0	0.667	0.785	1.000	0.279	-0.581	1.14
	-	150	1.833	0.461	28.0	3.980	0.001	0.001	1.704	0.711	2.70
90	-	150	1.533	0.450	28.0	3.407	0.006	0.006	1.425	0.484	2.37

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Diet ✻ Duration

Comparison												95% Confidence Interval	
Diet	Duration		Diet	Duration	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
CTL	60	-	CTL	90	0.333	0.621	28.0	0.537	0.994	1.000	0.310	-0.876	1.496
		-	CTL	150	2.667	0.621	28.0	4.294	0.002	0.003	2.479	1.115	3.842
		-	VDD	60	2.067	0.651	28.0	3.173	0.038	0.055	1.921	0.574	3.268
		-	VDD	90	2.333	0.621	28.0	3.757	0.009	0.012	2.169	0.846	3.492
		-	VDD	150	3.067	0.651	28.0	4.708	<.001	<.001	2.851	1.385	4.316
	90	-	CTL	150	2.333	0.621	28.0	3.757	0.009	0.012	2.169	0.846	3.492
		-	VDD	60	1.733	0.651	28.0	2.661	0.116	0.191	-1.611	-2.928	-0.295
		-	VDD	90	2.000	0.621	28.0	3.220	0.034	0.049	1.859	0.572	3.147
		-	VDD	150	2.733	0.651	28.0	4.196	0.003	0.004	2.541	1.119	3.963
	150	-	VDD	60	-0.600	0.651	28.0	-0.921	0.938	1.000	0.558	-0.692	1.808
		-	VDD	90	-0.333	0.621	28.0	-0.537	0.994	1.000	0.310	-0.876	1.496
		-	VDD	150	0.400	0.651	28.0	0.614	0.989	1.000	0.372	-0.873	1.616
VDD	60	-	VDD	90	0.267	0.651	28.0	0.409	0.998	1.000	0.248	-0.994	1.490
		-	VDD	150	1.000	0.680	28.0	1.470	0.685	1.000	0.930	-0.391	2.250
	90	-	VDD	150	0.733	0.651	28.0	1.126	0.866	1.000	0.682	-0.573	1.936

Note. Comparisons are based on estimated marginal means

ANOVA

ANOVA - Graffian follicle

	Sum of Squares	df	Mean Square	F	p	η^2
Overall model	55.8	5	11.15	4.30	0.005	
Diet	17.1	1	17.07	6.19	0.019	0.128
Duration	25.6	2	12.80	4.64	0.018	0.193
Diet ✻ Duration	13.1	2	6.54	2.37	0.112	0.098
Residuals	77.2	28	2.76			

Assumption Checks

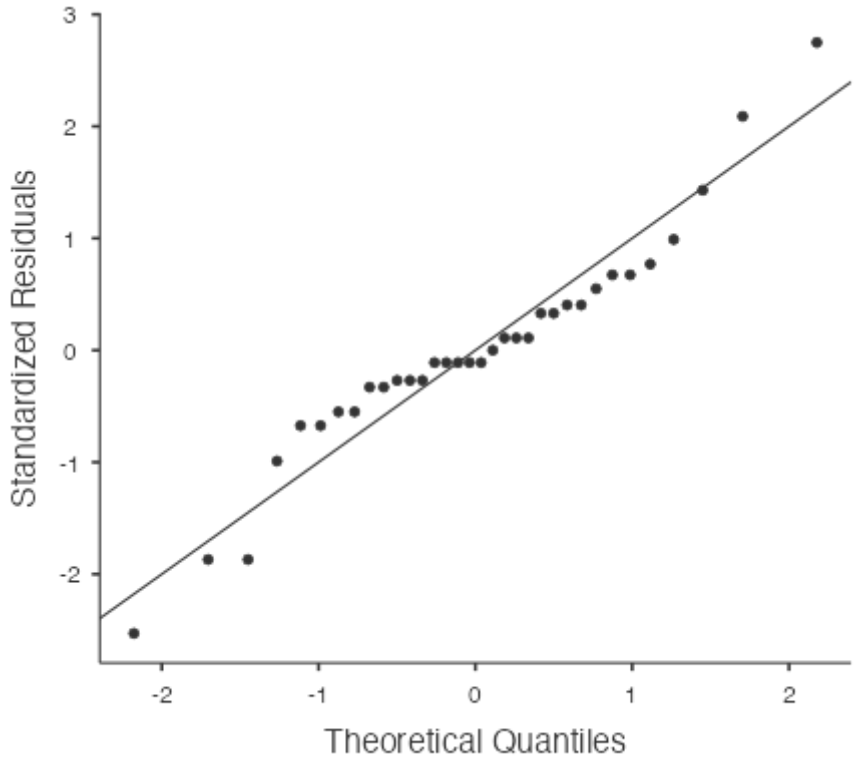
Homogeneity of Variances Test (Levene's)

