

1.3. ANOVA - visual spatial impression

1.3.1. Spaciousness and distance, full data set

ANOVA Table for Spaciousness

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Distance	5	1.825	0.365	7.505	<.0001	37.526	1
Residual	263	12.788	0.049				

Means Table for Spaciousness

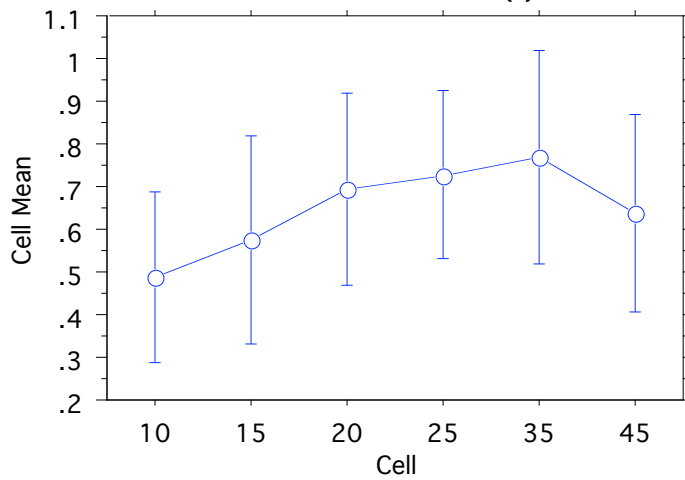
Effect: Distance

	Count	Mean	Std. Dev.	Std. Err.
10	18	0.486	0.201	0.047
15	53	0.575	0.243	0.033
20	36	0.694	0.224	0.037
25	108	0.727	0.198	0.019
35	36	0.771	0.249	0.042
45	18	0.639	0.23	0.054

Interaction Line Plot for Spaciousness

Effect: Distance M

Error Bars: ± 1 Standard Deviation(s)



Fisher's PLSD for Spaciousness

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
10, 15	-0.089	0.118	0.1386	
10, 20	-0.208	0.125	0.0012	S
10, 25	-0.241	0.111	<.0001	S
10, 35	-0.285	0.125	<.0001	S
10, 45	-0.153	0.145	0.0386	S
15, 20	-0.119	0.094	0.0131	S
15, 25	-0.151	0.073	<.0001	S

15, 35	-0.195	0.094	<.0001	S
15, 45	-0.063	0.118	0.2927	
20, 25	-0.032	0.084	0.4457	
20, 35	-0.076	0.102	0.1428	
20, 45	0.056	0.125	0.3836	
25, 35	-0.044	0.084	0.301	
25, 45	0.088	0.111	0.1183	
35, 45	0.132	0.125	0.0392	S

Scheffe for Spaciousness

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
10, 15	-0.089	0.202	0.8194	
10, 20	-0.208	0.213	0.0609	
10, 25	-0.241	0.188	0.0031	S
10, 35	-0.285	0.213	0.0016	S
10, 45	-0.153	0.246	0.5057	
15, 20	-0.119	0.16	0.287	
15, 25	-0.151	0.124	0.0059	S
15, 35	-0.195	0.16	0.0058	S
15, 45	-0.063	0.202	0.9527	
20, 25	-0.032	0.142	0.9886	
20, 35	-0.076	0.174	0.8261	
20, 45	0.056	0.213	0.9792	
25, 35	-0.044	0.142	0.956	
25, 45	0.088	0.188	0.7829	
35, 45	0.132	0.213	0.509	

1.3.2. Spaciousness and Auditorium, full data set

ANOVA Table for Spaciousness

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Auditorium	2	0.437	0.219	4.103	0.0176	8.206	0.725
Residual	266	14.175	0.053				

Means Table for Spaciousness

Effect: Auditorium

	Count	Mean	Std. Dev.	Std. Err.
A	90	0.728	0.245	0.026
B	89	0.629	0.233	0.025
C	90	0.672	0.214	0.023

Fisher's PLSD for Spaciousness

Effect: Auditorium

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
A, B	0.099	0.068	0.0046	S
A, C	0.056	0.068	0.1076	
B, C	-0.043	0.068	0.2137	

