Mixed Model Analysis

Model Dimension[a]

		Number of Levels	Covariance Structure	Number of Parameters
Fixed Effects	Intercept	1		1
	SNR	3		2
	Program	6		5
	Noise_Type	2		1
	SNR * Program	18		10
	SNR * Noise_Type	6		2
	Program * Noise_Type	12		5
	SNR * Program * Noise_Type	36		10
Random Effects	Audiogram	4	Variance Components	1
Residual				1
Total		88		38

a. Dependent Variable: HASQI.

Information Criteria[a]

-2 Restricted Log Likelihood	-2485.917708
Akaike's Information Criterion (AIC)	-2481.917708
Hurvich and Tsai's Criterion (AICC)	-2481.906927
Bozdogan's Criterion (CAIC)	-2469.882696
Schwarz's Bayesian Criterion (BIC)	-2471.882696

The information criteria are displayed in smaller-is-better form.

a. Dependent Variable: HASQI.

Coefficients of Determination

Pseudo-R Square Measures	Marginal	.493
	Conditional	.693

Intraclass Correlation Coefficients

Overall ICCs	Adjusted	.395
	Conditional	.200

Fixed Effects

Type III Tests of Fixed Effects[a]

Source	Numerator df	Denominator df	F	Sig.
Intercept	1	3.013	38.576	.008
SNR	2	1113.002	706.354	<.001
Program	5	1113.002	60.870	<.001
Noise_Type	1	1113.002	53.936	<.001
SNR * Program	10	1113.002	1.374	.187
SNR * Noise_Type	2	1113.002	.402	.669
Program * Noise_Type	5	1113.002	11.568	<.001
SNR * Program * Noise_Type	10	1113.002	.452	.920

a. Dependent Variable: HASQI.

Covariance Parameters

Estimates of Covariance Parameters[a]

Parameter		Estimate	Std. Error
Residual		.006	.000
Audiogram	Variance	.004	.003

a. Dependent Variable: HASQI.

Estimated Marginal Means

1. SNR

Estimates[a]

SNR	Mean	Std. Error	df	95% Confidence Interval	
				Lower Bound	Upper Bound
-5	.089	.030	3.077	-.006	.184
0	.182	.030	3.077	.087	.277
5	.291	.030	3.077	.196	.387

a. Dependent Variable: HASQI.

Pairwise Comparisons[a]

(I) SNR	(J) SNR	Mean Difference (I-J)	Std. Error	df	Sig.[c]	95% Confidence Interval for Difference[c]	
						Lower Bound	Upper Bound
-5	0	-.093*	.005	1113.002	<.001	-.106	-.080
	5	-.202*	.005	1113.002	<.001	-.215	-.189
0	-5	.093*	.005	1113.002	<.001	.080	.106
	5	-.109*	.005	1113.002	<.001	-.122	-.096
5	-5	.202*	.005	1113.002	<.001	.189	.215
	0	.109*	.005	1113.002	<.001	.096	.122

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: HASQI.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

Numerator df	Denominator df	F	Sig.
2	1113.002	706.354	<.001

The F tests the effect of SNR. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: HASQI.

2. Program

Estimates[a]

Program	Mean	Std. Error	df	95% Confidence Interval	
				Lower Bound	Upper Bound
No Processing	.146	.031	3.175	.052	.240
Beam	.170	.031	3.175	.076	.265
Beam + NoiseBlock	.184	.031	3.175	.090	.279
DNN	.206	.031	3.175	.112	.301
NoiseBlock	.157	.031	3.175	.063	.251
Beam + DNN	.262	.031	3.175	.167	.356

a. Dependent Variable: HASQI.

Pairwise Comparisons[a]

(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df	Sig.[c]
No Processing	Beam	-.024*	.008	1113.002	.022
	Beam + NoiseBlock	-.038*	.008	1113.002	<.001
	DNN	-.060*	.008	1113.002	<.001
	NoiseBlock	-.011	.008	1113.002	1.000
	Beam + DNN	-.116*	.008	1113.002	<.001
Beam	No Processing	.024*	.008	1113.002	.022
	Beam + NoiseBlock	-.014	.008	1113.002	.957
	DNN	-.036*	.008	1113.002	<.001
	NoiseBlock	.013	.008	1113.002	1.000
	Beam + DNN	-.092*	.008	1113.002	<.001
Beam + NoiseBlock	No Processing	.038*	.008	1113.002	<.001
	Beam	.014	.008	1113.002	.957
	DNN	-.022	.008	1113.002	.062
	NoiseBlock	.027*	.008	1113.002	.005
	Beam + DNN	-.077*	.008	1113.002	<.001
DNN	No Processing	.060*	.008	1113.002	<.001
	Beam	.036*	.008	1113.002	<.001
	Beam + NoiseBlock	.022	.008	1113.002	.062
	NoiseBlock	.049*	.008	1113.002	<.001
	Beam + DNN	-.056*	.008	1113.002	<.001
NoiseBlock	No Processing	.011	.008	1113.002	1.000
	Beam	-.013	.008	1113.002	1.000
	Beam + NoiseBlock	-.027*	.008	1113.002	.005
	DNN	-.049*	.008	1113.002	<.001
	Beam + DNN	-.105*	.008	1113.002	<.001
Beam + DNN	No Processing	.116*	.008	1113.002	<.001
	Beam	.092*	.008	1113.002	<.001
	Beam + NoiseBlock	.077*	.008	1113.002	<.001
	DNN	.056*	.008	1113.002	<.001
	NoiseBlock	.105*	.008	1113.002	<.001

Pairwise Comparisons[a]

(I) Program	(J) Program	95% Confidence Interval for Difference[c] Lower Bound	Upper Bound
No Processing	Beam	-.047	-.002
	Beam + NoiseBlock	-.061	-.016
	DNN	-.083	-.038
	NoiseBlock	-.034	.011
	Beam + DNN	-.138	-.093
Beam	No Processing	.002	.047
	Beam + NoiseBlock	-.037	.008
	DNN	-.058	-.014
	NoiseBlock	-.009	.036
	Beam + DNN	-.114	-.069
Beam + NoiseBlock	No Processing	.016	.061
	Beam	-.008	.037
	DNN	-.044	.001
	NoiseBlock	.005	.050
	Beam + DNN	-.100	-.055
DNN	No Processing	.038	.083
	Beam	.014	.058
	Beam + NoiseBlock	-.001	.044
	NoiseBlock	.027	.072
	Beam + DNN	-.078	-.033
NoiseBlock	No Processing	-.011	.034
	Beam	-.036	.009
	Beam + NoiseBlock	-.050	-.005
	DNN	-.072	-.027
	Beam + DNN	-.127	-.082
Beam + DNN	No Processing	.093	.138
	Beam	.069	.114
	Beam + NoiseBlock	.055	.100
	DNN	.033	.078
	NoiseBlock	.082	.127

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: HASQI.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

Numerator df	Denominator df	F	Sig.
5	1113.002	60.870	<.001

The F tests the effect of Program. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: HASQI.