F	df1	df2	p
30.8	5	28	<.001

Normality Test (Shapiro-Wilk)

Statistic	p
0.940	0.062

Q-Q Plot



ANOVA

ANOVA - CL

	Sum of Squares	df	Mean Square	F	p	η^2
Overall model	43.29	5	8.66	1.805	0.144	
Diet	2.82	1	2.82	0.544	0.467	0.015
Duration	15.61	2	7.81	1.509	0.239	0.083
Diet ✻ Duration	24.86	2	12.43	2.402	0.109	0.132
Residuals	144.87	28	5.17			

Assumption Checks

overall, diet &/or duration have no effect on CL numbers

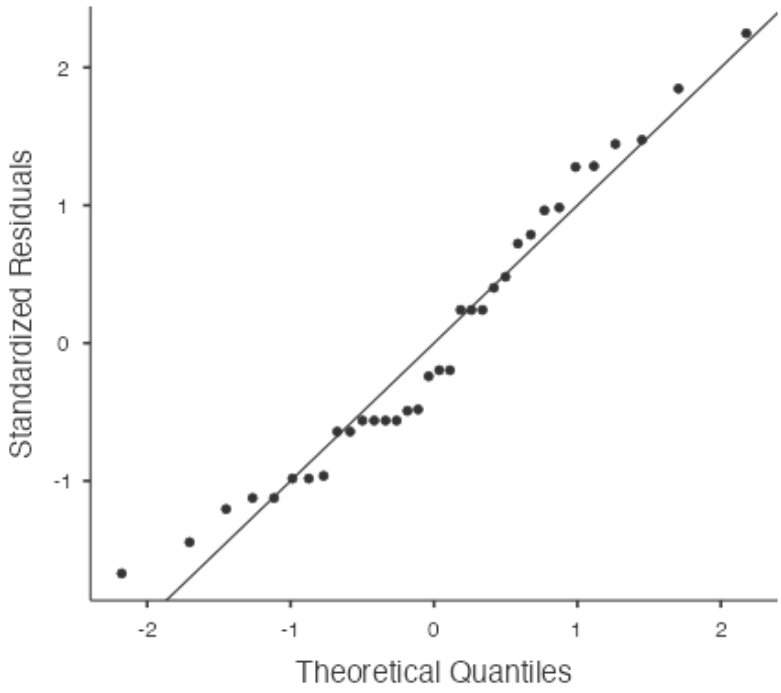
Homogeneity of Variances Test (Levene's)

F	df1	df2	p
1.32	5	28	0.283

Normality Test (Shapiro-Wilk)

Statistic	p
0.956	0.186

Q-Q Plot



Post Hoc Tests

Post Hoc Comparisons - Diet

Comparison									95% Confidence Interval	
Diet		Diet	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
CTL	-	VDD	-0.578	0.783	28.0	-0.738	0.467	0.467	-0.254	-0.963	0.455

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Duration

Comparison										95% Confidence Interval	
Duration		Duration	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
60	-	90	1.367	0.952	28.0	1.436	0.337	0.486	0.6008	-0.272	1.473
	-	150	1.533	0.974	28.0	1.574	0.273	0.380	0.6741	-0.222	1.570
90	-	150	0.167	0.952	28.0	0.175	0.983	1.000	0.0733	-0.784	0.930