Scheffe for Spaciousness

Effect: Auditorium

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
A, B	0.099	0.085	0.018	S
A, C	0.056	0.085	0.2734	
B, C	-0.043	0.085	0.461	

1.3.3. Envelopment and Distance, full data set

ANOVA Table for Envelopment

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Distance M	5	1.117	0.223	2.955	0.0129	14.777	0.858
Residual	263	19.889	0.076				

Means Table for Envelopment

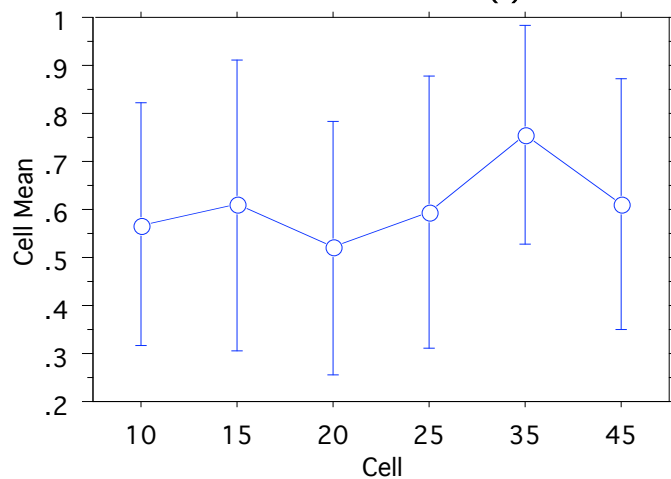
Effect: Distance M

	Count	Mean	Std. Dev.	Std. Err.
10	18	0.569	0.254	0.06
15	53	0.608	0.3	0.041
20	36	0.521	0.263	0.044
25	108	0.595	0.285	0.027
35	36	0.757	0.227	0.038
45	18	0.611	0.26	0.061

Interaction Line Plot for Envelopment

Effect: Distance M

Error Bars: ± 1 Standard Deviation(s)



Fisher's PLSD for Envelopment

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
10, 15	-0.039	0.148	0.6032	
10, 20	0.049	0.156	0.5408	
10, 25	-0.025	0.138	0.7164	
10, 35	-0.188	0.156	0.0189	S
10, 45	-0.042	0.18	0.6498	
15, 20	0.088	0.117	0.1412	
15, 25	0.014	0.091	0.7686	
15, 35	-0.148	0.117	0.013	S
15, 45	-0.003	0.148	0.9722	
20, 25	-0.074	0.104	0.1628	
20, 35	-0.236	0.128	0.0003	S
20, 45	-0.09	0.156	0.2565	
25, 35	-0.162	0.104	0.0024	S
25, 45	-0.016	0.138	0.8172	
35, 45	0.146	0.156	0.0673	

Fisher's PLSD for Envelopment

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
10, 15	-0.039	0.148	0.6032	
10, 20	0.049	0.156	0.5408	
10, 25	-0.025	0.138	0.7164	
10, 35	-0.188	0.156	0.0189	S
10, 45	-0.042	0.18	0.6498	
15, 20	0.088	0.117	0.1412	
15, 25	0.014	0.091	0.7686	
15, 35	-0.148	0.117	0.013	S
15, 45	-0.003	0.148	0.9722	
20, 25	-0.074	0.104	0.1628	
20, 35	-0.236	0.128	0.0003	S
20, 45	-0.09	0.156	0.2565	
25, 35	-0.162	0.104	0.0024	S
25, 45	-0.016	0.138	0.8172	
35, 45	0.146	0.156	0.0673	

1.3.4. Envelopment and Auditorium, full data set

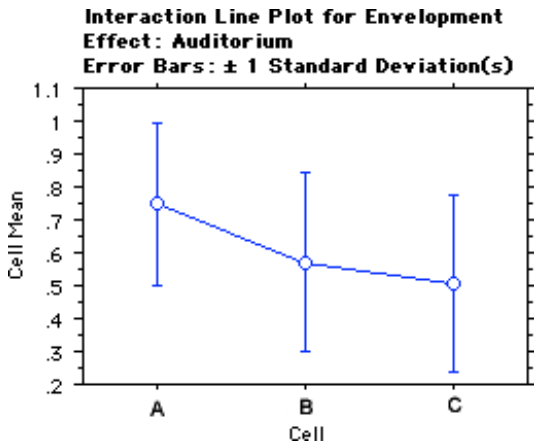
ANOVA Table for Envelopment

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Auditorium	2	2.765	1.383	20.162	<.0001	40.324	1
Residual	266	18.242	0.069				

