



	Group A	Group B	Group C	Group D	Group E	Group F
	F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLA	FAM_POST_UND	FAM_COULD_PLA
	Y	Y	Y	Y	Y	Y
1	4	2	5.0	2	4	1
2	4	3	3.0	4	1	1
3	5	3	3.0	2	4	3
4	4	3	4.0	5	4	3
5	4	3	3.0	5	3	2
6	4	2	3.0	3	3	1
7	5	3	2.0	4	4	4
8	5	2	2.0	3	3	1
9	5	3	3.0	3	3	1
10	4	4	4.0	4	3	2
11	5	4	4.0	3	4	4
12	4	3	3.0	1	3	1
13	4	2	2.0	2	4	1
14	4	4	4.0	2	4	1
15	2	4	4.0	4	4	3
16	4	2	2.0	1	1	1
17	4	2	2.0	3	3	2
18	4	4	4.0	5	4	3
19	3	4	4.0	5	4	3
20	2	3	3.0	2	3	1
21	5	3	3.0	1	3	1
22	3	4	4.0	1	3	1
23	5	2	4.0	3	2	2
24	4	3	3.0	2	5	3
25	3	2	2.0	2	1	1
26	2	3	4.0	3	3	2
27	4	1	2.0	3	3	1

	Group A	Group B	Group C	Group D	Group E	Group F
	F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLA	FAM_POST_UND	FAM_COULD_PLA
	Y	Y	Y	Y	Y	Y
28	1	3	2.0	3	3	2
29	2	5	5.0	5	2	1
30	2	3				
31	2	5	4.0	2	5	5
32	3	3	4.0	3	4	2
33	3	3	4.0	5	4	3
34	3	2	3.0	3	2	3
35	3	2	2.0	2	4	3
36	2	2	3.0	2	4	4
37	3	4	4.0	2	5	3
38	2	2	3.0	3	4	4
39	3	1	2.0	1	4	4
40	4	1	2.0	1	4	1
41	4	2	2.0	3	4	5
42	3	3	5.0	5	5	4
43	2	3	3.0	2	4	5
44	4	2	2.0	2	4	3
45	4	4	2.0	1	5	2
46	2	3	3.0	3	4	2
47	2	2	3.0	2	4	3
48	4	5	5.0	2	5	5
49	4	1	2.0	2	1	2
50	3	1	1.0	1	4	1
51	3	3	3.0	1	4	2
52	4	4	4.0	1	4	1
53	2	4	3.0	1	2	1
54	3	2	3.0	1	3	3

	Group A	Group B	Group C	Group D	Group E	Group F
	F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLA	FAM_POST_UND	FAM_COULD_PLA
	Y	Y	Y	Y	Y	Y
55	2	4	3.0	4	5	4
56	3	2	3.0	3	2	2
57	1	4	3.5	3	5	4
58	3	3	3.0	3	4	3
59	5	1	2.0	1	3	4
60	3	2			3	3
61	5	3	3.0	2	3	4
62	3	3	3.0	2	3	4
63	3	3	3.0	4	2	3
64	2	3	3.0	3	1	2
65	5	3				
66	4	3				
67	5	3				
68	4	4				
69	4	3				
70	4	3				
71	4	4				
72	5	3				
73	5	3				
74	5	4				
75	5	4				
76	4	4				
77	5	2				
78	5	5				
79	2	4				
80	4	2				
81	4	2				

	Group A	Group B	Group C	Group D	Group E	Group F
	F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLA	FAM_POST_UND	FAM_COULD_PLA
	Y	Y	Y	Y	Y	Y
82	4	4				
83	3	4				
84	4	3				
85	5	3				
86	3	4				
87	5	5				
88	4	3				
89	3	2				
90	3	3				
91	3	3				
92	1	3				
93	3	5				
94	3	3				
95	4	3				
96	1	4				
97	5	4				
98	4	3				
99	3	2				
100	3	3				
101	4	4				
102	3	4				
103	3	2				
104	4	2				
105	4	3				
106	2	5				
107	4	2				
108	4	2				