3. Noise_Type

Estimates[a]

Noise_Type	Mean	Std. Error	df	95% Confidence Interval	
				Lower Bound	Upper Bound
SSN	.204	.030	3.045	.108	.299
Babble	.171	.030	3.045	.076	.267

a. Dependent Variable: HASQI.

Pairwise Comparisons[a]

(I) Noise_Type	(J) Noise_Type	Mean Difference (I-J)	Std. Error	df	Sig.[c]	95% Confidence Interval for [c]...
						Lower Bound
SSN	Babble	.032*	.004	1113.002	<.001	.024
Babble	SSN	-.032*	.004	1113.002	<.001	-.041

Pairwise Comparisons[a]

(I) Noise_Type	(J) Noise_Type	95% Confidence Interval for [c]...
		Upper Bound
SSN	Babble	.041
Babble	SSN	-.024

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: HASQI.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

Numerator df	Denominator df	F	Sig.
1	1113.002	53.936	<.001

The F tests the effect of Noise_Type. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: HASQI.

4. SNR * Program

Estimates[a]

SNR	Program	Mean	Std. Error	df	95% Confidence Interval	
					Lower Bound	Upper Bound
-5	No Processing	.058	.032	3.580	-.033	.150
	Beam	.080	.032	3.580	-.012	.172
	Beam + NoiseBlock	.089	.032	3.580	-.003	.181
	DNN	.100	.032	3.580	.008	.192
	NoiseBlock	.065	.032	3.580	-.027	.157
	Beam + DNN	.142	.032	3.580	.051	.234
0	No Processing	.135	.032	3.580	.044	.227
	Beam	.164	.032	3.580	.073	.256
	Beam + NoiseBlock	.180	.032	3.580	.088	.272
	DNN	.200	.032	3.580	.108	.292
	NoiseBlock	.148	.032	3.580	.056	.239
	Beam + DNN	.266	.032	3.580	.174	.358
5	No Processing	.244	.032	3.580	.152	.336
	Beam	.266	.032	3.580	.174	.358
	Beam + NoiseBlock	.284	.032	3.580	.192	.376
	DNN	.319	.032	3.580	.227	.410
	NoiseBlock	.258	.032	3.580	.167	.350
	Beam + DNN	.377	.032	3.580	.285	.468

a. Dependent Variable: HASQI.

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df	Sig.[c]
-5	No Processing	Beam	-.022	.013	1113.002	1.000
		Beam + NoiseBlock	-.030	.013	1113.002	.325
		DNN	-.041*	.013	1113.002	.026
		NoiseBlock	-.007	.013	1113.002	1.000
		Beam + DNN	-.084*	.013	1113.002	<.001
	Beam	No Processing	.022	.013	1113.002	1.000
		Beam + NoiseBlock	-.009	.013	1113.002	1.000
		DNN	-.020	.013	1113.002	1.000
		NoiseBlock	.015	.013	1113.002	1.000
		Beam + DNN	-.062*	.013	1113.002	<.001
	Beam + NoiseBlock	No Processing	.030	.013	1113.002	.325
		Beam	.009	.013	1113.002	1.000
		DNN	-.011	.013	1113.002	1.000
		NoiseBlock	.024	.013	1113.002	1.000
		Beam + DNN	-.054*	.013	1113.002	<.001
	DNN	No Processing	.041*	.013	1113.002	.026
		Beam	.020	.013	1113.002	1.000
		Beam + NoiseBlock	.011	.013	1113.002	1.000
		NoiseBlock	.035	.013	1113.002	.126
		Beam + DNN	-.043*	.013	1113.002	.019
	NoiseBlock	No Processing	.007	.013	1113.002	1.000
		Beam	-.015	.013	1113.002	1.000
		Beam + NoiseBlock	-.024	.013	1113.002	1.000
		DNN	-.035	.013	1113.002	.126
		Beam + DNN	-.077*	.013	1113.002	<.001
	Beam + DNN	No Processing	.084*	.013	1113.002	<.001
		Beam	.062*	.013	1113.002	<.001
		Beam + NoiseBlock	.054*	.013	1113.002	<.001
		DNN	.043*	.013	1113.002	.019
		NoiseBlock	.077*	.013	1113.002	<.001
0	No Processing	Beam	-.029	.013	1113.002	.431
		Beam + NoiseBlock	-.045*	.013	1113.002	.011
		DNN	-.064*	.013	1113.002	<.001
		NoiseBlock	-.012	.013	1113.002	1.000
		Beam + DNN	-.131*	.013	1113.002	<.001

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	95% Confidence Interval for Difference[c] Lower Bound	Upper Bound
-5	No Processing	Beam	-.061	.017
		Beam + NoiseBlock	-.069	.008
		DNN	-.080	-.003
		NoiseBlock	-.045	.032
		Beam + DNN	-.123	-.045
	Beam	No Processing	-.017	.061
		Beam + NoiseBlock	-.047	.030
		DNN	-.059	.019
		NoiseBlock	-.024	.054
		Beam + DNN	-.101	-.023
	Beam + NoiseBlock	No Processing	-.008	.069
		Beam	-.030	.047
		DNN	-.050	.028
		NoiseBlock	-.015	.062
		Beam + DNN	-.092	-.015
	DNN	No Processing	.003	.080
		Beam	-.019	.059
		Beam + NoiseBlock	-.028	.050
		NoiseBlock	-.004	.074
		Beam + DNN	-.081	-.004
	NoiseBlock	No Processing	-.032	.045
		Beam	-.054	.024
		Beam + NoiseBlock	-.062	.015
		DNN	-.074	.004
		Beam + DNN	-.116	-.039
	Beam + DNN	No Processing	.045	.123
		Beam	.023	.101
		Beam + NoiseBlock	.015	.092
		DNN	.004	.081
		NoiseBlock	.039	.116
0	No Processing	Beam	-.068	.010
		Beam + NoiseBlock	-.083	-.006
		DNN	-.103	-.026
		NoiseBlock	-.051	.027
		Beam + DNN	-.169	-.092