Means Table for Envelopment

Effect: Auditorium

	Count	Mean	Std. Dev.	Std. Err.
A	90	0.747	0.244	0.026
B	89	0.57	0.272	0.029
C	90	0.508	0.269	0.028



Fisher's PLSD for Envelopment

Effect: Auditorium

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
A, B	0.177	0.077	<.0001	S
A, C	0.239	0.077	<.0001	S
B, C	0.062	0.077	0.1151	

Fisher's PLSD for Envelopment

Effect: Auditorium

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
A, B	0.177	0.077	<.0001	S
A, C	0.239	0.077	<.0001	S
B, C	0.062	0.077	0.1151	

1.3.5. Stage dominance and Auditorium, 15m & 25m data set

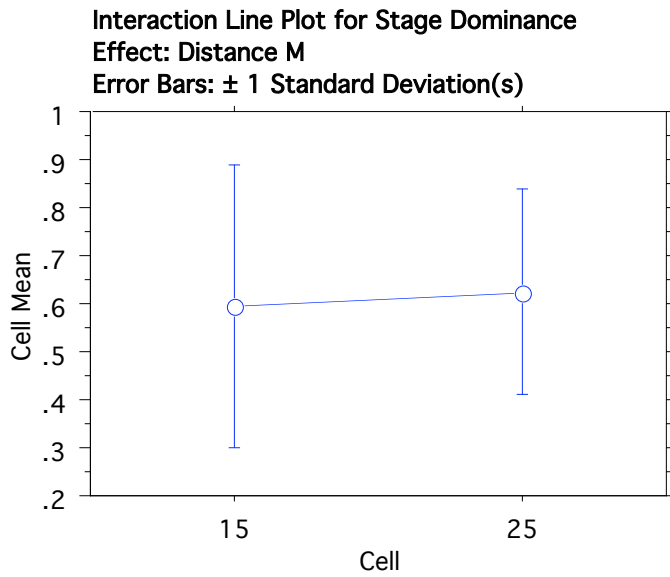
ANOVA Table for Stage Dominance

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Distance	1	0.025	0.025	0.377	0.5504	0.377	0.091
Residual	105	6.997	0.067				

Means Table for Stage Dominance

Effect: Distance M

	Count	Mean	Std. Dev.	Std. Err.
15	53	0.594	0.295	0.041
25	54	0.625	0.216	0.029



Fisher's PLSD for Stage Dominance
 Effect: Distance M
 Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value
15, 25	-0.031	0.099	0.5404

Scheffe for Stage Dominance
 Effect: Distance M
 Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value
15, 25	-0.031	0.099	0.5404

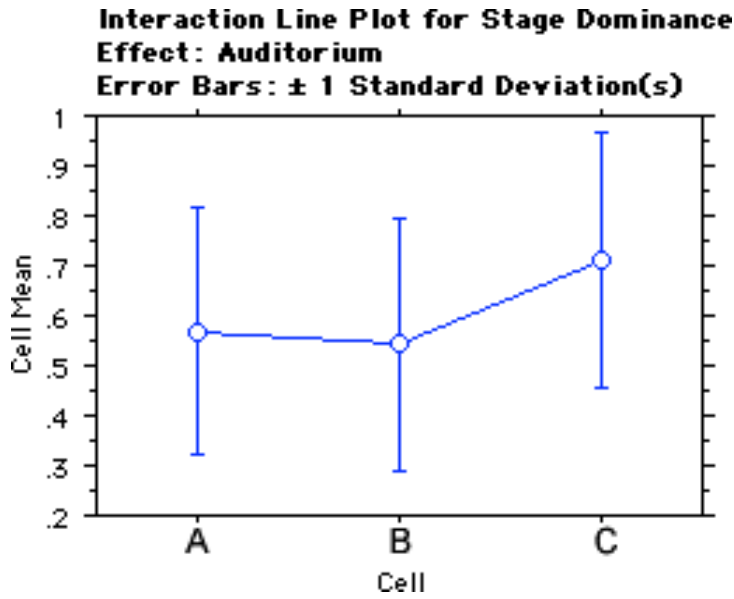
1.3.5. Stage dominance and Auditorium, full data set

