

**Robust Tests of Equality of Means - use case templates,  
GenderMag motivation facet, creation task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	.707	1	71.371	.403
Recall	Welch	.029	1	72.284	.866
FMeasure	Welch	.252	1	72.106	.617
Duration	Welch	3.359	1	76.019	.071
FirstActDet	Welch	.751	1	77.199	.389
LastActDet	Welch	3.427	1	76.501	.068
ProcDur	Welch	.191	1	75.229	.664
FixRel	Welch	2.554	1	76.171	.114
FixIrrel	Welch	1.007	1	76.235	.319
AvDurRelFix	Welch	.137	1	75.413	.712
AvDurlrelFix	Welch	.015	1	76.526	.902
TotSac	Welch	.029	1	76.690	.865
Sac2Key	Welch	.122	1	70.327	.728
AvAttention	Welch	1.483	1	75.464	.227
AvMentWL	Welch	.657	1	74.571	.420
AvFam	Welch	.316	1	77.400	.575
AvSCL	Welch	2.785	1	77.491	.099
HRVar_RMSSD	Welch	.912	1	77.960	.342
HRVar_NN50	Welch	2.063	1	77.544	.155
NASA_MD	Welch	.096	1	65.119	.758
NASA_PD	Welch	.837	1	75.602	.363
NASA_TD	Welch	.004	1	54.676	.948
NASA_Performance	Welch	3.699	1	73.947	.058
NASA_Effort	Welch	.238	1	64.397	.627
NASA_Frustration	Welch	1.436	1	69.733	.235
NASA_Score	Welch	.554	1	64.827	.459

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag motivation facet, creation task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.040	1	.040	.722	.398
	Within Groups	4.291	78	.055		
	Total	4.330	79			
Recall	Between Groups	.001	1	.001	.029	.865
	Within Groups	3.945	78	.051		
	Total	3.947	79			
FMeasure	Between Groups	.013	1	.013	.256	.614
	Within Groups	3.962	78	.051		
	Total	3.975	79			
Duration	Between Groups	72382.228	1	72382.228	3.330	.072
	Within Groups	1695276.159	78	21734.310		
	Total	1767658.388	79			
FirstActDet	Between Groups	2892.146	1	2892.146	.736	.394
	Within Groups	306627.404	78	3931.121		
	Total	309519.550	79			
LastActDet	Between Groups	76421.516	1	76421.516	3.383	.070
	Within Groups	1761942.434	78	22589.006		
	Total	1838363.950	79			
ProcDur	Between Groups	54.833	1	54.833	.190	.664
	Within Groups	22472.154	78	288.105		
	Total	22526.988	79			
FixRel	Between Groups	26.823	1	26.823	2.529	.116
	Within Groups	827.391	78	10.608		
	Total	854.214	79			
FixIrrel	Between Groups	26923.433	1	26923.433	.996	.321
	Within Groups	2108038.966	78	27026.141		
	Total	2134962.399	79			
AvDurRelFix	Between Groups	382.624	1	382.624	.137	.712
	Within Groups	218100.286	78	2796.158		
	Total	218482.911	79			
AvDurIrrelFix	Between Groups	426.852	1	426.852	.015	.902
	Within Groups	2201836.821	78	28228.677		
	Total	2202263.673	79			
TotSac	Between Groups	3.152	1	3.152	.029	.866
	Within Groups	8522.798	78	109.267		
	Total	8525.950	79			
Sac2Key	Between Groups	9.618	1	9.618	.125	.725
	Within Groups	6001.182	78	76.938		
	Total	6010.800	79			
AvAttention	Between Groups	.105	1	.105	1.477	.228
	Within Groups	5.569	78	.071		
	Total	5.675	79			
AvMentWL	Between Groups	.040	1	.040	.658	.420
	Within Groups	4.739	78	.061		
	Total	4.780	79			
AvFam	Between Groups	.021	1	.021	.309	.580
	Within Groups	5.221	78	.067		
	Total	5.242	79			
AvSCL	Between Groups	56496.138	1	56496.138	2.717	.103
	Within Groups	1621909.750	78	20793.715		

	Total	1678405.888	79			
HRVar_RMSSD	Between Groups	363.312	1	363.312	.880	.351
	Within Groups	32207.587	78	412.918		
	Total	32570.899	79			
HRVar_NN50	Between Groups	735.270	1	735.270	2.011	.160
	Within Groups	28520.661	78	365.649		
	Total	29255.931	79			
NASA_MD	Between Groups	9.549	1	9.549	.101	.752
	Within Groups	7407.639	78	94.970		
	Total	7417.188	79			
NASA_PD	Between Groups	247.475	1	247.475	.833	.364
	Within Groups	23177.525	78	297.148		
	Total	23425.000	79			
NASA_TD	Between Groups	1.528	1	1.528	.005	.945
	Within Groups	24747.222	78	317.272		
	Total	24748.750	79			
NASA_Performance	Between Groups	2280.619	1	2280.619	3.722	.057
	Within Groups	47788.131	78	612.668		
	Total	50068.750	79			
NASA_Effort	Between Groups	40.306	1	40.306	.251	.618
	Within Groups	12506.881	78	160.345		
	Total	12547.188	79			
NASA_Frustration	Between Groups	600.051	1	600.051	1.478	.228
	Within Groups	31669.949	78	406.025		
	Total	32270.000	79			
NASA_Score	Between Groups	92.078	1	92.078	.584	.447
	Within Groups	12302.638	78	157.726		
	Total	12394.716	79			

### Task \* Motivation - use case templates, GenderMag motivation facet, creation task

Dependent Variable	Task	Motivation	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Create	Abby	.777 <sup>a</sup>	.061	.655	.900
		Tim	.560 <sup>a</sup>	.049	.461	.659
	ALCO Create	Abby	.878 <sup>a</sup>	.063	.751	1.005
		Tim	.853 <sup>a</sup>	.055	.743	.964
Recall	ARNE Create	Abby	.714 <sup>a</sup>	.064	.586	.843
		Tim	.603 <sup>a</sup>	.052	.500	.706
	ALCO Create	Abby	.799 <sup>a</sup>	.066	.666	.932
		Tim	.882 <sup>a</sup>	.058	.767	.998
FMeasure	ARNE Create	Abby	.740 <sup>a</sup>	.062	.616	.864
		Tim	.574 <sup>a</sup>	.050	.474	.674
	ALCO Create	Abby	.833 <sup>a</sup>	.064	.705	.962
		Tim	.866 <sup>a</sup>	.056	.754	.978
Duration	ARNE Create	Abby	811.467 <sup>a</sup>	30.485	750.348	872.585
		Tim	894.000 <sup>a</sup>	24.584	844.711	943.289
	ALCO Create	Abby	612.450 <sup>a</sup>	31.555	549.186	675.714
		Tim	656.437 <sup>a</sup>	27.460	601.383	711.490
FirstActDet	ARNE Create	Abby	155.967 <sup>a</sup>	9.009	137.906	174.028
		Tim	136.241 <sup>a</sup>	7.265	121.675	150.806
	ALCO Create	Abby	174.758 <sup>a</sup>	9.325	156.063	193.453
		Tim	198.290 <sup>a</sup>	8.115	182.021	214.558
LastActDet	ARNE Create	Abby	775.333 <sup>a</sup>	30.579	714.027	836.640
		Tim	879.306 <sup>a</sup>	24.660	829.865	928.746
	ALCO Create	Abby	585.442 <sup>a</sup>	31.652	521.983	648.900
		Tim	639.909 <sup>a</sup>	27.544	584.686	695.131
ProcDur	ARNE Create	Abby	36.133 <sup>a</sup>	1.924	32.276	39.991
		Tim	14.694 <sup>a</sup>	1.552	11.584	17.805
	ALCO Create	Abby	27.008 <sup>a</sup>	1.992	23.016	31.001
		Tim	16.528 <sup>a</sup>	1.733	13.053	20.002
FixRel	ARNE Create	Abby	10.001 <sup>a</sup>	.209	9.583	10.420
		Tim	10.429 <sup>a</sup>	.168	10.091	10.767
	ALCO Create	Abby	3.829 <sup>a</sup>	.216	3.395	4.262
		Tim	4.032 <sup>a</sup>	.188	3.655	4.409
FixIrrel	ARNE Create	Abby	301.997 <sup>a</sup>	21.669	258.553	345.441
		Tim	254.894 <sup>a</sup>	17.475	219.859	289.929
	ALCO Create	Abby	5.022 <sup>a</sup>	22.430	-39.947	49.991
		Tim	3.716 <sup>a</sup>	19.519	-35.417	42.849
AvDurRelFix	ARNE Create	Abby	105.697 <sup>a</sup>	10.785	84.075	127.318
		Tim	91.544 <sup>a</sup>	8.697	74.107	108.981
	ALCO Create	Abby	131.983 <sup>a</sup>	11.163	109.603	154.364
		Tim	157.062 <sup>a</sup>	9.714	137.586	176.537
AvDurlrelFix	ARNE Create	Abby	253.213 <sup>a</sup>	31.243	190.574	315.853
		Tim		25.196	155.677	256.707

			206.192 <sup>a</sup>		
TotSac	ALCO Create	Abby	373.950 <sup>a</sup>	32.340	309.112
		Tim	449.185 <sup>a</sup>	28.143	392.762
TotSac	ARNE Create	Abby	84.867 <sup>a</sup>	2.946	78.960
		Tim	89.213 <sup>a</sup>	2.376	84.450
TotSac	ALCO Create	Abby	85.008 <sup>a</sup>	3.049	78.895
		Tim	87.401 <sup>a</sup>	2.654	82.081
Sac2Key	ARNE Create	Abby	11.833 <sup>a</sup>	2.353	7.117
		Tim	15.926 <sup>a</sup>	1.897	12.122
Sac2Key	ALCO Create	Abby	15.158 <sup>a</sup>	2.435	10.276
		Tim	17.034 <sup>a</sup>	2.119	12.785
AvAttention	ARNE Create	Abby	.743 <sup>a</sup>	.037	.669
		Tim	.682 <sup>a</sup>	.030	.622
AvAttention	ALCO Create	Abby	.383 <sup>a</sup>	.038	.306
		Tim	.389 <sup>a</sup>	.033	.322
AvMentWL	ARNE Create	Abby	.753 <sup>a</sup>	.046	.661
		Tim	.770 <sup>a</sup>	.037	.696
AvMentWL	ALCO Create	Abby	.362 <sup>a</sup>	.048	.267
		Tim	.407 <sup>a</sup>	.042	.324
AvFam	ARNE Create	Abby	.740 <sup>a</sup>	.043	.653
		Tim	.765 <sup>a</sup>	.035	.695
AvFam	ALCO Create	Abby	.329 <sup>a</sup>	.045	.239
		Tim	.312 <sup>a</sup>	.039	.234
AvSCL	ARNE Create	Abby	477.967 <sup>a</sup>	41.415	394.936
		Tim	523.463 <sup>a</sup>	33.399	456.503
AvSCL	ALCO Create	Abby	532.517 <sup>a</sup>	42.868	446.571
		Tim	640.964 <sup>a</sup>	37.305	566.173
HRVar_RMSSD	ARNE Create	Abby	19.237 <sup>a</sup>	4.495	10.226
		Tim	46.286 <sup>a</sup>	3.625	39.019
HRVar_RMSSD	ALCO Create	Abby	29.512 <sup>a</sup>	4.652	20.184
		Tim	36.144 <sup>a</sup>	4.049	28.027
HRVar_NN50	ARNE Create	Abby	10.114 <sup>a</sup>	5.238	-.386
		Tim	34.061 <sup>a</sup>	4.224	25.593
HRVar_NN50	ALCO Create	Abby	22.468 <sup>a</sup>	5.421	11.599
		Tim	25.175 <sup>a</sup>	4.718	15.717
NASA_MD	ARNE Create	Abby	53.000 <sup>a</sup>	2.411	48.166
		Tim	51.389 <sup>a</sup>	1.944	47.491
NASA_MD	ALCO Create	Abby	46.208 <sup>a</sup>	2.496	41.205
		Tim	51.548 <sup>a</sup>	2.172	47.193
NASA_PD	ARNE Create	Abby	23.667 <sup>a</sup>	4.334	14.978
		Tim	20.185 <sup>a</sup>	3.495	13.178
NASA_PD	ALCO Create	Abby	18.542 <sup>a</sup>	4.486	9.548
		Tim	17.560 <sup>a</sup>	3.904	9.733
NASA_TD	ARNE Create	Abby	47.500 <sup>a</sup>	3.641	40.201
		Tim	29.722 <sup>a</sup>	2.936	23.836
NASA_TD	ALCO	Abby	25.250 <sup>a</sup>	3.768	17.695

	Create	Tim	21.677 <sup>a</sup>	3.279	15.102	28.251
NASA_Performance	ARNE Create	Abby	61.500 <sup>a</sup>	7.476	46.511	76.489
		Tim	36.111 <sup>a</sup>	6.029	24.023	48.199
	ALCO Create	Abby	65.625 <sup>a</sup>	7.739	50.110	81.140
		Tim	47.798 <sup>a</sup>	6.734	34.296	61.299
NASA_Effort	ARNE Create	Abby	49.500 <sup>a</sup>	3.390	42.704	56.296
		Tim	47.222 <sup>a</sup>	2.734	41.742	52.703
	ALCO Create	Abby	42.083 <sup>a</sup>	3.509	35.049	49.118
		Tim	48.571 <sup>a</sup>	3.053	42.450	54.693
NASA_Frustration	ARNE Create	Abby	38.833 <sup>a</sup>	5.899	27.008	50.659
		Tim	17.361 <sup>a</sup>	4.757	7.824	26.898
	ALCO Create	Abby	35.083 <sup>a</sup>	6.106	22.842	47.324
		Tim	30.893 <sup>a</sup>	5.313	20.241	41.545
NASA_Score	ARNE Create	Abby	45.667 <sup>a</sup>	3.678	38.292	53.042
		Tim	33.665 <sup>a</sup>	2.967	27.718	39.613
	ALCO Create	Abby	42.408 <sup>a</sup>	3.808	34.774	50.042
		Tim	38.763 <sup>a</sup>	3.313	32.120	45.406

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag information processing facet, creation task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	1.330	1	56.261	.254
Recall	Welch	.338	1	48.852	.564
FMeasure	Welch	.828	1	52.816	.367
Duration	Welch	2.060	1	58.441	.157
FirstActDet	Welch	3.835	1	61.902	.055
LastActDet	Welch	1.231	1	57.854	.272
ProcDur	Welch	6.373	1	50.164	.015
FixRel	Welch	2.016	1	50.625	.162
FixIrrel	Welch	.201	1	57.291	.656
AvDurRelFix	Welch	11.016	1	41.070	.002
AvDurlrelFix	Welch	10.223	1	44.076	.003
TotSac	Welch	1.086	1	48.009	.303
Sac2Key	Welch	5.069	1	61.371	.028
AvAttention	Welch	41.415	1	67.219	.000
AvMentWL	Welch	7.429	1	59.209	.008
AvFam	Welch	5.319	1	50.219	.025
AvSCL	Welch	2.601	1	59.357	.112
HRVar_RMSSD	Welch	10.550	1	41.997	.002
HRVar_NN50	Welch	3.747	1	50.260	.059
NASA_MD	Welch	5.771	1	36.521	.021
NASA_PD	Welch	23.509	1	77.996	.000
NASA_TD	Welch	1.187	1	33.586	.284
NASA_Performance	Welch	.814	1	59.604	.371
NASA_Effort	Welch	2.788	1	39.797	.103
NASA_Frustration	Welch	.399	1	48.785	.530
NASA_Score	Welch	.665	1	49.288	.419

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag information processing facet, creation task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.066	1	.066	1.205	.276
	Within Groups	4.264	78	.055		
	Total	4.330	79			
Recall	Between Groups	.017	1	.017	.341	.561
	Within Groups	3.929	78	.050		
	Total	3.947	79			
FMeasure	Between Groups	.040	1	.040	.787	.378
	Within Groups	3.935	78	.050		
	Total	3.975	79			
Duration	Between Groups	40135.756	1	40135.756	1.812	.182
	Within Groups	1727522.631	78	22147.726		
	Total	1767658.388	79			
FirstActDet	Between Groups	12296.678	1	12296.678	3.227	.076
	Within Groups	297222.872	78	3810.550		
	Total	309519.550	79			
LastActDet	Between Groups	25376.412	1	25376.412	1.092	.299
	Within Groups	1812987.538	78	23243.430		
	Total	1838363.950	79			
ProcDur	Between Groups	1684.228	1	1684.228	6.303	.014
	Within Groups	20842.759	78	267.215		
	Total	22526.988	79			
FixRel	Between Groups	21.144	1	21.144	1.980	.163
	Within Groups	833.070	78	10.680		
	Total	854.214	79			
FixIrrel	Between Groups	4906.250	1	4906.250	.180	.673
	Within Groups	2130056.149	78	27308.412		
	Total	2134962.399	79			
AvDurRelFix	Between Groups	30888.100	1	30888.100	12.843	.001
	Within Groups	187594.811	78	2405.062		
	Total	218482.911	79			
AvDurlrelFix	Between Groups	276925.522	1	276925.522	11.219	.001
	Within Groups	1925338.151	78	24683.822		
	Total	2202263.673	79			
TotSac	Between Groups	119.785	1	119.785	1.111	.295
	Within Groups	8406.165	78	107.771		
	Total	8525.950	79			
Sac2Key	Between Groups	313.712	1	313.712	4.295	.042
	Within Groups	5697.088	78	73.040		
	Total	6010.800	79			
AvAttention	Between Groups	1.672	1	1.672	32.590	.000
	Within Groups	4.003	78	.051		
	Total	5.675	79			
AvMentWL	Between Groups	.366	1	.366	6.472	.013
	Within Groups	4.413	78	.057		
	Total	4.780	79			
AvFam	Between Groups	.331	1	.331	5.256	.025
	Within Groups	4.911	78	.063		
	Total	5.242	79			
AvSCL	Between Groups	47286.350	1	47286.350	2.261	.137
	Within Groups	1631119.537	78	20911.789		

	Total	1678405.888	79			
HRVar_RMSSD	Between Groups	4362.321	1	4362.321	12.062	.001
	Within Groups	28208.578	78	361.648		
	Total	32570.899	79			
HRVar_NN50	Between Groups	1325.177	1	1325.177	3.701	.058
	Within Groups	27930.754	78	358.087		
	Total	29255.931	79			
NASA_MD	Between Groups	650.841	1	650.841	7.503	.008
	Within Groups	6766.346	78	86.748		
	Total	7417.187	79			
NASA_PD	Between Groups	3778.134	1	3778.134	15.000	.000
	Within Groups	19646.866	78	251.883		
	Total	23425.000	79			
NASA_TD	Between Groups	522.397	1	522.397	1.682	.198
	Within Groups	24226.353	78	310.594		
	Total	24748.750	79			
NASA_Performance	Between Groups	448.807	1	448.807	.706	.404
	Within Groups	49619.943	78	636.153		
	Total	50068.750	79			
NASA_Effort	Between Groups	515.599	1	515.599	3.343	.071
	Within Groups	12031.588	78	154.251		
	Total	12547.188	79			
NASA_Frustration	Between Groups	166.154	1	166.154	.404	.527
	Within Groups	32103.846	78	411.588		
	Total	32270.000	79			
NASA_Score	Between Groups	105.115	1	105.115	.667	.417
	Within Groups	12289.600	78	157.559		
	Total	12394.716	79			

**Task \* InformationProcessing - use case templates, GenderMag information processing facet, creation task**

Dependent Variable	Task	InformationProcessing	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Create	Abby	.652 <sup>a</sup>	.061	.530	.774
		Tim	.627 <sup>a</sup>	.050	.527	.726
	ALCO Create	Abby	.967 <sup>a</sup>	.069	.829	1.105
		Tim	.765 <sup>a</sup>	.048	.668	.861
Recall	ARNE Create	Abby	.610 <sup>a</sup>	.064	.482	.738
		Tim	.667 <sup>a</sup>	.052	.564	.771
	ALCO Create	Abby	.950 <sup>a</sup>	.072	.806	1.094
		Tim	.731 <sup>a</sup>	.050	.631	.832
FMeasure	ARNE Create	Abby	.628 <sup>a</sup>	.062	.504	.751
		Tim	.638 <sup>a</sup>	.050	.537	.738
	ALCO Create	Abby	.954 <sup>a</sup>	.070	.814	1.094
		Tim	.745 <sup>a</sup>	.049	.647	.843
Duration	ARNE Create	Abby	790.194 <sup>a</sup>	30.364	729.319	851.070
		Tim	920.271 <sup>a</sup>	24.685	870.780	969.761
	ALCO Create	Abby	600.667 <sup>a</sup>	34.285	531.928	669.405
		Tim	668.220 <sup>a</sup>	23.963	620.176	716.264
FirstActDet	ARNE Create	Abby	146.653 <sup>a</sup>	8.973	128.664	164.642
		Tim	140.760 <sup>a</sup>	7.295	126.136	155.385
	ALCO Create	Abby	148.375 <sup>a</sup>	10.132	128.062	168.688
		Tim	224.673 <sup>a</sup>	7.081	210.476	238.870
LastActDet	ARNE Create	Abby	771.389 <sup>a</sup>	30.457	710.326	832.452
		Tim	895.260 <sup>a</sup>	24.761	845.617	944.903
	ALCO Create	Abby	582.875 <sup>a</sup>	34.391	513.925	651.825
		Tim	642.475 <sup>a</sup>	24.037	594.284	690.667
ProcDur	ARNE Create	Abby	18.806 <sup>a</sup>	1.916	14.963	22.648
		Tim	25.010 <sup>a</sup>	1.558	21.887	28.134
	ALCO Create	Abby	17.792 <sup>a</sup>	2.164	13.453	22.130
		Tim	25.744 <sup>a</sup>	1.512	22.712	28.777
FixRel	ARNE Create	Abby	10.379 <sup>a</sup>	.208	9.962	10.796
		Tim	10.199 <sup>a</sup>	.169	9.860	10.538
	ALCO Create	Abby	4.223 <sup>a</sup>	.235	3.752	4.694
		Tim	3.637 <sup>a</sup>	.164	3.308	3.966
FixIrrel	ARNE Create	Abby	242.748 <sup>a</sup>	21.583	199.477	286.019
		Tim	293.442 <sup>a</sup>	17.547	258.264	328.621
	ALCO Create	Abby	6.904 <sup>a</sup>	24.371	-41.956	55.764
		Tim	1.834 <sup>a</sup>	17.034	-32.316	35.984
AvDurRelFix	ARNE Create	Abby	85.662 <sup>a</sup>	10.742	64.126	107.198
		Tim	104.801 <sup>a</sup>	8.733	87.293	122.309
	ALCO Create	Abby	122.479 <sup>a</sup>	12.129	98.162	146.796
		Tim	166.566 <sup>a</sup>	8.477	149.569	183.562
AvDurIrrelFix	ARNE	Abby	194.443 <sup>a</sup>	31.119	132.053	256.833

	Create	Tim	244.392 <sup>a</sup>	25.299	193.670	295.115
TotSac	ARNE Create	Abby	345.438 <sup>a</sup>	35.139	274.989	415.886
		Tim	477.697 <sup>a</sup>	24.560	428.458	526.936
Sac2Key	ARNE Create	Abby	85.292 <sup>a</sup>	2.934	79.409	91.175
		Tim	89.438 <sup>a</sup>	2.386	84.655	94.220
	ALCO Create	Abby	85.625 <sup>a</sup>	3.313	78.982	92.268
		Tim	86.784 <sup>a</sup>	2.316	82.141	91.427
AvAttention	ARNE Create	Abby	11.500 <sup>a</sup>	2.343	6.802	16.198
		Tim	16.688 <sup>a</sup>	1.905	12.868	20.507
	ALCO Create	Abby	13.875 <sup>a</sup>	2.646	8.570	19.180
		Tim	18.317 <sup>a</sup>	1.849	14.609	22.025
AvMentWL	ARNE Create	Abby	.835 <sup>a</sup>	.037	.761	.909
		Tim	.606 <sup>a</sup>	.030	.546	.666
	ALCO Create	Abby	.554 <sup>a</sup>	.042	.471	.638
		Tim	.218 <sup>a</sup>	.029	.160	.277
AvFam	ARNE Create	Abby	.822 <sup>a</sup>	.046	.730	.914
		Tim	.721 <sup>a</sup>	.037	.646	.796
	ALCO Create	Abby	.479 <sup>a</sup>	.052	.375	.583
		Tim	.290 <sup>a</sup>	.036	.218	.363
AvSCL	ARNE Create	Abby	.822 <sup>a</sup>	.043	.736	.909
		Tim	.706 <sup>a</sup>	.035	.636	.776
	ALCO Create	Abby	.379 <sup>a</sup>	.049	.282	.477
		Tim	.262 <sup>a</sup>	.034	.194	.330
HRVar_RMSSD	ARNE Create	Abby	552.500 <sup>a</sup>	41.250	469.799	635.201
		Tim	473.250 <sup>a</sup>	33.535	406.016	540.484
	ALCO Create	Abby	587.000 <sup>a</sup>	46.578	493.617	680.383
		Tim	586.481 <sup>a</sup>	32.555	521.212	651.750
HRVar_NN50	ARNE Create	Abby	41.785 <sup>a</sup>	4.477	32.809	50.760
		Tim	32.756 <sup>a</sup>	3.639	25.459	40.053
	ALCO Create	Abby	40.552 <sup>a</sup>	5.055	30.418	50.687
		Tim	25.103 <sup>a</sup>	3.533	18.020	32.186
NASA_MD	ARNE Create	Abby	27.280 <sup>a</sup>	5.217	16.821	37.739
		Tim	24.180 <sup>a</sup>	4.241	15.677	32.682
	ALCO Create	Abby	27.300 <sup>a</sup>	5.890	15.490	39.110
		Tim	20.343 <sup>a</sup>	4.117	12.089	28.598
NASA_PD	ARNE Create	Abby	57.361 <sup>a</sup>	2.402	52.546	62.176
		Tim	47.917 <sup>a</sup>	1.952	44.002	51.831
	ALCO Create	Abby	51.875 <sup>a</sup>	2.712	46.438	57.312
		Tim	45.881 <sup>a</sup>	1.895	42.081	49.681
NASA_TD	ARNE Create	Abby	12.708 <sup>a</sup>	4.316	4.054	21.362
		Tim	27.969 <sup>a</sup>	3.509	20.933	35.004
	ALCO Create	Abby	6.042 <sup>a</sup>	4.874	-3.730	15.813
		Tim	30.060 <sup>a</sup>	3.407	23.230	36.889

	Create	Tim	22.552 <sup>a</sup>	2.862	16.814	28.289
NASA_Performance	ARNE Create	Abby	46.528 <sup>a</sup>	7.447	31.598	61.457
		Tim	44.167 <sup>a</sup>	6.054	32.029	56.304
	ALCO Create	Abby	51.875 <sup>a</sup>	8.408	35.017	68.733
		Tim	61.548 <sup>a</sup>	5.877	49.765	73.330
NASA_Effort	ARNE Create	Abby	52.917 <sup>a</sup>	3.376	46.148	59.686
		Tim	44.375 <sup>a</sup>	2.745	38.872	49.878
	ALCO Create	Abby	47.708 <sup>a</sup>	3.812	40.065	55.352
		Tim	42.946 <sup>a</sup>	2.665	37.604	48.289
NASA_Frustration	ARNE Create	Abby	31.181 <sup>a</sup>	5.875	19.402	42.959
		Tim	20.417 <sup>a</sup>	4.776	10.841	29.993
	ALCO Create	Abby	33.333 <sup>a</sup>	6.634	20.033	46.633
		Tim	32.643 <sup>a</sup>	4.637	23.347	41.939
NASA_Score	ARNE Create	Abby	40.255 <sup>a</sup>	3.664	32.909	47.600
		Tim	36.224 <sup>a</sup>	2.979	30.252	42.196
	ALCO Create	Abby	41.224 <sup>a</sup>	4.137	32.929	49.518
		Tim	39.948 <sup>a</sup>	2.892	34.150	45.745

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag self-efficacy facet, creation task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	.099	1	61.258	.754
Recall	Welch	.051	1	64.135	.823
FMeasure	Welch	.076	1	61.669	.784
Duration	Welch	3.437	1	65.723	.068
FirstActDet	Welch	3.812	1	63.218	.055
LastActDet	Welch	3.874	1	65.027	.053
ProcDur	Welch	1.836	1	66.895	.180
FixRel	Welch	.074	1	66.452	.787
FixIrrel	Welch	.242	1	64.072	.625
AvDurRelFix	Welch	1.697	1	65.594	.197
AvDurIrrelFix	Welch	1.721	1	67.617	.194
TotSac	Welch	.015	1	56.410	.904
Sac2Key	Welch	.187	1	53.411	.667
AvAttention	Welch	2.031	1	67.003	.159
AvMentWL	Welch	2.198	1	61.540	.143
AvFam	Welch	1.108	1	60.179	.297
AvSCL	Welch	.405	1	61.828	.527
HRVar_RMSSD	Welch	.113	1	62.128	.738
HRVar_NN50	Welch	1.302	1	65.413	.258
NASA_MD	Welch	.354	1	69.786	.554
NASA_PD	Welch	.982	1	65.889	.325
NASA_TD	Welch	2.002	1	66.679	.162
NASA_Performance	Welch	.074	1	68.569	.786
NASA_Effort	Welch	.278	1	68.563	.600
NASA_Frustration	Welch	.177	1	62.997	.676
NASA_Score	Welch	3.160	1	68.887	.080

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag self-efficacy facet, creation task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.006	1	.006	.104	.748
	Within Groups	4.324	78	.055		
	Total	4.330	79			
Recall	Between Groups	.003	1	.003	.052	.821
	Within Groups	3.944	78	.051		
	Total	3.947	79			
FMeasure	Between Groups	.004	1	.004	.079	.779
	Within Groups	3.971	78	.051		
	Total	3.975	79			
Duration	Between Groups	75150.075	1	75150.075	3.463	.067
	Within Groups	1692508.313	78	21698.825		
	Total	1767658.388	79			
FirstActDet	Between Groups	14829.633	1	14829.633	3.925	.051
	Within Groups	294689.917	78	3778.076		
	Total	309519.550	79			
LastActDet	Between Groups	88129.200	1	88129.200	3.928	.051
	Within Groups	1750234.750	78	22438.907		
	Total	1838363.950	79			
ProcDur	Between Groups	516.675	1	516.675	1.831	.180
	Within Groups	22010.313	78	282.183		
	Total	22526.988	79			
FixRel	Between Groups	.806	1	.806	.074	.787
	Within Groups	853.408	78	10.941		
	Total	854.214	79			
FixIrrel	Between Groups	6742.427	1	6742.427	.247	.621
	Within Groups	2128219.972	78	27284.871		
	Total	2134962.399	79			
AvDurRelFix	Between Groups	4691.251	1	4691.251	1.712	.195
	Within Groups	213791.660	78	2740.919		
	Total	218482.911	79			
AvDurlrelFix	Between Groups	47128.591	1	47128.591	1.706	.195
	Within Groups	2155135.082	78	27629.937		
	Total	2202263.673	79			
TotSac	Between Groups	1.752	1	1.752	.016	.900
	Within Groups	8524.198	78	109.285		
	Total	8525.950	79			
Sac2Key	Between Groups	16.133	1	16.133	.210	.648
	Within Groups	5994.667	78	76.855		
	Total	6010.800	79			
AvAttention	Between Groups	.144	1	.144	2.024	.159
	Within Groups	5.531	78	.071		
	Total	5.675	79			
AvMentWL	Between Groups	.137	1	.137	2.296	.134
	Within Groups	4.643	78	.060		
	Total	4.780	79			
AvFam	Between Groups	.078	1	.078	1.171	.283
	Within Groups	5.164	78	.066		
	Total	5.242	79			
AvSCL	Between Groups	9022.002	1	9022.002	.422	.518
	Within Groups	1669383.885	78	21402.358		