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df	Sig.[c]
	Beam	No Processing	.029	.013	1113.002	.431
		Beam + NoiseBlock	-.016	.013	1113.002	1.000
		DNN	-.036	.013	1113.002	.106
		NoiseBlock	.017	.013	1113.002	1.000
		Beam + DNN	-.102*	.013	1113.002	<.001
	Beam + NoiseBlock	No Processing	.045*	.013	1113.002	.011
		Beam	.016	.013	1113.002	1.000
		DNN	-.020	.013	1113.002	1.000
		NoiseBlock	.033	.013	1113.002	.207
		Beam + DNN	-.086*	.013	1113.002	<.001
	DNN	No Processing	.064*	.013	1113.002	<.001
		Beam	.036	.013	1113.002	.106
		Beam + NoiseBlock	.020	.013	1113.002	1.000
		NoiseBlock	.052*	.013	1113.002	.001
		Beam + DNN	-.066*	.013	1113.002	<.001
	NoiseBlock	No Processing	.012	.013	1113.002	1.000
		Beam	-.017	.013	1113.002	1.000
		Beam + NoiseBlock	-.033	.013	1113.002	.207
		DNN	-.052*	.013	1113.002	.001
		Beam + DNN	-.118*	.013	1113.002	<.001
	Beam + DNN	No Processing	.131*	.013	1113.002	<.001
		Beam	.102*	.013	1113.002	<.001
		Beam + NoiseBlock	.086*	.013	1113.002	<.001
		DNN	.066*	.013	1113.002	<.001
		NoiseBlock	.118*	.013	1113.002	<.001
5	No Processing	Beam	-.022	.013	1113.002	1.000
		Beam + NoiseBlock	-.040*	.013	1113.002	.036
		DNN	-.075*	.013	1113.002	<.001
		NoiseBlock	-.015	.013	1113.002	1.000
		Beam + DNN	-.133*	.013	1113.002	<.001
	Beam	No Processing	.022	.013	1113.002	1.000
		Beam + NoiseBlock	-.018	.013	1113.002	1.000
		DNN	-.053*	.013	1113.002	.001
		NoiseBlock	.008	.013	1113.002	1.000
		Beam + DNN	-.111*	.013	1113.002	<.001

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	95% Confidence Interval for Difference[c] Lower Bound	Upper Bound
	Beam	No Processing	-.010	.068
		Beam + NoiseBlock	-.055	.023
		DNN	-.074	.003
		NoiseBlock	-.022	.056
		Beam + DNN	-.141	-.063
	Beam + NoiseBlock	No Processing	.006	.083
		Beam	-.023	.055
		DNN	-.059	.019
		NoiseBlock	-.006	.071
		Beam + DNN	-.125	-.047
	DNN	No Processing	.026	.103
		Beam	-.003	.074
		Beam + NoiseBlock	-.019	.059
		NoiseBlock	.014	.091
		Beam + DNN	-.105	-.027
	NoiseBlock	No Processing	-.027	.051
		Beam	-.056	.022
		Beam + NoiseBlock	-.071	.006
		DNN	-.091	-.014
		Beam + DNN	-.157	-.080
	Beam + DNN	No Processing	.092	.169
		Beam	.063	.141
		Beam + NoiseBlock	.047	.125
		DNN	.027	.105
		NoiseBlock	.080	.157
5	No Processing	Beam	-.061	.017
		Beam + NoiseBlock	-.079	-.001
		DNN	-.114	-.036
		NoiseBlock	-.053	.024
		Beam + DNN	-.172	-.094
	Beam	No Processing	-.017	.061
		Beam + NoiseBlock	-.057	.021
		DNN	-.092	-.014
		NoiseBlock	-.031	.046
		Beam + DNN	-.149	-.072

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df	Sig.[c]
	Beam + NoiseBlock	No Processing	.040*	.013	1113.002	.036
		Beam	.018	.013	1113.002	1.000
		DNN	-.035	.013	1113.002	.129
		NoiseBlock	.026	.013	1113.002	.796
		Beam + DNN	-.093*	.013	1113.002	<.001
	DNN	No Processing	.075*	.013	1113.002	<.001
		Beam	.053*	.013	1113.002	.001
		Beam + NoiseBlock	.035	.013	1113.002	.129
		NoiseBlock	.060*	.013	1113.002	<.001
		Beam + DNN	-.058*	.013	1113.002	<.001
	NoiseBlock	No Processing	.015	.013	1113.002	1.000
		Beam	-.008	.013	1113.002	1.000
		Beam + NoiseBlock	-.026	.013	1113.002	.796
		DNN	-.060*	.013	1113.002	<.001
		Beam + DNN	-.118*	.013	1113.002	<.001
	Beam + DNN	No Processing	.133*	.013	1113.002	<.001
		Beam	.111*	.013	1113.002	<.001
		Beam + NoiseBlock	.093*	.013	1113.002	<.001
		DNN	.058*	.013	1113.002	<.001
		NoiseBlock	.118*	.013	1113.002	<.001

Pairwise Comparisons[a]

SNR	(I) Program	(J) Program	95% Confidence Interval for Difference[c] Lower Bound	Upper Bound
	Beam + NoiseBlock	No Processing	.001	.079
		Beam	-.021	.057
		DNN	-.074	.004
		NoiseBlock	-.013	.064
		Beam + DNN	-.131	-.054
	DNN	No Processing	.036	.114
		Beam	.014	.092
		Beam + NoiseBlock	-.004	.074
		NoiseBlock	.021	.099
		Beam + DNN	-.097	-.019
	NoiseBlock	No Processing	-.024	.053
		Beam	-.046	.031
		Beam + NoiseBlock	-.064	.013
		DNN	-.099	-.021
		Beam + DNN	-.157	-.079
	Beam + DNN	No Processing	.094	.172
		Beam	.072	.149
		Beam + NoiseBlock	.054	.131
		DNN	.019	.097
		NoiseBlock	.079	.157

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: HASQI.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

SNR	Numerator df	Denominator df	F	Sig.
-5	5	1113.002	10.489	<.001
0	5	1113.002	25.428	<.001
5	5	1113.002	27.701	<.001

Each F tests the simple effects of Program within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: HASQI.

5. SNR * Noise_Type[a]

SNR	Noise_Type	Mean	Std. Error	df	95% Confidence Interval	
					Lower Bound	Upper Bound
-5	SSN	.103	.031	3.175	.008	.197
	Babble	.076	.031	3.175	-.019	.170
0	SSN	.199	.031	3.175	.105	.293
	Babble	.166	.031	3.175	.071	.260
5	SSN	.310	.031	3.175	.215	.404
	Babble	.273	.031	3.175	.179	.367

a. Dependent Variable: HASQI.

6. Program * Noise_Type

Estimates[a]

Program	Noise_Type	Mean	Std. Error	df	95% Confidence Interval	
					Lower Bound	Upper Bound
No Processing	SSN	.166	.031	3.374	.073	.259
	Babble	.126	.031	3.374	.033	.219
Beam	SSN	.161	.031	3.374	.068	.254
	Babble	.180	.031	3.374	.087	.272
Beam + NoiseBlock	SSN	.183	.031	3.374	.091	.276
	Babble	.185	.031	3.374	.092	.278
DNN	SSN	.247	.031	3.374	.154	.339
	Babble	.166	.031	3.374	.073	.259
NoiseBlock	SSN	.185	.031	3.374	.092	.278
	Babble	.130	.031	3.374	.037	.222
Beam + DNN	SSN	.281	.031	3.374	.188	.374
	Babble	.243	.031	3.374	.150	.336

a. Dependent Variable: HASQI.