ANOVA Table for Stage Dominance

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Auditorium	2	1.477	0.738	11.624	<.0001	23.248	0.997
Residual	266	16.897	0.064				

Means Table for Stage Dominance
 Effect: Auditorium

	Count	Mean	Std. Dev.	Std. Err.
A	90	0.569	0.249	0.026
B	89	0.542	0.253	0.027
C	90	0.711	0.254	0.027



Fisher's PLSD for Stage Dominance
 Effect: Auditorium
 Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
A, B	0.027	0.074	0.4692	
A, C	-0.142	0.074	0.0002	S
B, C	-0.169	0.074	<.0001	S

Fisher's PLSD for Stage Dominance
 Effect: Auditorium
 Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
A, B	0.027	0.074	0.4692	
A, C	-0.142	0.074	0.0002	S
B, C	-0.169	0.074	<.0001	S

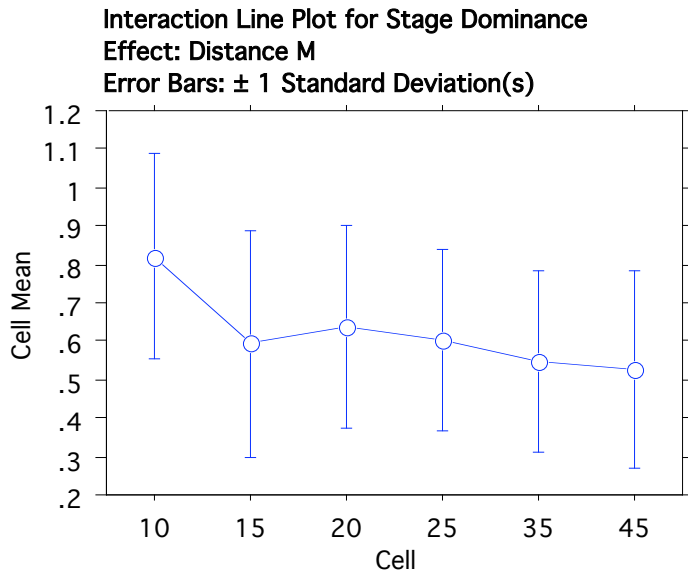
1.3.6. Stage dominance and Distance, full data set

ANOVA Table for Stage Dominance

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Distance	5	1.096	0.219	3.336	0.0061	16.681	0.905
Residual	263	17.278	0.066				

Means Table for Stage Dominance
 Effect: Distance M

	Count	Mean	Std. Dev.	Std. Err.
10	18	0.819	0.269	0.063
15	53	0.594	0.295	0.041
20	36	0.639	0.264	0.044
25	108	0.602	0.237	0.023
35	36	0.549	0.238	0.04
45	18	0.528	0.256	0.06



Fisher's PLSD for Stage Dominance

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
10, 15	0.225	0.138	0.0014	S
10, 20	0.181	0.146	0.0153	S
10, 25	0.218	0.128	0.001	S
10, 35	0.271	0.146	0.0003	S
10, 45	0.292	0.168	0.0007	S
15, 20	-0.045	0.109	0.4217	
15, 25	-0.008	0.085	0.8614	
15, 35	0.046	0.109	0.4095	
15, 45	0.067	0.138	0.342	
20, 25	0.037	0.097	0.4534	
20, 35	0.09	0.119	0.1363	
20, 45	0.111	0.146	0.1344	
25, 35	0.053	0.097	0.2814	
25, 45	0.074	0.128	0.2573	
35, 45	0.021	0.146	0.7785	

Scheffe for Stage Dominance

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
10, 15	0.225	0.234	0.0692	
10, 20	0.181	0.248	0.3139	
10, 25	0.218	0.219	0.0523	
10, 35	0.271	0.248	0.0221	S
10, 45	0.292	0.286	0.0428	S
15, 20	-0.045	0.186	0.9856	