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Diet ✻ Duration

Comparison												95% Confidence Interval	
Diet	Duration		Diet	Duration	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
CTL	60	-	CTL	90	2.500	1.31	28.0	1.904	0.421	1.000	1.099	-0.121	2.319
		-	CTL	150	3.667	1.31	28.0	2.792	0.088	0.140	1.612	0.350	2.874
		-	VDD	60	1.600	1.38	28.0	1.162	0.851	1.000	0.703	-0.552	1.959
		-	VDD	90	1.833	1.31	28.0	1.396	0.729	1.000	0.806	-0.397	2.009
		-	VDD	150	1.000	1.38	28.0	0.726	0.977	1.000	0.440	-0.807	1.686
	90	-	CTL	150	1.167	1.31	28.0	0.888	0.946	1.000	0.513	-0.678	1.704
		-	VDD	60	-0.900	1.38	28.0	-0.653	0.986	1.000	0.396	-0.849	1.641
		-	VDD	90	-0.667	1.31	28.0	-0.508	0.995	1.000	-0.293	-1.478	0.892
		-	VDD	150	-1.500	1.38	28.0	-1.089	0.882	1.000	-0.659	-1.913	0.594
	150	-	VDD	60	-2.067	1.38	28.0	-1.500	0.667	1.000	0.909	-0.356	2.174
		-	VDD	90	-1.833	1.31	28.0	-1.396	0.729	1.000	0.806	-0.397	2.009
		-	VDD	150	-2.667	1.38	28.0	-1.936	0.402	0.945	-1.172	-2.454	0.109
VDD	60	-	VDD	90	0.233	1.38	28.0	0.169	1.000	1.000	0.103	-1.138	1.343
		-	VDD	150	-0.600	1.44	28.0	-0.417	0.998	1.000	-0.264	-1.561	1.034
	90	-	VDD	150	-0.833	1.38	28.0	-0.605	0.990	1.000	-0.366	-1.611	0.878

Note. Comparisons are based on estimated marginal means

ANOVA

ANOVA - Atretic follicle

	Sum of Squares	df	Mean Square	F	p	η^2
Overall model	49.435	5	9.887	4.233	0.005	
Diet	17.067	1	17.067	7.561	0.010	0.152
Duration	0.994	2	0.497	0.220	0.804	0.009
Diet ✻ Duration	31.375	2	15.687	6.950	0.004	0.279
Residuals	63.200	28	2.257			

Assumption Checks

Homogeneity of Variances Test (Levene's)

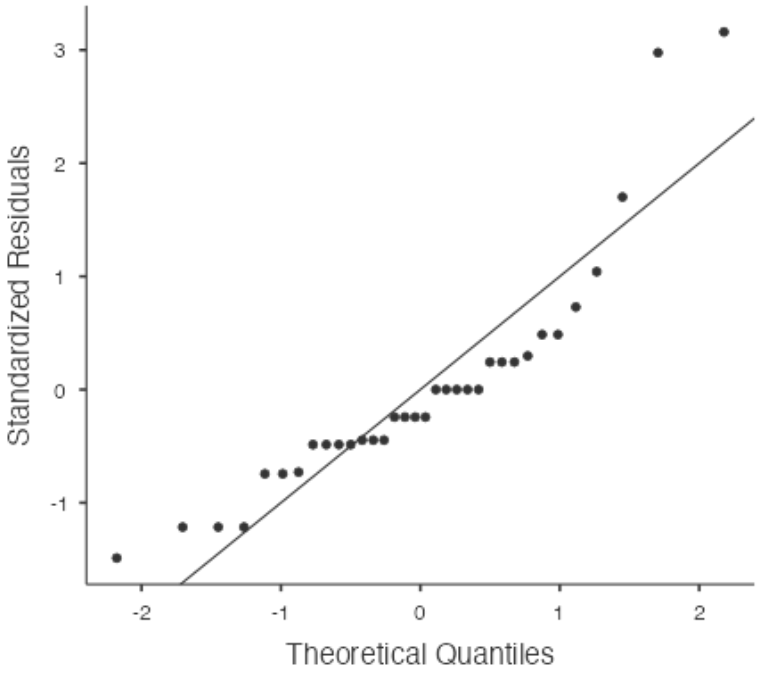
F	df1	df2	p
1.85	5	28	0.136

overall, diet has an effect on atretic follicles [F0.5(5,28)=4.233, p=0.005]
however, post hoc tests show control diet had more atretic follicles than VDD diet (p=0.010, d= -0.947)
CTL60 had more atretic follciles than VDD60 (p=0.005, d= -2.4406)
CTL150 had fewer atretic follicles than VDD60 (p=0.29, d=1.9968)

Normality Test (Shapiro-Wilk)

Statistic	p
0.846	<.001

Q-Q Plot



Post Hoc Tests

Post Hoc Comparisons - Diet

Comparison										95% Confidence Interval	
Diet		Diet	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
CTL	-	VDD	-1.42	0.517	28.0	-2.75	0.010	0.010	-0.947	-1.70	-0.195

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Duration

Comparison										95% Confidence Interval	
Duration		Duration	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
60	-	90	-4.16e−16	0.628	28.0	-6.62e−16	1.000	1.000	-2.22e−16	-0.857	0.857
	-	150	0.367	0.643	28.0	0.570	0.837	1.000	0.244	-0.636	1.124
90	-	150	0.367	0.628	28.0	0.583	0.830	1.000	0.244	-0.615	1.104