Pairwise Comparisons[a]

Noise_Type	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
SSN	No Processing	Beam	.005	.011	1113.002
		Beam + NoiseBlock	-.017	.011	1113.002
		DNN	-.080*	.011	1113.002
		NoiseBlock	-.018	.011	1113.002
		Beam + DNN	-.115*	.011	1113.002
	Beam	No Processing	-.005	.011	1113.002
		Beam + NoiseBlock	-.023	.011	1113.002
		DNN	-.086*	.011	1113.002
		NoiseBlock	-.024	.011	1113.002
		Beam + DNN	-.120*	.011	1113.002
	Beam + NoiseBlock	No Processing	.017	.011	1113.002
		Beam	.023	.011	1113.002
		DNN	-.063*	.011	1113.002
		NoiseBlock	-.001	.011	1113.002
		Beam + DNN	-.097*	.011	1113.002
	DNN	No Processing	.080*	.011	1113.002
		Beam	.086*	.011	1113.002
		Beam + NoiseBlock	.063*	.011	1113.002
		NoiseBlock	.062*	.011	1113.002
		Beam + DNN	-.034*	.011	1113.002
	NoiseBlock	No Processing	.018	.011	1113.002
		Beam	.024	.011	1113.002
		Beam + NoiseBlock	.001	.011	1113.002
		DNN	-.062*	.011	1113.002
		Beam + DNN	-.096*	.011	1113.002
	Beam + DNN	No Processing	.115*	.011	1113.002
		Beam	.120*	.011	1113.002
		Beam + NoiseBlock	.097*	.011	1113.002
		DNN	.034*	.011	1113.002
		NoiseBlock	.096*	.011	1113.002
Babble	No Processing	Beam	-.054*	.011	1113.002
		Beam + NoiseBlock	-.059*	.011	1113.002
		DNN	-.040*	.011	1113.002
		NoiseBlock	-.004	.011	1113.002
		Beam + DNN	-.117*	.011	1113.002

Pairwise Comparisons[a]

Noise_Type	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for Difference[c]	
				Lower Bound	Upper Bound
SSN	No Processing	Beam	1.000	-.026	.037
		Beam + NoiseBlock	1.000	-.049	.014
		DNN	<.001	-.112	-.049
		NoiseBlock	1.000	-.050	.013
		Beam + DNN	<.001	-.146	-.083
	Beam	No Processing	1.000	-.037	.026
		Beam + NoiseBlock	.533	-.054	.009
		DNN	<.001	-.117	-.054
		NoiseBlock	.416	-.055	.008
		Beam + DNN	<.001	-.151	-.088
	Beam + NoiseBlock	No Processing	1.000	-.014	.049
		Beam	.533	-.009	.054
		DNN	<.001	-.095	-.031
		NoiseBlock	1.000	-.033	.031
		Beam + DNN	<.001	-.129	-.065
	DNN	No Processing	<.001	.049	.112
		Beam	<.001	.054	.117
		Beam + NoiseBlock	<.001	.031	.095
		NoiseBlock	<.001	.030	.094
		Beam + DNN	.024	-.066	-.002
	NoiseBlock	No Processing	1.000	-.013	.050
		Beam	.416	-.008	.055
		Beam + NoiseBlock	1.000	-.031	.033
		DNN	<.001	-.094	-.030
		Beam + DNN	<.001	-.128	-.064
	Beam + DNN	No Processing	<.001	.083	.146
		Beam	<.001	.088	.151
		Beam + NoiseBlock	<.001	.065	.129
		DNN	.024	.002	.066
		NoiseBlock	<.001	.064	.128
Babble	No Processing	Beam	<.001	-.085	-.022
		Beam + NoiseBlock	<.001	-.091	-.028
		DNN	.003	-.072	-.008
		NoiseBlock	1.000	-.035	.028
		Beam + DNN	<.001	-.149	-.085

Pairwise Comparisons[a]

Noise_Type	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
	Beam	No Processing	.054*	.011	1113.002
		Beam + NoiseBlock	-.006	.011	1113.002
		DNN	.014	.011	1113.002
		NoiseBlock	.050*	.011	1113.002
		Beam + DNN	-.063*	.011	1113.002
	Beam + NoiseBlock	No Processing	.059*	.011	1113.002
		Beam	.006	.011	1113.002
		DNN	.019	.011	1113.002
		NoiseBlock	.056*	.011	1113.002
		Beam + DNN	-.058*	.011	1113.002
	DNN	No Processing	.040*	.011	1113.002
		Beam	-.014	.011	1113.002
		Beam + NoiseBlock	-.019	.011	1113.002
		NoiseBlock	.036*	.011	1113.002
		Beam + DNN	-.077*	.011	1113.002
	NoiseBlock	No Processing	.004	.011	1113.002
		Beam	-.050*	.011	1113.002
		Beam + NoiseBlock	-.056*	.011	1113.002
		DNN	-.036*	.011	1113.002
		Beam + DNN	-.113*	.011	1113.002
	Beam + DNN	No Processing	.117*	.011	1113.002
		Beam	.063*	.011	1113.002
		Beam + NoiseBlock	.058*	.011	1113.002
		DNN	.077*	.011	1113.002
		NoiseBlock	.113*	.011	1113.002

Pairwise Comparisons[a]

Noise_Type	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for Difference[c]	
				Lower Bound	Upper Bound
	Beam	No Processing	<.001	.022	.085
		Beam + NoiseBlock	1.000	-.037	.026
		DNN	1.000	-.018	.045
		NoiseBlock	<.001	.018	.082
		Beam + DNN	<.001	-.095	-.032
	Beam + NoiseBlock	No Processing	<.001	.028	.091
		Beam	1.000	-.026	.037
		DNN	1.000	-.012	.051
		NoiseBlock	<.001	.024	.087
		Beam + DNN	<.001	-.089	-.026
	DNN	No Processing	.003	.008	.072
		Beam	1.000	-.045	.018
		Beam + NoiseBlock	1.000	-.051	.012
		NoiseBlock	.012	.005	.068
		Beam + DNN	<.001	-.109	-.045
	NoiseBlock	No Processing	1.000	-.028	.035
		Beam	<.001	-.082	-.018
		Beam + NoiseBlock	<.001	-.087	-.024
		DNN	.012	-.068	-.005
		Beam + DNN	<.001	-.145	-.082
	Beam + DNN	No Processing	<.001	.085	.149
		Beam	<.001	.032	.095
		Beam + NoiseBlock	<.001	.026	.089
		DNN	<.001	.045	.109
		NoiseBlock	<.001	.082	.145

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: HASQI.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

Noise_Type	Numerator df	Denominator df	F	Sig.
SSN	5	1113.002	40.667	<.001
Babble	5	1113.002	31.771	<.001

Each F tests the simple effects of Program within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: HASQI.