	Total	1678405.888	79			
HRVar_RMSSD	Between Groups	48.992	1	48.992	.118	.733
	Within Groups	32521.907	78	416.948		
	Total	32570.899	79			
HRVar_NN50	Between Groups	485.274	1	485.274	1.316	.255
	Within Groups	28770.657	78	368.855		
	Total	29255.931	79			
NASA_MD	Between Groups	32.552	1	32.552	.344	.559
	Within Groups	7384.635	78	94.675		
	Total	7417.187	79			
NASA_PD	Between Groups	292.969	1	292.969	.988	.323
	Within Groups	23132.031	78	296.565		
	Total	23425.000	79			
NASA_TD	Between Groups	618.802	1	618.802	2.000	.161
	Within Groups	24129.948	78	309.358		
	Total	24748.750	79			
NASA_Performance	Between Groups	46.875	1	46.875	.073	.788
	Within Groups	50021.875	78	641.306		
	Total	50068.750	79			
NASA_Effort	Between Groups	43.802	1	43.802	.273	.603
	Within Groups	12503.385	78	160.300		
	Total	12547.188	79			
NASA_Frustration	Between Groups	75.208	1	75.208	.182	.671
	Within Groups	32194.792	78	412.754		
	Total	32270.000	79			
NASA_Score	Between Groups	473.092	1	473.092	3.095	.082
	Within Groups	11921.624	78	152.841		
	Total	12394.716	79			

### Task \* SelfEfficacy - use case templates, GenderMag self-efficacy facet, creation task

Dependent Variable	Task	SelfEfficacy	Mean	95% Confidence Interval		
				Std. Error	Lower Bound	Upper Bound
Precision	ARNE Create	Abby	.614 <sup>a</sup>	.056	.502	.726
		Tim	.661 <sup>a</sup>	.053	.555	.767
	ALCO Create	Abby	.862 <sup>a</sup>	.061	.740	.984
		Tim	.869 <sup>a</sup>	.058	.754	.985
Recall	ARNE Create	Abby	.625 <sup>a</sup>	.059	.508	.743
		Tim	.660 <sup>a</sup>	.055	.549	.771
	ALCO Create	Abby	.839 <sup>a</sup>	.064	.711	.966
		Tim	.843 <sup>a</sup>	.060	.722	.964
FMeasure	ARNE Create	Abby	.612 <sup>a</sup>	.057	.498	.726
		Tim	.654 <sup>a</sup>	.054	.547	.762
	ALCO Create	Abby	.848 <sup>a</sup>	.062	.725	.972
		Tim	.851 <sup>a</sup>	.059	.733	.968
Duration	ARNE Create	Abby	886.429 <sup>a</sup>	27.910	830.473	942.384
		Tim	842.619 <sup>a</sup>	26.349	789.792	895.446
	ALCO Create	Abby	665.556 <sup>a</sup>	30.364	604.680	726.431
		Tim	603.331 <sup>a</sup>	28.771	545.648	661.014
FirstActDet	ARNE Create	Abby	122.667 <sup>a</sup>	8.248	106.131	139.202
		Tim	163.905 <sup>a</sup>	7.786	148.294	179.516
	ALCO Create	Abby	185.569 <sup>a</sup>	8.973	167.580	203.559
		Tim	187.479 <sup>a</sup>	8.502	170.433	204.524
LastActDet	ARNE Create	Abby	864.036 <sup>a</sup>	27.996	807.908	920.164
		Tim	820.310 <sup>a</sup>	26.430	767.320	873.299
	ALCO Create	Abby	645.569 <sup>a</sup>	30.457	584.506	706.632
		Tim	579.781 <sup>a</sup>	28.860	521.920	637.641
ProcDur	ARNE Create	Abby	22.393 <sup>a</sup>	1.761	18.861	25.924
		Tim	22.310 <sup>a</sup>	1.663	18.975	25.644
	ALCO Create	Abby	19.986 <sup>a</sup>	1.916	16.144	23.828
		Tim	23.550 <sup>a</sup>	1.816	19.909	27.191
FixRel	ARNE Create	Abby	10.242 <sup>a</sup>	.191	9.859	10.625
		Tim	10.310 <sup>a</sup>	.180	9.949	10.672
	ALCO Create	Abby	3.842 <sup>a</sup>	.208	3.425	4.259
		Tim	4.018 <sup>a</sup>	.197	3.623	4.413
FixIrrel	ARNE Create	Abby	281.773 <sup>a</sup>	19.839	241.999	321.547
		Tim	261.660 <sup>a</sup>	18.730	224.109	299.210
	ALCO Create	Abby	2.707 <sup>a</sup>	21.583	-40.564	45.979
		Tim	6.031 <sup>a</sup>	20.451	-34.971	47.033
AvDurRelFix	ARNE Create	Abby	100.387 <sup>a</sup>	9.874	80.592	120.182
		Tim	92.810 <sup>a</sup>	9.322	74.121	111.498
	ALCO Create	Abby	126.639 <sup>a</sup>	10.742	105.103	148.175
		Tim	162.406 <sup>a</sup>	10.178	142.000	182.812
AvDurlrelFix	ARNE Create	Abby	233.171 <sup>a</sup>	28.604	175.823	290.519
		Tim		27.005	158.659	266.942

		212.800 <sup>a</sup>			
ALCO Create	Abby	357.917 <sup>a</sup>	31.119	295.526	420.307
	Tim	465.218 <sup>a</sup>	29.487	406.100	524.336
TotSac	ARNE Create	88.655 <sup>a</sup>	2.697	83.247	94.062
	Tim	86.667 <sup>a</sup>	2.546	81.561	91.772
ALCO Create	Abby	84.514 <sup>a</sup>	2.934	78.631	90.397
	Tim	87.895 <sup>a</sup>	2.780	82.321	93.470
Sac2Key	ARNE Create	15.345 <sup>a</sup>	2.154	11.027	19.663
	Tim	13.583 <sup>a</sup>	2.033	9.507	17.660
ALCO Create	Abby	16.944 <sup>a</sup>	2.343	12.247	21.642
	Tim	15.248 <sup>a</sup>	2.220	10.796	19.699
AvAttention	ARNE Create	.700 <sup>a</sup>	.034	.632	.768
	Tim	.708 <sup>a</sup>	.032	.644	.773
ALCO Create	Abby	.413 <sup>a</sup>	.037	.339	.486
	Tim	.360 <sup>a</sup>	.035	.290	.430
AvMentWL	ARNE Create	.799 <sup>a</sup>	.042	.714	.883
	Tim	.730 <sup>a</sup>	.040	.650	.810
ALCO Create	Abby	.387 <sup>a</sup>	.046	.295	.480
	Tim	.382 <sup>a</sup>	.044	.295	.469
AvFam	ARNE Create	.787 <sup>a</sup>	.040	.708	.866
	Tim	.725 <sup>a</sup>	.037	.650	.800
ALCO Create	Abby	.321 <sup>a</sup>	.043	.234	.407
	Tim	.320 <sup>a</sup>	.041	.238	.402
AvSCL	ARNE Create	513.524 <sup>a</sup>	37.916	437.506	589.541
	Tim	500.905 <sup>a</sup>	35.796	429.138	572.672
ALCO Create	Abby	590.750 <sup>a</sup>	41.250	508.049	673.451
	Tim	582.731 <sup>a</sup>	39.086	504.367	661.095
HRVar_RMSSD	ARNE Create	37.312 <sup>a</sup>	4.115	29.062	45.562
	Tim	35.938 <sup>a</sup>	3.885	28.150	43.727
ALCO Create	Abby	27.285 <sup>a</sup>	4.477	18.310	36.260
	Tim	38.370 <sup>a</sup>	4.242	29.866	46.875
HRVar_NN50	ARNE Create	23.118 <sup>a</sup>	4.795	13.505	32.732
	Tim	27.899 <sup>a</sup>	4.527	18.823	36.975
ALCO Create	Abby	17.115 <sup>a</sup>	5.217	6.656	27.574
	Tim	30.528 <sup>a</sup>	4.943	20.618	40.439
NASA_MD	ARNE Create	51.012 <sup>a</sup>	2.207	46.586	55.438
	Tim	52.917 <sup>a</sup>	2.084	48.738	57.095
ALCO Create	Abby	52.292 <sup>a</sup>	2.402	47.477	57.106
	Tim	45.464 <sup>a</sup>	2.276	40.902	50.027
NASA_PD	ARNE Create	23.929 <sup>a</sup>	3.968	15.974	31.883
	Tim	18.929 <sup>a</sup>	3.746	11.419	26.438
ALCO Create	Abby	21.458 <sup>a</sup>	4.316	12.804	30.112
	Tim	14.643 <sup>a</sup>	4.090	6.443	22.843
NASA_TD	ARNE Create	41.131 <sup>a</sup>	3.333	34.449	47.813
	Tim	31.012 <sup>a</sup>	3.147	24.703	37.321
ALCO	Abby	29.028 <sup>a</sup>	3.626	21.758	36.298

	Create	Tim	17.899 <sup>a</sup>	3.436	11.010	24.787
NASA_Performance	ARNE Create	Abby	43.750 <sup>a</sup>	6.845	30.027	57.473
		Tim	46.607 <sup>a</sup>	6.462	33.651	59.563
	ALCO Create	Abby	68.542 <sup>a</sup>	7.447	53.612	83.471
		Tim	44.881 <sup>a</sup>	7.056	30.734	59.028
NASA_Effort	ARNE Create	Abby	47.440 <sup>a</sup>	3.103	41.218	53.663
		Tim	48.631 <sup>a</sup>	2.930	42.757	54.505
	ALCO Create	Abby	49.792 <sup>a</sup>	3.376	43.023	56.561
		Tim	40.863 <sup>a</sup>	3.199	34.449	47.277
NASA_Frustration	ARNE Create	Abby	24.762 <sup>a</sup>	5.400	13.935	35.589
		Tim	25.298 <sup>a</sup>	5.098	15.076	35.519
	ALCO Create	Abby	39.583 <sup>a</sup>	5.875	27.805	51.362
		Tim	26.393 <sup>a</sup>	5.567	15.232	37.554
NASA_Score	ARNE Create	Abby	38.671 <sup>a</sup>	3.368	31.919	45.423
		Tim	37.232 <sup>a</sup>	3.179	30.858	43.607
	ALCO Create	Abby	47.641 <sup>a</sup>	3.664	40.296	54.987
		Tim	33.530 <sup>a</sup>	3.472	26.570	40.490

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag risk facet, creation task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	19.798	1	62.361	.000
Recall	Welch	1.619	1	70.575	.207
FMeasure	Welch	8.331	1	64.730	.005
Duration	Welch	2.633	1	75.374	.109
FirstActDet	Welch	43.999	1	57.535	.000
LastActDet	Welch	6.993	1	75.254	.010
ProcDur	Welch	418.959	1	43.219	.000
FixRel	Welch	.108	1	68.606	.744
FixIrrel	Welch	3.157	1	55.114	.081
AvDurRelFix	Welch	19.296	1	70.472	.000
AvDurIrrelFix	Welch	17.353	1	71.549	.000
TotSac	Welch	17.726	1	73.545	.000
Sac2Key	Welch	19.438	1	62.214	.000
AvAttention	Welch	.331	1	68.134	.567
AvMentWL	Welch	4.913	1	67.250	.030
AvFam	Welch	2.809	1	67.835	.098
AvSCL	Welch	1.290	1	72.497	.260
HRVar_RMSSD	Welch	83.319	1	52.431	.000
HRVar_NN50	Welch	14.938	1	74.722	.000
NASA_MD	Welch	24.073	1	59.463	.000
NASA_PD	Welch	22.239	1	49.468	.000
NASA_TD	Welch	18.887	1	48.546	.000
NASA_Performance	Welch	9.168	1	77.513	.003
NASA_Effort	Welch	24.155	1	70.482	.000
NASA_Frustration	Welch	10.649	1	70.481	.002
NASA_Score	Welch	4.515	1	68.506	.037

a. Asymptotically F distributed.

### ANOVA - use case templates, GenderMag risk facet, creation task

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.732	1	.732	15.861	.000
	Within Groups	3.599	78	.046		
	Total	4.330	79			
Recall	Between Groups	.067	1	.067	1.356	.248
	Within Groups	3.879	78	.050		
	Total	3.947	79			
FMeasure	Between Groups	.317	1	.317	6.754	.011
	Within Groups	3.658	78	.047		
	Total	3.975	79			
Duration	Between Groups	50333.217	1	50333.217	2.286	.135
	Within Groups	1717325.170	78	22016.989		
	Total	1767658.388	79			
FirstActDet	Between Groups	118342.358	1	118342.358	48.283	.000
	Within Groups	191177.192	78	2450.990		
	Total	309519.550	79			
LastActDet	Between Groups	132612.942	1	132612.942	6.064	.016
	Within Groups	1705751.008	78	21868.603		
	Total	1838363.950	79			
ProcDur	Between Groups	19546.820	1	19546.820	511.599	.000
	Within Groups	2980.168	78	38.207		
	Total	22526.988	79			
FixRel	Between Groups	1.201	1	1.201	.110	.741
	Within Groups	853.013	78	10.936		
	Total	854.214	79			
FixIrrel	Between Groups	92228.861	1	92228.861	3.522	.064
	Within Groups	2042733.537	78	26188.892		
	Total	2134962.399	79			
AvDurRelFix	Between Groups	43536.810	1	43536.810	19.411	.000
	Within Groups	174946.101	78	2242.899		
	Total	218482.910	79			
AvDurIrrelFix	Between Groups	400048.409	1	400048.409	17.314	.000
	Within Groups	1802215.264	78	23105.324		
	Total	2202263.673	79			
TotSac	Between Groups	1386.681	1	1386.681	15.150	.000
	Within Groups	7139.269	78	91.529		
	Total	8525.950	79			
Sac2Key	Between Groups	999.695	1	999.695	15.561	.000
	Within Groups	5011.105	78	64.245		
	Total	6010.800	79			
AvAttention	Between Groups	.025	1	.025	.339	.562
	Within Groups	5.650	78	.072		
	Total	5.675	79			
AvMentWL	Between Groups	.291	1	.291	5.056	.027
	Within Groups	4.489	78	.058		
	Total	4.780	79			
AvFam	Between Groups	.187	1	.187	2.879	.094
	Within Groups	5.055	78	.065		
	Total	5.242	79			
AvSCL	Between Groups	27055.188	1	27055.188	1.278	.262
	Within Groups	1651350.699	78	21171.163		

	Total	1678405.887	79			
HRVar_RMSSD	Between Groups	14636.150	1	14636.150	63.654	.000
	Within Groups	17934.749	78	229.933		
	Total	32570.899	79			
HRVar_NN50	Between Groups	4586.471	1	4586.471	14.502	.000
	Within Groups	24669.460	78	316.275		
	Total	29255.931	79			
NASA_MD	Between Groups	1858.716	1	1858.716	26.083	.000
	Within Groups	5558.472	78	71.262		
	Total	7417.188	79			
NASA_PD	Between Groups	5826.407	1	5826.407	25.824	.000
	Within Groups	17598.593	78	225.623		
	Total	23425.000	79			
NASA_TD	Between Groups	5461.154	1	5461.154	22.085	.000
	Within Groups	19287.596	78	247.277		
	Total	24748.750	79			
NASA_Performance	Between Groups	4955.323	1	4955.323	8.568	.004
	Within Groups	45113.427	78	578.377		
	Total	50068.750	79			
NASA_Effort	Between Groups	2980.148	1	2980.148	24.297	.000
	Within Groups	9567.040	78	122.654		
	Total	12547.188	79			
NASA_Frustration	Between Groups	3896.471	1	3896.471	10.712	.002
	Within Groups	28373.529	78	363.763		
	Total	32270.000	79			
NASA_Score	Between Groups	691.227	1	691.227	4.607	.035
	Within Groups	11703.489	78	150.045		
	Total	12394.716	79			

**Task \* Risk - use case templates, GenderMag risk facet, creation task**

Dependent Variable	Task	Risk	Mean	95% Confidence Interval		
				Std. Error	Lower Bound	Upper Bound
Precision	ARNE Create	Abby	.804 <sup>a</sup>	.056	.692	.917
		Tim	.513 <sup>a</sup>	.053	.407	.618
	ALCO Create	Abby	.894 <sup>a</sup>	.064	.765	1.023
		Tim	.837 <sup>a</sup>	.054	.729	.945
Recall	ARNE Create	Abby	.702 <sup>a</sup>	.059	.584	.820
		Tim	.598 <sup>a</sup>	.055	.488	.708
	ALCO Create	Abby	.798 <sup>a</sup>	.067	.663	.933
		Tim	.883 <sup>a</sup>	.056	.771	.996
FMeasure	ARNE Create	Abby	.749 <sup>a</sup>	.057	.635	.863
		Tim	.546 <sup>a</sup>	.053	.439	.653
	ALCO Create	Abby	.841 <sup>a</sup>	.065	.710	.972
		Tim	.859 <sup>a</sup>	.055	.749	.968
Duration	ARNE Create	Abby	809.444 <sup>a</sup>	27.994	753.320	865.569
		Tim	905.833 <sup>a</sup>	26.213	853.279	958.388
	ALCO Create	Abby	608.937 <sup>a</sup>	32.103	544.574	673.300
		Tim	659.950 <sup>a</sup>	26.817	606.186	713.714
FirstActDet	ARNE Create	Abby	174.500 <sup>a</sup>	8.272	157.915	191.085
		Tim	119.875 <sup>a</sup>	7.746	104.345	135.405
	ALCO Create	Abby	213.040 <sup>a</sup>	9.487	194.020	232.059
		Tim	160.008 <sup>a</sup>	7.925	144.121	175.896
LastActDet	ARNE Create	Abby	767.056 <sup>a</sup>	28.080	710.758	823.353
		Tim	898.510 <sup>a</sup>	26.294	845.794	951.227
	ALCO Create	Abby	571.575 <sup>a</sup>	32.202	507.014	636.137
		Tim	653.775 <sup>a</sup>	26.899	599.846	707.704
ProcDur	ARNE Create	Abby	42.389 <sup>a</sup>	1.767	38.847	45.931
		Tim	7.323 <sup>a</sup>	1.654	4.006	10.640
	ALCO Create	Abby	37.361 <sup>a</sup>	2.026	33.299	41.423
		Tim	6.175 <sup>a</sup>	1.692	2.782	9.568
FixRel	ARNE Create	Abby	10.207 <sup>a</sup>	.192	9.823	10.592
		Tim	10.328 <sup>a</sup>	.180	9.968	10.688
	ALCO Create	Abby	3.668 <sup>a</sup>	.220	3.227	4.109
		Tim	4.192 <sup>a</sup>	.184	3.824	4.561
FixIrrel	ARNE Create	Abby	346.852 <sup>a</sup>	19.899	306.958	386.746
		Tim	215.364 <sup>a</sup>	18.633	178.008	252.721
	ALCO Create	Abby	4.698 <sup>a</sup>	22.819	-41.052	50.448
		Tim	4.041 <sup>a</sup>	19.062	-34.176	42.257
AvDurRelFix	ARNE Create	Abby	120.974 <sup>a</sup>	9.903	101.119	140.829
		Tim	78.316 <sup>a</sup>	9.273	59.724	96.909
	ALCO Create	Abby	155.603 <sup>a</sup>	11.357	132.834	178.373
		Tim	133.442 <sup>a</sup>	9.487	114.422	152.462
AvDurlrelFix	ARNE Create	Abby	298.024 <sup>a</sup>	28.690	240.503	355.545
		Tim		26.866	112.844	220.569

		166.706 <sup>a</sup>				
TotSac	ALCO Create	Abby	444.810 <sup>a</sup>	32.902	378.845	510.774
		Tim	378.325 <sup>a</sup>	27.484	323.223	433.427
TotSac	ARNE Create	Abby	82.667 <sup>a</sup>	2.705	77.243	88.090
		Tim	91.406 <sup>a</sup>	2.533	86.327	96.485
TotSac	ALCO Create	Abby	82.984 <sup>a</sup>	3.102	76.764	89.204
		Tim	89.425 <sup>a</sup>	2.592	84.229	94.621
Sac2Key	ARNE Create	Abby	9.000 <sup>a</sup>	2.160	4.669	13.331
		Tim	18.563 <sup>a</sup>	2.023	14.507	22.618
Sac2Key	ALCO Create	Abby	13.992 <sup>a</sup>	2.477	9.025	18.959
		Tim	18.200 <sup>a</sup>	2.069	14.051	22.349
AvAttention	ARNE Create	Abby	.750 <sup>a</sup>	.034	.682	.818
		Tim	.670 <sup>a</sup>	.032	.606	.734
AvAttention	ALCO Create	Abby	.310 <sup>a</sup>	.039	.232	.388
		Tim	.463 <sup>a</sup>	.033	.397	.528
AvMentWL	ARNE Create	Abby	.722 <sup>a</sup>	.042	.637	.807
		Tim	.796 <sup>a</sup>	.040	.716	.875
AvMentWL	ALCO Create	Abby	.315 <sup>a</sup>	.049	.218	.413
		Tim	.454 <sup>a</sup>	.041	.373	.535
AvFam	ARNE Create	Abby	.717 <sup>a</sup>	.040	.637	.796
		Tim	.785 <sup>a</sup>	.037	.711	.860
AvFam	ALCO Create	Abby	.279 <sup>a</sup>	.046	.187	.370
		Tim	.363 <sup>a</sup>	.038	.286	.439
AvSCL	ARNE Create	Abby	505.722 <sup>a</sup>	38.031	429.476	581.969
		Tim	508.333 <sup>a</sup>	35.612	436.936	579.730
AvSCL	ALCO Create	Abby	585.298 <sup>a</sup>	43.613	497.859	672.736
		Tim	588.183 <sup>a</sup>	36.431	515.144	661.223
HRVar_RMSSD	ARNE Create	Abby	15.997 <sup>a</sup>	4.127	7.722	24.271
		Tim	52.097 <sup>a</sup>	3.865	44.348	59.845
HRVar_RMSSD	ALCO Create	Abby	20.184 <sup>a</sup>	4.733	10.694	29.673
		Tim	45.472 <sup>a</sup>	3.954	37.545	53.399
HRVar_NN50	ARNE Create	Abby	9.487 <sup>a</sup>	4.810	-.155	19.130
		Tim	37.524 <sup>a</sup>	4.504	28.495	46.554
HRVar_NN50	ALCO Create	Abby	16.239 <sup>a</sup>	5.516	5.181	27.297
		Tim	31.404 <sup>a</sup>	4.607	22.167	40.641
NASA_MD	ARNE Create	Abby	48.333 <sup>a</sup>	2.214	43.894	52.772
		Tim	54.688 <sup>a</sup>	2.073	50.531	58.844
NASA_MD	ALCO Create	Abby	42.798 <sup>a</sup>	2.539	37.707	47.888
		Tim	54.958 <sup>a</sup>	2.121	50.706	59.211
NASA_PD	ARNE Create	Abby	30.278 <sup>a</sup>	3.980	22.299	38.256
		Tim	14.792 <sup>a</sup>	3.726	7.321	22.263
NASA_PD	ALCO Create	Abby	27.143 <sup>a</sup>	4.564	17.993	36.292
		Tim	8.958 <sup>a</sup>	3.812	1.315	16.601
NASA_TD	ARNE Create	Abby	49.444 <sup>a</sup>	3.343	42.742	56.147
		Tim	26.042 <sup>a</sup>	3.130	19.765	32.318
NASA_TD	ALCO	Abby	30.843 <sup>a</sup>	3.834	23.157	38.530

	Create	Tim	16.083 <sup>a</sup>	3.202	9.663	22.504
NASA_Performance	ARNE Create	Abby	61.944 <sup>a</sup>	6.865	48.180	75.709
		Tim	32.604 <sup>a</sup>	6.429	19.715	45.493
	ALCO Create	Abby	69.881 <sup>a</sup>	7.873	54.096	85.666
		Tim	43.542 <sup>a</sup>	6.577	30.356	56.727
NASA_Effort	ARNE Create	Abby	43.889 <sup>a</sup>	3.113	37.648	50.130
		Tim	51.146 <sup>a</sup>	2.915	45.302	56.990
	ALCO Create	Abby	37.530 <sup>a</sup>	3.570	30.373	44.687
		Tim	53.125 <sup>a</sup>	2.982	47.147	59.103
NASA_Frustration	ARNE Create	Abby	36.944 <sup>a</sup>	5.417	26.085	47.804
		Tim	16.094 <sup>a</sup>	5.072	5.925	26.263
	ALCO Create	Abby	41.310 <sup>a</sup>	6.212	28.856	53.763
		Tim	24.667 <sup>a</sup>	5.189	14.264	35.069
NASA_Score	ARNE Create	Abby	45.139 <sup>a</sup>	3.378	38.367	51.911
		Tim	32.561 <sup>a</sup>	3.163	26.219	38.902
	ALCO Create	Abby	44.042 <sup>a</sup>	3.874	36.276	51.809
		Tim	37.129 <sup>a</sup>	3.236	30.642	43.617

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag learning style facet, creation task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	.060	1	53.725	.807
Recall	Welch	.008	1	56.395	.931
FMeasure	Welch	.030	1	55.088	.864
Duration	Welch	.010	1	46.459	.922
FirstActDet	Welch	.035	1	45.659	.852
LastActDet	Welch	.010	1	46.492	.922
ProcDur	Welch	.000	1	52.047	.983
FixRel	Welch	.884	1	50.213	.352
FixIrrel	Welch	.486	1	52.903	.489
AvDurRelFix	Welch	.673	1	54.827	.416
AvDurIrrelFix	Welch	.756	1	53.758	.388
TotSac	Welch	.124	1	53.464	.726
Sac2Key	Welch	.273	1	54.477	.603
AvAttention	Welch	.282	1	51.613	.597
AvMentWL	Welch	.006	1	49.263	.939
AvFam	Welch	.009	1	49.422	.926
AvSCL	Welch	1.395	1	47.789	.243
HRVar_RMSSD	Welch	.671	1	56.474	.416
HRVar_NN50	Welch	1.310	1	53.096	.257
NASA_MD	Welch	.025	1	51.803	.875
NASA_PD	Welch	1.477	1	47.877	.230
NASA_TD	Welch	.048	1	63.009	.828
NASA_Performance	Welch	.074	1	50.827	.787
NASA_Effort	Welch	.547	1	60.320	.462
NASA_Frustration	Welch	.634	1	52.863	.430
NASA_Score	Welch	1.328	1	51.806	.254

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag learning style facet, creation task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.003	1	.003	.059	.808
	Within Groups	4.327	78	.055		
	Total	4.330	79			
Recall	Between Groups	.000	1	.000	.007	.933
	Within Groups	3.946	78	.051		
	Total	3.947	79			
FMeasure	Between Groups	.001	1	.001	.029	.866
	Within Groups	3.974	78	.051		
	Total	3.975	79			
Duration	Between Groups	240.854	1	240.854	.011	.918
	Within Groups	1767417.533	78	22659.199		
	Total	1767658.388	79			
FirstActDet	Between Groups	155.707	1	155.707	.039	.843
	Within Groups	309363.843	78	3966.203		
	Total	309519.550	79			
LastActDet	Between Groups	252.270	1	252.270	.011	.918
	Within Groups	1838111.680	78	23565.534		
	Total	1838363.950	79			
ProcDur	Between Groups	.132	1	.132	.000	.983
	Within Groups	22526.855	78	288.806		
	Total	22526.988	79			
FixRel	Between Groups	9.877	1	9.877	.912	.342
	Within Groups	844.338	78	10.825		
	Total	854.214	79			
FixIrrel	Between Groups	13145.202	1	13145.202	.483	.489
	Within Groups	2121817.197	78	27202.785		
	Total	2134962.399	79			
AvDurRelFix	Between Groups	1808.052	1	1808.052	.651	.422
	Within Groups	216674.859	78	2777.883		
	Total	218482.910	79			
AvDurIrrelFix	Between Groups	20761.692	1	20761.692	.742	.392
	Within Groups	2181501.982	78	27967.974		
	Total	2202263.673	79			
TotSac	Between Groups	13.302	1	13.302	.122	.728
	Within Groups	8512.648	78	109.137		
	Total	8525.950	79			
Sac2Key	Between Groups	20.395	1	20.395	.266	.608
	Within Groups	5990.405	78	76.800		
	Total	6010.800	79			
AvAttention	Between Groups	.021	1	.021	.286	.594
	Within Groups	5.654	78	.072		
	Total	5.675	79			
AvMentWL	Between Groups	.000	1	.000	.006	.937
	Within Groups	4.779	78	.061		
	Total	4.780	79			
AvFam	Between Groups	.001	1	.001	.009	.924
	Within Groups	5.241	78	.067		
	Total	5.242	79			
AvSCL	Between Groups	31573.503	1	31573.503	1.495	.225
	Within Groups	1646832.384	78	21113.236		

	Total	1678405.887	79			
HRVar_RMSSD	Between Groups	262.981	1	262.981	.635	.428
	Within Groups	32307.918	78	414.204		
	Total	32570.899	79			
HRVar_NN50	Between Groups	478.968	1	478.968	1.298	.258
	Within Groups	28776.963	78	368.935		
	Total	29255.931	79			
NASA_MD	Between Groups	2.408	1	2.408	.025	.874
	Within Groups	7414.780	78	95.061		
	Total	7417.187	79			
NASA_PD	Between Groups	465.496	1	465.496	1.581	.212
	Within Groups	22959.504	78	294.353		
	Total	23425.000	79			
NASA_TD	Between Groups	13.215	1	13.215	.042	.839
	Within Groups	24735.535	78	317.122		
	Total	24748.750	79			
NASA_Performance	Between Groups	48.240	1	48.240	.075	.785
	Within Groups	50020.510	78	641.289		
	Total	50068.750	79			
NASA_Effort	Between Groups	78.879	1	78.879	.493	.484
	Within Groups	12468.309	78	159.850		
	Total	12547.187	79			
NASA_Frustration	Between Groups	258.505	1	258.505	.630	.430
	Within Groups	32011.495	78	410.404		
	Total	32270.000	79			
NASA_Score	Between Groups	209.317	1	209.317	1.340	.251
	Within Groups	12185.398	78	156.223		
	Total	12394.716	79			