	Group A	Group B	Group C	Group D	Group E	Group F
	F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLA	FAM_POST_UND	FAM_COULD_PLA
	Y	Y	Y	Y	Y	Y
109	5	4				
110	2	4				
111	3	3				
112	4	5				
113	4	2				
114	3	2				
115	3	3				
116	4	4				
117	3	3				
118	5	4				
119	1	4				
120	4	2				
121	3	4				
122	4	4				
123	2	2				
124	4	4				
125	5	3				
126	3	3				
127	4	3				
128	3	3				

Ordinary one-way ANOVA ANOVA						
1	Table Analyzed	Understanding vs 'could play'				
2	Data sets analyzed	A : F_UND	B : U_UND	C : UNF_POST_UND	D : UNF_COULD_PLAY	E : FAM_POST_UND
3						
4	ANOVA summary					
5	F	11.13				
6	P value	<0.0001				
7	P value summary	****				
8	Significant diff. among means (P < 0.05)?	Yes				
9	R square	0.1001				
10						
11	Brown-Forsythe test					
12	F (DFn, DFd)	3.543 (5, 500)				
13	P value	0.0037				
14	P value summary	**				
15	Are SDs significantly different (P < 0.05)?	Yes				
16						
17	Bartlett's test					
18	Bartlett's statistic (corrected)	11.95				
19	P value	0.0355				
20	P value summary	*				
21	Are SDs significantly different (P < 0.05)?	Yes				
22						
23	ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
24	Treatment (between columns)	64.87	5	12.97	F (5, 500) = 11.13	P<0.0001
25	Residual (within columns)	583.1	500	1.166		
26	Total	648	505			
27						

Ordinary one-way ANOVA ANOVA						
28	Data summary					
29	Number of treatments (columns)	6				
30	Number of values (total)	506				

Ordinary one-way ANOVA									
Multiple comparisons									
1	Number of families	1							
2	Number of comparisons per family	15							
3	Alpha	0.05							
4									
5	Uncorrected Fisher's LSD	Mean Diff.	95.00% CI of diff.	Significant?	Summary	Individual P Value			
6									
7	F_UND vs. U_UND	0.4453	0.1801 to 0.7105	Yes	**	0.0010	A-B		
8	F_UND vs. UNF_POST_UND	0.4113	0.08299 to 0.7396	Yes	*	0.0142	A-C		
9	F_UND vs. UNF_COULD_PLAY	0.8871	0.5588 to 1.215	Yes	****	<0.0001	A-D		
10	F_UND vs. FAM_POST_UND	0.0873	-0.2392 to 0.4138	No	ns	0.5996	A-E		
11	F_UND vs. FAM_COULD_PLAY	1.008	0.6814 to 1.334	Yes	****	<0.0001	A-F		
12	U_UND vs. UNF_POST_UND	-0.03402	-0.3623 to 0.2943	No	ns	0.8387	B-C		
13	U_UND vs. UNF_COULD_PLAY	0.4418	0.1135 to 0.7701	Yes	**	0.0085	B-D		
14	U_UND vs. FAM_POST_UND	-0.358	-0.6845 to -0.03148	Yes	*	0.0317	B-E		
15	U_UND vs. FAM_COULD_PLAY	0.5626	0.2361 to 0.8892	Yes	***	0.0008	B-F		
16	UNF_POST_UND vs. UNF_COULD_PLAY	0.4758	0.09473 to 0.8569	Yes	*	0.0145	C-D		
17	UNF_POST_UND vs. FAM_POST_UND	-0.324	-0.7035 to 0.05557	No	ns	0.0942	C-E		
18	UNF_POST_UND vs. FAM_COULD_PLAY	0.5966	0.2171 to 0.9762	Yes	**	0.0021	C-F		
19	UNF_COULD_PLAY vs. FAM_POST_UND	-0.7998	-1.179 to -0.4202	Yes	****	<0.0001	D-E		
20	UNF_COULD_PLAY vs. FAM_COULD_PLAY	0.1208	-0.2587 to 0.5004	No	ns	0.5319	D-F		
21	FAM_POST_UND vs. FAM_COULD_PLAY	0.9206	0.5426 to 1.299	Yes	****	<0.0001	E-F		
22									
23									
24	Test details	Mean 1	Mean 2	Mean Diff.	SE of diff.	n1	n2	t	DF
25									
26	F_UND vs. U_UND	3.5	3.055	0.4453	0.135	128	128	3.299	500
27	F_UND vs. UNF_POST_UND	3.5	3.089	0.4113	0.1671	128	62	2.461	500