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Diet ✻ Duration

Comparison											95% Confidence Interval	
Diet	Duration		Diet	Duration	Mean Difference	SE	df	t	p_{tukey}	$p_{bonferroni}$	Cohen's d	Lower	Upper
CTL	60	-	CTL	90	-2.3333	0.867	28.0	-2.6900	0.109	0.179	-1.5531	-2.810	-0.296
		-	CTL	150	-0.6667	0.867	28.0	-0.7686	0.971	1.000	-0.4437	-1.633	0.745
		-	VDD	60	-3.6667	0.910	28.0	-4.0305	0.005	0.006	-2.4406	-3.849	-1.032
		-	VDD	90	-1.3333	0.867	28.0	-1.5372	0.644	1.000	-0.8875	-2.095	0.320
		-	VDD	150	-2.2667	0.910	28.0	-2.4916	0.161	0.284	-1.5087	-2.816	-0.201
	90	-	CTL	150	1.6667	0.867	28.0	1.9215	0.411	0.974	1.1094	-0.112	2.330
		-	VDD	60	-1.3333	0.910	28.0	-1.4656	0.688	1.000	0.8875	-0.376	2.151
		-	VDD	90	1.0000	0.867	28.0	1.1529	0.855	1.000	0.6656	-0.531	1.862
		-	VDD	150	0.0667	0.910	28.0	0.0733	1.000	1.000	0.0444	-1.196	1.285
	150	-	VDD	60	-3.0000	0.910	28.0	-3.2977	0.029	0.040	1.9968	0.641	3.352
		-	VDD	90	-0.6667	0.867	28.0	-0.7686	0.971	1.000	0.4437	-0.745	1.633
		-	VDD	150	-1.6000	0.910	28.0	-1.7588	0.507	1.000	-1.0650	-2.339	0.209
VDD	60	-	VDD	90	2.3333	0.910	28.0	2.5648	0.140	0.240	1.5531	0.242	2.864
		-	VDD	150	1.4000	0.950	28.0	1.4734	0.683	1.000	0.9319	-0.389	2.252
	90	-	VDD	150	-0.9333	0.910	28.0	-1.0259	0.905	1.000	-0.6212	-1.873	0.631

Note. Comparisons are based on estimated marginal means

Principal Component Analysis

Component Loadings

	Component			
	1	2	3	Uniqueness
Tertiary follicle	0.841			0.260
Duration	-0.757			0.207
Graffian follicle	0.753			0.407
Primary follicle	0.696			0.382
secondary follicle				0.723
Atretic follicle		0.949		0.180
Diet		0.557		0.253
CL			0.955	0.161

Note. 'promax' rotation was used
[6]

Component Statistics

Summary

Component	SS Loadings	% of Variance	Cumulative %
1	2.74	34.3	34.3
2	1.46	18.3	52.6
3	1.22	15.3	67.8

Inter-Component Correlations

	1	2	3
1	—	-0.155	-0.0747
2		—	0.2824
3			—

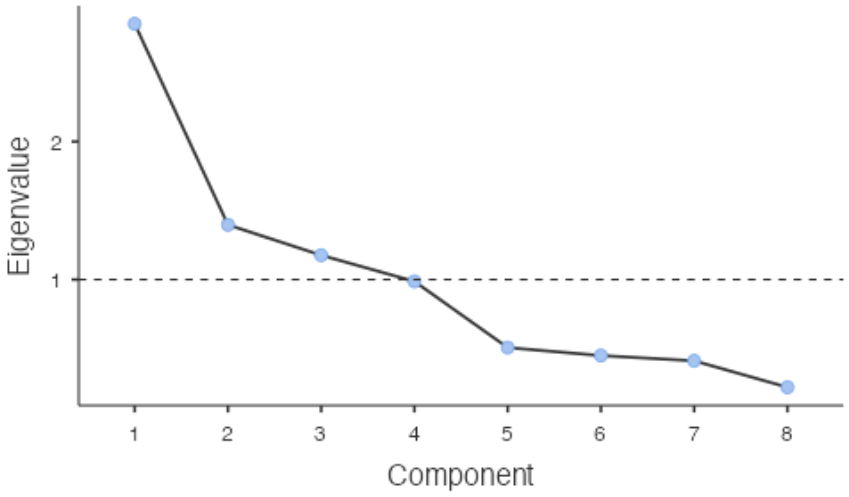
Assumption Checks

Bartlett's Test of Sphericity

χ^2	df	p
69.5	28	<.001

Eigenvalues

Scree Plot



References

[1] The jamovi project (2024). *jamovi*. (Version 2.6) [Computer Software]. Retrieved from https://www.jamovi.org.