# Task \* LearningStyle - use case templates, GenderMag learning style facet, creation task

Dependent Variable	Task	LearningStyle	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Create	Abby	.625 <sup>a</sup>	.066	.491	.758
		Tim	.645 <sup>a</sup>	.047	.550	.740
	ALCO Create	Abby	.859 <sup>a</sup>	.056	.746	.971
		Tim	.873 <sup>a</sup>	.062	.748	.998
Recall	ARNE Create	Abby	.628 <sup>a</sup>	.069	.488	.767
		Tim	.651 <sup>a</sup>	.049	.552	.750
	ALCO Create	Abby	.847 <sup>a</sup>	.059	.729	.965
		Tim	.834 <sup>a</sup>	.065	.704	.965
FMeasure	ARNE Create	Abby	.622 <sup>a</sup>	.067	.487	.757
		Tim	.640 <sup>a</sup>	.048	.544	.736
	ALCO Create	Abby	.850 <sup>a</sup>	.057	.736	.964
		Tim	.849 <sup>a</sup>	.063	.722	.976
Duration	ARNE Create	Abby	864.500 <sup>a</sup>	33.095	798.148	930.852
		Tim	864.537 <sup>a</sup>	23.520	817.383	911.691
	ALCO Create	Abby	640.889 <sup>a</sup>	27.994	584.764	697.013
		Tim	627.998 <sup>a</sup>	31.082	565.682	690.313
FirstActDet	ARNE Create	Abby	139.750 <sup>a</sup>	9.780	120.143	159.357
		Tim	145.250 <sup>a</sup>	6.950	131.316	159.184
	ALCO Create	Abby	187.694 <sup>a</sup>	8.272	171.109	204.280
		Tim	185.354 <sup>a</sup>	9.185	166.939	203.768
LastActDet	ARNE Create	Abby	842.050 <sup>a</sup>	33.197	775.494	908.606
		Tim	842.241 <sup>a</sup>	23.592	794.942	889.540
	ALCO Create	Abby	620.778 <sup>a</sup>	28.080	564.480	677.075
		Tim	604.573 <sup>a</sup>	31.177	542.066	667.080
ProcDur	ARNE Create	Abby	22.450 <sup>a</sup>	2.089	18.262	26.638
		Tim	22.296 <sup>a</sup>	1.484	19.320	25.272
	ALCO Create	Abby	20.111 <sup>a</sup>	1.767	16.569	23.653
		Tim	23.425 <sup>a</sup>	1.962	19.492	27.358
FixRel	ARNE Create	Abby	10.585 <sup>a</sup>	.227	10.131	11.040
		Tim	10.104 <sup>a</sup>	.161	9.781	10.427
	ALCO Create	Abby	3.988 <sup>a</sup>	.192	3.604	4.373
		Tim	3.872 <sup>a</sup>	.213	3.445	4.299
FixIrrel	ARNE Create	Abby	315.505 <sup>a</sup>	23.525	268.341	362.669
		Tim	247.389 <sup>a</sup>	16.718	213.871	280.907
	ALCO Create	Abby	3.312 <sup>a</sup>	19.899	-36.582	43.206
		Tim	5.426 <sup>a</sup>	22.093	-38.869	49.721
AvDurRelFix	ARNE Create	Abby	112.155 <sup>a</sup>	11.708	88.682	135.628
		Tim	87.956 <sup>a</sup>	8.320	71.274	104.637
	ALCO Create	Abby	130.639 <sup>a</sup>	9.903	110.784	150.494
		Tim	158.406 <sup>a</sup>	10.996	136.361	180.451
AvDurlrelFix	ARNE Create	Abby	266.455 <sup>a</sup>	33.918	198.453	334.457
		Tim		24.105	150.508	247.163

		198.836 <sup>a</sup>			
TotSac	ALCO Create	Abby	369.917 <sup>a</sup>	28.690	312.396
		Tim	453.218 <sup>a</sup>	31.855	389.352
TotSac	ARNE Create	Abby	84.800 <sup>a</sup>	3.198	78.388
		Tim	89.250 <sup>a</sup>	2.273	84.693
TotSac	ALCO Create	Abby	85.639 <sup>a</sup>	2.705	80.215
		Tim	86.770 <sup>a</sup>	3.004	80.748
Sac2Key	ARNE Create	Abby	12.900 <sup>a</sup>	2.554	7.780
		Tim	15.333 <sup>a</sup>	1.815	11.694
Sac2Key	ALCO Create	Abby	16.819 <sup>a</sup>	2.160	12.488
		Tim	15.373 <sup>a</sup>	2.399	10.564
AvAttention	ARNE Create	Abby	.740 <sup>a</sup>	.040	.659
		Tim	.684 <sup>a</sup>	.029	.627
AvAttention	ALCO Create	Abby	.421 <sup>a</sup>	.034	.353
		Tim	.352 <sup>a</sup>	.038	.276
AvMentWL	ARNE Create	Abby	.780 <sup>a</sup>	.050	.680
		Tim	.756 <sup>a</sup>	.036	.684
AvMentWL	ALCO Create	Abby	.442 <sup>a</sup>	.042	.357
		Tim	.328 <sup>a</sup>	.047	.234
AvFam	ARNE Create	Abby	.770 <sup>a</sup>	.047	.676
		Tim	.748 <sup>a</sup>	.033	.681
AvFam	ALCO Create	Abby	.367 <sup>a</sup>	.040	.287
		Tim	.274 <sup>a</sup>	.044	.186
AvSCL	ARNE Create	Abby	542.600 <sup>a</sup>	44.960	452.460
		Tim	487.556 <sup>a</sup>	31.952	423.496
AvSCL	ALCO Create	Abby	599.500 <sup>a</sup>	38.031	523.253
		Tim	573.981 <sup>a</sup>	42.225	489.324
HRVar_RMSSD	ARNE Create	Abby	36.126 <sup>a</sup>	4.879	26.343
		Tim	36.903 <sup>a</sup>	3.468	29.950
HRVar_RMSSD	ALCO Create	Abby	27.285 <sup>a</sup>	4.127	19.010
		Tim	38.370 <sup>a</sup>	4.583	29.183
HRVar_NN50	ARNE Create	Abby	25.758 <sup>a</sup>	5.686	14.358
		Tim	25.370 <sup>a</sup>	4.041	17.268
HRVar_NN50	ALCO Create	Abby	16.229 <sup>a</sup>	4.810	6.587
		Tim	31.414 <sup>a</sup>	5.340	20.708
NASA_MD	ARNE Create	Abby	51.000 <sup>a</sup>	2.618	45.752
		Tim	52.500 <sup>a</sup>	1.860	48.770
NASA_MD	ALCO Create	Abby	53.750 <sup>a</sup>	2.214	49.311
		Tim	44.006 <sup>a</sup>	2.458	39.077
NASA_PD	ARNE Create	Abby	25.750 <sup>a</sup>	4.705	16.318
		Tim	19.028 <sup>a</sup>	3.343	12.325
NASA_PD	ALCO Create	Abby	18.750 <sup>a</sup>	3.980	10.772
		Tim	17.351 <sup>a</sup>	4.418	8.493
NASA_TD	ARNE Create	Abby	30.000 <sup>a</sup>	3.952	22.076
		Tim	39.444 <sup>a</sup>	2.809	33.813
NASA_TD	ALCO	Abby	26.528 <sup>a</sup>	3.343	19.825

	Create	Tim	20.399 <sup>a</sup>	3.712	12.957	27.841
NASA_Performance	ARNE Create	Abby	42.500 <sup>a</sup>	8.117	26.227	58.773
		Tim	46.667 <sup>a</sup>	5.768	35.102	58.231
	ALCO Create	Abby	63.750 <sup>a</sup>	6.865	49.986	77.514
		Tim	49.673 <sup>a</sup>	7.623	34.390	64.955
NASA_Effort	ARNE Create	Abby	45.500 <sup>a</sup>	3.680	38.122	52.878
		Tim	49.444 <sup>a</sup>	2.615	44.201	54.688
	ALCO Create	Abby	48.958 <sup>a</sup>	3.113	42.718	55.199
		Tim	41.696 <sup>a</sup>	3.456	34.767	48.626
NASA_Frustration	ARNE Create	Abby	22.000 <sup>a</sup>	6.404	9.162	34.838
		Tim	26.713 <sup>a</sup>	4.551	17.589	35.837
	ALCO Create	Abby	37.917 <sup>a</sup>	5.417	27.057	48.776
		Tim	28.060 <sup>a</sup>	6.014	16.002	40.117
NASA_Score	ARNE Create	Abby	36.125 <sup>a</sup>	3.993	28.119	44.131
		Tim	38.966 <sup>a</sup>	2.838	33.276	44.656
	ALCO Create	Abby	46.224 <sup>a</sup>	3.378	39.451	52.996
		Tim	34.948 <sup>a</sup>	3.751	27.428	42.467

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag motivation facet, modification task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	.363	1	76.357	.549
Recall	Welch	.173	1	74.401	.678
FMeasure	Welch	.265	1	75.495	.608
Duration	Welch	.245	1	76.031	.622
FirstActDet	Welch	4.138	1	76.659	.045
LastActDet	Welch	.055	1	76.615	.815
ProcDur	Welch	3.134	1	75.557	.081
FixRel	Welch	11.925	1	74.219	.001
FixIrrel	Welch	6.798	1	67.833	.011
AvDurRelFix	Welch	1.787	1	74.207	.185
AvDurIrrelFix	Welch	3.161	1	75.603	.079
TotSac	Welch	.765	1	75.600	.385
Sac2Key	Welch	.101	1	73.269	.752
AvAttention	Welch	5.467	1	76.778	.022
AvMentWL	Welch	.003	1	76.930	.956
AvFam	Welch	.219	1	75.721	.641
AvSCL	Welch	.210	1	75.208	.648
HRVar_RMSSD	Welch	.642	1	71.251	.426
HRVar_NN50	Welch	4.238	1	75.153	.043
NASA_MD	Welch	8.643	1	76.871	.004
NASA_PD	Welch	7.071	1	74.406	.010
NASA_TD	Welch	1.441	1	76.528	.234
NASA_Performance	Welch	7.784	1	74.670	.007
NASA_Effort	Welch	4.596	1	76.855	.035
NASA_Frustration	Welch	4.060	1	76.155	.047
NASA_Score	Welch	3.180	1	72.429	.079

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag motivation facet, modification task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.018	1	.018	.358	.552
	Within Groups	3.982	77	.052		
	Total	4.001	78			
Recall	Between Groups	.009	1	.009	.174	.678
	Within Groups	3.876	77	.050		
	Total	3.884	78			
FMeasure	Between Groups	.013	1	.013	.263	.609
	Within Groups	3.730	77	.048		
	Total	3.743	78			
Duration	Between Groups	3321.755	1	3321.755	.242	.624
	Within Groups	1057001.081	77	13727.287		
	Total	1060322.835	78			
FirstActDet	Between Groups	13853.282	1	13853.282	4.055	.048
	Within Groups	263048.186	77	3416.210		
	Total	276901.468	78			
LastActDet	Between Groups	799.016	1	799.016	.054	.817
	Within Groups	1141539.820	77	14825.192		
	Total	1142338.835	78			
ProcDur	Between Groups	862.468	1	862.468	3.110	.082
	Within Groups	21353.532	77	277.319		
	Total	22216.000	78			
FixRel	Between Groups	109.118	1	109.118	11.954	.001
	Within Groups	702.858	77	9.128		
	Total	811.976	78			
FixIrrel	Between Groups	169775.116	1	169775.116	7.035	.010
	Within Groups	1858184.724	77	24132.269		
	Total	2027959.839	78			
AvDurRelFix	Between Groups	4505.614	1	4505.614	1.791	.185
	Within Groups	193674.114	77	2515.248		
	Total	198179.727	78			
AvDurlrelFix	Between Groups	81338.618	1	81338.618	3.136	.081
	Within Groups	1997206.411	77	25937.746		
	Total	2078545.028	78			
TotSac	Between Groups	91.166	1	91.166	.759	.386
	Within Groups	9254.378	77	120.187		
	Total	9345.544	78			
Sac2Key	Between Groups	8.675	1	8.675	.101	.751
	Within Groups	6590.540	77	85.591		
	Total	6599.215	78			
AvAttention	Between Groups	.214	1	.214	5.345	.023
	Within Groups	3.076	77	.040		
	Total	3.290	78			
AvMentWL	Between Groups	.000	1	.000	.003	.957
	Within Groups	2.627	77	.034		
	Total	2.627	78			
AvFam	Between Groups	.006	1	.006	.217	.642
	Within Groups	1.972	77	.026		
	Total	1.978	78			
AvSCL	Between Groups	4424.444	1	4424.444	.209	.649
	Within Groups	1627538.290	77	21136.861		

	Total	1631962.734	78			
HRVar_RMSSD	Between Groups	284.717	1	284.717	.654	.421
	Within Groups	33505.792	77	435.140		
	Total	33790.509	78			
HRVar_NN50	Between Groups	1549.162	1	1549.162	4.220	.043
	Within Groups	28266.611	77	367.099		
	Total	29815.774	78			
NASA_MD	Between Groups	690.610	1	690.610	8.312	.005
	Within Groups	6397.997	77	83.091		
	Total	7088.608	78			
NASA_PD	Between Groups	1611.893	1	1611.893	6.633	.012
	Within Groups	18712.791	77	243.023		
	Total	20324.684	78			
NASA_TD	Between Groups	330.243	1	330.243	1.415	.238
	Within Groups	17968.492	77	233.357		
	Total	18298.734	78			
NASA_Performance	Between Groups	3594.113	1	3594.113	7.779	.007
	Within Groups	35577.406	77	462.044		
	Total	39171.519	78			
NASA_Effort	Between Groups	661.613	1	661.613	4.418	.039
	Within Groups	11532.057	77	149.767		
	Total	12193.671	78			
NASA_Frustration	Between Groups	1499.130	1	1499.130	4.006	.049
	Within Groups	28817.959	77	374.259		
	Total	30317.089	78			
NASA_Score	Between Groups	306.187	1	306.187	3.221	.077
	Within Groups	7319.850	77	95.063		
	Total	7626.037	78			

### Task \* Motivation - use case templates, GenderMag motivation facet, modification task

Dependent Variable	Task	Motivation	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Modify	Abby	.735 <sup>a</sup>	.061	.614	.857
		Tim	.730 <sup>a</sup>	.047	.635	.825
	ALCO Modify	Abby	.866 <sup>a</sup>	.056	.753	.979
		Tim	.860 <sup>a</sup>	.057	.746	.975
Recall	ARNE Modify	Abby	.704 <sup>a</sup>	.069	.566	.842
		Tim	.717 <sup>a</sup>	.054	.609	.824
	ALCO Modify	Abby	.846 <sup>a</sup>	.064	.718	.974
		Tim	.911 <sup>a</sup>	.065	.781	1.042
FMeasure	ARNE Modify	Abby	.714 <sup>a</sup>	.064	.586	.841
		Tim	.720 <sup>a</sup>	.050	.620	.819
	ALCO Modify	Abby	.852 <sup>a</sup>	.059	.733	.970
		Tim	.881 <sup>a</sup>	.060	.761	1.002
Duration	ARNE Modify	Abby	576.810 <sup>a</sup>	34.937	506.637	646.983
		Tim	590.456 <sup>a</sup>	27.257	535.709	645.202
	ALCO Modify	Abby	519.018 <sup>a</sup>	32.486	453.767	584.269
		Tim	491.524 <sup>a</sup>	33.002	425.237	557.811
FirstActDet	ARNE Modify	Abby	121.833 <sup>a</sup>	14.553	92.603	151.063
		Tim	132.641 <sup>a</sup>	11.354	109.836	155.445
	ALCO Modify	Abby	52.445 <sup>a</sup>	13.532	25.266	79.625
		Tim	100.286 <sup>a</sup>	13.747	72.674	127.897
LastActDet	ARNE Modify	Abby	549.464 <sup>a</sup>	35.029	479.107	619.821
		Tim	571.546 <sup>a</sup>	27.328	516.656	626.437
	ALCO Modify	Abby	494.075 <sup>a</sup>	32.572	428.653	559.497
		Tim	472.000 <sup>a</sup>	33.089	405.539	538.461
ProcDur	ARNE Modify	Abby	27.345 <sup>a</sup>	1.880	23.568	31.122
		Tim	18.909 <sup>a</sup>	1.467	15.963	21.856
	ALCO Modify	Abby	24.943 <sup>a</sup>	1.749	21.431	28.455
		Tim	19.524 <sup>a</sup>	1.776	15.956	23.092
FixRel	ARNE Modify	Abby	10.160 <sup>a</sup>	.231	9.697	10.623
		Tim	10.294 <sup>a</sup>	.180	9.933	10.656
	ALCO Modify	Abby	4.018 <sup>a</sup>	.214	3.588	4.449
		Tim	4.155 <sup>a</sup>	.218	3.717	4.592
FixIrrel	ARNE Modify	Abby	250.417 <sup>a</sup>	22.187	205.854	294.981
		Tim	308.308 <sup>a</sup>	17.309	273.541	343.075
	ALCO Modify	Abby	5.520 <sup>a</sup>	20.631	-35.918	46.957
		Tim	3.043 <sup>a</sup>	20.958	-39.052	45.139
AvDurRelFix	ARNE Modify	Abby	88.407 <sup>a</sup>	11.708	64.891	111.923
		Tim	109.202 <sup>a</sup>	9.134	90.855	127.548
	ALCO Modify	Abby	146.857 <sup>a</sup>	10.887	124.990	168.724
		Tim	125.292 <sup>a</sup>	11.060	103.078	147.506
AvDurlrelFix	ARNE Modify	Abby	201.693 <sup>a</sup>	33.692	134.021	269.364
		Tim		26.285	207.014	312.604

			259.809 <sup>a</sup>		
TotSac	ALCO Modify	Abby	436.570 <sup>a</sup>	31.328	373.645
		Tim	371.875 <sup>a</sup>	31.826	307.951
TotSac	ARNE Modify	Abby	83.167 <sup>a</sup>	3.340	76.458
		Tim	81.204 <sup>a</sup>	2.606	75.970
TotSac	ALCO Modify	Abby	87.467 <sup>a</sup>	3.106	81.230
		Tim	89.619 <sup>a</sup>	3.155	83.282
Sac2Key	ARNE Modify	Abby	9.357 <sup>a</sup>	2.760	3.813
		Tim	13.193 <sup>a</sup>	2.153	8.867
	ALCO Modify	Abby	15.323 <sup>a</sup>	2.567	10.168
		Tim	19.429 <sup>a</sup>	2.607	14.192
AvAttention	ARNE Modify	Abby	.690 <sup>a</sup>	.046	.598
		Tim	.620 <sup>a</sup>	.036	.547
	ALCO Modify	Abby	.664 <sup>a</sup>	.043	.578
		Tim	.700 <sup>a</sup>	.043	.613
AvMentWL	ARNE Modify	Abby	.696 <sup>a</sup>	.055	.585
		Tim	.580 <sup>a</sup>	.043	.494
	ALCO Modify	Abby	.548 <sup>a</sup>	.051	.445
		Tim	.667 <sup>a</sup>	.052	.562
AvFam	ARNE Modify	Abby	.782 <sup>a</sup>	.046	.690
		Tim	.680 <sup>a</sup>	.036	.608
	ALCO Modify	Abby	.566 <sup>a</sup>	.043	.481
		Tim	.657 <sup>a</sup>	.043	.570
AvSCL	ARNE Modify	Abby	488.083 <sup>a</sup>	39.016	409.718
		Tim	530.154 <sup>a</sup>	30.439	469.015
	ALCO Modify	Abby	537.706 <sup>a</sup>	36.279	464.837
		Tim	480.452 <sup>a</sup>	36.855	406.427
HRVar_RMSSD	ARNE Modify	Abby	27.058 <sup>a</sup>	6.260	14.485
		Tim	36.605 <sup>a</sup>	4.884	26.796
	ALCO Modify	Abby	35.123 <sup>a</sup>	5.821	23.432
		Tim	26.141 <sup>a</sup>	5.913	14.264
HRVar_NN50	ARNE Modify	Abby	12.721 <sup>a</sup>	6.580	-.495
		Tim	32.337 <sup>a</sup>	5.133	22.026
	ALCO Modify	Abby	29.410 <sup>a</sup>	6.118	17.121
		Tim	24.448 <sup>a</sup>	6.215	11.963
NASA_MD	ARNE Modify	Abby	42.500 <sup>a</sup>	2.175	38.131
		Tim	47.815 <sup>a</sup>	1.697	44.407
	ALCO Modify	Abby	40.473 <sup>a</sup>	2.022	36.411
		Tim	49.405 <sup>a</sup>	2.055	45.278
NASA_PD	ARNE Modify	Abby	21.071 <sup>a</sup>	3.665	13.709
		Tim	15.130 <sup>a</sup>	2.860	9.386
	ALCO Modify	Abby	13.587 <sup>a</sup>	3.408	6.741
		Tim	10.476 <sup>a</sup>	3.462	3.522
NASA_TD	ARNE Modify	Abby	35.893 <sup>a</sup>	3.061	29.745
		Tim	15.731 <sup>a</sup>	2.388	10.935
	ALCO	Abby	16.807 <sup>a</sup>	2.846	11.090

	Modify	Tim	18.810 <sup>a</sup>	2.891	13.002	24.617
NASA_Performance	ARNE Modify	Abby	60.833 <sup>a</sup>	6.585	47.607	74.059
		Tim	49.704 <sup>a</sup>	5.137	39.385	60.022
	ALCO Modify	Abby	63.345 <sup>a</sup>	6.123	51.046	75.643
		Tim	51.429 <sup>a</sup>	6.220	38.935	63.922
NASA_Effort	ARNE Modify	Abby	39.881 <sup>a</sup>	3.444	32.963	46.799
		Tim	45.167 <sup>a</sup>	2.687	39.770	50.564
	ALCO Modify	Abby	38.580 <sup>a</sup>	3.203	32.147	45.012
		Tim	46.071 <sup>a</sup>	3.253	39.537	52.606
NASA_Frustration	ARNE Modify	Abby	35.357 <sup>a</sup>	5.730	23.847	46.867
		Tim	16.722 <sup>a</sup>	4.471	7.743	25.702
	ALCO Modify	Abby	25.492 <sup>a</sup>	5.328	14.790	36.195
		Tim	20.357 <sup>a</sup>	5.413	9.485	31.230
NASA_Score	ARNE Modify	Abby	39.256 <sup>a</sup>	2.699	33.834	44.678
		Tim	31.711 <sup>a</sup>	2.106	27.482	35.941
	ALCO Modify	Abby	33.047 <sup>a</sup>	2.510	28.006	38.089
		Tim	32.758 <sup>a</sup>	2.550	27.636	37.879

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag information processing facet, modification task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	.822	1	70.979	.368
Recall	Welch	.120	1	66.769	.730
FMeasure	Welch	.476	1	69.062	.493
Duration	Welch	5.094	1	72.515	.027
FirstActDet	Welch	.028	1	53.903	.867
LastActDet	Welch	2.864	1	71.771	.095
ProcDur	Welch	10.625	1	67.352	.002
FixRel	Welch	5.916	1	63.269	.018
FixIrrel	Welch	.447	1	65.434	.506
AvDurRelFix	Welch	11.242	1	52.402	.001
AvDurIrrelFix	Welch	11.931	1	57.165	.001
TotSac	Welch	2.263	1	63.625	.137
Sac2Key	Welch	5.227	1	72.600	.025
AvAttention	Welch	56.744	1	75.857	.000
AvMentWL	Welch	4.802	1	76.993	.031
AvFam	Welch	8.438	1	70.578	.005
AvSCL	Welch	5.903	1	70.688	.018
HRVar_RMSSD	Welch	6.414	1	51.875	.014
HRVar_NN50	Welch	1.056	1	59.646	.308
NASA_MD	Welch	4.572	1	45.453	.038
NASA_PD	Welch	10.923	1	76.385	.001
NASA_TD	Welch	1.992	1	41.768	.166
NASA_Performance	Welch	.520	1	73.818	.473
NASA_Effort	Welch	1.442	1	48.957	.236
NASA_Frustration	Welch	.606	1	64.020	.439
NASA_Score	Welch	.077	1	55.915	.782

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag information processing facet, modification task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.038	1	.038	.743	.391
	Within Groups	3.962	77	.051		
	Total	4.001	78			
Recall	Between Groups	.006	1	.006	.114	.737
	Within Groups	3.879	77	.050		
	Total	3.884	78			
FMeasure	Between Groups	.021	1	.021	.440	.509
	Within Groups	3.722	77	.048		
	Total	3.743	78			
Duration	Between Groups	58773.818	1	58773.818	4.519	.037
	Within Groups	1001549.018	77	13007.130		
	Total	1060322.835	78			
FirstActDet	Between Groups	109.685	1	109.685	.031	.862
	Within Groups	276791.783	77	3594.698		
	Total	276901.468	78			
LastActDet	Between Groups	36824.035	1	36824.035	2.565	.113
	Within Groups	1105514.800	77	14357.335		
	Total	1142338.835	78			
ProcDur	Between Groups	2554.011	1	2554.011	10.002	.002
	Within Groups	19661.989	77	255.351		
	Total	22216.000	78			
FixRel	Between Groups	56.952	1	56.952	5.808	.018
	Within Groups	755.024	77	9.806		
	Total	811.976	78			
FixIrrel	Between Groups	11233.982	1	11233.982	.429	.514
	Within Groups	2016725.857	77	26191.245		
	Total	2027959.839	78			
AvDurRelFix	Between Groups	27435.050	1	27435.050	12.372	.001
	Within Groups	170744.677	77	2217.463		
	Total	198179.727	78			
AvDurlrelFix	Between Groups	289697.241	1	289697.241	12.470	.001
	Within Groups	1788847.788	77	23231.789		
	Total	2078545.028	78			
TotSac	Between Groups	261.242	1	261.242	2.214	.141
	Within Groups	9084.302	77	117.978		
	Total	9345.544	78			
Sac2Key	Between Groups	374.415	1	374.415	4.631	.035
	Within Groups	6224.800	77	80.842		
	Total	6599.215	78			
AvAttention	Between Groups	1.258	1	1.258	47.665	.000
	Within Groups	2.032	77	.026		
	Total	3.290	78			
AvMentWL	Between Groups	.124	1	.124	3.821	.054
	Within Groups	2.503	77	.033		
	Total	2.627	78			
AvFam	Between Groups	.179	1	.179	7.665	.007
	Within Groups	1.799	77	.023		
	Total	1.978	78			
AvSCL	Between Groups	106117.645	1	106117.645	5.355	.023
	Within Groups	1525845.089	77	19816.170		

	Total	1631962.734	78			
HRVar_RMSSD	Between Groups	2853.292	1	2853.292	7.102	.009
	Within Groups	30937.217	77	401.782		
	Total	33790.509	78			
HRVar_NN50	Between Groups	410.761	1	410.761	1.076	.303
	Within Groups	29405.013	77	381.883		
	Total	29815.774	78			
NASA_MD	Between Groups	470.904	1	470.904	5.479	.022
	Within Groups	6617.704	77	85.944		
	Total	7088.608	78			
NASA_PD	Between Groups	2003.918	1	2003.918	8.422	.005
	Within Groups	18320.765	77	237.932		
	Total	20324.684	78			
NASA_TD	Between Groups	579.006	1	579.006	2.516	.117
	Within Groups	17719.728	77	230.126		
	Total	18298.734	78			
NASA_Performance	Between Groups	229.274	1	229.274	.453	.503
	Within Groups	38942.245	77	505.743		
	Total	39171.519	78			
NASA_Effort	Between Groups	256.239	1	256.239	1.653	.202
	Within Groups	11937.432	77	155.032		
	Total	12193.671	78			
NASA_Frustration	Between Groups	230.609	1	230.609	.590	.445
	Within Groups	30086.480	77	390.734		
	Total	30317.089	78			
NASA_Score	Between Groups	8.074	1	8.074	.082	.776
	Within Groups	7617.963	77	98.935		
	Total	7626.037	78			

# Task \* InformationProcessing - use case templates, GenderMag information processing facet, modification task

Dependent Variable	Task	InformationProcessing	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Modify	Abby	.689 <sup>a</sup>	.053	.583	.796
		Tim	.787 <sup>a</sup>	.052	.683	.892
	ALCO Modify	Abby	.963 <sup>a</sup>	.063	.838	1.089
		Tim	.777 <sup>a</sup>	.052	.672	.882
Recall	ARNE Modify	Abby	.647 <sup>a</sup>	.060	.526	.767
		Tim	.794 <sup>a</sup>	.059	.675	.912
	ALCO Modify	Abby	.950 <sup>a</sup>	.071	.808	1.092
		Tim	.822 <sup>a</sup>	.059	.703	.941
FMeasure	ARNE Modify	Abby	.664 <sup>a</sup>	.056	.553	.776
		Tim	.785 <sup>a</sup>	.055	.676	.895
	ALCO Modify	Abby	.952 <sup>a</sup>	.066	.821	1.084
		Tim	.795 <sup>a</sup>	.055	.685	.905
Duration	ARNE Modify	Abby	544.122 <sup>a</sup>	30.595	482.671	605.574
		Tim	636.381 <sup>a</sup>	30.023	576.079	696.683
	ALCO Modify	Abby	480.667 <sup>a</sup>	36.104	408.149	553.185
		Tim	524.397 <sup>a</sup>	30.114	463.912	584.881
FirstActDet	ARNE Modify	Abby	125.678 <sup>a</sup>	12.744	100.081	151.275
		Tim	130.786 <sup>a</sup>	12.506	105.667	155.904
	ALCO Modify	Abby	62.500 <sup>a</sup>	15.039	32.293	92.707
		Tim	91.668 <sup>a</sup>	12.544	66.473	116.862
LastActDet	ARNE Modify	Abby	525.315 <sup>a</sup>	30.675	463.702	586.928
		Tim	608.905 <sup>a</sup>	30.101	548.444	669.365
	ALCO Modify	Abby	460.875 <sup>a</sup>	36.199	388.167	533.583
		Tim	500.457 <sup>a</sup>	30.193	439.814	561.101
ProcDur	ARNE Modify	Abby	18.807 <sup>a</sup>	1.647	15.500	22.115
		Tim	27.476 <sup>a</sup>	1.616	24.231	30.722
	ALCO Modify	Abby	19.792 <sup>a</sup>	1.943	15.889	23.695
		Tim	23.939 <sup>a</sup>	1.621	20.684	27.195
FixRel	ARNE Modify	Abby	10.422 <sup>a</sup>	.202	10.017	10.828
		Tim	9.996 <sup>a</sup>	.198	9.598	10.394
	ALCO Modify	Abby	4.423 <sup>a</sup>	.238	3.945	4.902
		Tim	3.808 <sup>a</sup>	.199	3.408	4.207
FixIrrel	ARNE Modify	Abby	245.058 <sup>a</sup>	19.429	206.033	284.083
		Tim	331.739 <sup>a</sup>	19.066	293.443	370.034
	ALCO Modify	Abby	7.004 <sup>a</sup>	22.928	-39.049	53.057
		Tim	1.771 <sup>a</sup>	19.124	-36.640	40.182
AvDurRelFix	ARNE Modify	Abby	86.489 <sup>a</sup>	10.253	65.895	107.082
		Tim	117.610 <sup>a</sup>	10.061	97.401	137.818
	ALCO Modify	Abby	112.479 <sup>a</sup>	12.099	88.177	136.781
		Tim	154.758 <sup>a</sup>	10.092	134.489	175.028
AvDurIrrelFix	ARNE	Abby	196.781 <sup>a</sup>	29.504	137.520	256.042