Ordinary one-way ANOVA									
Multiple comparisons									
28	F_UND vs. UNF_COULD_PLAY	3.5	2.613	0.8871	0.1671	128	62	5.309	500
29	F_UND vs. FAM_POST_UND	3.5	3.413	0.0873	0.1662	128	63	0.5253	500
30	F_UND vs. FAM_COULD_PLAY	3.5	2.492	1.008	0.1662	128	63	6.065	500
31	U_UND vs. UNF_POST_UND	3.055	3.089	-0.03402	0.1671	128	62	0.2036	500
32	U_UND vs. UNF_COULD_PLAY	3.055	2.613	0.4418	0.1671	128	62	2.644	500
33	U_UND vs. FAM_POST_UND	3.055	3.413	-0.358	0.1662	128	63	2.154	500
34	U_UND vs. FAM_COULD_PLAY	3.055	2.492	0.5626	0.1662	128	63	3.385	500
35	UNF_POST_UND vs. UNF_COULD_PLAY	3.089	2.613	0.4758	0.194	62	62	2.453	500
36	UNF_POST_UND vs. FAM_POST_UND	3.089	3.413	-0.324	0.1932	62	63	1.677	500
37	UNF_POST_UND vs. FAM_COULD_PLAY	3.089	2.492	0.5966	0.1932	62	63	3.088	500
38	UNF_COULD_PLAY vs. FAM_POST_UND	2.613	3.413	-0.7998	0.1932	62	63	4.14	500
39	UNF_COULD_PLAY vs. FAM_COULD_PLAY	2.613	2.492	0.1208	0.1932	62	63	0.6255	500
40	FAM_POST_UND vs. FAM_COULD_PLAY	3.413	2.492	0.9206	0.1924	63	63	4.785	500



Ordinary one-way ANOVA CIs for graphing		A		
		Column means diff.		
		Mean	Upper Limit	Lower Limit
1	F_UND - U_UND	0.445	0.711	0.180
2	F_UND - UNF_POST_UND	0.411	0.740	0.083
3	F_UND - UNF_COULD_PLAY	0.887	1.215	0.559
4	F_UND - FAM_POST_UND	0.087	0.414	-0.239
5	F_UND - FAM_COULD_PLAY	1.008	1.334	0.681
6	U_UND - UNF_POST_UND	-0.034	0.294	-0.362
7	U_UND - UNF_COULD_PLAY	0.442	0.770	0.113
8	U_UND - FAM_POST_UND	-0.358	-0.031	-0.685
9	U_UND - FAM_COULD_PLAY	0.563	0.889	0.236
10	UNF_POST_UND - UNF_COULD_PLAY	0.476	0.857	0.095
11	UNF_POST_UND - FAM_POST_UND	-0.324	0.056	-0.704
12	UNF_POST_UND - FAM_COULD_PLAY	0.597	0.976	0.217
13	UNF_COULD_PLAY - FAM_POST_UND	-0.800	-0.420	-1.179
14	UNF_COULD_PLAY - FAM_COULD_PLAY	0.121	0.500	-0.259
15	FAM_POST_UND - FAM_COULD_PLAY	0.921	1.299	0.543