15, 25	-0.008	0.144	>.9999
15, 35	0.046	0.186	0.9838
15, 45	0.067	0.234	0.9695
20, 25	0.037	0.165	0.9895
20, 35	0.09	0.203	0.8156
20, 45	0.111	0.248	0.8124
25, 35	0.053	0.165	0.9478
25, 45	0.074	0.219	0.9357
35, 45	0.021	0.248	>.9999

1.3.7 Stage dominance and Auditorium, full data set

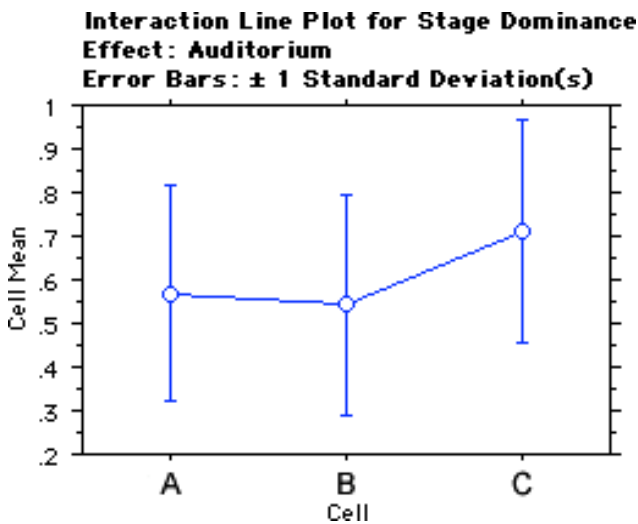
ANOVA Table for Stage Dominance

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Auditorium	2	1.477	0.738	11.624	<.0001	23.248	0.997
Residual	266	16.897	0.064				

Means Table for Stage Dominance

Effect: Auditorium

	Count	Mean	Std. Dev.	Std. Err.
A	90	0.569	0.249	0.026
B	89	0.542	0.253	0.027
C	90	0.711	0.254	0.027



Fisher's PLSD for Stage Dominance

Effect: Auditorium

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value
A, B	0.027	0.074	0.4692
A, C	-0.142	0.074	0.0002S
B, C	-0.169	0.074	<.0001S

Scheffe for Stage Dominance

Effect: Auditorium

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value
A, B	0.027	0.093	0.7692
A, C	-0.142	0.092	0.0015
B, C	-0.169	0.093	<.0001

1.3.8. Intimacy and Distance, full data set

ANOVA Table for

Intimacy

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Distance	5	2.08	0.416	5.92	<.0001	29.599	0.997
Residual	263	18.477	0.07				

Means Table for Intimacy

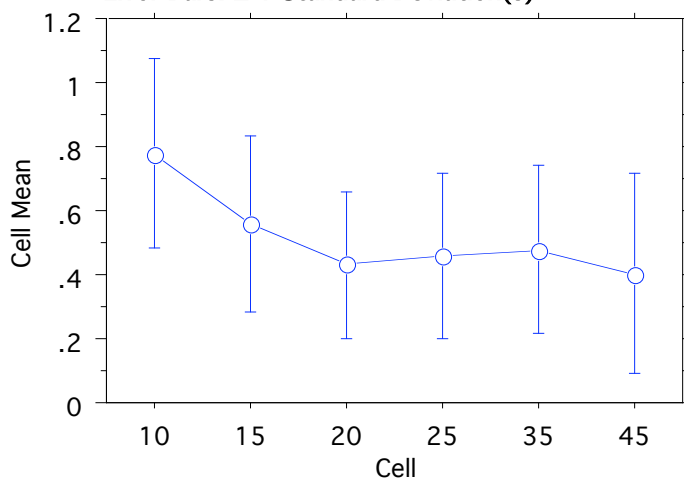
Effect: Distance M

	Count	Mean	Std. Dev.	Std. Err.
10	18	0.778	0.296	0.07
15	53	0.557	0.276	0.038
20	36	0.431	0.228	0.038
25	108	0.461	0.258	0.025
35	36	0.479	0.263	0.044
45	18	0.403	0.311	0.073