	Modify	Tim	282.729 <sup>a</sup>	28.952	224.576	340.881
TotSac	ALCO	Abby	333.437 <sup>a</sup>	34.817	263.505	403.370
	Modify	Tim	460.275 <sup>a</sup>	29.040	401.946	518.603
Sac2Key	ARNE	Abby	81.889 <sup>a</sup>	2.925	76.014	87.764
	Modify	Tim	82.286 <sup>a</sup>	2.870	76.521	88.051
	ALCO	Abby	88.625 <sup>a</sup>	3.452	81.692	95.558
	Modify	Tim	88.627 <sup>a</sup>	2.879	82.845	94.409
AvAttention	ARNE	Abby	10.248 <sup>a</sup>	2.417	5.393	15.103
	Modify	Tim	13.143 <sup>a</sup>	2.372	8.379	17.907
	ALCO	Abby	14.875 <sup>a</sup>	2.852	9.146	20.604
	Modify	Tim	19.813 <sup>a</sup>	2.379	15.034	24.592
AvMentWL	ARNE	Abby	.749 <sup>a</sup>	.040	.668	.830
	Modify	Tim	.524 <sup>a</sup>	.040	.444	.603
	ALCO	Abby	.742 <sup>a</sup>	.048	.646	.837
	Modify	Tim	.634 <sup>a</sup>	.040	.554	.713
AvFam	ARNE	Abby	.694 <sup>a</sup>	.048	.597	.791
	Modify	Tim	.550 <sup>a</sup>	.047	.455	.645
	ALCO	Abby	.679 <sup>a</sup>	.057	.564	.794
	Modify	Tim	.554 <sup>a</sup>	.048	.459	.650
AvSCL	ARNE	Abby	.794 <sup>a</sup>	.040	.713	.875
	Modify	Tim	.636 <sup>a</sup>	.039	.556	.715
	ALCO	Abby	.679 <sup>a</sup>	.047	.584	.774
	Modify	Tim	.561 <sup>a</sup>	.040	.481	.640
HRVar_RMSSD	ARNE	Abby	554.144 <sup>a</sup>	34.167	485.518	622.770
	Modify	Tim	457.238 <sup>a</sup>	33.528	389.895	524.581
	ALCO	Abby	584.000 <sup>a</sup>	40.320	503.016	664.984
	Modify	Tim	440.772 <sup>a</sup>	33.629	373.225	508.318
HRVar_NN50	ARNE	Abby	35.016 <sup>a</sup>	5.482	24.005	46.026
	Modify	Tim	29.102 <sup>a</sup>	5.379	18.297	39.906
	ALCO	Abby	40.120 <sup>a</sup>	6.469	27.127	53.113
	Modify	Tim	21.858 <sup>a</sup>	5.396	11.021	32.695
NASA_MD	ARNE	Abby	19.573 <sup>a</sup>	5.762	7.999	31.146
	Modify	Tim	29.132 <sup>a</sup>	5.654	17.775	40.489
	ALCO	Abby	27.320 <sup>a</sup>	6.800	13.662	40.978
	Modify	Tim	26.239 <sup>a</sup>	5.671	14.848	37.631
NASA_PD	ARNE	Abby	46.148 <sup>a</sup>	1.905	42.323	49.974
	Modify	Tim	44.643 <sup>a</sup>	1.869	40.889	48.397
	ALCO	Abby	46.875 <sup>a</sup>	2.248	42.360	51.390
	Modify	Tim	43.918 <sup>a</sup>	1.875	40.152	47.683
NASA_TD	ARNE	Abby	15.685 <sup>a</sup>	3.210	9.238	22.132
	Modify	Tim	20.357 <sup>a</sup>	3.150	14.030	26.684
	ALCO	Abby	6.875 <sup>a</sup>	3.788	-.733	14.483
	Modify	Tim	16.229 <sup>a</sup>	3.159	9.884	22.575

	Modify	Tim	12.323 <sup>a</sup>	2.638	7.024	17.621
NASA_Performance	ARNE Modify	Abby	57.944 <sup>a</sup>	5.766	46.362	69.527
		Tim	50.238 <sup>a</sup>	5.659	38.872	61.604
	ALCO Modify	Abby	63.958 <sup>a</sup>	6.805	50.290	77.626
		Tim	50.903 <sup>a</sup>	5.676	39.502	62.303
NASA_Effort	ARNE Modify	Abby	43.037 <sup>a</sup>	3.016	36.979	49.095
		Tim	42.619 <sup>a</sup>	2.960	36.674	48.564
	ALCO Modify	Abby	42.708 <sup>a</sup>	3.559	35.559	49.857
		Tim	42.532 <sup>a</sup>	2.969	36.570	48.495
NASA_Frustration	ARNE Modify	Abby	30.333 <sup>a</sup>	5.018	20.254	40.413
		Tim	17.857 <sup>a</sup>	4.924	7.966	27.748
	ALCO Modify	Abby	33.333 <sup>a</sup>	5.922	21.439	45.228
		Tim	13.636 <sup>a</sup>	4.939	3.716	23.557
NASA_Score	ARNE Modify	Abby	37.336 <sup>a</sup>	2.364	32.589	42.084
		Tim	32.024 <sup>a</sup>	2.320	27.365	36.683
	ALCO Modify	Abby	36.354 <sup>a</sup>	2.790	30.751	41.957
		Tim	29.924 <sup>a</sup>	2.327	25.250	34.597

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag self-efficacy facet, modification task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	5.487	1	76.838	.022
Recall	Welch	4.029	1	76.697	.048
FMeasure	Welch	5.006	1	76.746	.028
Duration	Welch	.911	1	75.058	.343
FirstActDet	Welch	3.213	1	60.072	.078
LastActDet	Welch	.595	1	75.356	.443
ProcDur	Welch	1.122	1	74.783	.293
FixRel	Welch	2.323	1	75.631	.132
FixIrrel	Welch	.906	1	73.912	.344
AvDurRelFix	Welch	5.776	1	72.531	.019
AvDurIrrelFix	Welch	6.298	1	74.736	.014
TotSac	Welch	2.646	1	73.479	.108
Sac2Key	Welch	.113	1	68.471	.738
AvAttention	Welch	13.787	1	72.488	.000
AvMentWL	Welch	.660	1	75.926	.419
AvFam	Welch	.819	1	76.916	.368
AvSCL	Welch	.152	1	76.660	.698
HRVar_RMSSD	Welch	.001	1	70.728	.980
HRVar_NN50	Welch	.038	1	73.230	.846
NASA_MD	Welch	2.842	1	68.890	.096
NASA_PD	Welch	4.891	1	76.692	.030
NASA_TD	Welch	.490	1	56.143	.487
NASA_Performance	Welch	1.373	1	75.822	.245
NASA_Effort	Welch	1.124	1	73.326	.293
NASA_Frustration	Welch	.309	1	75.340	.580
NASA_Score	Welch	.022	1	67.978	.883

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag self-efficacy facet, modification task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.260	1	.260	5.357	.023
	Within Groups	3.740	77	.049		
	Total	4.001	78			
Recall	Between Groups	.189	1	.189	3.946	.051
	Within Groups	3.695	77	.048		
	Total	3.884	78			
FMeasure	Between Groups	.224	1	.224	4.898	.030
	Within Groups	3.519	77	.046		
	Total	3.743	78			
Duration	Between Groups	12359.753	1	12359.753	.908	.344
	Within Groups	1047963.083	77	13609.910		
	Total	1060322.835	78			
FirstActDet	Between Groups	11807.804	1	11807.804	3.430	.068
	Within Groups	265093.664	77	3442.775		
	Total	276901.468	78			
LastActDet	Between Groups	8710.085	1	8710.085	.592	.444
	Within Groups	1133628.750	77	14722.451		
	Total	1142338.835	78			
ProcDur	Between Groups	318.501	1	318.501	1.120	.293
	Within Groups	21897.499	77	284.383		
	Total	22216.000	78			
FixRel	Between Groups	23.591	1	23.591	2.304	.133
	Within Groups	788.385	77	10.239		
	Total	811.976	78			
FixIrrel	Between Groups	23690.562	1	23690.562	.910	.343
	Within Groups	2004269.278	77	26029.471		
	Total	2027959.839	78			
AvDurRelFix	Between Groups	13987.562	1	13987.562	5.847	.018
	Within Groups	184192.166	77	2392.106		
	Total	198179.727	78			
AvDurIrrelFix	Between Groups	156989.164	1	156989.164	6.291	.014
	Within Groups	1921555.864	77	24955.271		
	Total	2078545.028	78			
TotSac	Between Groups	312.608	1	312.608	2.665	.107
	Within Groups	9032.936	77	117.311		
	Total	9345.544	78			
Sac2Key	Between Groups	9.948	1	9.948	.116	.734
	Within Groups	6589.267	77	85.575		
	Total	6599.215	78			
AvAttention	Between Groups	.505	1	.505	13.962	.000
	Within Groups	2.785	77	.036		
	Total	3.290	78			
AvMentWL	Between Groups	.021	1	.021	.626	.431
	Within Groups	2.606	77	.034		
	Total	2.627	78			
AvFam	Between Groups	.020	1	.020	.798	.375
	Within Groups	1.957	77	.025		
	Total	1.978	78			
AvSCL	Between Groups	3074.380	1	3074.380	.145	.704
	Within Groups	1628888.354	77	21154.394		

	Total	1631962.734	78			
HRVar_RMSSD	Between Groups	.297	1	.297	.001	.979
	Within Groups	33790.212	77	438.834		
	Total	33790.509	78			
HRVar_NN50	Between Groups	14.869	1	14.869	.038	.845
	Within Groups	29800.905	77	387.025		
	Total	29815.774	78			
NASA_MD	Between Groups	259.651	1	259.651	2.928	.091
	Within Groups	6828.957	77	88.688		
	Total	7088.608	78			
NASA_PD	Between Groups	1190.300	1	1190.300	4.790	.032
	Within Groups	19134.383	77	248.498		
	Total	20324.684	78			
NASA_TD	Between Groups	125.333	1	125.333	.531	.468
	Within Groups	18173.401	77	236.018		
	Total	18298.734	78			
NASA_Performance	Between Groups	679.384	1	679.384	1.359	.247
	Within Groups	38492.135	77	499.898		
	Total	39171.519	78			
NASA_Effort	Between Groups	176.810	1	176.810	1.133	.290
	Within Groups	12016.860	77	156.063		
	Total	12193.671	78			
NASA_Frustration	Between Groups	120.577	1	120.577	.307	.581
	Within Groups	30196.512	77	392.162		
	Total	30317.089	78			
NASA_Score	Between Groups	2.240	1	2.240	.023	.881
	Within Groups	7623.798	77	99.010		
	Total	7626.037	78			

# Task \* SelfEfficacy - use case templates, GenderMag self-efficacy facet, modification task

Dependent Variable	Task	SelfEfficacy	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Modify	Abby	.796 <sup>a</sup>	.049	.698	.895
		Tim	.625 <sup>a</sup>	.058	.510	.741
	ALCO Modify	Abby	.873 <sup>a</sup>	.054	.765	.981
		Tim	.847 <sup>a</sup>	.060	.727	.967
Recall	ARNE Modify	Abby	.753 <sup>a</sup>	.056	.641	.864
		Tim	.641 <sup>a</sup>	.065	.510	.773
	ALCO Modify	Abby	.893 <sup>a</sup>	.061	.770	1.015
		Tim	.863 <sup>a</sup>	.068	.727	.999
FMeasure	ARNE Modify	Abby	.770 <sup>a</sup>	.051	.667	.873
		Tim	.630 <sup>a</sup>	.061	.508	.751
	ALCO Modify	Abby	.878 <sup>a</sup>	.056	.765	.991
		Tim	.851 <sup>a</sup>	.063	.725	.977
Duration	ARNE Modify	Abby	575.050 <sup>a</sup>	28.293	518.221	631.879
		Tim	600.211 <sup>a</sup>	33.306	533.314	667.108
	ALCO Modify	Abby	497.458 <sup>a</sup>	31.037	435.119	559.797
		Tim	515.022 <sup>a</sup>	34.474	445.778	584.266
FirstActDet	ARNE Modify	Abby	144.217 <sup>a</sup>	11.785	120.545	167.888
		Tim	100.739 <sup>a</sup>	13.873	72.874	128.604
	ALCO Modify	Abby	78.875 <sup>a</sup>	12.928	52.908	104.842
		Tim	77.135 <sup>a</sup>	14.360	48.292	105.978
LastActDet	ARNE Modify	Abby	550.992 <sup>a</sup>	28.368	494.013	607.970
		Tim	580.042 <sup>a</sup>	33.393	512.969	647.114
	ALCO Modify	Abby	474.406 <sup>a</sup>	31.118	411.904	536.909
		Tim	494.640 <sup>a</sup>	34.565	425.214	564.066
ProcDur	ARNE Modify	Abby	24.058 <sup>a</sup>	1.523	21.000	27.117
		Tim	20.169 <sup>a</sup>	1.793	16.569	23.770
	ALCO Modify	Abby	23.052 <sup>a</sup>	1.670	19.697	26.407
		Tim	20.382 <sup>a</sup>	1.856	16.655	24.109
FixRel	ARNE Modify	Abby	10.172 <sup>a</sup>	.187	9.797	10.547
		Tim	10.341 <sup>a</sup>	.220	9.900	10.783
	ALCO Modify	Abby	4.098 <sup>a</sup>	.205	3.686	4.509
		Tim	4.082 <sup>a</sup>	.228	3.625	4.539
FixIrrel	ARNE Modify	Abby	284.993 <sup>a</sup>	17.968	248.904	321.083
		Tim	279.627 <sup>a</sup>	21.151	237.144	322.110
	ALCO Modify	Abby	4.945 <sup>a</sup>	19.710	-34.644	44.533
		Tim	2.973 <sup>a</sup>	21.893	-41.001	46.946
AvDurRelFix	ARNE Modify	Abby	100.317 <sup>a</sup>	9.482	81.272	119.361
		Tim	99.750 <sup>a</sup>	11.161	77.332	122.168
	ALCO Modify	Abby	120.693 <sup>a</sup>	10.401	99.802	141.584
		Tim	158.528 <sup>a</sup>	11.553	135.323	181.733
AvDurlrelFix	ARNE Modify	Abby	236.392 <sup>a</sup>	27.285	181.589	291.196
		Tim		32.119	166.523	295.547

		231.035 <sup>a</sup>				
TotSac	ALCO Modify	Abby	358.078 <sup>a</sup>	29.930	297.961	418.195
		Tim	471.585 <sup>a</sup>	33.246	404.809	538.360
TotSac	ARNE Modify	Abby	81.283 <sup>a</sup>	2.705	75.851	86.716
		Tim	83.361 <sup>a</sup>	3.184	76.966	89.756
TotSac	ALCO Modify	Abby	86.885 <sup>a</sup>	2.967	80.926	92.845
		Tim	91.411 <sup>a</sup>	3.296	84.791	98.031
Sac2Key	ARNE Modify	Abby	11.833 <sup>a</sup>	2.235	7.343	16.323
		Tim	10.983 <sup>a</sup>	2.631	5.698	16.269
Sac2Key	ALCO Modify	Abby	17.406 <sup>a</sup>	2.452	12.481	22.331
		Tim	17.738 <sup>a</sup>	2.724	12.267	23.209
AvAttention	ARNE Modify	Abby	.617 <sup>a</sup>	.037	.542	.692
		Tim	.707 <sup>a</sup>	.044	.619	.795
AvAttention	ALCO Modify	Abby	.794 <sup>a</sup>	.041	.712	.876
		Tim	.507 <sup>a</sup>	.045	.416	.598
AvMentWL	ARNE Modify	Abby	.614 <sup>a</sup>	.045	.524	.704
		Tim	.659 <sup>a</sup>	.053	.553	.765
AvMentWL	ALCO Modify	Abby	.630 <sup>a</sup>	.049	.532	.729
		Tim	.583 <sup>a</sup>	.055	.473	.692
AvFam	ARNE Modify	Abby	.714 <sup>a</sup>	.037	.639	.789
		Tim	.743 <sup>a</sup>	.044	.655	.830
AvFam	ALCO Modify	Abby	.622 <sup>a</sup>	.041	.540	.704
		Tim	.605 <sup>a</sup>	.045	.514	.696
AvSCL	ARNE Modify	Abby	505.908 <sup>a</sup>	31.597	442.444	569.372
		Tim	521.481 <sup>a</sup>	37.194	446.774	596.188
AvSCL	ALCO Modify	Abby	500.583 <sup>a</sup>	34.660	430.966	570.200
		Tim	516.947 <sup>a</sup>	38.499	439.619	594.275
HRVar_RMSSD	ARNE Modify	Abby	27.744 <sup>a</sup>	5.069	17.562	37.927
		Tim	40.235 <sup>a</sup>	5.967	28.249	52.221
HRVar_RMSSD	ALCO Modify	Abby	28.952 <sup>a</sup>	5.561	17.783	40.121
		Tim	32.422 <sup>a</sup>	6.177	20.015	44.828
HRVar_NN50	ARNE Modify	Abby	22.528 <sup>a</sup>	5.329	11.825	33.231
		Tim	25.799 <sup>a</sup>	6.273	13.200	38.398
HRVar_NN50	ALCO Modify	Abby	25.984 <sup>a</sup>	5.845	14.244	37.725
		Tim	27.944 <sup>a</sup>	6.493	14.903	40.985
NASA_MD	ARNE Modify	Abby	48.333 <sup>a</sup>	1.761	44.795	51.871
		Tim	40.750 <sup>a</sup>	2.073	36.585	44.915
NASA_MD	ALCO Modify	Abby	46.198 <sup>a</sup>	1.932	42.317	50.079
		Tim	43.818 <sup>a</sup>	2.146	39.507	48.129
NASA_PD	ARNE Modify	Abby	17.417 <sup>a</sup>	2.968	11.454	23.379
		Tim	18.250 <sup>a</sup>	3.494	11.231	25.269
NASA_PD	ALCO Modify	Abby	7.448 <sup>a</sup>	3.256	.908	13.988
		Tim	19.055 <sup>a</sup>	3.617	11.790	26.319
NASA_TD	ARNE Modify	Abby	29.208 <sup>a</sup>	2.479	24.230	34.187
		Tim	16.792 <sup>a</sup>	2.918	10.931	22.652
NASA_TD	ALCO	Abby	16.615 <sup>a</sup>	2.719	11.153	22.076

	Modify	Tim	19.918 <sup>a</sup>	3.020	13.852	25.984
NASA_Performance	ARNE Modify	Abby	57.083 <sup>a</sup>	5.333	46.372	67.794
		Tim	50.389 <sup>a</sup>	6.277	37.780	62.998
	ALCO Modify	Abby	56.719 <sup>a</sup>	5.850	44.969	68.468
		Tim	57.264 <sup>a</sup>	6.498	44.213	70.315
NASA_Effort	ARNE Modify	Abby	45.000 <sup>a</sup>	2.789	39.398	50.602
		Tim	39.278 <sup>a</sup>	3.283	32.683	45.873
	ALCO Modify	Abby	42.656 <sup>a</sup>	3.060	36.511	48.802
		Tim	42.545 <sup>a</sup>	3.399	35.719	49.372
NASA_Frustration	ARNE Modify	Abby	30.000 <sup>a</sup>	4.641	20.679	39.321
		Tim	16.333 <sup>a</sup>	5.463	5.361	27.306
	ALCO Modify	Abby	23.750 <sup>a</sup>	5.091	13.525	33.975
		Tim	21.091 <sup>a</sup>	5.655	9.733	32.448
NASA_Score	ARNE Modify	Abby	37.840 <sup>a</sup>	2.186	33.450	42.231
		Tim	30.299 <sup>a</sup>	2.573	25.130	35.467
	ALCO Modify	Abby	32.231 <sup>a</sup>	2.398	27.414	37.047
		Tim	33.948 <sup>a</sup>	2.664	28.599	39.298

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag risk facet, modification task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	27.060	1	72.531	.000
Recall	Welch	4.264	1	75.878	.042
FMeasure	Welch	13.476	1	72.408	.000
Duration	Welch	5.447	1	72.341	.022
FirstActDet	Welch	19.719	1	63.569	.000
LastActDet	Welch	14.406	1	72.743	.000
ProcDur	Welch	391.636	1	34.547	.000
FixRel	Welch	.950	1	55.563	.334
FixIrrel	Welch	1.419	1	44.984	.240
AvDurRelFix	Welch	26.044	1	62.050	.000
AvDurlrelFix	Welch	22.631	1	61.271	.000
TotSac	Welch	15.762	1	76.350	.000
Sac2Key	Welch	16.954	1	74.675	.000
AvAttention	Welch	.272	1	57.705	.604
AvMentWL	Welch	19.694	1	70.672	.000
AvFam	Welch	11.921	1	58.362	.001
AvSCL	Welch	.600	1	62.116	.441
HRVar_RMSSD	Welch	66.228	1	58.693	.000
HRVar_NN50	Welch	7.361	1	64.336	.009
NASA_MD	Welch	21.220	1	48.254	.000
NASA_PD	Welch	11.935	1	38.650	.001
NASA_TD	Welch	11.364	1	38.893	.002
NASA_Performance	Welch	9.927	1	67.820	.002
NASA_Effort	Welch	18.385	1	57.860	.000
NASA_Frustration	Welch	8.325	1	56.274	.006
NASA_Score	Welch	5.498	1	49.217	.023

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag risk facet, modification task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.780	1	.780	18.656	.000
	Within Groups	3.220	77	.042		
	Total	4.001	78			
Recall	Between Groups	.150	1	.150	3.090	.083
	Within Groups	3.734	77	.048		
	Total	3.884	78			
FMeasure	Between Groups	.403	1	.403	9.278	.003
	Within Groups	3.341	77	.043		
	Total	3.743	78			
Duration	Between Groups	49210.008	1	49210.008	3.748	.057
	Within Groups	1011112.828	77	13131.335		
	Total	1060322.835	78			
FirstActDet	Between Groups	54051.890	1	54051.890	18.676	.000
	Within Groups	222849.579	77	2894.150		
	Total	276901.468	78			
LastActDet	Between Groups	130790.090	1	130790.090	9.956	.002
	Within Groups	1011548.746	77	13136.997		
	Total	1142338.835	78			
ProcDur	Between Groups	19548.468	1	19548.468	564.279	.000
	Within Groups	2667.532	77	34.643		
	Total	22216.000	78			
FixRel	Between Groups	10.240	1	10.240	.983	.324
	Within Groups	801.736	77	10.412		
	Total	811.976	78			
FixIrrel	Between Groups	43459.860	1	43459.860	1.686	.198
	Within Groups	1984499.980	77	25772.727		
	Total	2027959.839	78			
AvDurRelFix	Between Groups	48691.034	1	48691.034	25.080	.000
	Within Groups	149488.693	77	1941.412		
	Total	198179.727	78			
AvDurlrelFix	Between Groups	461583.142	1	461583.142	21.981	.000
	Within Groups	1616961.886	77	20999.505		
	Total	2078545.028	78			
TotSac	Between Groups	1305.530	1	1305.530	12.503	.001
	Within Groups	8040.014	77	104.416		
	Total	9345.544	78			
Sac2Key	Between Groups	891.057	1	891.057	12.020	.001
	Within Groups	5708.158	77	74.132		
	Total	6599.215	78			
AvAttention	Between Groups	.012	1	.012	.275	.602
	Within Groups	3.278	77	.043		
	Total	3.290	78			
AvMentWL	Between Groups	.480	1	.480	17.196	.000
	Within Groups	2.148	77	.028		
	Total	2.627	78			
AvFam	Between Groups	.266	1	.266	11.957	.001
	Within Groups	1.712	77	.022		
	Total	1.978	78			
AvSCL	Between Groups	12154.820	1	12154.820	.578	.449
	Within Groups	1619807.914	77	21036.466		

	Total	1631962.734	78			
HRVar_RMSSD	Between Groups	11702.212	1	11702.212	40.794	.000
	Within Groups	22088.298	77	286.861		
	Total	33790.509	78			
HRVar_NN50	Between Groups	2456.373	1	2456.373	6.913	.010
	Within Groups	27359.401	77	355.317		
	Total	29815.774	78			
NASA_MD	Between Groups	1687.901	1	1687.901	24.065	.000
	Within Groups	5400.707	77	70.139		
	Total	7088.608	78			
NASA_PD	Between Groups	3455.356	1	3455.356	15.772	.000
	Within Groups	16869.328	77	219.082		
	Total	20324.684	78			
NASA_TD	Between Groups	2974.872	1	2974.872	14.948	.000
	Within Groups	15323.862	77	199.011		
	Total	18298.734	78			
NASA_Performance	Between Groups	4086.191	1	4086.191	8.968	.004
	Within Groups	35085.328	77	455.654		
	Total	39171.519	78			
NASA_Effort	Between Groups	2366.619	1	2366.619	18.544	.000
	Within Groups	9827.052	77	127.624		
	Total	12193.671	78			
NASA_Frustration	Between Groups	3029.916	1	3029.916	8.550	.005
	Within Groups	27287.172	77	354.379		
	Total	30317.089	78			
NASA_Score	Between Groups	564.543	1	564.543	6.156	.015
	Within Groups	7061.494	77	91.708		
	Total	7626.037	78			

### Task \* Risk - use case templates, GenderMag risk facet, modification task

Dependent Variable	Task	RiskPersona	Mean	95% Confidence Interval		
				Std. Error	Lower Bound	Upper Bound
Precision	ARNE Modify	Abby	.859 <sup>a</sup>	.061	.736	.981
		Tim	.634 <sup>a</sup>	.047	.540	.728
	ALCO Modify	Abby	.893 <sup>a</sup>	.065	.763	1.024
		Tim	.837 <sup>a</sup>	.050	.737	.937
Recall	ARNE Modify	Abby	.756 <sup>a</sup>	.069	.617	.895
		Tim	.676 <sup>a</sup>	.053	.569	.783
	ALCO Modify	Abby	.882 <sup>a</sup>	.074	.734	1.030
		Tim	.880 <sup>a</sup>	.057	.767	.994
FMeasure	ARNE Modify	Abby	.803 <sup>a</sup>	.064	.675	.932
		Tim	.650 <sup>a</sup>	.049	.552	.749
	ALCO Modify	Abby	.881 <sup>a</sup>	.068	.744	1.018
		Tim	.856 <sup>a</sup>	.052	.751	.961
Duration	ARNE Modify	Abby	567.714 <sup>a</sup>	35.205	497.004	638.425
		Tim	597.530 <sup>a</sup>	27.047	543.203	651.856
	ALCO Modify	Abby	488.867 <sup>a</sup>	37.562	413.422	564.312
		Tim	517.368 <sup>a</sup>	28.774	459.573	575.163
FirstActDet	ARNE Modify	Abby	153.000 <sup>a</sup>	14.664	123.546	182.454
		Tim	108.400 <sup>a</sup>	11.266	85.771	131.029
	ALCO Modify	Abby	101.900 <sup>a</sup>	15.646	70.474	133.326
		Tim	57.896 <sup>a</sup>	11.986	33.822	81.970
LastActDet	ARNE Modify	Abby	525.071 <sup>a</sup>	35.297	454.175	595.968
		Tim	590.519 <sup>a</sup>	27.118	536.049	644.988
	ALCO Modify	Abby	450.033 <sup>a</sup>	37.660	374.390	525.676
		Tim	509.750 <sup>a</sup>	28.850	451.804	567.696
ProcDur	ARNE Modify	Abby	42.643 <sup>a</sup>	1.895	38.837	46.449
		Tim	7.011 <sup>a</sup>	1.456	4.087	9.935
	ALCO Modify	Abby	38.833 <sup>a</sup>	2.022	34.773	42.894
		Tim	7.618 <sup>a</sup>	1.549	4.507	10.729
FixRel	ARNE Modify	Abby	10.042 <sup>a</sup>	.232	9.575	10.509
		Tim	10.386 <sup>a</sup>	.179	10.028	10.745
	ALCO Modify	Abby	3.831 <sup>a</sup>	.248	3.333	4.329
		Tim	4.315 <sup>a</sup>	.190	3.934	4.697
FixIrrel	ARNE Modify	Abby	330.560 <sup>a</sup>	22.357	285.655	375.465
		Tim	245.975 <sup>a</sup>	17.177	211.475	280.475
	ALCO Modify	Abby	4.695 <sup>a</sup>	23.854	-43.217	52.606
		Tim	3.750 <sup>a</sup>	18.273	-32.952	40.453
AvDurRelFix	ARNE Modify	Abby	115.121 <sup>a</sup>	11.798	91.425	138.818
		Tim	88.424 <sup>a</sup>	9.064	70.218	106.630
	ALCO Modify	Abby	145.300 <sup>a</sup>	12.588	120.017	170.583
		Tim	126.626 <sup>a</sup>	9.643	107.258	145.994
AvDurlrelFix	ARNE Modify	Abby	281.836 <sup>a</sup>	33.950	213.646	350.026
		Tim		26.083	145.086	249.866

		197.476 <sup>a</sup>			
TotSac	ALCO Modify	Abby	431.900 <sup>a</sup>	36.223	359.144
		Tim	375.878 <sup>a</sup>	27.748	320.144
TotSac	ARNE Modify	Abby	79.286 <sup>a</sup>	3.366	72.526
		Tim	84.222 <sup>a</sup>	2.586	79.029
TotSac	ALCO Modify	Abby	84.433 <sup>a</sup>	3.591	77.221
		Tim	92.220 <sup>a</sup>	2.751	86.695
Sac2Key	ARNE Modify	Abby	7.000 <sup>a</sup>	2.781	1.413
		Tim	15.026 <sup>a</sup>	2.137	10.734
Sac2Key	ALCO Modify	Abby	14.433 <sup>a</sup>	2.968	8.473
		Tim	20.192 <sup>a</sup>	2.273	15.625
AvAttention	ARNE Modify	Abby	.664 <sup>a</sup>	.046	.571
		Tim	.640 <sup>a</sup>	.036	.568
AvAttention	ALCO Modify	Abby	.747 <sup>a</sup>	.049	.647
		Tim	.629 <sup>a</sup>	.038	.553
AvMentWL	ARNE Modify	Abby	.579 <sup>a</sup>	.056	.467
		Tim	.672 <sup>a</sup>	.043	.586
AvMentWL	ALCO Modify	Abby	.510 <sup>a</sup>	.059	.391
		Tim	.699 <sup>a</sup>	.046	.608
AvFam	ARNE Modify	Abby	.679 <sup>a</sup>	.046	.586
		Tim	.761 <sup>a</sup>	.036	.689
AvFam	ALCO Modify	Abby	.527 <sup>a</sup>	.049	.428
		Tim	.691 <sup>a</sup>	.038	.615
AvSCL	ARNE Modify	Abby	461.857 <sup>a</sup>	39.315	382.891
		Tim	550.552 <sup>a</sup>	30.205	489.883
AvSCL	ALCO Modify	Abby	461.350 <sup>a</sup>	41.947	377.097
		Tim	545.900 <sup>a</sup>	32.134	481.358
HRVar_RMSSD	ARNE Modify	Abby	16.509 <sup>a</sup>	6.308	3.840
		Tim	44.810 <sup>a</sup>	4.846	35.076
HRVar_RMSSD	ALCO Modify	Abby	16.534 <sup>a</sup>	6.730	3.017
		Tim	42.074 <sup>a</sup>	5.156	31.719
HRVar_NN50	ARNE Modify	Abby	17.061 <sup>a</sup>	6.630	3.743
		Tim	28.961 <sup>a</sup>	5.094	18.730
HRVar_NN50	ALCO Modify	Abby	24.380 <sup>a</sup>	7.074	10.171
		Tim	28.759 <sup>a</sup>	5.419	17.874
NASA_MD	ARNE Modify	Abby	43.571 <sup>a</sup>	2.192	39.169
		Tim	46.981 <sup>a</sup>	1.684	43.599
NASA_MD	ALCO Modify	Abby	41.667 <sup>a</sup>	2.338	36.970
		Tim	48.382 <sup>a</sup>	1.791	44.784
NASA_PD	ARNE Modify	Abby	18.571 <sup>a</sup>	3.694	11.153
		Tim	17.074 <sup>a</sup>	2.838	11.374
NASA_PD	ALCO Modify	Abby	11.333 <sup>a</sup>	3.941	3.418
		Tim	12.408 <sup>a</sup>	3.019	6.344
NASA_TD	ARNE Modify	Abby	32.857 <sup>a</sup>	3.084	26.662
		Tim	18.093 <sup>a</sup>	2.370	13.333
NASA_TD	ALCO	Abby	20.083 <sup>a</sup>	3.291	13.474
					26.693