7. SNR * Program * Noise_Type

Estimates[a]

SNR	Program	Noise_Type	Mean	Std. Error	df	95% ... Lower Bound
-5	No Processing	SSN	.069	.033	4.233	-.020
		Babble	.048	.033	4.233	-.042
	Beam	SSN	.074	.033	4.233	-.015
		Babble	.086	.033	4.233	-.003
	Beam + NoiseBlock	SSN	.090	.033	4.233	.000
		Babble	.088	.033	4.233	-.001
	DNN	SSN	.135	.033	4.233	.045
		Babble	.065	.033	4.233	-.024
	NoiseBlock	SSN	.083	.033	4.233	-.007
		Babble	.048	.033	4.233	-.042
	Beam + DNN	SSN	.166	.033	4.233	.076
		Babble	.119	.033	4.233	.030
0	No Processing	SSN	.155	.033	4.233	.066
		Babble	.115	.033	4.233	.026
	Beam	SSN	.154	.033	4.233	.065
		Babble	.174	.033	4.233	.085
	Beam + NoiseBlock	SSN	.179	.033	4.233	.090
		Babble	.181	.033	4.233	.092
	DNN	SSN	.245	.033	4.233	.156
		Babble	.155	.033	4.233	.066
	NoiseBlock	SSN	.176	.033	4.233	.087
		Babble	.119	.033	4.233	.030
	Beam + DNN	SSN	.284	.033	4.233	.195
		Babble	.248	.033	4.233	.159
5	No Processing	SSN	.273	.033	4.233	.184
		Babble	.214	.033	4.233	.125

Estimates[a]

SNR	Program	Noise_Type	95% ... Upper Bound
-5	No Processing	SSN	.159
		Babble	.137
	Beam	SSN	.164
		Babble	.175
	Beam + NoiseBlock	SSN	.179
		Babble	.177
	DNN	SSN	.224
		Babble	.155
	NoiseBlock	SSN	.172
		Babble	.137
	Beam + DNN	SSN	.255
		Babble	.209
0	No Processing	SSN	.245
		Babble	.205
	Beam	SSN	.244
		Babble	.264
	Beam + NoiseBlock	SSN	.268
		Babble	.270
	DNN	SSN	.334
		Babble	.244
	NoiseBlock	SSN	.265
		Babble	.208
	Beam + DNN	SSN	.373
		Babble	.338
5	No Processing	SSN	.363
		Babble	.304

Estimates[a]

SNR	Program	Noise_Type	Mean	Std. Error	df	95% ... Lower Bound
	Beam	SSN	.254	.033	4.233	.165
		Babble	.278	.033	4.233	.189
	Beam + NoiseBlock	SSN	.282	.033	4.233	.193
		Babble	.286	.033	4.233	.197
	DNN	SSN	.360	.033	4.233	.271
		Babble	.277	.033	4.233	.188
	NoiseBlock	SSN	.295	.033	4.233	.206
		Babble	.222	.033	4.233	.133
	Beam + DNN	SSN	.393	.033	4.233	.303
		Babble	.361	.033	4.233	.271

Estimates[a]

SNR	Program	Noise_Type	95% ... Upper Bound
	Beam	SSN	.343
		Babble	.367
	Beam + NoiseBlock	SSN	.371
		Babble	.376
	DNN	SSN	.449
		Babble	.367
	NoiseBlock	SSN	.384
		Babble	.311
	Beam + DNN	SSN	.482
		Babble	.450

a. Dependent Variable: HASQI.

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
-5	SSN	No Processing	Beam	-.005	.019	1113.002
			Beam + NoiseBlock	-.020	.019	1113.002
			DNN	-.065*	.019	1113.002
			NoiseBlock	-.013	.019	1113.002
			Beam + DNN	-.096*	.019	1113.002
		Beam	No Processing	.005	.019	1113.002
			Beam + NoiseBlock	-.015	.019	1113.002
			DNN	-.060*	.019	1113.002
			NoiseBlock	-.008	.019	1113.002
			Beam + DNN	-.091*	.019	1113.002
		Beam + NoiseBlock	No Processing	.020	.019	1113.002
			Beam	.015	.019	1113.002
			DNN	-.045	.019	1113.002
			NoiseBlock	.007	.019	1113.002
			Beam + DNN	-.076*	.019	1113.002
		DNN	No Processing	.065*	.019	1113.002
			Beam	.060*	.019	1113.002
			Beam + NoiseBlock	.045	.019	1113.002
			NoiseBlock	.052	.019	1113.002
			Beam + DNN	-.031	.019	1113.002
		NoiseBlock	No Processing	.013	.019	1113.002
			Beam	.008	.019	1113.002
			Beam + NoiseBlock	-.007	.019	1113.002
			DNN	-.052	.019	1113.002
			Beam + DNN	-.083*	.019	1113.002
		Beam + DNN	No Processing	.096*	.019	1113.002
			Beam	.091*	.019	1113.002
			Beam + NoiseBlock	.076*	.019	1113.002
			DNN	.031	.019	1113.002
			NoiseBlock	.083*	.019	1113.002
	Babble	No Processing	Beam	-.039	.019	1113.002
			Beam + NoiseBlock	-.040	.019	1113.002
			DNN	-.018	.019	1113.002
			NoiseBlock	-9.398E-5	.019	1113.002
			Beam + DNN	-.072*	.019	1113.002

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
-5	SSN	No Processing	Beam	1.000	-.060
			Beam + NoiseBlock	1.000	-.075
			DNN	.007	-.120
			NoiseBlock	1.000	-.068
			Beam + DNN	<.001	-.151
		Beam	No Processing	1.000	-.050
			Beam + NoiseBlock	1.000	-.070
			DNN	.019	-.115
			NoiseBlock	1.000	-.063
			Beam + DNN	<.001	-.146
		Beam + NoiseBlock	No Processing	1.000	-.035
			Beam	1.000	-.040
			DNN	.238	-.100
			NoiseBlock	1.000	-.048
			Beam + DNN	<.001	-.131
		DNN	No Processing	.007	.010
			Beam	.019	.006
			Beam + NoiseBlock	.238	-.010
			NoiseBlock	.081	-.003
			Beam + DNN	1.000	-.086
		NoiseBlock	No Processing	1.000	-.042
			Beam	1.000	-.046
			Beam + NoiseBlock	1.000	-.062
			DNN	.081	-.107
			Beam + DNN	<.001	-.138
		Beam + DNN	No Processing	<.001	.041
			Beam	<.001	.036
			Beam + NoiseBlock	<.001	.021
			DNN	1.000	-.024
			NoiseBlock	<.001	.028
	Babble	No Processing	Beam	.579	-.093
			Beam + NoiseBlock	.453	-.095
			DNN	1.000	-.073
			NoiseBlock	1.000	-.055
			Beam + DNN	.002	-.127