Interaction Line Plot for Intimacy

Effect: Distance M

Error Bars: ± 1 Standard Deviation(s)



Fisher's PLSD for Intimacy

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value
10, 15	0.221	0.142	0.0025

10, 20	0.347	0.151	<.0001	S
10, 25	0.317	0.133	<.0001	S
10, 35	0.299	0.151	0.0001	S
10, 45	0.375	0.174	<.0001	S
15, 20	0.126	0.113	0.0285	S
15, 25	0.096	0.088	0.0318	S
15, 35	0.077	0.113	0.1773	
15, 45	0.154	0.142	0.0343	S
20, 25	-0.03	0.1	0.5557	
20, 35	-0.049	0.123	0.4372	
20, 45	0.028	0.151	0.7169	
25, 35	-0.019	0.1	0.7169	
25, 45	0.058	0.133	0.3919	
35, 45	0.076	0.151	0.319	

Scheffe for Intimacy

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
10, 15	0.221	0.242	0.0997	
10, 20	0.347	0.257	0.0013	S
10, 25	0.317	0.226	0.0007	S
10, 35	0.299	0.257	0.0108	S
10, 45	0.375	0.296	0.0036	S
15, 20	0.126	0.192	0.4368	
15, 25	0.096	0.149	0.4607	
15, 35	0.077	0.192	0.8716	
15, 45	0.154	0.242	0.4782	
20, 25	-0.03	0.171	0.9966	
20, 35	-0.049	0.209	0.9876	
20, 45	0.028	0.257	0.9997	
25, 35	-0.019	0.171	0.9997	
25, 45	0.058	0.226	0.9808	
35, 45	0.076	0.257	0.9625	

1.3.9. Intimacy and Auditorium, full data set

ANOVA Table for

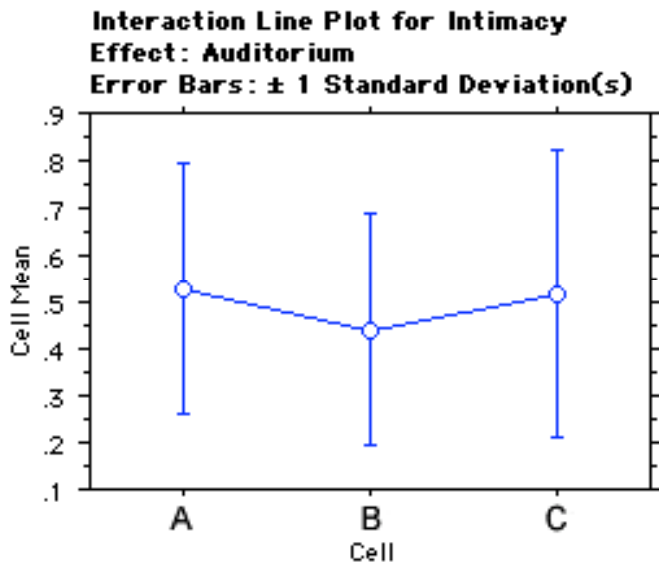
Intimacy

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Auditorium	2	0.398	0.199	2.628	0.0741	5.256	0.509
Residual	266	20.158	0.076				

Means Table for Intimacy

Effect: Auditorium

	Count	Mean	Std. Dev.	Std. Err.
A	90	0.528	0.269	0.028
B	89	0.441	0.247	0.026
C	90	0.517	0.306	0.032



Fisher's PLSD for Intimacy

Effect: Auditorium

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
A, B	0.087	0.081	0.0359	S
A, C	0.011	0.081	0.7868	
B, C	-0.076	0.081	0.0671	

Fisher's PLSD for Intimacy

Effect: Auditorium

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
A, B	0.087	0.081	0.0359	S
A, C	0.011	0.081	0.7868	
B, C	-0.076	0.081	0.0671	