	Modify	Tim	16.001 <sup>a</sup>	2.521	10.938	21.064
NASA_Performance	ARNE Modify	Abby	62.500 <sup>a</sup>	6.635	49.173	75.827
		Tim	48.407 <sup>a</sup>	5.098	38.168	58.647
	ALCO Modify	Abby	60.750 <sup>a</sup>	7.080	46.530	74.970
		Tim	53.653 <sup>a</sup>	5.423	42.760	64.546
NASA_Effort	ARNE Modify	Abby	39.643 <sup>a</sup>	3.471	32.672	46.614
		Tim	45.352 <sup>a</sup>	2.666	39.996	50.707
	ALCO Modify	Abby	38.333 <sup>a</sup>	3.703	30.896	45.771
		Tim	46.282 <sup>a</sup>	2.837	40.585	51.980
NASA_Frustration	ARNE Modify	Abby	31.071 <sup>a</sup>	5.774	19.473	42.670
		Tim	20.056 <sup>a</sup>	4.436	11.145	28.966
	ALCO Modify	Abby	25.833 <sup>a</sup>	6.161	13.459	38.208
		Tim	20.065 <sup>a</sup>	4.720	10.585	29.545
NASA_Score	ARNE Modify	Abby	38.036 <sup>a</sup>	2.720	32.572	43.499
		Tim	32.660 <sup>a</sup>	2.090	28.463	36.858
	ALCO Modify	Abby	33.000 <sup>a</sup>	2.902	27.171	38.829
		Tim	32.799 <sup>a</sup>	2.223	28.333	37.264

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag learning style facet, modification task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	2.027	1	50.884	.161
Recall	Welch	.475	1	52.017	.494
FMeasure	Welch	1.162	1	50.933	.286
Duration	Welch	2.419	1	55.478	.126
FirstActDet	Welch	.291	1	55.340	.592
LastActDet	Welch	2.910	1	53.232	.094
ProcDur	Welch	2.352	1	46.457	.132
FixRel	Welch	5.641	1	50.905	.021
FixIrrel	Welch	4.007	1	57.727	.050
AvDurRelFix	Welch	5.547	1	48.014	.023
AvDurIrrelFix	Welch	6.469	1	45.457	.014
TotSac	Welch	.104	1	58.210	.748
Sac2Key	Welch	2.516	1	48.686	.119
AvAttention	Welch	5.024	1	43.730	.030
AvMentWL	Welch	.887	1	48.605	.351
AvFam	Welch	.585	1	49.404	.448
AvSCL	Welch	10.541	1	49.599	.002
HRVar_RMSSD	Welch	.652	1	54.388	.423
HRVar_NN50	Welch	.474	1	49.270	.494
NASA_MD	Welch	.241	1	48.353	.626
NASA_PD	Welch	1.210	1	45.522	.277
NASA_TD	Welch	3.017	1	40.984	.090
NASA_Performance	Welch	1.714	1	45.367	.197
NASA_Effort	Welch	.251	1	52.061	.619
NASA_Frustration	Welch	5.567	1	47.696	.022
NASA_Score	Welch	3.317	1	43.653	.075

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag learning style facet, modification task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.101	1	.101	1.993	.162
	Within Groups	3.900	77	.051		
	Total	4.001	78			
Recall	Between Groups	.023	1	.023	.459	.500
	Within Groups	3.861	77	.050		
	Total	3.884	78			
FMeasure	Between Groups	.055	1	.055	1.142	.289
	Within Groups	3.688	77	.048		
	Total	3.743	78			
Duration	Between Groups	29818.951	1	29818.951	2.228	.140
	Within Groups	1030503.885	77	13383.167		
	Total	1060322.835	78			
FirstActDet	Between Groups	963.216	1	963.216	.269	.606
	Within Groups	275938.253	77	3583.614		
	Total	276901.468	78			
LastActDet	Between Groups	39608.791	1	39608.791	2.766	.100
	Within Groups	1102730.044	77	14321.169		
	Total	1142338.835	78			
ProcDur	Between Groups	693.687	1	693.687	2.482	.119
	Within Groups	21522.313	77	279.511		
	Total	22216.000	78			
FixRel	Between Groups	54.553	1	54.553	5.546	.021
	Within Groups	757.423	77	9.837		
	Total	811.976	78			
FixIrrel	Between Groups	90154.191	1	90154.191	3.582	.062
	Within Groups	1937805.648	77	25166.307		
	Total	2027959.839	78			
AvDurRelFix	Between Groups	13669.423	1	13669.423	5.705	.019
	Within Groups	184510.304	77	2396.238		
	Total	198179.727	78			
AvDurlrelFix	Between Groups	172011.156	1	172011.156	6.947	.010
	Within Groups	1906533.873	77	24760.180		
	Total	2078545.028	78			
TotSac	Between Groups	11.196	1	11.196	.092	.762
	Within Groups	9334.348	77	121.225		
	Total	9345.544	78			
Sac2Key	Between Groups	212.350	1	212.350	2.560	.114
	Within Groups	6386.865	77	82.946		
	Total	6599.215	78			
AvAttention	Between Groups	.222	1	.222	5.567	.021
	Within Groups	3.068	77	.040		
	Total	3.290	78			
AvMentWL	Between Groups	.030	1	.030	.904	.345
	Within Groups	2.597	77	.034		
	Total	2.627	78			
AvFam	Between Groups	.015	1	.015	.588	.445
	Within Groups	1.963	77	.025		
	Total	1.978	78			
AvSCL	Between Groups	196997.596	1	196997.596	10.571	.002
	Within Groups	1434965.139	77	18635.911		

	Total	1631962.734	78			
HRVar_RMSSD	Between Groups	265.353	1	265.353	.609	.437
	Within Groups	33525.156	77	435.392		
	Total	33790.509	78			
HRVar_NN50	Between Groups	183.981	1	183.981	.478	.491
	Within Groups	29631.793	77	384.828		
	Total	29815.774	78			
NASA_MD	Between Groups	22.642	1	22.642	.247	.621
	Within Groups	7065.965	77	91.766		
	Total	7088.608	78			
NASA_PD	Between Groups	336.784	1	336.784	1.297	.258
	Within Groups	19987.899	77	259.583		
	Total	20324.684	78			
NASA_TD	Between Groups	802.199	1	802.199	3.530	.064
	Within Groups	17496.535	77	227.228		
	Total	18298.734	78			
NASA_Performance	Between Groups	915.840	1	915.840	1.843	.179
	Within Groups	38255.679	77	496.827		
	Total	39171.519	78			
NASA_Effort	Between Groups	38.228	1	38.228	.242	.624
	Within Groups	12155.443	77	157.863		
	Total	12193.671	78			
NASA_Frustration	Between Groups	2108.380	1	2108.380	5.755	.019
	Within Groups	28208.708	77	366.347		
	Total	30317.089	78			
NASA_Score	Between Groups	347.906	1	347.906	3.681	.059
	Within Groups	7278.131	77	94.521		
	Total	7626.037	78			

# Task \* LearningStyle - use case templates, GenderMag learning style facet, modification task

Dependent Variable	Task	LearningStyle	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Modify	Abby	.743 <sup>a</sup>	.071	.599	.886
		Tim	.727 <sup>a</sup>	.044	.639	.816
	ALCO Modify	Abby	.872 <sup>a</sup>	.060	.751	.993
		Tim	.855 <sup>a</sup>	.054	.746	.964
Recall	ARNE Modify	Abby	.714 <sup>a</sup>	.081	.551	.876
		Tim	.710 <sup>a</sup>	.050	.610	.810
	ALCO Modify	Abby	.879 <sup>a</sup>	.068	.742	1.016
		Tim	.883 <sup>a</sup>	.061	.760	1.007
FMeasure	ARNE Modify	Abby	.723 <sup>a</sup>	.075	.573	.873
		Tim	.715 <sup>a</sup>	.046	.622	.807
	ALCO Modify	Abby	.873 <sup>a</sup>	.063	.746	1.000
		Tim	.863 <sup>a</sup>	.057	.749	.977
Duration	ARNE Modify	Abby	575.900 <sup>a</sup>	41.147	493.254	658.546
		Tim	588.388 <sup>a</sup>	25.334	537.503	639.273
	ALCO Modify	Abby	516.728 <sup>a</sup>	34.733	446.964	586.492
		Tim	493.487 <sup>a</sup>	31.276	430.668	556.306
FirstActDet	ARNE Modify	Abby	134.633 <sup>a</sup>	17.139	100.208	169.059
		Tim	124.858 <sup>a</sup>	10.553	103.662	146.053
	ALCO Modify	Abby	82.150 <sup>a</sup>	14.468	53.090	111.210
		Tim	74.825 <sup>a</sup>	13.028	48.658	100.992
LastActDet	ARNE Modify	Abby	555.967 <sup>a</sup>	41.255	473.104	638.829
		Tim	564.576 <sup>a</sup>	25.401	513.557	615.594
	ALCO Modify	Abby	494.617 <sup>a</sup>	34.824	424.670	564.564
		Tim	471.536 <sup>a</sup>	31.358	408.551	534.520
ProcDur	ARNE Modify	Abby	19.933 <sup>a</sup>	2.215	15.485	24.382
		Tim	23.812 <sup>a</sup>	1.364	21.073	26.551
	ALCO Modify	Abby	22.111 <sup>a</sup>	1.869	18.356	25.866
		Tim	21.951 <sup>a</sup>	1.683	18.570	25.332
FixRel	ARNE Modify	Abby	10.218 <sup>a</sup>	.272	9.672	10.763
		Tim	10.244 <sup>a</sup>	.167	9.908	10.580
	ALCO Modify	Abby	4.196 <sup>a</sup>	.229	3.736	4.657
		Tim	4.003 <sup>a</sup>	.206	3.588	4.417
FixIrrel	ARNE Modify	Abby	301.735 <sup>a</sup>	26.130	249.251	354.219
		Tim	274.456 <sup>a</sup>	16.088	242.142	306.771
	ALCO Modify	Abby	3.433 <sup>a</sup>	22.058	-40.871	47.737
		Tim	4.832 <sup>a</sup>	19.862	-35.062	44.726
AvDurRelFix	ARNE Modify	Abby	107.608 <sup>a</sup>	13.789	79.912	135.304
		Tim	96.693 <sup>a</sup>	8.490	79.641	113.746
	ALCO Modify	Abby	129.203 <sup>a</sup>	11.640	105.824	152.582
		Tim	140.424 <sup>a</sup>	10.481	119.372	161.476
AvDurlIrrelFix	ARNE	Abby	252.725 <sup>a</sup>	39.680	173.025	332.425

	Modify	Tim	226.046 <sup>a</sup>	24.431	176.975	275.117
TotSac	ARNE Modify	Abby	383.608 <sup>a</sup>	33.495	316.331	450.885
		Tim	417.271 <sup>a</sup>	30.161	356.691	477.851
Sac2Key	ARNE Modify	Abby	83.167 <sup>a</sup>	3.934	75.266	91.067
		Tim	81.561 <sup>a</sup>	2.422	76.696	86.425
	ALCO Modify	Abby	91.406 <sup>a</sup>	3.320	84.736	98.075
		Tim	86.244 <sup>a</sup>	2.990	80.238	92.249
AvAttention	ARNE Modify	Abby	12.700 <sup>a</sup>	3.251	6.170	19.230
		Tim	10.976 <sup>a</sup>	2.002	6.956	14.996
	ALCO Modify	Abby	20.183 <sup>a</sup>	2.744	14.672	25.695
		Tim	15.263 <sup>a</sup>	2.471	10.300	20.226
AvMentWL	ARNE Modify	Abby	.657 <sup>a</sup>	.054	.548	.766
		Tim	.648 <sup>a</sup>	.033	.581	.715
	ALCO Modify	Abby	.622 <sup>a</sup>	.046	.530	.714
		Tim	.736 <sup>a</sup>	.041	.654	.819
AvFam	ARNE Modify	Abby	.640 <sup>a</sup>	.065	.509	.771
		Tim	.627 <sup>a</sup>	.040	.546	.707
	ALCO Modify	Abby	.638 <sup>a</sup>	.055	.527	.748
		Tim	.590 <sup>a</sup>	.049	.491	.689
AvSCL	ARNE Modify	Abby	.740 <sup>a</sup>	.054	.631	.849
		Tim	.718 <sup>a</sup>	.033	.651	.785
	ALCO Modify	Abby	.643 <sup>a</sup>	.046	.552	.735
		Tim	.591 <sup>a</sup>	.041	.509	.674
HRVar_RMSSD	ARNE Modify	Abby	545.967 <sup>a</sup>	45.951	453.672	638.261
		Tim	496.194 <sup>a</sup>	28.292	439.368	553.020
	ALCO Modify	Abby	572.128 <sup>a</sup>	38.788	494.219	650.037
		Tim	450.948 <sup>a</sup>	34.927	380.794	521.102
HRVar_NN50	ARNE Modify	Abby	32.613 <sup>a</sup>	7.372	17.805	47.421
		Tim	32.344 <sup>a</sup>	4.539	23.227	41.462
	ALCO Modify	Abby	34.084 <sup>a</sup>	6.223	21.584	46.584
		Tim	27.032 <sup>a</sup>	5.604	15.776	38.287
NASA_MD	ARNE Modify	Abby	24.721 <sup>a</sup>	7.749	9.156	40.286
		Tim	23.316 <sup>a</sup>	4.771	13.732	32.899
	ALCO Modify	Abby	27.946 <sup>a</sup>	6.542	14.807	41.085
		Tim	25.703 <sup>a</sup>	5.890	13.872	37.534
NASA_PD	ARNE Modify	Abby	52.000 <sup>a</sup>	2.562	46.855	57.145
		Tim	42.530 <sup>a</sup>	1.577	39.362	45.698
	ALCO Modify	Abby	46.806 <sup>a</sup>	2.162	42.462	51.149
		Tim	43.977 <sup>a</sup>	1.947	40.066	47.888
NASA_TD	ARNE Modify	Abby	12.000 <sup>a</sup>	4.317	3.329	20.671
		Tim	20.333 <sup>a</sup>	2.658	14.995	25.672
	ALCO Modify	Abby	13.139 <sup>a</sup>	3.644	5.820	20.458
		Tim	10.860 <sup>a</sup>	3.281	4.270	17.451

	Modify	Tim	10.049 <sup>a</sup>	2.740	4.545	15.552
NASA_Performance	ARNE Modify	Abby	57.167 <sup>a</sup>	7.755	41.590	72.744
		Tim	53.394 <sup>a</sup>	4.775	43.803	62.985
	ALCO Modify	Abby	56.167 <sup>a</sup>	6.547	43.018	69.316
		Tim	57.581 <sup>a</sup>	5.895	45.741	69.421
NASA_Effort	ARNE Modify	Abby	49.333 <sup>a</sup>	4.056	41.186	57.481
		Tim	39.909 <sup>a</sup>	2.497	34.893	44.925
	ALCO Modify	Abby	44.583 <sup>a</sup>	3.424	37.706	51.461
		Tim	40.925 <sup>a</sup>	3.083	34.733	47.118
NASA_Frustration	ARNE Modify	Abby	26.500 <sup>a</sup>	6.749	12.944	40.056
		Tim	24.136 <sup>a</sup>	4.155	15.790	32.483
	ALCO Modify	Abby	29.167 <sup>a</sup>	5.697	17.724	40.609
		Tim	17.208 <sup>a</sup>	5.130	6.904	27.512
NASA_Score	ARNE Modify	Abby	37.000 <sup>a</sup>	3.179	30.615	43.385
		Tim	34.109 <sup>a</sup>	1.957	30.177	38.040
	ALCO Modify	Abby	36.148 <sup>a</sup>	2.684	30.758	41.538
		Tim	30.100 <sup>a</sup>	2.416	25.247	34.954

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag motivation facet, understanding task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	3.141	1	65.898	.081
Recall	Welch	.074	1	59.835	.787
FMeasure	Welch	1.309	1	62.597	.257
Duration	Welch	.965	1	64.992	.329
FirstActDet	Welch	.001	1	66.645	.977
LastActDet	Welch	1.688	1	62.711	.199
ProcDur	Welch	5.220	1	61.669	.026
FixRel	Welch	1.148	1	69.756	.288
FixIrrel	Welch	.230	1	68.543	.633
AvDurRelFix	Welch	.120	1	66.667	.730
AvDurIrrelFix	Welch	.737	1	71.694	.394
TotSac	Welch	.066	1	66.147	.798
Sac2Key	Welch	.599	1	56.618	.442
AvAttention	Welch	.338	1	67.165	.563
AvMentWL	Welch	.274	1	67.718	.602
AvFam	Welch	.197	1	76.838	.658
AvSCL	Welch	3.450	1	58.458	.068
HRVar_RMSSD	Welch	4.074	1	76.221	.047
HRVar_NN50	Welch	4.964	1	68.748	.029
NASA_MD	Welch	.001	1	48.430	.970
NASA_PD	Welch	.002	1	64.711	.961
NASA_TD	Welch	.900	1	52.204	.347
NASA_Performance	Welch	8.526	1	71.596	.005
NASA_Effort	Welch	.045	1	47.176	.834
NASA_Frustration	Welch	3.718	1	58.165	.059
NASA_Score	Welch	2.776	1	54.748	.101

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag motivation facet, understanding task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.114	1	.114	3.161	.079
	Within Groups	2.815	78	.036		
	Total	2.930	79			
Recall	Between Groups	.002	1	.002	.078	.781
	Within Groups	2.343	78	.030		
	Total	2.345	79			
FMeasure	Between Groups	.042	1	.042	1.355	.248
	Within Groups	2.447	78	.031		
	Total	2.490	79			
Duration	Between Groups	9603.352	1	9603.352	.979	.326
	Within Groups	765245.135	78	9810.835		
	Total	774848.488	79			
FirstActDet	Between Groups	2.700	1	2.700	.001	.977
	Within Groups	252223.500	78	3233.635		
	Total	252226.200	79			
LastActDet	Between Groups	18550.533	1	18550.533	1.746	.190
	Within Groups	828768.854	78	10625.242		
	Total	847319.388	79			
ProcDur	Between Groups	1459.519	1	1459.519	5.447	.022
	Within Groups	20900.281	78	267.952		
	Total	22359.800	79			
FixRel	Between Groups	.606	1	.606	1.115	.294
	Within Groups	42.409	78	.544		
	Total	43.016	79			
FixIrrel	Between Groups	4483.519	1	4483.519	.226	.636
	Within Groups	1546334.043	78	19824.795		
	Total	1550817.562	79			
AvDurRelFix	Between Groups	301.626	1	301.626	.120	.730
	Within Groups	195932.530	78	2511.956		
	Total	196234.156	79			
AvDurIrrelFix	Between Groups	14650.974	1	14650.974	.703	.404
	Within Groups	1625985.407	78	20845.967		
	Total	1640636.381	79			
TotSac	Between Groups	8.008	1	8.008	.066	.798
	Within Groups	9431.792	78	120.920		
	Total	9439.800	79			
Sac2Key	Between Groups	44.408	1	44.408	.653	.422
	Within Groups	5304.792	78	68.010		
	Total	5349.200	79			
AvAttention	Between Groups	.014	1	.014	.336	.564
	Within Groups	3.270	78	.042		
	Total	3.284	79			
AvMentWL	Between Groups	.007	1	.007	.271	.604
	Within Groups	1.941	78	.025		
	Total	1.948	79			
AvFam	Between Groups	.006	1	.006	.176	.676
	Within Groups	2.669	78	.034		
	Total	2.675	79			
AvSCL	Between Groups	65917.969	1	65917.969	3.701	.058
	Within Groups	1389102.781	78	17809.010		

	Total	1455020.750	79			
HRVar_RMSSD	Between Groups	1601.512	1	1601.512	3.678	.059
	Within Groups	33968.067	78	435.488		
	Total	35569.578	79			
HRVar_NN50	Between Groups	1703.437	1	1703.437	4.869	.030
	Within Groups	27289.356	78	349.864		
	Total	28992.793	79			
NASA_MD	Between Groups	.208	1	.208	.002	.968
	Within Groups	9888.542	78	126.776		
	Total	9888.750	79			
NASA_PD	Between Groups	.469	1	.469	.002	.960
	Within Groups	14719.531	78	188.712		
	Total	14720.000	79			
NASA_TD	Between Groups	262.552	1	262.552	1.022	.315
	Within Groups	20036.198	78	256.874		
	Total	20298.750	79			
NASA_Performance	Between Groups	2950.208	1	2950.208	8.140	.006
	Within Groups	28269.792	78	362.433		
	Total	31220.000	79			
NASA_Effort	Between Groups	11.719	1	11.719	.053	.818
	Within Groups	17130.469	78	219.621		
	Total	17142.188	79			
NASA_Frustration	Between Groups	1417.969	1	1417.969	3.999	.049
	Within Groups	27657.031	78	354.577		
	Total	29075.000	79			
NASA_Score	Between Groups	303.478	1	303.478	3.078	.083
	Within Groups	7690.958	78	98.602		
	Total	7994.436	79			

### Task \* Motivation - use case templates, GenderMag motivation facet, understanding task

Dependent Variable	Task	Motivation	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Understand	Abby	.806 <sup>a</sup>	.055	.695	.916
		Tim	.700 <sup>a</sup>	.040	.620	.781
	ALCO Understand	Abby	.936 <sup>a</sup>	.045	.845	1.026
		Tim	.915 <sup>a</sup>	.049	.818	1.012
Recall	ARNE Understand	Abby	.786 <sup>a</sup>	.056	.675	.898
		Tim	.785 <sup>a</sup>	.041	.704	.867
	ALCO Understand	Abby	.937 <sup>a</sup>	.046	.846	1.028
		Tim	.931 <sup>a</sup>	.049	.833	1.029
FMeasure	ARNE Understand	Abby	.790 <sup>a</sup>	.054	.683	.897
		Tim	.735 <sup>a</sup>	.039	.657	.814
	ALCO Understand	Abby	.935 <sup>a</sup>	.044	.847	1.023
		Tim	.922 <sup>a</sup>	.047	.828	1.017
Duration	ARNE Understand	Abby	238.667 <sup>a</sup>	35.368	167.788	309.545
		Tim	262.378 <sup>a</sup>	25.770	210.733	314.022
	ALCO Understand	Abby	253.420 <sup>a</sup>	28.955	195.393	311.447
		Tim	320.050 <sup>a</sup>	31.161	257.603	382.497
FirstActDet	ARNE Understand	Abby	71.500 <sup>a</sup>	19.033	33.358	109.642
		Tim	33.989 <sup>a</sup>	13.868	6.197	61.781
	ALCO Understand	Abby	53.073 <sup>a</sup>	15.582	21.847	84.300
		Tim	58.813 <sup>a</sup>	16.769	25.207	92.418
LastActDet	ARNE Understand	Abby	215.417 <sup>a</sup>	35.470	144.334	286.499
		Tim	252.617 <sup>a</sup>	25.844	200.823	304.410
	ALCO Understand	Abby	224.020 <sup>a</sup>	29.039	165.825	282.215
		Tim	304.553 <sup>a</sup>	31.251	241.926	367.181
ProcDur	ARNE Understand	Abby	23.250 <sup>a</sup>	2.004	19.235	27.265
		Tim	9.761 <sup>a</sup>	1.460	6.835	12.687
	ALCO Understand	Abby	29.400 <sup>a</sup>	1.640	26.113	32.687
		Tim	15.497 <sup>a</sup>	1.765	11.959	19.035
FixRel	ARNE Understand	Abby	10.084 <sup>a</sup>	.235	9.614	10.555
		Tim	10.248 <sup>a</sup>	.171	9.905	10.591
	ALCO Understand	Abby	10.990 <sup>a</sup>	.192	10.605	11.376
		Tim	10.856 <sup>a</sup>	.207	10.441	11.271
FixIrrel	ARNE Understand	Abby	302.510 <sup>a</sup>	44.849	212.631	392.390
		Tim	179.986 <sup>a</sup>	32.679	114.497	245.476
	ALCO Understand	Abby	284.153 <sup>a</sup>	36.718	210.570	357.737
		Tim	288.544 <sup>a</sup>	39.514	209.355	367.732
AvDurRelFix	ARNE Understand	Abby	104.761 <sup>a</sup>	15.856	72.985	136.538
		Tim	62.005 <sup>a</sup>	11.553	38.851	85.159
	ALCO Understand	Abby	99.313 <sup>a</sup>	12.981	73.298	125.329
		Tim	101.681 <sup>a</sup>	13.970	73.684	129.678
AvDurlrelFix	ARNE Understand	Abby	254.346 <sup>a</sup>	44.475	165.216	343.477
		Tim		32.406	69.394	199.281

			134.337 <sup>a</sup>		
TotSac	ALCO Understand	Abby	283.527 <sup>a</sup>	36.411	210.556
		Tim	287.794 <sup>a</sup>	39.185	209.265
TotSac	ARNE Understand	Abby	82.431 <sup>a</sup>	3.668	75.080
		Tim	93.200 <sup>a</sup>	2.673	87.844
TotSac	ALCO Understand	Abby	88.987 <sup>a</sup>	3.003	82.969
		Tim	92.369 <sup>a</sup>	3.232	85.892
Sac2Key	ARNE Understand	Abby	9.236 <sup>a</sup>	2.701	3.823
		Tim	15.800 <sup>a</sup>	1.968	11.856
Sac2Key	ALCO Understand	Abby	13.047 <sup>a</sup>	2.211	8.615
		Tim	16.344 <sup>a</sup>	2.380	11.575
AvAttention	ARNE Understand	Abby	.671 <sup>a</sup>	.057	.557
		Tim	.609 <sup>a</sup>	.041	.527
AvAttention	ALCO Understand	Abby	.569 <sup>a</sup>	.046	.476
		Tim	.473 <sup>a</sup>	.050	.373
AvMentWL	ARNE Understand	Abby	.554 <sup>a</sup>	.053	.448
		Tim	.583 <sup>a</sup>	.039	.506
AvMentWL	ALCO Understand	Abby	.506 <sup>a</sup>	.044	.419
		Tim	.472 <sup>a</sup>	.047	.378
AvFam	ARNE Understand	Abby	.854 <sup>a</sup>	.048	.759
		Tim	.872 <sup>a</sup>	.035	.803
AvFam	ALCO Understand	Abby	.632 <sup>a</sup>	.039	.554
		Tim	.575 <sup>a</sup>	.042	.491
AvSCL	ARNE Understand	Abby	556.389 <sup>a</sup>	46.043	464.116
		Tim	562.528 <sup>a</sup>	33.549	495.295
AvSCL	ALCO Understand	Abby	522.107 <sup>a</sup>	37.695	446.564
		Tim	596.019 <sup>a</sup>	40.566	514.722
HRVar_RMSSD	ARNE Understand	Abby	27.697 <sup>a</sup>	6.462	14.748
		Tim	37.773 <sup>a</sup>	4.708	28.337
HRVar_RMSSD	ALCO Understand	Abby	25.388 <sup>a</sup>	5.290	14.786
		Tim	37.127 <sup>a</sup>	5.693	25.718
HRVar_NN50	ARNE Understand	Abby	18.599 <sup>a</sup>	6.641	5.290
		Tim	24.514 <sup>a</sup>	4.839	14.817
HRVar_NN50	ALCO Understand	Abby	15.409 <sup>a</sup>	5.437	4.513
		Tim	26.740 <sup>a</sup>	5.851	15.014
NASA_MD	ARNE Understand	Abby	37.014 <sup>a</sup>	3.576	29.847
		Tim	39.278 <sup>a</sup>	2.606	34.056
NASA_MD	ALCO Understand	Abby	34.700 <sup>a</sup>	2.928	28.833
		Tim	40.750 <sup>a</sup>	3.151	34.436
NASA_PD	ARNE Understand	Abby	12.569 <sup>a</sup>	4.549	3.452
		Tim	10.222 <sup>a</sup>	3.315	3.579
NASA_PD	ALCO Understand	Abby	14.667 <sup>a</sup>	3.725	7.202
		Tim	14.969 <sup>a</sup>	4.008	6.936
NASA_TD	ARNE Understand	Abby	24.931 <sup>a</sup>	5.285	14.338
		Tim	16.611 <sup>a</sup>	3.851	8.893
NASA_TD	ALCO	Abby	20.300 <sup>a</sup>	4.327	11.628
					28.972

	Understand	Tim	15.812 <sup>a</sup>	4.657	6.480	25.145
NASA_Performance	ARNE Understand	Abby	79.028 <sup>a</sup>	6.957	65.085	92.970
		Tim	65.000 <sup>a</sup>	5.069	54.841	75.159
	ALCO Understand	Abby	77.400 <sup>a</sup>	5.696	65.986	88.814
		Tim	61.031 <sup>a</sup>	6.130	48.747	73.315
NASA_Effort	ARNE Understand	Abby	36.875 <sup>a</sup>	4.531	27.794	45.956
		Tim	38.417 <sup>a</sup>	3.302	31.800	45.033
	ALCO Understand	Abby	31.100 <sup>a</sup>	3.710	23.665	38.535
		Tim	37.312 <sup>a</sup>	3.992	29.312	45.313
NASA_Frustration	ARNE Understand	Abby	32.639 <sup>a</sup>	6.218	20.177	45.100
		Tim	24.472 <sup>a</sup>	4.531	15.392	33.552
	ALCO Understand	Abby	37.633 <sup>a</sup>	5.091	27.431	47.835
		Tim	26.500 <sup>a</sup>	5.478	15.521	37.479
NASA_Score	ARNE Understand	Abby	37.176 <sup>a</sup>	3.355	30.451	43.900
		Tim	32.333 <sup>a</sup>	2.445	27.434	37.233
	ALCO Understand	Abby	35.967 <sup>a</sup>	2.747	30.461	41.472
		Tim	32.729 <sup>a</sup>	2.956	26.805	38.654

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag information processing facet, understanding task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	1.528	1	52.885	.222
Recall	Welch	.270	1	48.987	.606
FMeasure	Welch	.944	1	49.875	.336
Duration	Welch	7.039	1	51.070	.011
FirstActDet	Welch	1.570	1	67.415	.214
LastActDet	Welch	4.169	1	52.760	.046
ProcDur	Welch	9.224	1	54.297	.004
FixRel	Welch	.347	1	52.713	.558
FixIrrel	Welch	10.622	1	69.920	.002
AvDurRelFix	Welch	11.983	1	73.173	.001
AvDurIrrelFix	Welch	15.460	1	68.563	.000
TotSac	Welch	.830	1	57.565	.366
Sac2Key	Welch	4.406	1	53.049	.041
AvAttention	Welch	44.334	1	45.113	.000
AvMentWL	Welch	7.494	1	41.005	.009
AvFam	Welch	21.275	1	51.511	.000
AvSCL	Welch	2.918	1	47.890	.094
HRVar_RMSSD	Welch	6.548	1	69.715	.013
HRVar_NN50	Welch	.792	1	60.601	.377
NASA_MD	Welch	.172	1	76.560	.680
NASA_PD	Welch	8.389	1	36.039	.006
NASA_TD	Welch	1.171	1	77.095	.283
NASA_Performance	Welch	.060	1	41.795	.808
NASA_Effort	Welch	.139	1	74.559	.710
NASA_Frustration	Welch	.232	1	52.988	.632
NASA_Score	Welch	.066	1	62.569	.798

a. Asymptotically F distributed.