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
-5	SSN	No Processing	Beam	.050
			Beam + NoiseBlock	.035
			DNN	-.010
			NoiseBlock	.042
			Beam + DNN	-.041
		Beam	No Processing	.060
			Beam + NoiseBlock	.040
			DNN	-.006
			NoiseBlock	.046
			Beam + DNN	-.036
		Beam + NoiseBlock	No Processing	.075
			Beam	.070
			DNN	.010
			NoiseBlock	.062
			Beam + DNN	-.021
		DNN	No Processing	.120
			Beam	.115
			Beam + NoiseBlock	.100
			NoiseBlock	.107
			Beam + DNN	.024
		NoiseBlock	No Processing	.068
			Beam	.063
			Beam + NoiseBlock	.048
			DNN	.003
			Beam + DNN	-.028
		Beam + DNN	No Processing	.151
			Beam	.146
			Beam + NoiseBlock	.131
			DNN	.086
			NoiseBlock	.138
	Babble	No Processing	Beam	.016
			Beam + NoiseBlock	.014
			DNN	.037
			NoiseBlock	.055
			Beam + DNN	-.017

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
		Beam	No Processing	.039	.019	1113.002
			Beam + NoiseBlock	-.002	.019	1113.002
			DNN	.021	.019	1113.002
			NoiseBlock	.039	.019	1113.002
			Beam + DNN	-.033	.019	1113.002
		Beam + NoiseBlock	No Processing	.040	.019	1113.002
			Beam	.002	.019	1113.002
			DNN	.023	.019	1113.002
			NoiseBlock	.040	.019	1113.002
			Beam + DNN	-.031	.019	1113.002
		DNN	No Processing	.018	.019	1113.002
			Beam	-.021	.019	1113.002
			Beam + NoiseBlock	-.023	.019	1113.002
			NoiseBlock	.018	.019	1113.002
			Beam + DNN	-.054	.019	1113.002
		NoiseBlock	No Processing	9.398E-5	.019	1113.002
			Beam	-.039	.019	1113.002
			Beam + NoiseBlock	-.040	.019	1113.002
			DNN	-.018	.019	1113.002
			Beam + DNN	-.072*	.019	1113.002
		Beam + DNN	No Processing	.072*	.019	1113.002
			Beam	.033	.019	1113.002
			Beam + NoiseBlock	.031	.019	1113.002
			DNN	.054	.019	1113.002
			NoiseBlock	.072*	.019	1113.002
0	SSN	No Processing	Beam	.001	.019	1113.002
			Beam + NoiseBlock	-.024	.019	1113.002
			DNN	-.090*	.019	1113.002
			NoiseBlock	-.021	.019	1113.002
			Beam + DNN	-.128*	.019	1113.002
		Beam	No Processing	-.001	.019	1113.002
			Beam + NoiseBlock	-.025	.019	1113.002
			DNN	-.091*	.019	1113.002
			NoiseBlock	-.022	.019	1113.002
			Beam + DNN	-.130*	.019	1113.002
		Beam + NoiseBlock	No Processing	.024	.019	1113.002
			Beam	.025	.019	1113.002

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
		Beam	No Processing	.579	-.016
			Beam + NoiseBlock	1.000	-.057
			DNN	1.000	-.034
			NoiseBlock	.586	-.016
			Beam + DNN	1.000	-.088
		Beam + NoiseBlock	No Processing	.453	-.014
			Beam	1.000	-.053
			DNN	1.000	-.032
			NoiseBlock	.459	-.014
			Beam + DNN	1.000	-.086
		DNN	No Processing	1.000	-.037
			Beam	1.000	-.076
			Beam + NoiseBlock	1.000	-.078
			NoiseBlock	1.000	-.037
			Beam + DNN	.057	-.109
		NoiseBlock	No Processing	1.000	-.055
			Beam	.586	-.093
			Beam + NoiseBlock	.459	-.095
			DNN	1.000	-.073
			Beam + DNN	.002	-.127
		Beam + DNN	No Processing	.002	.017
			Beam	1.000	-.022
			Beam + NoiseBlock	1.000	-.024
			DNN	.057	-.001
			NoiseBlock	.002	.017
0	SSN	No Processing	Beam	1.000	-.054
			Beam + NoiseBlock	1.000	-.079
			DNN	<.001	-.144
			NoiseBlock	1.000	-.075
			Beam + DNN	<.001	-.183
		Beam	No Processing	1.000	-.056
			Beam + NoiseBlock	1.000	-.080
			DNN	<.001	-.146
			NoiseBlock	1.000	-.077
			Beam + DNN	<.001	-.184
		Beam + NoiseBlock	No Processing	1.000	-.031
			Beam	1.000	-.030

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
		Beam	No Processing	.093
			Beam + NoiseBlock	.053
			DNN	.076
			NoiseBlock	.093
			Beam + DNN	.022
		Beam + NoiseBlock	No Processing	.095
			Beam	.057
			DNN	.078
			NoiseBlock	.095
			Beam + DNN	.024
		DNN	No Processing	.073
			Beam	.034
			Beam + NoiseBlock	.032
			NoiseBlock	.073
			Beam + DNN	.001
		NoiseBlock	No Processing	.055
			Beam	.016
			Beam + NoiseBlock	.014
			DNN	.037
			Beam + DNN	-.017
		Beam + DNN	No Processing	.127
			Beam	.088
			Beam + NoiseBlock	.086
			DNN	.109
			NoiseBlock	.127
0	SSN	No Processing	Beam	.056
			Beam + NoiseBlock	.031
			DNN	-.035
			NoiseBlock	.034
			Beam + DNN	-.074
		Beam	No Processing	.054
			Beam + NoiseBlock	.030
			DNN	-.036
			NoiseBlock	.033
			Beam + DNN	-.075
		Beam + NoiseBlock	No Processing	.079
			Beam	.080