1.3.10. Intimacy and auditorium, equivalent distances at 15 m & 25 m data set

ANOVA Table for

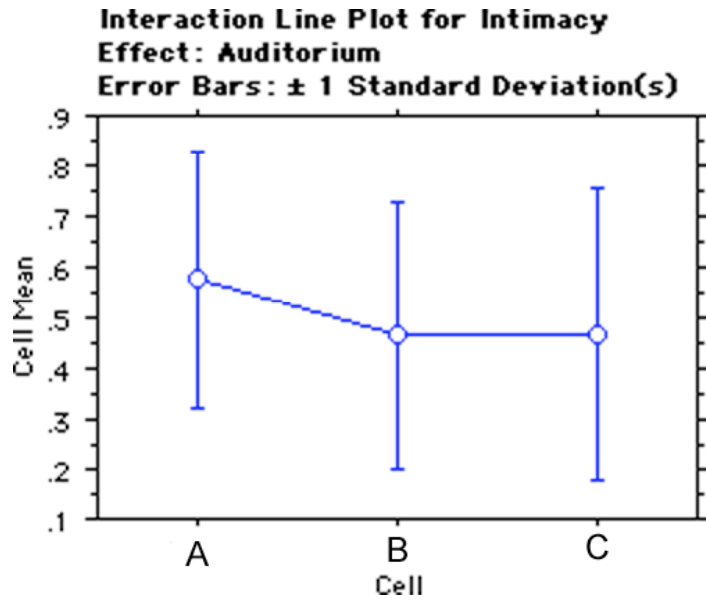
Intimacy

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Auditorium	2	0.298	0.149	2.059	0.1328	4.118	0.403
Residual	104	7.514	0.072				

Means Table for Intimacy

Effect: Auditorium

	Count	Mean	Std. Dev.	Std. Err.
A	36	0.576	0.252	0.042
B	35	0.464	0.265	0.045
C	36	0.465	0.288	0.048



Fisher's PLSD for Intimacy
 Effect: Auditorium
 Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value
A, B	0.112	0.127	0.0819
A, C	0.111	0.126	0.0824
B, C	-0.001	0.127	0.9876

Fisher's PLSD for Intimacy
 Effect: Auditorium
 Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value
A, B	0.112	0.127	0.0819
A, C	0.111	0.126	0.0824
B, C	-0.001	0.127	0.9876

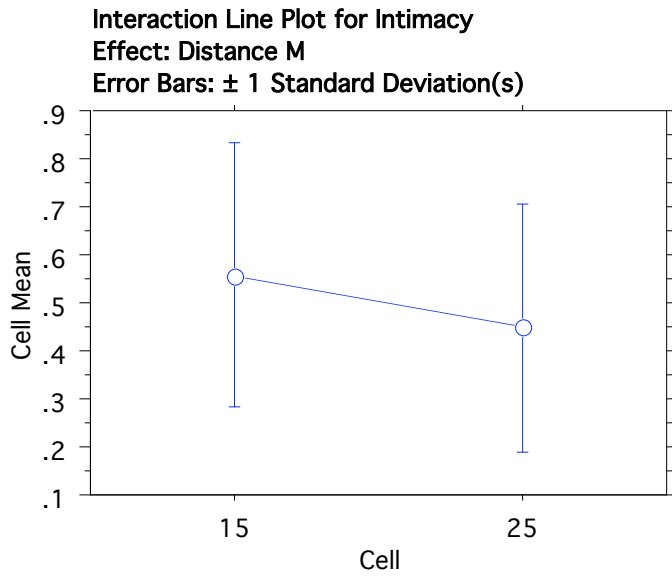
1.3.11. Intimacy and Distance, equivalent positions (at 15 m and 25 m) data set

ANOVA Table for Intimacy

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Distance	1	0.309	0.309	4.328	0.0399	4.328	0.529
Residual	105	7.503	0.071				

Means Table for Intimacy
 Effect: Distance M

	Count	Mean	Std. Dev.	Std. Err.
15	53	0.557	0.276	0.038
25	54	0.449	0.259	0.035



Fisher's PLSD for Intimacy

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
15, 25	0.108	0.102	0.0399	S