# ANOVA - use case templates, GenderMag information processing facet, understanding task

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.060	1	.060	1.631	.205
	Within Groups	2.870	78	.037		
	Total	2.930	79			
Recall	Between Groups	.009	1	.009	.303	.584
	Within Groups	2.336	78	.030		
	Total	2.345	79			
FMeasure	Between Groups	.033	1	.033	1.047	.309
	Within Groups	2.457	78	.031		
	Total	2.490	79			
Duration	Between Groups	69498.341	1	69498.341	7.685	.007
	Within Groups	705350.146	78	9042.951		
	Total	774848.487	79			
FirstActDet	Between Groups	4506.765	1	4506.765	1.419	.237
	Within Groups	247719.435	78	3175.890		
	Total	252226.200	79			
LastActDet	Between Groups	45778.553	1	45778.553	4.455	.038
	Within Groups	801540.834	78	10276.165		
	Total	847319.388	79			
ProcDur	Between Groups	2466.726	1	2466.726	9.672	.003
	Within Groups	19893.074	78	255.039		
	Total	22359.800	79			
FixRel	Between Groups	.203	1	.203	.371	.544
	Within Groups	42.812	78	.549		
	Total	43.016	79			
FixIrrel	Between Groups	165593.903	1	165593.903	9.324	.003
	Within Groups	1385223.659	78	17759.278		
	Total	1550817.562	79			
AvDurRelFix	Between Groups	22483.291	1	22483.291	10.093	.002
	Within Groups	173750.865	78	2227.575		
	Total	196234.156	79			
AvDurlrelFix	Between Groups	246465.361	1	246465.361	13.789	.000
	Within Groups	1394171.019	78	17873.987		
	Total	1640636.381	79			
TotSac	Between Groups	100.246	1	100.246	.837	.363
	Within Groups	9339.554	78	119.738		
	Total	9439.800	79			
Sac2Key	Between Groups	303.449	1	303.449	4.691	.033
	Within Groups	5045.751	78	64.689		
	Total	5349.200	79			
AvAttention	Between Groups	1.323	1	1.323	52.650	.000
	Within Groups	1.961	78	.025		
	Total	3.284	79			
AvMentWL	Between Groups	.212	1	.212	9.528	.003
	Within Groups	1.736	78	.022		
	Total	1.948	79			
AvFam	Between Groups	.611	1	.611	23.097	.000
	Within Groups	2.064	78	.026		
	Total	2.675	79			
AvSCL	Between Groups	59507.168	1	59507.168	3.326	.072

	Within Groups	1395513.582	78	17891.200		
	Total	1455020.750	79			
HRVar_RMSSD	Between Groups	2446.824	1	2446.824	5.762	.019
	Within Groups	33122.755	78	424.651		
	Total	35569.578	79			
HRVar_NN50	Between Groups	284.042	1	284.042	.772	.382
	Within Groups	28708.751	78	368.061		
	Total	28992.793	79			
NASA_MD	Between Groups	17.283	1	17.283	.137	.713
	Within Groups	9871.467	78	126.557		
	Total	9888.750	79			
NASA_PD	Between Groups	1932.170	1	1932.170	11.785	.001
	Within Groups	12787.830	78	163.947		
	Total	14720.000	79			
NASA_TD	Between Groups	236.512	1	236.512	.920	.341
	Within Groups	20062.238	78	257.208		
	Total	20298.750	79			
NASA_Performance	Between Groups	29.872	1	29.872	.075	.785
	Within Groups	31190.128	78	399.873		
	Total	31220.000	79			
NASA_Effort	Between Groups	25.149	1	25.149	.115	.736
	Within Groups	17117.039	78	219.449		
	Total	17142.188	79			
NASA_Frustration	Between Groups	92.039	1	92.039	.248	.620
	Within Groups	28982.961	78	371.576		
	Total	29075.000	79			
NASA_Score	Between Groups	6.483	1	6.483	.063	.802
	Within Groups	7987.953	78	102.410		
	Total	7994.436	79			

**Task \* InformationProcessing - use case templates, GenderMag information processing facet, understanding task**

Dependent Variable	Task	InformationProcessing	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Understand	Abby	.749 <sup>a</sup>	.039	.671	.827
		Tim	.773 <sup>a</sup>	.063	.647	.900
	ALCO Understand	Abby	.975 <sup>a</sup>	.048	.879	1.071
		Tim	.862 <sup>a</sup>	.050	.762	.962
Recall	ARNE Understand	Abby	.780 <sup>a</sup>	.039	.701	.859
		Tim	.815 <sup>a</sup>	.064	.687	.943
	ALCO Understand	Abby	.983 <sup>a</sup>	.048	.886	1.081
		Tim	.875 <sup>a</sup>	.050	.775	.976
FMeasure	ARNE Understand	Abby	.758 <sup>a</sup>	.038	.682	.834
		Tim	.787 <sup>a</sup>	.061	.664	.909
	ALCO Understand	Abby	.978 <sup>a</sup>	.047	.885	1.072
		Tim	.868 <sup>a</sup>	.048	.771	.965
Duration	ARNE Understand	Abby	235.393 <sup>a</sup>	24.978	185.337	285.450
		Tim	326.167 <sup>a</sup>	40.466	245.071	407.263
	ALCO Understand	Abby	256.086 <sup>a</sup>	30.807	194.347	317.825
		Tim	339.150 <sup>a</sup>	31.884	275.252	403.048
FirstActDet	ARNE Understand	Abby	52.127 <sup>a</sup>	13.441	25.189	79.064
		Tim	55.833 <sup>a</sup>	21.776	12.193	99.474
	ALCO Understand	Abby	40.924 <sup>a</sup>	16.579	7.700	74.148
		Tim	74.900 <sup>a</sup>	17.158	40.514	109.286
LastActDet	ARNE Understand	Abby	220.020 <sup>a</sup>	25.050	169.819	270.221
		Tim	304.000 <sup>a</sup>	40.583	222.670	385.330
	ALCO Understand	Abby	237.686 <sup>a</sup>	30.896	175.769	299.603
		Tim	315.454 <sup>a</sup>	31.976	251.372	379.536
ProcDur	ARNE Understand	Abby	15.373 <sup>a</sup>	1.415	12.537	18.209
		Tim	22.167 <sup>a</sup>	2.293	17.572	26.761
	ALCO Understand	Abby	18.400 <sup>a</sup>	1.745	14.902	21.898
		Tim	23.696 <sup>a</sup>	1.806	20.076	27.316
FixRel	ARNE Understand	Abby	10.187 <sup>a</sup>	.166	9.855	10.520
		Tim	10.060 <sup>a</sup>	.269	9.521	10.599
	ALCO Understand	Abby	11.144 <sup>a</sup>	.205	10.734	11.554
		Tim	10.632 <sup>a</sup>	.212	10.208	11.057
FixIrrel	ARNE Understand	Abby	228.373 <sup>a</sup>	31.674	164.897	291.849
		Tim	305.625 <sup>a</sup>	51.314	202.789	408.461
	ALCO Understand	Abby	254.631 <sup>a</sup>	39.066	176.341	332.921
		Tim	324.450 <sup>a</sup>	40.432	243.422	405.478
AvDurRelFix	ARNE Understand	Abby	78.289 <sup>a</sup>	11.198	55.847	100.730
		Tim	108.855 <sup>a</sup>	18.142	72.498	145.212
	ALCO Understand	Abby	88.160 <sup>a</sup>	13.812	60.480	115.839
		Tim	115.483 <sup>a</sup>	14.295	86.836	144.130
AvDurIrrelFix	ARNE	Abby	181.889 <sup>a</sup>	31.410	118.943	244.836

	Understand	Tim	256.605 <sup>a</sup>	50.887	154.626	358.584
TotSac	ALCO Understand	Abby	254.183 <sup>a</sup>	38.740	176.546	331.821
		Tim	323.450 <sup>a</sup>	40.095	243.098	403.802
Sac2Key	ARNE Understand	Abby	87.412 <sup>a</sup>	2.590	82.220	92.603
		Tim	89.833 <sup>a</sup>	4.197	81.423	98.244
	ALCO Understand	Abby	90.648 <sup>a</sup>	3.195	84.245	97.051
		Tim	91.558 <sup>a</sup>	3.307	84.931	98.185
AvAttention	ARNE Understand	Abby	12.155 <sup>a</sup>	1.908	8.332	15.978
		Tim	14.333 <sup>a</sup>	3.090	8.140	20.527
	ALCO Understand	Abby	14.133 <sup>a</sup>	2.353	9.418	18.848
		Tim	16.175 <sup>a</sup>	2.435	11.295	21.055
AvMentWL	ARNE Understand	Abby	.681 <sup>a</sup>	.040	.601	.762
		Tim	.433 <sup>a</sup>	.065	.304	.563
	ALCO Understand	Abby	.670 <sup>a</sup>	.049	.571	.768
		Tim	.324 <sup>a</sup>	.051	.222	.426
AvFam	ARNE Understand	Abby	.582 <sup>a</sup>	.038	.507	.658
		Tim	.500 <sup>a</sup>	.061	.378	.622
	ALCO Understand	Abby	.546 <sup>a</sup>	.046	.453	.639
		Tim	.415 <sup>a</sup>	.048	.318	.511
AvSCL	ARNE Understand	Abby	.883 <sup>a</sup>	.034	.815	.950
		Tim	.767 <sup>a</sup>	.055	.657	.876
	ALCO Understand	Abby	.646 <sup>a</sup>	.042	.563	.729
		Tim	.540 <sup>a</sup>	.043	.454	.627
HRVar_RMSSD	ARNE Understand	Abby	573.817 <sup>a</sup>	32.517	508.651	638.983
		Tim	487.667 <sup>a</sup>	52.681	382.092	593.241
	ALCO Understand	Abby	566.676 <sup>a</sup>	40.106	486.301	647.051
		Tim	568.658 <sup>a</sup>	41.509	485.473	651.844
HRVar_NN50	ARNE Understand	Abby	34.071 <sup>a</sup>	4.564	24.926	43.217
		Tim	26.053 <sup>a</sup>	7.393	11.237	40.870
	ALCO Understand	Abby	34.534 <sup>a</sup>	5.629	23.254	45.814
		Tim	30.370 <sup>a</sup>	5.825	18.695	42.044
NASA_MD	ARNE Understand	Abby	21.942 <sup>a</sup>	4.690	12.543	31.341
		Tim	19.630 <sup>a</sup>	7.598	4.402	34.858
	ALCO Understand	Abby	22.230 <sup>a</sup>	5.785	10.637	33.823
		Tim	22.559 <sup>a</sup>	5.987	10.561	34.558
NASA_PD	ARNE Understand	Abby	38.942 <sup>a</sup>	2.526	33.880	44.003
		Tim	34.167 <sup>a</sup>	4.092	25.967	42.366
	ALCO Understand	Abby	38.143 <sup>a</sup>	3.115	31.900	44.385
		Tim	38.750 <sup>a</sup>	3.224	32.289	45.211
NASA_TD	ARNE Understand	Abby	9.175 <sup>a</sup>	3.213	2.736	15.614
		Tim	22.500 <sup>a</sup>	5.205	12.068	32.932
	ALCO Understand	Abby	7.762 <sup>a</sup>	3.963	-.180	15.704
		Tim	23.125 <sup>a</sup>	4.101	14.906	31.344

	Understand	Tim	17.500 <sup>a</sup>	4.765	7.951	27.049
NASA_Performance	ARNE Understand	Abby	72.083 <sup>a</sup>	4.913	62.237	81.930
		Tim	71.667 <sup>a</sup>	7.960	55.715	87.619
	ALCO Understand	Abby	65.143 <sup>a</sup>	6.060	52.998	77.287
		Tim	69.875 <sup>a</sup>	6.272	57.306	82.444
NASA_Effort	ARNE Understand	Abby	37.842 <sup>a</sup>	3.200	31.428	44.255
		Tim	36.667 <sup>a</sup>	5.185	26.277	47.057
	ALCO Understand	Abby	33.429 <sup>a</sup>	3.947	25.518	41.339
		Tim	36.667 <sup>a</sup>	4.085	28.480	44.853
NASA_Frustration	ARNE Understand	Abby	29.433 <sup>a</sup>	4.391	20.633	38.234
		Tim	24.167 <sup>a</sup>	7.115	9.909	38.424
	ALCO Understand	Abby	28.952 <sup>a</sup>	5.416	18.098	39.807
		Tim	32.917 <sup>a</sup>	5.606	21.683	44.151
NASA_Score	ARNE Understand	Abby	34.872 <sup>a</sup>	2.370	30.123	39.621
		Tim	34.167 <sup>a</sup>	3.839	26.473	41.861
	ALCO Understand	Abby	31.833 <sup>a</sup>	2.923	25.976	37.691
		Tim	36.472 <sup>a</sup>	3.025	30.410	42.534

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag self-efficacy facet, understanding task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	3.970	1	74.835	.050
Recall	Welch	1.576	1	66.044	.214
FMeasure	Welch	2.967	1	70.818	.089
Duration	Welch	1.631	1	71.565	.206
FirstActDet	Welch	1.227	1	73.450	.272
LastActDet	Welch	1.126	1	73.032	.292
ProcDur	Welch	.989	1	70.154	.323
FixRel	Welch	3.735	1	61.951	.058
FixIrrel	Welch	.583	1	69.695	.448
AvDurRelFix	Welch	.597	1	70.127	.443
AvDurIrrelFix	Welch	1.646	1	71.034	.204
TotSac	Welch	.551	1	68.866	.460
Sac2Key	Welch	2.805	1	65.730	.099
AvAttention	Welch	2.546	1	74.966	.115
AvMentWL	Welch	2.315	1	62.128	.133
AvFam	Welch	7.713	1	68.022	.007
AvSCL	Welch	.178	1	70.241	.674
HRVar_RMSSD	Welch	1.596	1	75.558	.210
HRVar_NN50	Welch	.133	1	75.565	.716
NASA_MD	Welch	.042	1	77.983	.838
NASA_PD	Welch	2.535	1	59.289	.117
NASA_TD	Welch	4.327	1	73.983	.041
NASA_Performance	Welch	.674	1	64.573	.415
NASA_Effort	Welch	.971	1	77.331	.327
NASA_Frustration	Welch	5.267	1	74.118	.025
NASA_Score	Welch	2.063	1	77.773	.155

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag self-efficacy facet, understanding task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.138	1	.138	3.850	.053
	Within Groups	2.792	78	.036		
	Total	2.930	79			
Recall	Between Groups	.048	1	.048	1.635	.205
	Within Groups	2.297	78	.029		
	Total	2.345	79			
FMeasure	Between Groups	.092	1	.092	2.977	.088
	Within Groups	2.398	78	.031		
	Total	2.490	79			
Duration	Between Groups	15831.074	1	15831.074	1.627	.206
	Within Groups	759017.413	78	9730.992		
	Total	774848.487	79			
FirstActDet	Between Groups	3837.402	1	3837.402	1.205	.276
	Within Groups	248388.798	78	3184.472		
	Total	252226.200	79			
LastActDet	Between Groups	11884.813	1	11884.813	1.110	.295
	Within Groups	835434.574	78	10710.700		
	Total	847319.388	79			
ProcDur	Between Groups	282.378	1	282.378	.998	.321
	Within Groups	22077.422	78	283.044		
	Total	22359.800	79			
FixRel	Between Groups	2.089	1	2.089	3.981	.050
	Within Groups	40.927	78	.525		
	Total	43.016	79			
FixIrrel	Between Groups	11636.177	1	11636.177	.590	.445
	Within Groups	1539181.385	78	19733.095		
	Total	1550817.562	79			
AvDurRelFix	Between Groups	1501.986	1	1501.986	.602	.440
	Within Groups	194732.170	78	2496.566		
	Total	196234.156	79			
AvDurIrrelFix	Between Groups	33968.054	1	33968.054	1.649	.203
	Within Groups	1606668.327	78	20598.312		
	Total	1640636.381	79			
TotSac	Between Groups	67.401	1	67.401	.561	.456
	Within Groups	9372.399	78	120.159		
	Total	9439.800	79			
Sac2Key	Between Groups	192.837	1	192.837	2.917	.092
	Within Groups	5156.363	78	66.107		
	Total	5349.200	79			
AvAttention	Between Groups	.101	1	.101	2.465	.120
	Within Groups	3.183	78	.041		
	Total	3.284	79			
AvMentWL	Between Groups	.060	1	.060	2.464	.120
	Within Groups	1.888	78	.024		
	Total	1.948	79			
AvFam	Between Groups	.246	1	.246	7.896	.006
	Within Groups	2.429	78	.031		
	Total	2.675	79			
AvSCL	Between Groups	3345.681	1	3345.681	.180	.673
	Within Groups	1451675.069	78	18611.219		

	Total	1455020.750	79			
HRVar_RMSSD	Between Groups	686.810	1	686.810	1.536	.219
	Within Groups	34882.769	78	447.215		
	Total	35569.578	79			
HRVar_NN50	Between Groups	47.614	1	47.614	.128	.721
	Within Groups	28945.180	78	371.092		
	Total	28992.793	79			
NASA_MD	Between Groups	4.863	1	4.863	.038	.845
	Within Groups	9883.887	78	126.717		
	Total	9888.750	79			
NASA_PD	Between Groups	501.330	1	501.330	2.750	.101
	Within Groups	14218.670	78	182.291		
	Total	14720.000	79			
NASA_TD	Between Groups	921.896	1	921.896	3.711	.058
	Within Groups	19376.854	78	248.421		
	Total	20298.750	79			
NASA_Performance	Between Groups	280.102	1	280.102	.706	.403
	Within Groups	30939.898	78	396.665		
	Total	31220.000	79			
NASA_Effort	Between Groups	188.000	1	188.000	.865	.355
	Within Groups	16954.188	78	217.361		
	Total	17142.188	79			
NASA_Frustration	Between Groups	1798.274	1	1798.274	5.142	.026
	Within Groups	27276.726	78	349.702		
	Total	29075.000	79			
NASA_Score	Between Groups	191.504	1	191.504	1.914	.170
	Within Groups	7802.931	78	100.038		
	Total	7994.436	79			

# Task \* SelfEfficacy - use case templates, GenderMag self-efficacy facet, understanding task

Dependent Variable	Task	SelfEfficacy	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Understand	Abby	.735 <sup>a</sup>	.039	.656	.814
		Tim	.772 <sup>a</sup>	.056	.660	.883
	ALCO Understand	Abby	.931 <sup>a</sup>	.046	.840	1.022
		Tim	.905 <sup>a</sup>	.046	.813	.998
Recall	ARNE Understand	Abby	.766 <sup>a</sup>	.040	.687	.846
		Tim	.805 <sup>a</sup>	.056	.693	.917
	ALCO Understand	Abby	.933 <sup>a</sup>	.046	.841	1.025
		Tim	.936 <sup>a</sup>	.047	.842	1.029
FMeasure	ARNE Understand	Abby	.745 <sup>a</sup>	.038	.668	.822
		Tim	.781 <sup>a</sup>	.054	.672	.889
	ALCO Understand	Abby	.931 <sup>a</sup>	.044	.842	1.020
		Tim	.919 <sup>a</sup>	.045	.829	1.009
Duration	ARNE Understand	Abby	245.211 <sup>a</sup>	25.325	194.459	295.964
		Tim	255.833 <sup>a</sup>	35.688	184.314	327.353
	ALCO Understand	Abby	295.022 <sup>a</sup>	29.208	236.488	353.557
		Tim	293.075 <sup>a</sup>	29.581	233.793	352.357
FirstActDet	ARNE Understand	Abby	39.100 <sup>a</sup>	13.628	11.788	66.412
		Tim	66.389 <sup>a</sup>	19.205	27.901	104.876
	ALCO Understand	Abby	55.441 <sup>a</sup>	15.718	23.941	86.940
		Tim	59.225 <sup>a</sup>	15.919	27.323	91.127
LastActDet	ARNE Understand	Abby	228.700 <sup>a</sup>	25.398	177.801	279.599
		Tim	239.333 <sup>a</sup>	35.791	167.607	311.059
	ALCO Understand	Abby	270.944 <sup>a</sup>	29.292	212.241	329.648
		Tim	279.506 <sup>a</sup>	29.666	220.053	338.959
ProcDur	ARNE Understand	Abby	16.511 <sup>a</sup>	1.435	13.636	19.386
		Tim	16.500 <sup>a</sup>	2.022	12.448	20.552
	ALCO Understand	Abby	24.078 <sup>a</sup>	1.655	20.762	27.394
		Tim	13.569 <sup>a</sup>	1.676	10.210	16.927
FixRel	ARNE Understand	Abby	10.185 <sup>a</sup>	.168	9.848	10.522
		Tim	10.148 <sup>a</sup>	.237	9.673	10.623
	ALCO Understand	Abby	10.811 <sup>a</sup>	.194	10.423	11.200
		Tim	11.124 <sup>a</sup>	.196	10.731	11.518
FixIrrel	ARNE Understand	Abby	230.302 <sup>a</sup>	32.114	165.944	294.661
		Tim	252.194 <sup>a</sup>	45.255	161.501	342.888
	ALCO Understand	Abby	318.952 <sup>a</sup>	37.038	244.725	393.179
		Tim	214.638 <sup>a</sup>	37.511	139.463	289.812
AvDurRelFix	ARNE Understand	Abby	81.425 <sup>a</sup>	11.354	58.672	104.179
		Tim	85.341 <sup>a</sup>	16.000	53.277	117.405
	ALCO Understand	Abby	112.130 <sup>a</sup>	13.095	85.887	138.372
		Tim	75.213 <sup>a</sup>	13.262	48.635	101.790
AvDurlrelFix	ARNE Understand	Abby	182.389 <sup>a</sup>	31.846	118.567	246.211
		Tim		44.878	116.357	296.231

		206.294 <sup>a</sup>			
TotSac	ALCO Understand	Abby	318.159 <sup>a</sup>	36.730	244.551
		Tim	214.138 <sup>a</sup>	37.199	139.590
TotSac	ARNE Understand	Abby	89.408 <sup>a</sup>	2.627	84.145
		Tim	86.222 <sup>a</sup>	3.701	78.805
TotSac	ALCO Understand	Abby	90.370 <sup>a</sup>	3.029	84.300
		Tim	92.638 <sup>a</sup>	3.068	86.489
Sac2Key	ARNE Understand	Abby	11.147 <sup>a</sup>	1.934	7.271
		Tim	13.889 <sup>a</sup>	2.725	8.427
Sac2Key	ALCO Understand	Abby	13.881 <sup>a</sup>	2.231	9.411
		Tim	17.763 <sup>a</sup>	2.259	13.235
AvAttention	ARNE Understand	Abby	.619 <sup>a</sup>	.041	.538
		Tim	.661 <sup>a</sup>	.057	.547
AvAttention	ALCO Understand	Abby	.481 <sup>a</sup>	.047	.387
		Tim	.576 <sup>a</sup>	.047	.481
AvMentWL	ARNE Understand	Abby	.593 <sup>a</sup>	.038	.517
		Tim	.544 <sup>a</sup>	.054	.437
AvMentWL	ALCO Understand	Abby	.464 <sup>a</sup>	.044	.376
		Tim	.532 <sup>a</sup>	.045	.443
AvFam	ARNE Understand	Abby	.882 <sup>a</sup>	.034	.814
		Tim	.844 <sup>a</sup>	.048	.748
AvFam	ALCO Understand	Abby	.576 <sup>a</sup>	.039	.497
		Tim	.646 <sup>a</sup>	.040	.566
AvSCL	ARNE Understand	Abby	521.750 <sup>a</sup>	32.969	455.678
		Tim	597.167 <sup>a</sup>	46.460	504.059
AvSCL	ALCO Understand	Abby	566.093 <sup>a</sup>	38.025	489.890
		Tim	570.962 <sup>a</sup>	38.510	493.787
HRVar_RMSSD	ARNE Understand	Abby	33.409 <sup>a</sup>	4.627	24.137
		Tim	32.061 <sup>a</sup>	6.520	18.994
HRVar_RMSSD	ALCO Understand	Abby	30.510 <sup>a</sup>	5.336	19.816
		Tim	37.341 <sup>a</sup>	5.405	26.510
HRVar_NN50	ARNE Understand	Abby	21.005 <sup>a</sup>	4.755	11.475
		Tim	22.108 <sup>a</sup>	6.701	8.679
HRVar_NN50	ALCO Understand	Abby	20.897 <sup>a</sup>	5.485	9.905
		Tim	25.724 <sup>a</sup>	5.555	14.592
NASA_MD	ARNE Understand	Abby	40.458 <sup>a</sup>	2.561	35.327
		Tim	35.833 <sup>a</sup>	3.608	28.602
NASA_MD	ALCO Understand	Abby	37.889 <sup>a</sup>	2.953	31.970
		Tim	39.625 <sup>a</sup>	2.991	33.631
NASA_PD	ARNE Understand	Abby	10.014 <sup>a</sup>	3.258	3.485
		Tim	12.778 <sup>a</sup>	4.591	3.578
NASA_PD	ALCO Understand	Abby	14.537 <sup>a</sup>	3.757	7.008
		Tim	15.563 <sup>a</sup>	3.805	7.937
NASA_TD	ARNE Understand	Abby	27.653 <sup>a</sup>	3.785	20.068
		Tim	13.889 <sup>a</sup>	5.333	3.201
NASA_TD	ALCO	Abby	20.167 <sup>a</sup>	4.365	11.419

	Understand	Tim	11.625 <sup>a</sup>	4.421	2.766	20.484
NASA_Performance	ARNE Understand	Abby	73.750 <sup>a</sup>	4.982	63.767	83.733
		Tim	70.278 <sup>a</sup>	7.020	56.209	84.346
	ALCO Understand	Abby	69.889 <sup>a</sup>	5.745	58.375	81.403
		Tim	61.562 <sup>a</sup>	5.819	49.901	73.224
NASA_Effort	ARNE Understand	Abby	42.236 <sup>a</sup>	3.245	35.734	48.739
		Tim	33.056 <sup>a</sup>	4.572	23.892	42.219
	ALCO Understand	Abby	34.222 <sup>a</sup>	3.742	26.723	41.722
		Tim	36.500 <sup>a</sup>	3.790	28.905	44.095
NASA_Frustration	ARNE Understand	Abby	33.778 <sup>a</sup>	4.452	24.855	42.701
		Tim	23.333 <sup>a</sup>	6.274	10.759	35.908
	ALCO Understand	Abby	36.185 <sup>a</sup>	5.135	25.894	46.476
		Tim	18.625 <sup>a</sup>	5.201	8.202	29.048
NASA_Score	ARNE Understand	Abby	37.981 <sup>a</sup>	2.403	33.166	42.797
		Tim	31.528 <sup>a</sup>	3.386	24.742	38.313
	ALCO Understand	Abby	35.481 <sup>a</sup>	2.771	29.928	41.035
		Tim	30.583 <sup>a</sup>	2.806	24.959	36.208

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag risk facet, understanding task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	37.946	1	77.765	.000
Recall	Welch	7.948	1	71.145	.006
FMeasure	Welch	22.368	1	77.581	.000
Duration	Welch	5.929	1	73.250	.017
FirstActDet	Welch	13.598	1	42.145	.001
LastActDet	Welch	17.540	1	71.590	.000
ProcDur	Welch	376.071	1	28.504	.000
FixRel	Welch	.326	1	37.614	.571
FixIrrel	Welch	6.775	1	44.521	.013
AvDurRelFix	Welch	4.988	1	41.665	.031
AvDurIrrelFix	Welch	8.655	1	43.437	.005
TotSac	Welch	2.724	1	72.760	.103
Sac2Key	Welch	10.183	1	77.868	.002
AvAttention	Welch	2.264	1	40.410	.140
AvMentWL	Welch	8.354	1	43.548	.006
AvFam	Welch	12.296	1	41.147	.001
AvSCL	Welch	2.062	1	44.167	.158
HRVar_RMSSD	Welch	60.151	1	69.852	.000
HRVar_NN50	Welch	10.065	1	54.272	.002
NASA_MD	Welch	12.393	1	30.824	.001
NASA_PD	Welch	3.489	1	28.433	.072
NASA_TD	Welch	4.662	1	28.717	.039
NASA_Performance	Welch	3.632	1	48.692	.063
NASA_Effort	Welch	17.238	1	33.862	.000
NASA_Frustration	Welch	7.310	1	40.926	.010
NASA_Score	Welch	.640	1	32.905	.429

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag risk facet, understanding task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.615	1	.615	20.736	.000
	Within Groups	2.314	78	.030		
	Total	2.930	79			
Recall	Between Groups	.148	1	.148	5.269	.024
	Within Groups	2.197	78	.028		
	Total	2.345	79			
FMeasure	Between Groups	.356	1	.356	13.028	.001
	Within Groups	2.133	78	.027		
	Total	2.490	79			
Duration	Between Groups	36056.601	1	36056.601	3.807	.055
	Within Groups	738791.887	78	9471.691		
	Total	774848.487	79			
FirstActDet	Between Groups	38419.736	1	38419.736	14.016	.000
	Within Groups	213806.464	78	2741.109		
	Total	252226.200	79			
LastActDet	Between Groups	109303.334	1	109303.334	11.552	.001
	Within Groups	738016.054	78	9461.744		
	Total	847319.388	79			
ProcDur	Between Groups	19803.467	1	19803.467	604.252	.000
	Within Groups	2556.333	78	32.774		
	Total	22359.800	79			
FixRel	Between Groups	.206	1	.206	.375	.542
	Within Groups	42.810	78	.549		
	Total	43.016	79			
FixIrrel	Between Groups	121835.176	1	121835.176	6.650	.012
	Within Groups	1428982.386	78	18320.287		
	Total	1550817.562	79			
AvDurRelFix	Between Groups	12253.951	1	12253.951	5.195	.025
	Within Groups	183980.205	78	2358.721		
	Total	196234.156	79			
AvDurIrrelFix	Between Groups	164325.713	1	164325.713	8.682	.004
	Within Groups	1476310.668	78	18927.060		
	Total	1640636.381	79			
TotSac	Between Groups	208.610	1	208.610	1.763	.188
	Within Groups	9231.190	78	118.349		
	Total	9439.800	79			
Sac2Key	Between Groups	358.438	1	358.438	5.602	.020
	Within Groups	4990.762	78	63.984		
	Total	5349.200	79			
AvAttention	Between Groups	.099	1	.099	2.426	.123
	Within Groups	3.185	78	.041		
	Total	3.284	79			
AvMentWL	Between Groups	.189	1	.189	8.361	.005
	Within Groups	1.759	78	.023		
	Total	1.948	79			
AvFam	Between Groups	.381	1	.381	12.956	.001
	Within Groups	2.294	78	.029		
	Total	2.675	79			
AvSCL	Between Groups	37054.821	1	37054.821	2.038	.157
	Within Groups	1417965.929	78	18179.050		

	Total	1455020.750	79			
HRVar_RMSSD	Between Groups	9613.926	1	9613.926	28.891	.000
	Within Groups	25955.652	78	332.765		
	Total	35569.578	79			
HRVar_NN50	Between Groups	2815.097	1	2815.097	8.388	.005
	Within Groups	26177.696	78	335.611		
	Total	28992.793	79			
NASA_MD	Between Groups	1843.810	1	1843.810	17.877	.000
	Within Groups	8044.940	78	103.140		
	Total	9888.750	79			
NASA_PD	Between Groups	990.536	1	990.536	5.627	.020
	Within Groups	13729.464	78	176.019		
	Total	14720.000	79			
NASA_TD	Between Groups	1760.952	1	1760.952	7.409	.008
	Within Groups	18537.798	78	237.664		
	Total	20298.750	79			
NASA_Performance	Between Groups	1268.810	1	1268.810	3.304	.073
	Within Groups	29951.190	78	383.990		
	Total	31220.000	79			
NASA_Effort	Between Groups	3795.015	1	3795.015	22.178	.000
	Within Groups	13347.173	78	171.118		
	Total	17142.187	79			
NASA_Frustration	Between Groups	2625.000	1	2625.000	7.741	.007
	Within Groups	26450.000	78	339.103		
	Total	29075.000	79			
NASA_Score	Between Groups	86.330	1	86.330	.851	.359
	Within Groups	7908.106	78	101.386		
	Total	7994.436	79			