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
			DNN	-.066*	.019	1113.002
			NoiseBlock	.003	.019	1113.002
			Beam + DNN	-.105*	.019	1113.002
		DNN	No Processing	.090*	.019	1113.002
			Beam	.091*	.019	1113.002
			Beam + NoiseBlock	.066*	.019	1113.002
			NoiseBlock	.069*	.019	1113.002
			Beam + DNN	-.039	.019	1113.002
		NoiseBlock	No Processing	.021	.019	1113.002
			Beam	.022	.019	1113.002
			Beam + NoiseBlock	-.003	.019	1113.002
			DNN	-.069*	.019	1113.002
			Beam + DNN	-.108*	.019	1113.002
		Beam + DNN	No Processing	.128*	.019	1113.002
			Beam	.130*	.019	1113.002
			Beam + NoiseBlock	.105*	.019	1113.002
			DNN	.039	.019	1113.002
			NoiseBlock	.108*	.019	1113.002
	Babble	No Processing	Beam	-.059*	.019	1113.002
			Beam + NoiseBlock	-.066*	.019	1113.002
			DNN	-.039	.019	1113.002
			NoiseBlock	-.004	.019	1113.002
			Beam + DNN	-.133*	.019	1113.002
		Beam	No Processing	.059*	.019	1113.002
			Beam + NoiseBlock	-.007	.019	1113.002
			DNN	.020	.019	1113.002
			NoiseBlock	.055*	.019	1113.002
			Beam + DNN	-.074*	.019	1113.002
		Beam + NoiseBlock	No Processing	.066*	.019	1113.002
			Beam	.007	.019	1113.002
			DNN	.026	.019	1113.002
			NoiseBlock	.062*	.019	1113.002
			Beam + DNN	-.067*	.019	1113.002
		DNN	No Processing	.039	.019	1113.002
			Beam	-.020	.019	1113.002

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
			DNN	.006	-.121
			NoiseBlock	1.000	-.052
			Beam + DNN	<.001	-.160
		DNN	No Processing	<.001	.035
			Beam	<.001	.036
			Beam + NoiseBlock	.006	.011
			NoiseBlock	.003	.014
			Beam + DNN	.559	-.094
		NoiseBlock	No Processing	1.000	-.034
			Beam	1.000	-.033
			Beam + NoiseBlock	1.000	-.058
			DNN	.003	-.124
			Beam + DNN	<.001	-.163
		Beam + DNN	No Processing	<.001	.074
			Beam	<.001	.075
			Beam + NoiseBlock	<.001	.050
			DNN	.559	-.016
			NoiseBlock	<.001	.053
	Babble	No Processing	Beam	.024	-.114
			Beam + NoiseBlock	.007	-.121
			DNN	.520	-.094
			NoiseBlock	1.000	-.059
			Beam + DNN	<.001	-.188
		Beam	No Processing	.024	.004
			Beam + NoiseBlock	1.000	-.062
			DNN	1.000	-.035
			NoiseBlock	.046	.000
			Beam + DNN	.001	-.129
		Beam + NoiseBlock	No Processing	.007	.011
			Beam	1.000	-.048
			DNN	1.000	-.029
			NoiseBlock	.014	.007
			Beam + DNN	.005	-.122
		DNN	No Processing	.520	-.015
			Beam	1.000	-.074

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
			DNN	-.011
			NoiseBlock	.058
			Beam + DNN	-.050
		DNN	No Processing	.144
			Beam	.146
			Beam + NoiseBlock	.121
			NoiseBlock	.124
			Beam + DNN	.016
		NoiseBlock	No Processing	.075
			Beam	.077
			Beam + NoiseBlock	.052
			DNN	-.014
			Beam + DNN	-.053
		Beam + DNN	No Processing	.183
			Beam	.184
			Beam + NoiseBlock	.160
			DNN	.094
			NoiseBlock	.163
	Babble	No Processing	Beam	-.004
			Beam + NoiseBlock	-.011
			DNN	.015
			NoiseBlock	.051
			Beam + DNN	-.078
		Beam	No Processing	.114
			Beam + NoiseBlock	.048
			DNN	.074
			NoiseBlock	.110
			Beam + DNN	-.019
		Beam + NoiseBlock	No Processing	.121
			Beam	.062
			DNN	.081
			NoiseBlock	.117
			Beam + DNN	-.012
		DNN	No Processing	.094
			Beam	.035

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
			Beam + NoiseBlock	-.026	.019	1113.002
			NoiseBlock	.036	.019	1113.002
			Beam + DNN	-.093*	.019	1113.002
		NoiseBlock	No Processing	.004	.019	1113.002
			Beam	-.055*	.019	1113.002
			Beam + NoiseBlock	-.062*	.019	1113.002
			DNN	-.036	.019	1113.002
			Beam + DNN	-.129*	.019	1113.002
		Beam + DNN	No Processing	.133*	.019	1113.002
			Beam	.074*	.019	1113.002
			Beam + NoiseBlock	.067*	.019	1113.002
			DNN	.093*	.019	1113.002
			NoiseBlock	.129*	.019	1113.002
5	SSN	No Processing	Beam	.019	.019	1113.002
			Beam + NoiseBlock	-.008	.019	1113.002
			DNN	-.087*	.019	1113.002
			NoiseBlock	-.022	.019	1113.002
			Beam + DNN	-.119*	.019	1113.002
		Beam	No Processing	-.019	.019	1113.002
			Beam + NoiseBlock	-.028	.019	1113.002
			DNN	-.106*	.019	1113.002
			NoiseBlock	-.041	.019	1113.002
			Beam + DNN	-.138*	.019	1113.002
		Beam + NoiseBlock	No Processing	.008	.019	1113.002
			Beam	.028	.019	1113.002
			DNN	-.078*	.019	1113.002
			NoiseBlock	-.013	.019	1113.002
			Beam + DNN	-.111*	.019	1113.002
		DNN	No Processing	.087*	.019	1113.002
			Beam	.106*	.019	1113.002
			Beam + NoiseBlock	.078*	.019	1113.002
			NoiseBlock	.065*	.019	1113.002
			Beam + DNN	-.032	.019	1113.002
		NoiseBlock	No Processing	.022	.019	1113.002
			Beam	.041	.019	1113.002

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
			Beam + NoiseBlock	1.000	-.081
			NoiseBlock	.829	-.019
			Beam + DNN	<.001	-.148
		NoiseBlock	No Processing	1.000	-.051
			Beam	.046	-.110
			Beam + NoiseBlock	.014	-.117
			DNN	.829	-.091
			Beam + DNN	<.001	-.184
		Beam + DNN	No Processing	<.001	.078
			Beam	.001	.019
			Beam + NoiseBlock	.005	.012
			DNN	<.001	.039
			NoiseBlock	<.001	.074
5	SSN	No Processing	Beam	1.000	-.036
			Beam + NoiseBlock	1.000	-.063
			DNN	<.001	-.142
			NoiseBlock	1.000	-.076
			Beam + DNN	<.001	-.174
		Beam	No Processing	1.000	-.074
			Beam + NoiseBlock	1.000	-.083
			DNN	<.001	-.161
			NoiseBlock	.423	-.096
			Beam + DNN	<.001	-.193
		Beam + NoiseBlock	No Processing	1.000	-.046
			Beam	1.000	-.027
			DNN	<.001	-.133
			NoiseBlock	1.000	-.068
			Beam + DNN	<.001	-.166
		DNN	No Processing	<.001	.032
			Beam	<.001	.051
			Beam + NoiseBlock	<.001	.023
			NoiseBlock	.008	.010
			Beam + DNN	1.000	-.087
		NoiseBlock	No Processing	1.000	-.033
			Beam	.423	-.014