Scheffe for Intimacy

Effect: Distance M

Significance Level: 5 %

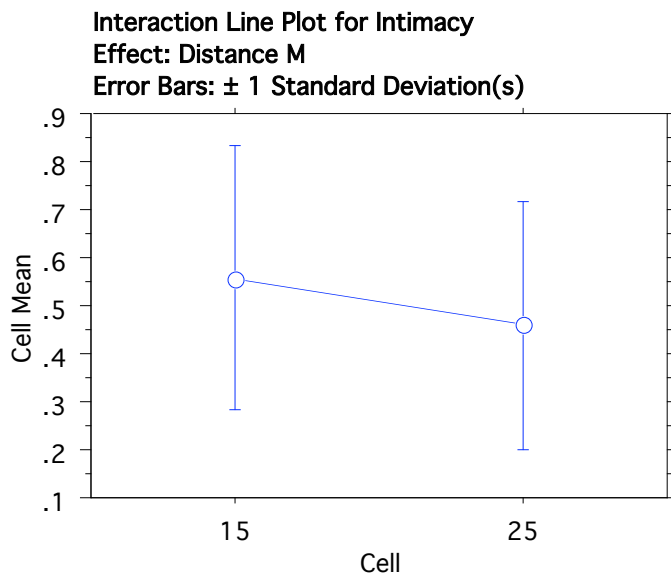
	Mean Diff.	Crit. Diff	P-Value	
15, 25	0.108	0.102	0.0399	S

1.3.12. Intimacy and Distance, equivalent distances at 15 m and 25 m data set

ANOVA Table for

Intimacy

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Distance M	1	0.327	0.327	4.689	0.0318	4.689	0.568
Residual	159	11.1	0.07				



Fisher's PLSD for Intimacy

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
15, 25	0.096	0.088	0.0318	S

Scheffe for Intimacy

Effect: Distance M

Significance Level: 5 %

	Mean Diff.	Crit. Diff	P-Value	
15, 25	0.096	0.088	0.0318	S

1.3.13. Correlation between perceived distance (target distance) and actual distance

1. Raw data

Paired Means Comparison

Hypothesized Difference = 0

	Mean Diff.	DF	t-Value	P-Value	95% Lower	95% Upper
Metres, M	-1.422	267	-1.814	.0708	-2.965	.121

Correlation Coefficient

Hypothesized Correlation = 0

	Correlation	Count	Z-Value	P-Value	95% Lower	95% Upper
Metres, M	.547	268	10.007	<.0001	.458	.626

2. Average data

Paired Means Comparison Hypothesized Difference = 0

	Mean Diff.	DF	t-Value	P-Value	95% Lower	95% Upper
Distance, PerceivedDistance	1.432	14	2.111	.0532	-.023	2.888

Correlation Coefficient Hypothesized Correlation = 0

	Correlation	Count	Z-Value	P-Value	95% Lower	95% Upper
Distance, PerceivedDistance	.958	15	6.660	<.0001	.876	.986

1.3.14. Correlation analysis of subjective scales – Average data

Correlation Matrix

	Image	Spaciousness	Envelopment	Stage Dominance	Intimacy	Distance
Image	1	0.361	0.079	-0.242	-0.187	0.055
Spaciousness	0.361	1	-0.451	-0.087	-0.812	0.189
Envelopment	0.079	-0.451	1	-0.57	0.587	0.146
Stage Dominance	-0.242	-0.087	-0.57	1	-0.053	-0.441
Intimacy	-0.187	-0.812	0.587	-0.053	1	-0.178
Distance	0.055	0.189	0.146	-0.441	-0.178	1

Fisher's r to z

	Correlation	P-Value
Image, Spaciousness	0.361	0.1897
Image, Envelopment	0.079	0.7848
Image, Stage Dominance	-0.242	0.3934
Image, Intimacy	-0.187	0.5128
Image, Distance	0.055	0.848
Spaciousness, Envelopment	-0.451	0.0921
Spaciousness, Stage Dominance	-0.087	0.7617
Spaciousness, Intimacy	-0.812	<.0001
Spaciousness, Distance	0.189	0.5081
Envelopment, Stage Dominance	-0.57	0.0249
Envelopment, Intimacy	0.587	0.0198
Envelopment, Distance	0.146	0.6113
Stage Dominance, Intimacy	-0.053	0.854
Stage Dominance, Distance	-0.441	0.1009
Intimacy, Distance	-0.178	0.5341