# Task \* Risk - use case templates, GenderMag risk facet, understanding task

Dependent Variable	Task	Risk	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Understand	Abby	.929 <sup>a</sup>	.065	.798	1.059
		Tim	.665 <sup>a</sup>	.039	.586	.745
	ALCO Understand	Abby	.970 <sup>a</sup>	.052	.866	1.074
		Tim	.894 <sup>a</sup>	.046	.802	.985
Recall	ARNE Understand	Abby	.852 <sup>a</sup>	.066	.720	.983
		Tim	.753 <sup>a</sup>	.040	.673	.833
	ALCO Understand	Abby	.965 <sup>a</sup>	.052	.860	1.070
		Tim	.914 <sup>a</sup>	.046	.821	1.007
FMeasure	ARNE Understand	Abby	.887 <sup>a</sup>	.063	.761	1.014
		Tim	.700 <sup>a</sup>	.038	.623	.777
	ALCO Understand	Abby	.966 <sup>a</sup>	.050	.865	1.067
		Tim	.903 <sup>a</sup>	.045	.814	.992
Duration	ARNE Understand	Abby	194.250 <sup>a</sup>	41.711	110.658	277.842
		Tim	278.658 <sup>a</sup>	25.342	227.872	329.445
	ALCO Understand	Abby	256.440 <sup>a</sup>	33.320	189.665	323.215
		Tim	318.163 <sup>a</sup>	29.408	259.228	377.097
FirstActDet	ARNE Understand	Abby	88.750 <sup>a</sup>	22.447	43.766	133.734
		Tim	34.742 <sup>a</sup>	13.637	7.412	62.072
	ALCO Understand	Abby	79.560 <sup>a</sup>	17.931	43.626	115.494
		Tim	42.258 <sup>a</sup>	15.825	10.544	73.973
LastActDet	ARNE Understand	Abby	155.625 <sup>a</sup>	41.832	71.792	239.458
		Tim	273.213 <sup>a</sup>	25.415	222.280	324.145
	ALCO Understand	Abby	216.025 <sup>a</sup>	33.416	149.057	282.993
		Tim	309.550 <sup>a</sup>	29.492	250.446	368.654
ProcDur	ARNE Understand	Abby	38.625 <sup>a</sup>	2.363	33.889	43.361
		Tim	5.446 <sup>a</sup>	1.436	2.569	8.323
	ALCO Understand	Abby	40.415 <sup>a</sup>	1.888	36.632	44.198
		Tim	8.612 <sup>a</sup>	1.666	5.274	11.951
FixRel	ARNE Understand	Abby	10.198 <sup>a</sup>	.277	9.643	10.753
		Tim	10.150 <sup>a</sup>	.168	9.813	10.488
	ALCO Understand	Abby	10.717 <sup>a</sup>	.221	10.273	11.160
		Tim	11.027 <sup>a</sup>	.195	10.636	11.418
FixIrrel	ARNE Understand	Abby	245.625 <sup>a</sup>	52.894	139.624	351.626
		Tim	239.060 <sup>a</sup>	32.136	174.659	303.461
	ALCO Understand	Abby	342.530 <sup>a</sup>	42.253	257.854	427.206
		Tim	252.058 <sup>a</sup>	37.291	177.325	326.792
AvDurRelFix	ARNE Understand	Abby	83.355 <sup>a</sup>	18.700	45.879	120.831
		Tim	83.397 <sup>a</sup>	11.361	60.628	106.166
	ALCO Understand	Abby	119.750 <sup>a</sup>	14.938	89.813	149.687
		Tim	88.908 <sup>a</sup>	13.184	62.487	115.330
AvDurlrelFix	ARNE Understand	Abby	197.355 <sup>a</sup>	52.453	92.238	302.472
		Tim		31.868	128.971	256.699

			192.835 <sup>a</sup>		
TotSac	ALCO Understand	Abby	341.770 <sup>a</sup>	41.900	257.800
		Tim	251.392 <sup>a</sup>	36.980	177.281
TotSac	ARNE Understand	Abby	87.083 <sup>a</sup>	4.326	78.414
		Tim	88.181 <sup>a</sup>	2.628	82.914
TotSac	ALCO Understand	Abby	87.950 <sup>a</sup>	3.456	81.025
		Tim	93.017 <sup>a</sup>	3.050	86.904
Sac2Key	ARNE Understand	Abby	7.167 <sup>a</sup>	3.186	.783
		Tim	15.194 <sup>a</sup>	1.935	11.315
Sac2Key	ALCO Understand	Abby	11.870 <sup>a</sup>	2.545	6.770
		Tim	17.079 <sup>a</sup>	2.246	12.578
AvAttention	ARNE Understand	Abby	.612 <sup>a</sup>	.067	.479
		Tim	.654 <sup>a</sup>	.041	.573
AvAttention	ALCO Understand	Abby	.457 <sup>a</sup>	.053	.350
		Tim	.543 <sup>a</sup>	.047	.449
AvMentWL	ARNE Understand	Abby	.550 <sup>a</sup>	.063	.424
		Tim	.578 <sup>a</sup>	.038	.502
AvMentWL	ALCO Understand	Abby	.424 <sup>a</sup>	.050	.323
		Tim	.524 <sup>a</sup>	.044	.435
AvFam	ARNE Understand	Abby	.850 <sup>a</sup>	.056	.737
		Tim	.870 <sup>a</sup>	.034	.801
AvFam	ALCO Understand	Abby	.548 <sup>a</sup>	.045	.459
		Tim	.628 <sup>a</sup>	.040	.548
AvSCL	ARNE Understand	Abby	469.958 <sup>a</sup>	54.302	361.135
		Tim	604.208 <sup>a</sup>	32.991	538.092
AvSCL	ALCO Understand	Abby	566.850 <sup>a</sup>	43.378	479.919
		Tim	568.054 <sup>a</sup>	38.284	491.331
HRVar_RMSSD	ARNE Understand	Abby	18.309 <sup>a</sup>	7.621	3.037
		Tim	39.948 <sup>a</sup>	4.630	30.669
HRVar_RMSSD	ALCO Understand	Abby	19.012 <sup>a</sup>	6.088	6.812
		Tim	41.112 <sup>a</sup>	5.373	30.344
HRVar_NN50	ARNE Understand	Abby	9.438 <sup>a</sup>	7.832	-6.258
		Tim	27.616 <sup>a</sup>	4.759	18.080
HRVar_NN50	ALCO Understand	Abby	12.857 <sup>a</sup>	6.257	.318
		Tim	28.335 <sup>a</sup>	5.522	17.269
NASA_MD	ARNE Understand	Abby	29.583 <sup>a</sup>	4.218	21.131
		Tim	42.427 <sup>a</sup>	2.562	37.292
NASA_MD	ALCO Understand	Abby	28.200 <sup>a</sup>	3.369	21.448
		Tim	44.813 <sup>a</sup>	2.973	38.854
NASA_PD	ARNE Understand	Abby	11.667 <sup>a</sup>	5.365	.914
		Tim	11.260 <sup>a</sup>	3.260	4.728
NASA_PD	ALCO Understand	Abby	24.250 <sup>a</sup>	4.286	15.661
		Tim	8.979 <sup>a</sup>	3.783	1.398
NASA_TD	ARNE Understand	Abby	32.083 <sup>a</sup>	6.233	19.591
		Tim	15.115 <sup>a</sup>	3.787	7.525
NASA_TD	ALCO	Abby	22.800 <sup>a</sup>	4.979	12.821
					32.779

	Understand	Tim	14.250 <sup>a</sup>	4.395	5.443	23.057
NASA_Performance	ARNE Understand	Abby	80.417 <sup>a</sup>	8.205	63.974	96.860
		Tim	67.813 <sup>a</sup>	4.985	57.822	77.803
	ALCO Understand	Abby	76.050 <sup>a</sup>	6.554	62.915	89.185
		Tim	61.875 <sup>a</sup>	5.785	50.282	73.468
NASA_Effort	ARNE Understand	Abby	28.125 <sup>a</sup>	5.344	17.415	38.835
		Tim	42.406 <sup>a</sup>	3.247	35.899	48.913
	ALCO Understand	Abby	22.100 <sup>a</sup>	4.269	13.545	30.655
		Tim	42.937 <sup>a</sup>	3.768	35.387	50.488
NASA_Frustration	ARNE Understand	Abby	38.958 <sup>a</sup>	7.333	24.262	53.655
		Tim	23.354 <sup>a</sup>	4.455	14.425	32.283
	ALCO Understand	Abby	37.800 <sup>a</sup>	5.858	26.060	49.540
		Tim	26.396 <sup>a</sup>	5.170	16.034	36.757
NASA_Score	ARNE Understand	Abby	36.806 <sup>a</sup>	3.957	28.875	44.736
		Tim	33.729 <sup>a</sup>	2.404	28.911	38.547
	ALCO Understand	Abby	35.200 <sup>a</sup>	3.161	28.865	41.535
		Tim	33.208 <sup>a</sup>	2.790	27.617	38.800

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag learning style facet, understanding task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	.068	1	40.433	.795
Recall	Welch	.535	1	52.616	.468
FMeasure	Welch	.022	1	44.610	.882
Duration	Welch	.595	1	36.689	.445
FirstActDet	Welch	2.164	1	45.658	.148
LastActDet	Welch	.906	1	37.480	.347
ProcDur	Welch	2.029	1	48.697	.161
FixRel	Welch	.185	1	37.197	.669
FixIrrel	Welch	.235	1	45.307	.630
AvDurRelFix	Welch	.136	1	46.601	.714
AvDurIrrelFix	Welch	.525	1	47.599	.472
TotSac	Welch	1.778	1	44.716	.189
Sac2Key	Welch	.195	1	47.694	.661
AvAttention	Welch	.544	1	48.611	.464
AvMentWL	Welch	.078	1	43.969	.781
AvFam	Welch	.009	1	45.851	.925
AvSCL	Welch	3.689	1	50.233	.060
HRVar_RMSSD	Welch	.090	1	40.325	.766
HRVar_NN50	Welch	.001	1	40.102	.972
NASA_MD	Welch	.063	1	48.830	.803
NASA_PD	Welch	.849	1	39.437	.363
NASA_TD	Welch	.001	1	56.310	.973
NASA_Performance	Welch	.000	1	46.177	.990
NASA_Effort	Welch	.046	1	48.042	.831
NASA_Frustration	Welch	.004	1	50.169	.947
NASA_Score	Welch	.015	1	50.869	.903

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag learning style facet, understanding task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.003	1	.003	.073	.787
	Within Groups	2.927	78	.038		
	Total	2.930	79			
Recall	Between Groups	.014	1	.014	.457	.501
	Within Groups	2.332	78	.030		
	Total	2.345	79			
FMeasure	Between Groups	.001	1	.001	.022	.883
	Within Groups	2.489	78	.032		
	Total	2.490	79			
Duration	Between Groups	6909.315	1	6909.315	.702	.405
	Within Groups	767939.173	78	9845.374		
	Total	774848.487	79			
FirstActDet	Between Groups	6545.152	1	6545.152	2.078	.153
	Within Groups	245681.048	78	3149.757		
	Total	252226.200	79			
LastActDet	Between Groups	11206.501	1	11206.501	1.045	.310
	Within Groups	836112.887	78	10719.396		
	Total	847319.387	79			
ProcDur	Between Groups	517.038	1	517.038	1.846	.178
	Within Groups	21842.762	78	280.035		
	Total	22359.800	79			
FixRel	Between Groups	.119	1	.119	.215	.644
	Within Groups	42.897	78	.550		
	Total	43.016	79			
FixIrrel	Between Groups	4503.944	1	4503.944	.227	.635
	Within Groups	1546313.618	78	19824.534		
	Total	1550817.562	79			
AvDurRelFix	Between Groups	323.183	1	323.183	.129	.721
	Within Groups	195910.973	78	2511.679		
	Total	196234.156	79			
AvDurIrrelFix	Between Groups	10167.820	1	10167.820	.486	.488
	Within Groups	1630468.561	78	20903.443		
	Total	1640636.381	79			
TotSac	Between Groups	205.800	1	205.800	1.738	.191
	Within Groups	9234.000	78	118.385		
	Total	9439.800	79			
Sac2Key	Between Groups	12.343	1	12.343	.180	.672
	Within Groups	5336.857	78	68.421		
	Total	5349.200	79			
AvAttention	Between Groups	.021	1	.021	.495	.484
	Within Groups	3.263	78	.042		
	Total	3.284	79			
AvMentWL	Between Groups	.002	1	.002	.077	.782
	Within Groups	1.946	78	.025		
	Total	1.948	79			
AvFam	Between Groups	.000	1	.000	.009	.927
	Within Groups	2.675	78	.034		
	Total	2.675	79			
AvSCL	Between Groups	58575.238	1	58575.238	3.272	.074
	Within Groups	1396445.512	78	17903.148		

	Total	1455020.750	79			
HRVar_RMSSD	Between Groups	43.947	1	43.947	.096	.757
	Within Groups	35525.631	78	455.457		
	Total	35569.578	79			
HRVar_NN50	Between Groups	.504	1	.504	.001	.971
	Within Groups	28992.289	78	371.696		
	Total	28992.793	79			
NASA_MD	Between Groups	7.202	1	7.202	.057	.812
	Within Groups	9881.548	78	126.687		
	Total	9888.750	79			
NASA_PD	Between Groups	173.571	1	173.571	.931	.338
	Within Groups	14546.429	78	186.493		
	Total	14720.000	79			
NASA_TD	Between Groups	.238	1	.238	.001	.976
	Within Groups	20298.512	78	260.237		
	Total	20298.750	79			
NASA_Performance	Between Groups	.060	1	.060	.000	.990
	Within Groups	31219.940	78	400.256		
	Total	31220.000	79			
NASA_Effort	Between Groups	9.301	1	9.301	.042	.838
	Within Groups	17132.887	78	219.652		
	Total	17142.188	79			
NASA_Frustration	Between Groups	1.488	1	1.488	.004	.950
	Within Groups	29073.512	78	372.737		
	Total	29075.000	79			
NASA_Score	Between Groups	1.343	1	1.343	.013	.909
	Within Groups	7993.093	78	102.476		
	Total	7994.436	79			

### Task \* LearningStyle - use case templates, GenderMag learning style facet, understanding task

Dependent Variable	Task	LearningStyle	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Understand	Abby	.685 <sup>a</sup>	.046	.593	.777
		Tim	.802 <sup>a</sup>	.048	.705	.899
	ALCO Understand	Abby	.992 <sup>a</sup>	.063	.865	1.119
		Tim	.880 <sup>a</sup>	.040	.800	.960
Recall	ARNE Understand	Abby	.778 <sup>a</sup>	.046	.685	.871
		Tim	.791 <sup>a</sup>	.049	.693	.889
	ALCO Understand	Abby	.992 <sup>a</sup>	.064	.864	1.120
		Tim	.897 <sup>a</sup>	.040	.816	.978
FMeasure	ARNE Understand	Abby	.723 <sup>a</sup>	.045	.634	.812
		Tim	.791 <sup>a</sup>	.047	.697	.885
	ALCO Understand	Abby	.992 <sup>a</sup>	.061	.868	1.115
		Tim	.887 <sup>a</sup>	.039	.810	.965
Duration	ARNE Understand	Abby	290.667 <sup>a</sup>	29.404	231.739	349.594
		Tim	221.848 <sup>a</sup>	31.077	159.567	284.128
	ALCO Understand	Abby	319.280 <sup>a</sup>	40.628	237.860	400.700
		Tim	278.887 <sup>a</sup>	25.568	227.648	330.127
FirstActDet	ARNE Understand	Abby	45.000 <sup>a</sup>	15.823	13.289	76.711
		Tim	58.276 <sup>a</sup>	16.724	24.761	91.791
	ALCO Understand	Abby	39.400 <sup>a</sup>	21.863	-4.415	83.215
		Tim	67.358 <sup>a</sup>	13.759	39.784	94.932
LastActDet	ARNE Understand	Abby	278.440 <sup>a</sup>	29.489	219.343	337.537
		Tim	202.286 <sup>a</sup>	31.167	139.826	264.745
	ALCO Understand	Abby	297.560 <sup>a</sup>	40.745	215.906	379.214
		Tim	258.591 <sup>a</sup>	25.642	207.203	309.978
ProcDur	ARNE Understand	Abby	12.227 <sup>a</sup>	1.666	8.888	15.565
		Tim	19.562 <sup>a</sup>	1.761	16.034	23.090
	ALCO Understand	Abby	21.720 <sup>a</sup>	2.302	17.107	26.333
		Tim	20.297 <sup>a</sup>	1.449	17.394	23.200
FixRel	ARNE Understand	Abby	10.167 <sup>a</sup>	.195	9.775	10.558
		Tim	10.166 <sup>a</sup>	.206	9.752	10.579
	ALCO Understand	Abby	10.864 <sup>a</sup>	.270	10.323	11.405
		Tim	10.935 <sup>a</sup>	.170	10.595	11.275
FixIrrel	ARNE Understand	Abby	281.603 <sup>a</sup>	37.287	206.879	356.328
		Tim	212.423 <sup>a</sup>	39.409	133.447	291.400
	ALCO Understand	Abby	289.220 <sup>a</sup>	51.519	185.973	392.467
		Tim	285.377 <sup>a</sup>	32.422	220.401	350.353
AvDurRelFix	ARNE Understand	Abby	99.283 <sup>a</sup>	13.183	72.865	125.702
		Tim	72.026 <sup>a</sup>	13.933	44.104	99.948
	ALCO Understand	Abby	103.740 <sup>a</sup>	18.214	67.238	140.242
		Tim	98.915 <sup>a</sup>	11.463	75.943	121.887
AvDurlrelFix	ARNE Understand	Abby	233.921 <sup>a</sup>	36.976	159.819	308.023
		Tim		39.080	87.753	244.389

166.071 <sup>a</sup>						
TotSac	ALCO Understand	Abby	288.220 <sup>a</sup>	51.090	185.834	390.606
		Tim	284.860 <sup>a</sup>	32.152	220.426	349.295
Sac2Key	ARNE Understand	Abby	88.013 <sup>a</sup>	3.050	81.902	94.125
		Tim	87.674 <sup>a</sup>	3.223	81.215	94.133
AvAttention	ALCO Understand	Abby	95.640 <sup>a</sup>	4.214	87.196	104.084
		Tim	88.210 <sup>a</sup>	2.652	82.896	93.525
AvMentWL	ARNE Understand	Abby	13.827 <sup>a</sup>	2.246	9.326	18.327
		Tim	11.583 <sup>a</sup>	2.373	6.827	16.340
AvFam	ALCO Understand	Abby	13.400 <sup>a</sup>	3.103	7.182	19.618
		Tim	16.123 <sup>a</sup>	1.953	12.210	20.036
AvSCL	ARNE Understand	Abby	.563 <sup>a</sup>	.047	.468	.657
		Tim	.695 <sup>a</sup>	.050	.596	.795
HRVar_RMSSD	ALCO Understand	Abby	.472 <sup>a</sup>	.065	.342	.602
		Tim	.534 <sup>a</sup>	.041	.452	.616
HRVar_NN50	ARNE Understand	Abby	.529 <sup>a</sup>	.044	.441	.618
		Tim	.597 <sup>a</sup>	.047	.503	.691
NASA_MD	ALCO Understand	Abby	.448 <sup>a</sup>	.061	.325	.571
		Tim	.508 <sup>a</sup>	.038	.431	.586
NASA_PD	ARNE Understand	Abby	.816 <sup>a</sup>	.040	.737	.895
		Tim	.897 <sup>a</sup>	.042	.813	.981
NASA_TD	ALCO Understand	Abby	.548 <sup>a</sup>	.055	.438	.658
		Tim	.628 <sup>a</sup>	.034	.559	.697
AvSCL	ARNE Understand	Abby	579.400 <sup>a</sup>	38.280	502.686	656.114
		Tim	545.214 <sup>a</sup>	40.458	464.135	626.294
AvFam	ALCO Understand	Abby	617.680 <sup>a</sup>	52.891	511.684	723.676
		Tim	536.285 <sup>a</sup>	33.286	469.580	602.991
HRVar_RMSSD	ARNE Understand	Abby	35.342 <sup>a</sup>	5.372	24.576	46.108
		Tim	30.873 <sup>a</sup>	5.678	19.494	42.252
HRVar_NN50	ALCO Understand	Abby	37.565 <sup>a</sup>	7.423	22.689	52.441
		Tim	29.516 <sup>a</sup>	4.671	20.155	38.878
NASA_MD	ARNE Understand	Abby	25.494 <sup>a</sup>	5.521	14.429	36.559
		Tim	18.744 <sup>a</sup>	5.835	7.050	30.439
NASA_PD	ALCO Understand	Abby	24.047 <sup>a</sup>	7.629	8.758	39.335
		Tim	21.341 <sup>a</sup>	4.801	11.720	30.963
NASA_TD	ARNE Understand	Abby	37.400 <sup>a</sup>	2.973	31.442	43.358
		Tim	38.679 <sup>a</sup>	3.142	32.381	44.976
NASA_TD	ALCO Understand	Abby	36.200 <sup>a</sup>	4.108	27.968	44.432
		Tim	39.812 <sup>a</sup>	2.585	34.632	44.993
NASA_TD	ARNE Understand	Abby	16.400 <sup>a</sup>	3.782	8.820	23.980
		Tim	7.821 <sup>a</sup>	3.998	-.190	15.833
NASA_TD	ALCO Understand	Abby	15.200 <sup>a</sup>	5.226	4.727	25.673
		Tim	14.635 <sup>a</sup>	3.289	8.044	21.226

	Understand	Tim	16.125 <sup>a</sup>	3.821	8.468	23.782
NASA_Performance	ARNE Understand	Abby	68.267 <sup>a</sup>	5.784	56.675	79.858
		Tim	74.690 <sup>a</sup>	6.113	62.440	86.941
	ALCO Understand	Abby	71.400 <sup>a</sup>	7.992	55.384	87.416
		Tim	64.781 <sup>a</sup>	5.029	54.702	74.860
NASA_Effort	ARNE Understand	Abby	36.533 <sup>a</sup>	3.767	28.983	44.083
		Tim	38.440 <sup>a</sup>	3.982	30.461	46.420
	ALCO Understand	Abby	34.200 <sup>a</sup>	5.205	23.768	44.632
		Tim	35.375 <sup>a</sup>	3.276	28.810	41.940
NASA_Frustration	ARNE Understand	Abby	20.200 <sup>a</sup>	5.170	9.840	30.560
		Tim	34.524 <sup>a</sup>	5.464	23.574	45.474
	ALCO Understand	Abby	36.400 <sup>a</sup>	7.143	22.085	50.715
		Tim	27.271 <sup>a</sup>	4.495	18.262	36.279
NASA_Score	ARNE Understand	Abby	32.289 <sup>a</sup>	2.790	26.698	37.880
		Tim	36.516 <sup>a</sup>	2.948	30.607	42.425
	ALCO Understand	Abby	35.533 <sup>a</sup>	3.855	27.809	43.258
		Tim	33.000 <sup>a</sup>	2.426	28.139	37.861

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag motivation facet, reviewing task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	5.174	1	77.564	.026
Recall	Welch	2.127	1	77.078	.149
FMeasure	Welch	3.919	1	77.737	.051
Duration	Welch	4.616	1	77.912	.035
FirstActDet	Welch	1.837	1	65.404	.180
LastActDet	Welch	3.812	1	77.963	.054
ProcDur	Welch	.288	1	75.625	.593
FixRel	Welch	2.472	1	75.901	.120
FixIrrel	Welch	.090	1	73.597	.765
AvDurRelFix	Welch	8.630	1	75.290	.004
AvDurlrelFix	Welch	9.518	1	75.396	.003
TotSac	Welch	7.097	1	77.200	.009
Sac2Key	Welch	.244	1	73.888	.623
AvAttention	Welch	.043	1	76.130	.836
AvMentWL	Welch	2.968	1	77.653	.089
AvFam	Welch	3.205	1	77.912	.077
AvSCL	Welch	2.713	1	74.068	.104
HRVar_RMSSD	Welch	.051	1	75.516	.823
HRVar_NN50	Welch	.960	1	75.361	.330
NASA_MD	Welch	.428	1	75.995	.515
NASA_PD	Welch	4.799	1	68.683	.032
NASA_TD	Welch	.513	1	77.741	.476
NASA_Performance	Welch	.766	1	77.668	.384
NASA_Effort	Welch	2.045	1	77.906	.157
NASA_Frustration	Welch	.285	1	77.918	.595
NASA_Score	Welch	.158	1	77.785	.692

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag motivation facet, reviewing task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.404	1	.404	5.160	.026
	Within Groups	6.103	78	.078		
	Total	6.507	79			
Recall	Between Groups	.158	1	.158	2.129	.149
	Within Groups	5.771	78	.074		
	Total	5.929	79			
FMeasure	Between Groups	.300	1	.300	3.902	.052
	Within Groups	5.988	78	.077		
	Total	6.288	79			
Duration	Between Groups	318031.642	1	318031.642	4.553	.036
	Within Groups	5447848.545	78	69844.212		
	Total	5765880.188	79			
FirstActDet	Between Groups	7711.301	1	7711.301	1.902	.172
	Within Groups	316224.187	78	4054.156		
	Total	323935.488	79			
LastActDet	Between Groups	264869.004	1	264869.004	3.781	.055
	Within Groups	5463822.984	78	70049.013		
	Total	5728691.987	79			
ProcDur	Between Groups	86.120	1	86.120	.290	.592
	Within Groups	23145.830	78	296.741		
	Total	23231.950	79			
FixRel	Between Groups	44.738	1	44.738	2.488	.119
	Within Groups	1402.325	78	17.979		
	Total	1447.063	79			
FixIrrel	Between Groups	2386.523	1	2386.523	.092	.763
	Within Groups	2029025.420	78	26013.146		
	Total	2031411.943	79			
AvDurRelFix	Between Groups	37655.617	1	37655.617	8.708	.004
	Within Groups	337302.328	78	4324.389		
	Total	374957.945	79			
AvDurIrrelFix	Between Groups	309203.470	1	309203.470	9.600	.003
	Within Groups	2512258.931	78	32208.448		
	Total	2821462.400	79			
TotSac	Between Groups	724.815	1	724.815	7.097	.009
	Within Groups	7965.935	78	102.127		
	Total	8690.750	79			
Sac2Key	Between Groups	36.136	1	36.136	.236	.629
	Within Groups	11949.414	78	153.198		
	Total	11985.550	79			
AvAttention	Between Groups	.002	1	.002	.043	.836
	Within Groups	3.256	78	.042		
	Total	3.258	79			
AvMentWL	Between Groups	.141	1	.141	2.958	.089
	Within Groups	3.731	78	.048		
	Total	3.872	79			
AvFam	Between Groups	.158	1	.158	3.183	.078
	Within Groups	3.870	78	.050		
	Total	4.028	79			
AvSCL	Between Groups	54033.236	1	54033.236	2.749	.101
	Within Groups	1533157.514	78	19655.866		

	Total	1587190.750	79			
HRVar_RMSSD	Between Groups	21.615	1	21.615	.051	.822
	Within Groups	33048.551	78	423.699		
	Total	33070.166	79			
HRVar_NN50	Between Groups	359.964	1	359.964	.969	.328
	Within Groups	28989.942	78	371.666		
	Total	29349.907	79			
NASA_MD	Between Groups	74.781	1	74.781	.430	.514
	Within Groups	13549.906	78	173.717		
	Total	13624.687	79			
NASA_PD	Between Groups	1395.853	1	1395.853	4.933	.029
	Within Groups	22071.335	78	282.966		
	Total	23467.187	79			
NASA_TD	Between Groups	315.809	1	315.809	.505	.480
	Within Groups	48813.878	78	625.819		
	Total	49129.687	79			
NASA_Performance	Between Groups	485.095	1	485.095	.763	.385
	Within Groups	49574.593	78	635.572		
	Total	50059.688	79			
NASA_Effort	Between Groups	383.772	1	383.772	2.017	.160
	Within Groups	14841.228	78	190.272		
	Total	15225.000	79			
NASA_Frustration	Between Groups	120.351	1	120.351	.281	.597
	Within Groups	33359.649	78	427.688		
	Total	33480.000	79			
NASA_Score	Between Groups	27.693	1	27.693	.157	.693
	Within Groups	13765.879	78	176.486		
	Total	13793.572	79			

# Task \* Motivation - use case templates, GenderMag motivation facet, reviewing task

Dependent Variable	Task	Motivation	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Review	Abby	.445 <sup>a</sup>	.043	.359	.531
		Tim	.512 <sup>a</sup>	.054	.405	.620
	ALCO Review	Abby	.833 <sup>a</sup>	.050	.733	.934
		Tim	.849 <sup>a</sup>	.054	.740	.957
Recall	ARNE Review	Abby	.532 <sup>a</sup>	.050	.433	.632
		Tim	.563 <sup>a</sup>	.062	.439	.686
	ALCO Review	Abby	.889 <sup>a</sup>	.058	.773	1.005
		Tim	.842 <sup>a</sup>	.062	.717	.968
FMeasure	ARNE Review	Abby	.471 <sup>a</sup>	.046	.379	.563
		Tim	.532 <sup>a</sup>	.057	.418	.646
	ALCO Review	Abby	.861 <sup>a</sup>	.053	.754	.968
		Tim	.839 <sup>a</sup>	.058	.724	.955
Duration	ARNE Review	Abby	827.708 <sup>a</sup>	26.328	774.878	880.539
		Tim	752.714 <sup>a</sup>	32.710	687.077	818.352
	ALCO Review	Abby	320.989 <sup>a</sup>	30.676	259.433	382.545
		Tim	280.675 <sup>a</sup>	33.113	214.230	347.120
FirstActDet	ARNE Review	Abby	152.812 <sup>a</sup>	10.311	132.123	173.502
		Tim	126.643 <sup>a</sup>	12.810	100.937	152.348
	ALCO Review	Abby	154.611 <sup>a</sup>	12.013	130.504	178.718
		Tim	163.288 <sup>a</sup>	12.968	137.266	189.309
LastActDet	ARNE Review	Abby	792.104 <sup>a</sup>	24.672	742.596	841.612
		Tim	742.893 <sup>a</sup>	30.653	681.384	804.402
	ALCO Review	Abby	300.344 <sup>a</sup>	28.746	242.660	358.028
		Tim	262.025 <sup>a</sup>	31.030	199.759	324.291
ProcDur	ARNE Review	Abby	23.573 <sup>a</sup>	1.506	20.551	26.595
		Tim	21.321 <sup>a</sup>	1.871	17.567	25.076
	ALCO Review	Abby	20.644 <sup>a</sup>	1.755	17.124	24.165
		Tim	18.650 <sup>a</sup>	1.894	14.849	22.451
FixRel	ARNE Review	Abby	10.171 <sup>a</sup>	.166	9.837	10.505
		Tim	10.284 <sup>a</sup>	.207	9.869	10.699
	ALCO Review	Abby	2.271 <sup>a</sup>	.194	1.882	2.660
		Tim	1.709 <sup>a</sup>	.209	1.289	2.129
FixIrrel	ARNE Review	Abby	270.389 <sup>a</sup>	17.854	234.563	306.215
		Tim	289.042 <sup>a</sup>	22.182	244.531	333.554
	ALCO Review	Abby	2.284 <sup>a</sup>	20.802	-39.459	44.027
		Tim	3.529 <sup>a</sup>	22.455	-41.530	48.588
AvDurRelFix	ARNE Review	Abby	96.102 <sup>a</sup>	8.128	79.792	112.413
		Tim	101.382 <sup>a</sup>	10.099	81.118	121.646
	ALCO Review	Abby	172.425 <sup>a</sup>	9.470	153.421	191.429
		Tim	195.313 <sup>a</sup>	10.223	174.799	215.826
AvDurlrelFix	ARNE Review	Abby	221.518 <sup>a</sup>	23.221	174.921	268.115
		Tim		28.850	182.784	298.569