[2] R Core Team (2024). *R: A Language and environment for statistical computing*. (Version 4.4) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from CRAN snapshot 2024-08-07).

[3] Kerby, D. S. (2014). The simple difference formula: An approach to teaching nonparametric correlation. *Comprehensive Psychology, 3*, 2165–2228.

[4] Fox, J., & Weisberg, S. (2023). *car: Companion to Applied Regression*. [R package]. Retrieved from https://cran.r-project.org/package=car.

[5] Lenth, R. (2023). *emmeans: Estimated Marginal Means, aka Least-Squares Means*. [R package]. Retrieved from https://cran.r-project.org/package=emmeans.

[6] Revelle, W. (2023). *psych: Procedures for Psychological, Psychometric, and Personality Research*. [R package]. Retrieved from https://cran.r-project.org/package=psych.

Independent Samples T-Test

Independent Samples T-Test

						95% Confidence Interval				95% Confidence Interval	
		Statistic	p	Mean difference	SE difference	Lower	Upper		Effect Size	Lower	Upper
P1 reactivity	**Mann-Whitney U**	2.00	0.400	-0.890		-1.133	0.18400	Rank biserial correlation	0.556		
Duration	**Mann-Whitney U**	4.50	1.000	0.000		-90	90	Rank biserial correlation	0.000		
P2 reactivity	**Mann-Whitney U**	1.00	0.200	-0.411		-0.693	0.00600	Rank biserial correlation	0.778		

Note. H_a $\mu_{CTL} \neq \mu_{VDD}$

Assumptions

Normality Test (Shapiro-Wilk)

	W	p
P1 reactivity	0.917	0.485
Duration	0.823	0.093
P2 reactivity	0.929	0.573

Note. A low p-value suggests a violation of the assumption of normality

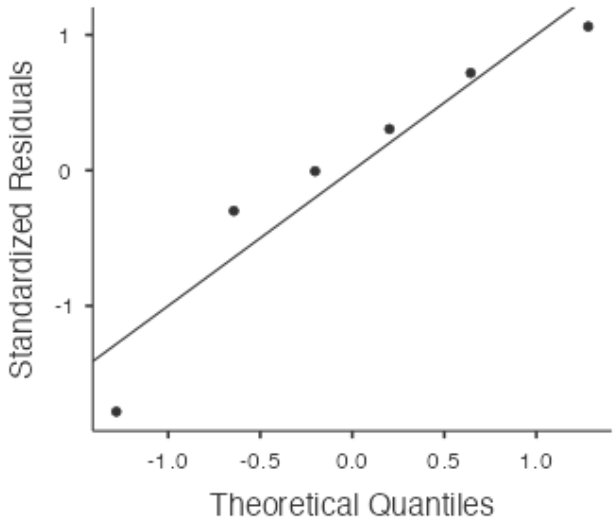
Homogeneity of Variances Test (Levene's)

	F	df	df2	p
P1 reactivity	8.988	1	4	0.040
Duration	0.000	1	4	1.000
P2 reactivity	0.787	1	4	0.425

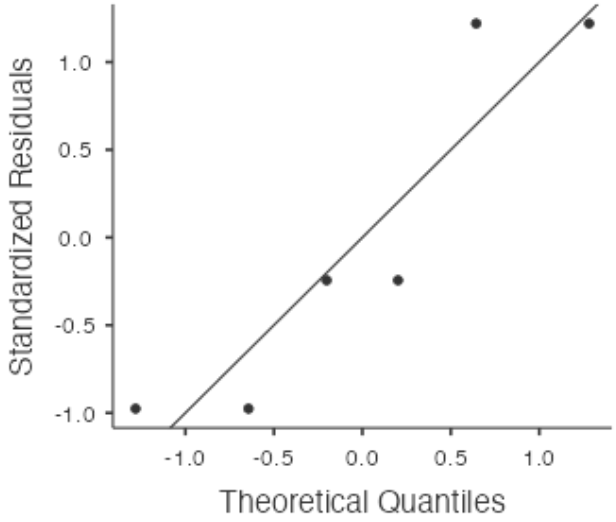
Note. A low p-value suggests a violation of the assumption of equal variances

Plots

P1 reactivity



Duration



P2 reactivity