		A	B	C	D	E	F
		F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLAY	FAM_POST_UND	FAM_COULD_PLAY
	✕	Y	Y	Y	Y	Y	Y
1		0.500	-1.055	1.911	-0.613	0.587	-1.492
2		0.500	-0.055	-0.089	1.387	-2.413	-1.492
3		1.500	-0.055	-0.089	-0.613	0.587	0.508
4		0.500	-0.055	0.911	2.387	0.587	0.508
5		0.500	-0.055	-0.089	2.387	-0.413	-0.492
6		0.500	-1.055	-0.089	0.387	-0.413	-1.492
7		1.500	-0.055	-1.089	1.387	0.587	1.508
8		1.500	-1.055	-1.089	0.387	-0.413	-1.492
9		1.500	-0.055	-0.089	0.387	-0.413	-1.492
10		0.500	0.945	0.911	1.387	-0.413	-0.492
11		1.500	0.945	0.911	0.387	0.587	1.508
12		0.500	-0.055	-0.089	-1.613	-0.413	-1.492
13		0.500	-1.055	-1.089	-0.613	0.587	-1.492
14		0.500	0.945	0.911	-0.613	0.587	-1.492
15		-1.500	0.945	0.911	1.387	0.587	0.508
16		0.500	-1.055	-1.089	-1.613	-2.413	-1.492
17		0.500	-1.055	-1.089	0.387	-0.413	-0.492
18		0.500	0.945	0.911	2.387	0.587	0.508
19		-0.500	0.945	0.911	2.387	0.587	0.508
20		-1.500	-0.055	-0.089	-0.613	-0.413	-1.492
21		1.500	-0.055	-0.089	-1.613	-0.413	-1.492
22		-0.500	0.945	0.911	-1.613	-0.413	-1.492
23		1.500	-1.055	0.911	0.387	-1.413	-0.492
24		0.500	-0.055	-0.089	-0.613	1.587	0.508
25		-0.500	-1.055	-1.089	-0.613	-2.413	-1.492
26		-1.500	-0.055	0.911	0.387	-0.413	-0.492
27		0.500	-2.055	-1.089	0.387	-0.413	-1.492

		A	B	C	D	E	F
		F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLAY	FAM_POST_UND	FAM_COULD_PLAY
	✕	Y	Y	Y	Y	Y	Y
28		-2.500	-0.055	-1.089	0.387	-0.413	-0.492
29		-1.500	1.945	1.911	2.387	-1.413	-1.492
30		-1.500	-0.055				
31		-1.500	1.945	0.911	-0.613	1.587	2.508
32		-0.500	-0.055	0.911	0.387	0.587	-0.492
33		-0.500	-0.055	0.911	2.387	0.587	0.508
34		-0.500	-1.055	-0.089	0.387	-1.413	0.508
35		-0.500	-1.055	-1.089	-0.613	0.587	0.508
36		-1.500	-1.055	-0.089	-0.613	0.587	1.508
37		-0.500	0.945	0.911	-0.613	1.587	0.508
38		-1.500	-1.055	-0.089	0.387	0.587	1.508
39		-0.500	-2.055	-1.089	-1.613	0.587	1.508
40		0.500	-2.055	-1.089	-1.613	0.587	-1.492
41		0.500	-1.055	-1.089	0.387	0.587	2.508
42		-0.500	-0.055	1.911	2.387	1.587	1.508
43		-1.500	-0.055	-0.089	-0.613	0.587	2.508
44		0.500	-1.055	-1.089	-0.613	0.587	0.508
45		0.500	0.945	-1.089	-1.613	1.587	-0.492
46		-1.500	-0.055	-0.089	0.387	0.587	-0.492
47		-1.500	-1.055	-0.089	-0.613	0.587	0.508
48		0.500	1.945	1.911	-0.613	1.587	2.508
49		0.500	-2.055	-1.089	-0.613	-2.413	-0.492
50		-0.500	-2.055	-2.089	-1.613	0.587	-1.492
51		-0.500	-0.055	-0.089	-1.613	0.587	-0.492
52		0.500	0.945	0.911	-1.613	0.587	-1.492
53		-1.500	0.945	-0.089	-1.613	-1.413	-1.492
54		-0.500	-1.055	-0.089	-1.613	-0.413	0.508