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
			Beam + NoiseBlock	.029
			NoiseBlock	.091
			Beam + DNN	-.039
		NoiseBlock	No Processing	.059
			Beam	.000
			Beam + NoiseBlock	-.007
			DNN	.019
			Beam + DNN	-.074
		Beam + DNN	No Processing	.188
			Beam	.129
			Beam + NoiseBlock	.122
			DNN	.148
			NoiseBlock	.184
5	SSN	No Processing	Beam	.074
			Beam + NoiseBlock	.046
			DNN	-.032
			NoiseBlock	.033
			Beam + DNN	-.064
		Beam	No Processing	.036
			Beam + NoiseBlock	.027
			DNN	-.051
			NoiseBlock	.014
			Beam + DNN	-.084
		Beam + NoiseBlock	No Processing	.063
			Beam	.083
			DNN	-.023
			NoiseBlock	.042
			Beam + DNN	-.056
		DNN	No Processing	.142
			Beam	.161
			Beam + NoiseBlock	.133
			NoiseBlock	.120
			Beam + DNN	.022
		NoiseBlock	No Processing	.076
			Beam	.096

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
			Beam + NoiseBlock	.013	.019	1113.002
			DNN	-.065*	.019	1113.002
			Beam + DNN	-.098*	.019	1113.002
		Beam + DNN	No Processing	.119*	.019	1113.002
			Beam	.138*	.019	1113.002
			Beam + NoiseBlock	.111*	.019	1113.002
			DNN	.032	.019	1113.002
			NoiseBlock	.098*	.019	1113.002
	Babble	No Processing	Beam	-.064*	.019	1113.002
			Beam + NoiseBlock	-.072*	.019	1113.002
			DNN	-.063*	.019	1113.002
			NoiseBlock	-.008	.019	1113.002
			Beam + DNN	-.146*	.019	1113.002
		Beam	No Processing	.064*	.019	1113.002
			Beam + NoiseBlock	-.008	.019	1113.002
			DNN	.001	.019	1113.002
			NoiseBlock	.056*	.019	1113.002
			Beam + DNN	-.083*	.019	1113.002
		Beam + NoiseBlock	No Processing	.072*	.019	1113.002
			Beam	.008	.019	1113.002
			DNN	.009	.019	1113.002
			NoiseBlock	.064*	.019	1113.002
			Beam + DNN	-.074*	.019	1113.002
		DNN	No Processing	.063*	.019	1113.002
			Beam	-.001	.019	1113.002
			Beam + NoiseBlock	-.009	.019	1113.002
			NoiseBlock	.055*	.019	1113.002
			Beam + DNN	-.083*	.019	1113.002
		NoiseBlock	No Processing	.008	.019	1113.002
			Beam	-.056*	.019	1113.002
			Beam + NoiseBlock	-.064*	.019	1113.002
			DNN	-.055*	.019	1113.002
			Beam + DNN	-.139*	.019	1113.002
		Beam + DNN	No Processing	.146*	.019	1113.002
			Beam	.083*	.019	1113.002

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
			Beam + NoiseBlock	1.000	-.042
			DNN	.008	-.120
			Beam + DNN	<.001	-.152
		Beam + DNN	No Processing	<.001	.064
			Beam	<.001	.084
			Beam + NoiseBlock	<.001	.056
			DNN	1.000	-.022
			NoiseBlock	<.001	.043
	Babble	No Processing	Beam	.010	-.119
			Beam + NoiseBlock	.002	-.127
			DNN	.011	-.118
			NoiseBlock	1.000	-.062
			Beam + DNN	<.001	-.201
		Beam	No Processing	.010	.009
			Beam + NoiseBlock	1.000	-.063
			DNN	1.000	-.054
			NoiseBlock	.041	.001
			Beam + DNN	<.001	-.137
		Beam + NoiseBlock	No Processing	.002	.017
			Beam	1.000	-.047
			DNN	1.000	-.046
			NoiseBlock	.009	.009
			Beam + DNN	.001	-.129
		DNN	No Processing	.011	.008
			Beam	1.000	-.055
			Beam + NoiseBlock	1.000	-.064
			NoiseBlock	.045	.001
			Beam + DNN	<.001	-.138
		NoiseBlock	No Processing	1.000	-.047
			Beam	.041	-.111
			Beam + NoiseBlock	.009	-.119
			DNN	.045	-.110
			Beam + DNN	<.001	-.194
		Beam + DNN	No Processing	<.001	.091
			Beam	<.001	.028

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
			Beam + NoiseBlock	.068
			DNN	-.010
			Beam + DNN	-.043
		Beam + DNN	No Processing	.174
			Beam	.193
			Beam + NoiseBlock	.166
			DNN	.087
			NoiseBlock	.152
	Babble	No Processing	Beam	-.009
			Beam + NoiseBlock	-.017
			DNN	-.008
			NoiseBlock	.047
			Beam + DNN	-.091
		Beam	No Processing	.119
			Beam + NoiseBlock	.047
			DNN	.055
			NoiseBlock	.111
			Beam + DNN	-.028
		Beam + NoiseBlock	No Processing	.127
			Beam	.063
			DNN	.064
			NoiseBlock	.119
			Beam + DNN	-.020
		DNN	No Processing	.118
			Beam	.054
			Beam + NoiseBlock	.046
			NoiseBlock	.110
			Beam + DNN	-.028
		NoiseBlock	No Processing	.062
			Beam	-.001
			Beam + NoiseBlock	-.009
			DNN	-.001
			Beam + DNN	-.084
		Beam + DNN	No Processing	.201
			Beam	.137

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	df
			Beam + NoiseBlock	.074*	.019	1113.002
			DNN	.083*	.019	1113.002
			NoiseBlock	.139*	.019	1113.002

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	Sig.[c]	95% Confidence Interval for [c]... Lower Bound
			Beam + NoiseBlock	.001	.020
			DNN	<.001	.028
			NoiseBlock	<.001	.084

Pairwise Comparisons[a]

SNR	Noise_Type	(I) Program	(J) Program	95% Confidence Interval for [c]... Upper Bound
			Beam + NoiseBlock	.129
			DNN	.138
			NoiseBlock	.194

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Dependent Variable: HASQI.

c. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests[a]

SNR	Noise_Type	Numerator df	Denominator df	F	Sig.
-5	SSN	5	1113.002	8.591	<.001
	Babble	5	1113.002	4.436	<.001
0	SSN	5	1113.002	16.255	<.001
	Babble	5	1113.002	13.741	<.001
5	SSN	5	1113.002	17.034	<.001
	Babble	5	1113.002	16.033	<.001

Each F tests the simple effects of Program within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Dependent Variable: HASQI.