		A	B	C	D	E	F
		F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLAY	FAM_POST_UND	FAM_COULD_PLAY
	✕	Y	Y	Y	Y	Y	Y
55		-1.500	0.945	-0.089	1.387	1.587	1.508
56		-0.500	-1.055	-0.089	0.387	-1.413	-0.492
57		-2.500	0.945	0.411	0.387	1.587	1.508
58		-0.500	-0.055	-0.089	0.387	0.587	0.508
59		1.500	-2.055	-1.089	-1.613	-0.413	1.508
60		-0.500	-1.055			-0.413	0.508
61		1.500	-0.055	-0.089	-0.613	-0.413	1.508
62		-0.500	-0.055	-0.089	-0.613	-0.413	1.508
63		-0.500	-0.055	-0.089	1.387	-1.413	0.508
64		-1.500	-0.055	-0.089	0.387	-2.413	-0.492
65		1.500	-0.055				
66		0.500	-0.055				
67		1.500	-0.055				
68		0.500	0.945				
69		0.500	-0.055				
70		0.500	-0.055				
71		0.500	0.945				
72		1.500	-0.055				
73		1.500	-0.055				
74		1.500	0.945				
75		1.500	0.945				
76		0.500	0.945				
77		1.500	-1.055				
78		1.500	1.945				
79		-1.500	0.945				
80		0.500	-1.055				
81		0.500	-1.055				

		A	B	C	D	E	F
		F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLAY	FAM_POST_UND	FAM_COULD_PLAY
✕		Y	Y	Y	Y	Y	Y
82		0.500	0.945				
83		-0.500	0.945				
84		0.500	-0.055				
85		1.500	-0.055				
86		-0.500	0.945				
87		1.500	1.945				
88		0.500	-0.055				
89		-0.500	-1.055				
90		-0.500	-0.055				
91		-0.500	-0.055				
92		-2.500	-0.055				
93		-0.500	1.945				
94		-0.500	-0.055				
95		0.500	-0.055				
96		-2.500	0.945				
97		1.500	0.945				
98		0.500	-0.055				
99		-0.500	-1.055				
100		-0.500	-0.055				
101		0.500	0.945				
102		-0.500	0.945				
103		-0.500	-1.055				
104		0.500	-1.055				
105		0.500	-0.055				
106		-1.500	1.945				
107		0.500	-1.055				
108		0.500	-1.055				

		A	B	C	D	E	F
		F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLAY	FAM_POST_UND	FAM_COULD_PLAY
		Y	Y	Y	Y	Y	Y
109		1.500	0.945				
110		-1.500	0.945				
111		-0.500	-0.055				
112		0.500	1.945				
113		0.500	-1.055				
114		-0.500	-1.055				
115		-0.500	-0.055				
116		0.500	0.945				
117		-0.500	-0.055				
118		1.500	0.945				
119		-2.500	0.945				
120		0.500	-1.055				
121		-0.500	0.945				
122		0.500	0.945				
123		-1.500	-1.055				
124		0.500	0.945				
125		1.500	-0.055				
126		-0.500	-0.055				
127		0.500	-0.055				
128		-0.500	-0.055				

Ordinary one-way ANOVA Descriptive Statistics							
		F_UND	U_UND	UNF_POST_UND	UNF_COULD_PLAY	FAM_POST_UND	FAM_COULD_PLAY
1	Number of values	128	128	62	62	63	63
2							
3	Minimum	1	1	1	1	1	1
4	25% Percentile	3	2	2	2	3	1
5	Median	4	3	3	2.5	4	2
6	75% Percentile	4	4	4	3	4	3
7	Maximum	5	5	5	5	5	5
8							
9	Mean	3.5	3.055	3.089	2.613	3.413	2.492
10	Std. Deviation	1.065	0.9745	0.9122	1.246	1.087	1.268
11	Std. Error of Mean	0.09412	0.08614	0.1159	0.1582	0.137	0.1598
12							
13	Lower 95% CI	3.314	2.884	2.857	2.296	3.139	2.173
14	Upper 95% CI	3.686	3.225	3.32	2.929	3.686	2.812