			240.676 <sup>a</sup>		
TotSac	ALCO Review	Abby	410.275 <sup>a</sup>	27.056	355.983
		Tim	478.938 <sup>a</sup>	29.205	420.333
TotSac	ARNE Review	Abby	90.667 <sup>a</sup>	2.087	86.478
		Tim	88.583 <sup>a</sup>	2.593	83.380
TotSac	ALCO Review	Abby	97.000 <sup>a</sup>	2.432	92.120
		Tim	94.312 <sup>a</sup>	2.625	89.045
Sac2Key	ARNE Review	Abby	10.271 <sup>a</sup>	1.698	6.864
		Tim	11.417 <sup>a</sup>	2.109	7.185
Sac2Key	ALCO Review	Abby	31.800 <sup>a</sup>	1.978	27.831
		Tim	28.513 <sup>a</sup>	2.135	24.228
AvAttention	ARNE Review	Abby	.769 <sup>a</sup>	.032	.705
		Tim	.729 <sup>a</sup>	.040	.649
AvAttention	ALCO Review	Abby	.607 <sup>a</sup>	.037	.532
		Tim	.597 <sup>a</sup>	.040	.517
AvMentWL	ARNE Review	Abby	.833 <sup>a</sup>	.038	.757
		Tim	.880 <sup>a</sup>	.048	.784
AvMentWL	ALCO Review	Abby	.640 <sup>a</sup>	.045	.551
		Tim	.592 <sup>a</sup>	.048	.496
AvFam	ARNE Review	Abby	.633 <sup>a</sup>	.039	.554
		Tim	.680 <sup>a</sup>	.049	.582
AvFam	ALCO Review	Abby	.453 <sup>a</sup>	.046	.361
		Tim	.393 <sup>a</sup>	.050	.293
AvSCL	ARNE Review	Abby	462.875 <sup>a</sup>	33.513	395.627
		Tim	555.702 <sup>a</sup>	41.637	472.153
AvSCL	ALCO Review	Abby	605.778 <sup>a</sup>	39.047	527.424
		Tim	516.538 <sup>a</sup>	42.149	431.960
HRVar_RMSSD	ARNE Review	Abby	33.204 <sup>a</sup>	3.737	25.706
		Tim	36.365 <sup>a</sup>	4.642	27.049
HRVar_RMSSD	ALCO Review	Abby	30.969 <sup>a</sup>	4.354	22.233
		Tim	43.839 <sup>a</sup>	4.700	34.408
HRVar_NN50	ARNE Review	Abby	24.661 <sup>a</sup>	4.085	16.464
		Tim	23.011 <sup>a</sup>	5.075	12.827
HRVar_NN50	ALCO Review	Abby	17.220 <sup>a</sup>	4.760	7.669
		Tim	33.907 <sup>a</sup>	5.138	23.598
NASA_MD	ARNE Review	Abby	66.094 <sup>a</sup>	2.532	61.012
		Tim	73.810 <sup>a</sup>	3.146	67.496
NASA_MD	ALCO Review	Abby	56.222 <sup>a</sup>	2.951	50.301
		Tim	52.438 <sup>a</sup>	3.185	46.046
NASA_PD	ARNE Review	Abby	16.250 <sup>a</sup>	3.059	10.112
		Tim	23.036 <sup>a</sup>	3.800	15.410
NASA_PD	ALCO Review	Abby	15.556 <sup>a</sup>	3.564	8.404
		Tim	12.375 <sup>a</sup>	3.847	4.655
NASA_TD	ARNE Review	Abby	50.521 <sup>a</sup>	3.900	42.696
		Tim	56.310 <sup>a</sup>	4.845	46.587
NASA_TD	ALCO	Abby	27.167 <sup>a</sup>	4.544	18.049

	Review	Tim	15.625 <sup>a</sup>	4.905	5.783	25.467
NASA_Performance	ARNE Review	Abby	44.479 <sup>a</sup>	6.042	32.356	56.602
		Tim	43.036 <sup>a</sup>	7.506	27.974	58.098
	ALCO Review	Abby	50.000 <sup>a</sup>	7.039	35.875	64.125
		Tim	26.188 <sup>a</sup>	7.598	10.940	41.435
NASA_Effort	ARNE Review	Abby	56.250 <sup>a</sup>	3.287	49.653	62.847
		Tim	53.690 <sup>a</sup>	4.084	45.495	61.886
	ALCO Review	Abby	53.167 <sup>a</sup>	3.830	45.480	60.853
		Tim	49.750 <sup>a</sup>	4.135	41.453	58.047
NASA_Frustration	ARNE Review	Abby	30.833 <sup>a</sup>	4.850	21.101	40.565
		Tim	34.583 <sup>a</sup>	6.026	22.492	46.675
	ALCO Review	Abby	35.167 <sup>a</sup>	5.651	23.827	46.506
		Tim	21.125 <sup>a</sup>	6.100	8.885	33.365
NASA_Score	ARNE Review	Abby	44.071 <sup>a</sup>	3.184	37.682	50.461
		Tim	47.411 <sup>a</sup>	3.956	39.472	55.349
	ALCO Review	Abby	46.713 <sup>a</sup>	3.710	39.268	54.158
		Tim	34.927 <sup>a</sup>	4.005	26.891	42.964

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag information processing facet, reviewing task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	.125	1	76.647	.724
Recall	Welch	.625	1	77.422	.432
FMeasure	Welch	.002	1	77.395	.966
Duration	Welch	.139	1	77.999	.711
FirstActDet	Welch	5.326	1	74.339	.024
LastActDet	Welch	.228	1	77.928	.634
ProcDur	Welch	4.131	1	76.467	.046
FixRel	Welch	4.032	1	76.912	.048
FixIrrel	Welch	.036	1	77.861	.851
AvDurRelFix	Welch	12.092	1	72.763	.001
AvDurlrelFix	Welch	12.215	1	73.645	.001
TotSac	Welch	1.560	1	77.604	.215
Sac2Key	Welch	6.602	1	76.482	.012
AvAttention	Welch	65.389	1	75.857	.000
AvMentWL	Welch	19.185	1	76.409	.000
AvFam	Welch	19.421	1	77.337	.000
AvSCL	Welch	2.624	1	77.986	.109
HRVar_RMSSD	Welch	5.579	1	68.102	.021
HRVar_NN50	Welch	.980	1	75.032	.325
NASA_MD	Welch	3.406	1	67.986	.069
NASA_PD	Welch	27.151	1	57.855	.000
NASA_TD	Welch	4.112	1	61.841	.047
NASA_Performance	Welch	.385	1	77.756	.537
NASA_Effort	Welch	2.883	1	64.802	.094
NASA_Frustration	Welch	1.919	1	76.123	.170
NASA_Score	Welch	1.685	1	77.727	.198

a. Asymptotically F distributed.

# ANOVA - use case templates, GenderMag information processing facet, reviewing task

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.010	1	.010	.125	.725
	Within Groups	6.497	78	.083		
	Total	6.507	79			
Recall	Between Groups	.047	1	.047	.619	.434
	Within Groups	5.882	78	.075		
	Total	5.929	79			
FMeasure	Between Groups	.000	1	.000	.002	.967
	Within Groups	6.287	78	.081		
	Total	6.288	79			
Duration	Between Groups	9999.259	1	9999.259	.136	.714
	Within Groups	5755880.929	78	73793.345		
	Total	5765880.188	79			
FirstActDet	Between Groups	20913.244	1	20913.244	5.383	.023
	Within Groups	303022.244	78	3884.901		
	Total	323935.488	79			
LastActDet	Between Groups	16231.735	1	16231.735	.222	.639
	Within Groups	5712460.253	78	73236.670		
	Total	5728691.988	79			
ProcDur	Between Groups	1166.708	1	1166.708	4.124	.046
	Within Groups	22065.242	78	282.888		
	Total	23231.950	79			
FixRel	Between Groups	70.784	1	70.784	4.012	.049
	Within Groups	1376.279	78	17.645		
	Total	1447.063	79			
FixIrrel	Between Groups	913.934	1	913.934	.035	.852
	Within Groups	2030498.009	78	26032.026		
	Total	2031411.943	79			
AvDurRelFix	Between Groups	51109.086	1	51109.086	12.310	.001
	Within Groups	323848.859	78	4151.908		
	Total	374957.945	79			
AvDurlrelFix	Between Groups	386642.231	1	386642.231	12.386	.001
	Within Groups	2434820.169	78	31215.643		
	Total	2821462.400	79			
TotSac	Between Groups	168.423	1	168.423	1.541	.218
	Within Groups	8522.327	78	109.261		
	Total	8690.750	79			
Sac2Key	Between Groups	933.796	1	933.796	6.590	.012
	Within Groups	11051.754	78	141.689		
	Total	11985.550	79			
AvAttention	Between Groups	1.447	1	1.447	62.346	.000
	Within Groups	1.811	78	.023		
	Total	3.258	79			
AvMentWL	Between Groups	.738	1	.738	18.355	.000
	Within Groups	3.134	78	.040		
	Total	3.872	79			
AvFam	Between Groups	.780	1	.780	18.722	.000
	Within Groups	3.248	78	.042		
	Total	4.028	79			
AvSCL	Between Groups	50622.823	1	50622.823	2.570	.113
	Within Groups	1536567.927	78	19699.589		

	Total	1587190.750	79			
HRVar_RMSSD	Between Groups	2281.582	1	2281.582	5.780	.019
	Within Groups	30788.584	78	394.725		
	Total	33070.166	79			
HRVar_NN50	Between Groups	366.839	1	366.839	.987	.323
	Within Groups	28983.068	78	371.578		
	Total	29349.907	79			
NASA_MD	Between Groups	589.898	1	589.898	3.530	.064
	Within Groups	13034.789	78	167.113		
	Total	13624.688	79			
NASA_PD	Between Groups	5590.475	1	5590.475	24.392	.000
	Within Groups	17876.713	78	229.189		
	Total	23467.187	79			
NASA_TD	Between Groups	2595.307	1	2595.307	4.350	.040
	Within Groups	46534.381	78	596.595		
	Total	49129.688	79			
NASA_Performance	Between Groups	238.097	1	238.097	.373	.543
	Within Groups	49821.590	78	638.738		
	Total	50059.688	79			
NASA_Effort	Between Groups	567.646	1	567.646	3.021	.086
	Within Groups	14657.354	78	187.915		
	Total	15225.000	79			
NASA_Frustration	Between Groups	804.639	1	804.639	1.921	.170
	Within Groups	32675.361	78	418.915		
	Total	33480.000	79			
NASA_Score	Between Groups	287.681	1	287.681	1.661	.201
	Within Groups	13505.891	78	173.152		
	Total	13793.572	79			

**Task \* InformationProcessing - use case templates, GenderMag information processing facet, reviewing task**

Dependent Variable	Task	InformationProcessing	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Review	Abby	.421 <sup>a</sup>	.047	.327	.515
		Tim	.540 <sup>a</sup>	.049	.441	.639
	ALCO Review	Abby	.939 <sup>a</sup>	.055	.830	1.049
		Tim	.730 <sup>a</sup>	.054	.622	.838
Recall	ARNE Review	Abby	.460 <sup>a</sup>	.054	.351	.568
		Tim	.646 <sup>a</sup>	.057	.532	.759
	ALCO Review	Abby	.924 <sup>a</sup>	.063	.797	1.050
		Tim	.786 <sup>a</sup>	.062	.662	.911
FMeasure	ARNE Review	Abby	.433 <sup>a</sup>	.050	.333	.533
		Tim	.576 <sup>a</sup>	.052	.471	.681
	ALCO Review	Abby	.928 <sup>a</sup>	.058	.811	1.045
		Tim	.754 <sup>a</sup>	.057	.640	.869
Duration	ARNE Review	Abby	753.646 <sup>a</sup>	28.621	696.213	811.079
		Tim	837.357 <sup>a</sup>	30.089	776.979	897.735
	ALCO Review	Abby	283.738 <sup>a</sup>	33.457	216.603	350.873
		Tim	310.696 <sup>a</sup>	32.851	244.776	376.616
FirstActDet	ARNE Review	Abby	124.521 <sup>a</sup>	11.209	102.029	147.013
		Tim	158.976 <sup>a</sup>	11.784	135.331	182.622
	ALCO Review	Abby	140.381 <sup>a</sup>	13.102	114.089	166.673
		Tim	182.781 <sup>a</sup>	12.865	156.966	208.597
LastActDet	ARNE Review	Abby	732.698 <sup>a</sup>	26.821	678.877	786.518
		Tim	810.786 <sup>a</sup>	28.196	754.205	867.366
	ALCO Review	Abby	266.652 <sup>a</sup>	31.352	203.740	329.565
		Tim	288.559 <sup>a</sup>	30.785	226.786	350.333
ProcDur	ARNE Review	Abby	18.979 <sup>a</sup>	1.637	15.694	22.264
		Tim	26.571 <sup>a</sup>	1.721	23.118	30.025
	ALCO Review	Abby	17.086 <sup>a</sup>	1.914	13.246	20.926
		Tim	22.137 <sup>a</sup>	1.879	18.367	25.908
FixRel	ARNE Review	Abby	10.462 <sup>a</sup>	.181	10.099	10.825
		Tim	9.952 <sup>a</sup>	.190	9.570	10.333
	ALCO Review	Abby	2.144 <sup>a</sup>	.211	1.719	2.568
		Tim	1.671 <sup>a</sup>	.208	1.254	2.087
FixIrrel	ARNE Review	Abby	232.897 <sup>a</sup>	19.409	193.949	271.844
		Tim	331.891 <sup>a</sup>	20.404	290.946	372.835
	ALCO Review	Abby	5.054 <sup>a</sup>	22.688	-40.473	50.581
		Tim	.712 <sup>a</sup>	22.277	-43.991	45.415
AvDurRelFix	ARNE Review	Abby	81.313 <sup>a</sup>	8.836	63.582	99.044
		Tim	118.284 <sup>a</sup>	9.289	99.643	136.924
	ALCO Review	Abby	165.765 <sup>a</sup>	10.329	145.039	186.492
		Tim	210.711 <sup>a</sup>	10.142	190.360	231.062
AvDurIrrelFix	ARNE	Abby	184.668 <sup>a</sup>	25.244	134.012	235.324

	Review	Tim	282.791 <sup>a</sup>	26.538	229.537	336.044
ALCO Review	Abby	390.296 <sup>a</sup>	29.509	331.083	449.510	
	Tim	525.133 <sup>a</sup>	28.974	466.992	583.275	
TotSac	ARNE Review	Abby	88.594 <sup>a</sup>	2.269	84.041	93.147
		Tim	90.952 <sup>a</sup>	2.385	86.166	95.739
	ALCO Review	Abby	97.629 <sup>a</sup>	2.652	92.306	102.951
		Tim	92.683 <sup>a</sup>	2.604	87.457	97.909
Sac2Key	ARNE Review	Abby	9.063 <sup>a</sup>	1.845	5.359	12.766
		Tim	12.798 <sup>a</sup>	1.940	8.905	16.691
	ALCO Review	Abby	30.286 <sup>a</sup>	2.157	25.957	34.614
		Tim	29.183 <sup>a</sup>	2.118	24.933	33.434
AvAttention	ARNE Review	Abby	.851 <sup>a</sup>	.035	.781	.921
		Tim	.635 <sup>a</sup>	.037	.561	.708
	ALCO Review	Abby	.714 <sup>a</sup>	.041	.633	.796
		Tim	.469 <sup>a</sup>	.040	.389	.549
AvMentWL	ARNE Review	Abby	.920 <sup>a</sup>	.042	.836	1.003
		Tim	.781 <sup>a</sup>	.044	.693	.869
	ALCO Review	Abby	.688 <sup>a</sup>	.049	.591	.786
		Tim	.521 <sup>a</sup>	.048	.425	.616
AvFam	ARNE Review	Abby	.720 <sup>a</sup>	.043	.634	.806
		Tim	.581 <sup>a</sup>	.045	.491	.671
	ALCO Review	Abby	.498 <sup>a</sup>	.050	.397	.598
		Tim	.321 <sup>a</sup>	.049	.222	.419
AvSCL	ARNE Review	Abby	532.406 <sup>a</sup>	36.432	459.300	605.512
		Tim	476.238 <sup>a</sup>	38.300	399.384	553.093
	ALCO Review	Abby	610.867 <sup>a</sup>	42.587	525.411	696.323
		Tim	480.854 <sup>a</sup>	41.816	396.945	564.763
HRVar_RMSSD	ARNE Review	Abby	40.294 <sup>a</sup>	4.062	32.143	48.445
		Tim	28.262 <sup>a</sup>	4.270	19.693	36.831
	ALCO Review	Abby	42.554 <sup>a</sup>	4.748	33.026	52.083
		Tim	34.613 <sup>a</sup>	4.662	25.257	43.968
HRVar_NN50	ARNE Review	Abby	25.472 <sup>a</sup>	4.441	16.561	34.383
		Tim	22.083 <sup>a</sup>	4.668	12.715	31.451
	ALCO Review	Abby	25.667 <sup>a</sup>	5.191	15.250	36.083
		Tim	29.615 <sup>a</sup>	5.097	19.387	39.843
NASA_MD	ARNE Review	Abby	71.146 <sup>a</sup>	2.753	65.621	76.670
		Tim	68.036 <sup>a</sup>	2.894	62.228	73.843
	ALCO Review	Abby	53.905 <sup>a</sup>	3.218	47.447	60.362
		Tim	53.880 <sup>a</sup>	3.160	47.539	60.220
NASA_PD	ARNE Review	Abby	12.187 <sup>a</sup>	3.325	5.515	18.860
		Tim	27.679 <sup>a</sup>	3.496	20.664	34.693
	ALCO Review	Abby	5.857 <sup>a</sup>	3.887	-1.943	13.657
		Tim	22.630 <sup>a</sup>	3.817	14.971	30.288
NASA_TD	ARNE Review	Abby	58.125 <sup>a</sup>	4.239	49.618	66.632
		Tim	47.619 <sup>a</sup>	4.457	38.676	56.562
	ALCO	Abby	22.690 <sup>a</sup>	4.956	12.747	32.634

	Review	Tim	17.000 <sup>a</sup>	4.866	7.236	26.764
NASA_Performance	ARNE Review	Abby	44.271 <sup>a</sup>	6.568	31.092	57.450
		Tim	43.274 <sup>a</sup>	6.905	29.419	57.129
	ALCO Review	Abby	33.810 <sup>a</sup>	7.677	18.404	49.215
		Tim	37.139 <sup>a</sup>	7.538	22.012	52.266
NASA_Effort	ARNE Review	Abby	59.219 <sup>a</sup>	3.574	52.047	66.390
		Tim	50.298 <sup>a</sup>	3.757	42.758	57.837
	ALCO Review	Abby	50.500 <sup>a</sup>	4.178	42.117	58.883
		Tim	51.722 <sup>a</sup>	4.102	43.491	59.953
NASA_Frustration	ARNE Review	Abby	37.917 <sup>a</sup>	5.272	27.337	48.496
		Tim	26.488 <sup>a</sup>	5.543	15.366	37.610
	ALCO Review	Abby	29.071 <sup>a</sup>	6.163	16.704	41.438
		Tim	23.556 <sup>a</sup>	6.051	11.412	35.699
NASA_Score	ARNE Review	Abby	47.144 <sup>a</sup>	3.462	40.198	54.090
		Tim	43.899 <sup>a</sup>	3.639	36.596	51.201
	ALCO Review	Abby	41.104 <sup>a</sup>	4.046	32.984	49.223
		Tim	37.543 <sup>a</sup>	3.973	29.570	45.516

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag self-efficacy facet, reviewing task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	7.138	1	69.916	.009
Recall	Welch	2.251	1	73.398	.138
FMeasure	Welch	5.192	1	72.362	.026
Duration	Welch	.761	1	71.839	.386
FirstActDet	Welch	.005	1	67.887	.943
LastActDet	Welch	.856	1	73.539	.358
ProcDur	Welch	.905	1	70.554	.345
FixRel	Welch	.001	1	70.918	.972
FixIrrel	Welch	.102	1	69.027	.750
AvDurRelFix	Welch	.485	1	69.550	.488
AvDurIrrelFix	Welch	.543	1	69.837	.463
TotSac	Welch	4.106	1	72.774	.046
Sac2Key	Welch	2.393	1	74.897	.126
AvAttention	Welch	7.890	1	77.970	.006
AvMentWL	Welch	1.299	1	76.249	.258
AvFam	Welch	1.513	1	74.758	.223
AvSCL	Welch	.009	1	69.729	.923
HRVar_RMSSD	Welch	2.049	1	61.177	.157
HRVar_NN50	Welch	2.507	1	64.408	.118
NASA_MD	Welch	.932	1	68.093	.338
NASA_PD	Welch	3.170	1	75.096	.079
NASA_TD	Welch	.150	1	64.856	.700
NASA_Performance	Welch	.105	1	72.681	.747
NASA_Effort	Welch	.442	1	66.080	.509
NASA_Frustration	Welch	.285	1	69.674	.595
NASA_Score	Welch	1.314	1	72.345	.255

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag self-efficacy facet, reviewing task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.542	1	.542	7.086	.009
	Within Groups	5.965	78	.076		
	Total	6.507	79			
Recall	Between Groups	.160	1	.160	2.166	.145
	Within Groups	5.769	78	.074		
	Total	5.929	79			
FMeasure	Between Groups	.382	1	.382	5.045	.028
	Within Groups	5.906	78	.076		
	Total	6.288	79			
Duration	Between Groups	54382.665	1	54382.665	.743	.391
	Within Groups	5711497.523	78	73224.327		
	Total	5765880.187	79			
FirstActDet	Between Groups	21.597	1	21.597	.005	.943
	Within Groups	323913.890	78	4152.742		
	Total	323935.488	79			
LastActDet	Between Groups	59749.570	1	59749.570	.822	.367
	Within Groups	5668942.418	78	72678.749		
	Total	5728691.988	79			
ProcDur	Between Groups	263.135	1	263.135	.894	.347
	Within Groups	22968.815	78	294.472		
	Total	23231.950	79			
FixRel	Between Groups	.023	1	.023	.001	.972
	Within Groups	1447.040	78	18.552		
	Total	1447.063	79			
FixIrrel	Between Groups	2655.309	1	2655.309	.102	.750
	Within Groups	2028756.634	78	26009.700		
	Total	2031411.943	79			
AvDurRelFix	Between Groups	2307.327	1	2307.327	.483	.489
	Within Groups	372650.618	78	4777.572		
	Total	374957.946	79			
AvDurIrrelFix	Between Groups	19394.690	1	19394.690	.540	.465
	Within Groups	2802067.710	78	35923.945		
	Total	2821462.400	79			
TotSac	Between Groups	421.284	1	421.284	3.974	.050
	Within Groups	8269.466	78	106.019		
	Total	8690.750	79			
Sac2Key	Between Groups	338.205	1	338.205	2.265	.136
	Within Groups	11647.345	78	149.325		
	Total	11985.550	79			
AvAttention	Between Groups	.269	1	.269	7.029	.010
	Within Groups	2.989	78	.038		
	Total	3.258	79			
AvMentWL	Between Groups	.059	1	.059	1.208	.275
	Within Groups	3.813	78	.049		
	Total	3.872	79			
AvFam	Between Groups	.073	1	.073	1.435	.235
	Within Groups	3.955	78	.051		
	Total	4.028	79			
AvSCL	Between Groups	191.142	1	191.142	.009	.923
	Within Groups	1586999.608	78	20346.149		

	Total	1587190.750	79			
HRVar_RMSSD	Between Groups	898.260	1	898.260	2.178	.144
	Within Groups	32171.905	78	412.460		
	Total	33070.166	79			
HRVar_NN50	Between Groups	946.718	1	946.718	2.600	.111
	Within Groups	28403.189	78	364.143		
	Total	29349.907	79			
NASA_MD	Between Groups	162.115	1	162.115	.939	.335
	Within Groups	13462.573	78	172.597		
	Total	13624.687	79			
NASA_PD	Between Groups	867.510	1	867.510	2.994	.088
	Within Groups	22599.678	78	289.739		
	Total	23467.188	79			
NASA_TD	Between Groups	97.321	1	97.321	.155	.695
	Within Groups	49032.366	78	628.620		
	Total	49129.688	79			
NASA_Performance	Between Groups	65.232	1	65.232	.102	.751
	Within Groups	49994.455	78	640.955		
	Total	50059.687	79			
NASA_Effort	Between Groups	87.766	1	87.766	.452	.503
	Within Groups	15137.234	78	194.067		
	Total	15225.000	79			
NASA_Frustration	Between Groups	121.328	1	121.328	.284	.596
	Within Groups	33358.672	78	427.675		
	Total	33480.000	79			
NASA_Score	Between Groups	222.212	1	222.212	1.277	.262
	Within Groups	13571.359	78	173.992		
	Total	13793.572	79			

# Task \* SelfEfficacy - use case templates, GenderMag self-efficacy facet, reviewing task

Dependent Variable	Task	SelfEfficacy	Mean	95% Confidence Interval		
				Std. Error	Lower Bound	Upper Bound
Precision	ARNE Review	Abby	.548 <sup>a</sup>	.054	.441	.656
		Tim	.413 <sup>a</sup>	.043	.327	.500
	ALCO Review	Abby	.958 <sup>a</sup>	.050	.857	1.060
		Tim	.658 <sup>a</sup>	.059	.539	.777
Recall	ARNE Review	Abby	.582 <sup>a</sup>	.062	.458	.706
		Tim	.515 <sup>a</sup>	.050	.416	.615
	ALCO Review	Abby	.930 <sup>a</sup>	.058	.813	1.046
		Tim	.750 <sup>a</sup>	.068	.613	.887
FMeasure	ARNE Review	Abby	.560 <sup>a</sup>	.057	.446	.674
		Tim	.447 <sup>a</sup>	.046	.355	.538
	ALCO Review	Abby	.941 <sup>a</sup>	.054	.833	1.049
		Tim	.699 <sup>a</sup>	.063	.572	.825
Duration	ARNE Review	Abby	767.952 <sup>a</sup>	32.710	702.315	833.590
		Tim	814.375 <sup>a</sup>	26.328	761.544	867.206
	ALCO Review	Abby	288.458 <sup>a</sup>	30.847	226.560	350.357
		Tim	308.536 <sup>a</sup>	36.222	235.851	381.220
FirstActDet	ARNE Review	Abby	148.417 <sup>a</sup>	12.810	122.711	174.122
		Tim	133.760 <sup>a</sup>	10.311	113.071	154.450
	ALCO Review	Abby	156.396 <sup>a</sup>	12.080	132.155	180.637
		Tim	165.638 <sup>a</sup>	14.185	137.173	194.103
LastActDet	ARNE Review	Abby	738.476 <sup>a</sup>	30.653	676.967	799.985
		Tim	795.969 <sup>a</sup>	24.672	746.461	845.476
	ALCO Review	Abby	265.571 <sup>a</sup>	28.906	207.566	323.576
		Tim	294.671 <sup>a</sup>	33.944	226.558	362.784
ProcDur	ARNE Review	Abby	24.083 <sup>a</sup>	1.871	20.329	27.838
		Tim	21.156 <sup>a</sup>	1.506	18.134	24.178
	ALCO Review	Abby	22.887 <sup>a</sup>	1.764	19.347	26.428
		Tim	13.864 <sup>a</sup>	2.072	9.707	18.022
FixRel	ARNE Review	Abby	10.104 <sup>a</sup>	.207	9.690	10.519
		Tim	10.328 <sup>a</sup>	.166	9.994	10.662
	ALCO Review	Abby	2.027 <sup>a</sup>	.195	1.636	2.418
		Tim	1.763 <sup>a</sup>	.229	1.304	2.222
FixIrrel	ARNE Review	Abby	264.894 <sup>a</sup>	22.182	220.382	309.405
		Tim	291.519 <sup>a</sup>	17.854	255.693	327.345
	ALCO Review	Abby	4.051 <sup>a</sup>	20.918	-37.925	46.026
		Tim	1.449 <sup>a</sup>	24.563	-47.841	50.739
AvDurRelFix	ARNE Review	Abby	92.459 <sup>a</sup>	10.099	72.195	112.723
		Tim	103.910 <sup>a</sup>	8.128	87.599	120.220
	ALCO Review	Abby	188.092 <sup>a</sup>	9.523	168.982	207.201
		Tim	183.978 <sup>a</sup>	11.183	161.539	206.418
AvDurlrelFix	ARNE Review	Abby	216.270 <sup>a</sup>	28.850	158.377	274.162
		Tim		23.221	196.277	289.470

		242.873 <sup>a</sup>			
ALCO Review	Abby	457.275 <sup>a</sup>	27.207	402.681	511.869
	Tim	444.935 <sup>a</sup>	31.948	380.827	509.043
TotSac	ARNE Review	88.893 <sup>a</sup>	2.593	83.689	94.097
	Tim	90.396 <sup>a</sup>	2.087	86.207	94.584
ALCO Review	Abby	93.675 <sup>a</sup>	2.445	88.768	98.582
	Tim	98.020 <sup>a</sup>	2.872	92.258	103.782
Sac2Key	ARNE Review	9.571 <sup>a</sup>	2.109	5.339	13.804
	Tim	11.885 <sup>a</sup>	1.698	8.479	15.292
ALCO Review	Abby	27.313 <sup>a</sup>	1.989	23.321	31.304
	Tim	33.720 <sup>a</sup>	2.335	29.033	38.407
AvAttention	ARNE Review	.730 <sup>a</sup>	.040	.650	.810
	Tim	.768 <sup>a</sup>	.032	.703	.832
ALCO Review	Abby	.638 <sup>a</sup>	.037	.562	.713
	Tim	.543 <sup>a</sup>	.044	.454	.631
AvMentWL	ARNE Review	.844 <sup>a</sup>	.048	.749	.939
	Tim	.865 <sup>a</sup>	.038	.788	.941
ALCO Review	Abby	.608 <sup>a</sup>	.045	.518	.698
	Tim	.615 <sup>a</sup>	.053	.509	.720
AvFam	ARNE Review	.644 <sup>a</sup>	.049	.546	.742
	Tim	.665 <sup>a</sup>	.039	.586	.744
ALCO Review	Abby	.417 <sup>a</sup>	.046	.324	.509
	Tim	.415 <sup>a</sup>	.054	.306	.523
AvSCL	ARNE Review	488.393 <sup>a</sup>	41.637	404.843	571.943
	Tim	521.771 <sup>a</sup>	33.513	454.523	589.019
ALCO Review	Abby	541.071 <sup>a</sup>	39.264	462.281	619.861
	Tim	566.524 <sup>a</sup>	46.107	474.004	659.044
HRVar_RMSSD	ARNE Review	33.736 <sup>a</sup>	4.642	24.420	43.051
	Tim	35.504 <sup>a</sup>	3.737	28.006	43.002
ALCO Review	Abby	37.523 <sup>a</sup>	4.378	28.738	46.308
	Tim	41.074 <sup>a</sup>	5.141	30.758	51.390
HRVar_NN50	ARNE Review	25.924 <sup>a</sup>	5.075	15.740	36.108
	Tim	22.112 <sup>a</sup>	4.085	13.915	30.309
ALCO Review	Abby	28.316 <sup>a</sup>	4.786	18.712	37.920
	Tim	26.166 <sup>a</sup>	5.620	14.889	37.443
NASA_MD	ARNE Review	71.131 <sup>a</sup>	3.146	64.817	77.445
	Tim	68.438 <sup>a</sup>	2.532	63.356	73.519
ALCO Review	Abby	54.354 <sup>a</sup>	2.967	48.400	60.308
	Tim	53.156 <sup>a</sup>	3.484	46.164	60.147
NASA_PD	ARNE Review	17.143 <sup>a</sup>	3.800	9.517	24.769
	Tim	21.406 <sup>a</sup>	3.059	15.268	27.544
ALCO Review	Abby	13.875 <sup>a</sup>	3.584	6.684	21.066
	Tim	13.156 <sup>a</sup>	4.208	4.711	21.600
NASA_TD	ARNE Review	57.679 <sup>a</sup>	4.845	47.956	67.401
	Tim	49.323 <sup>a</sup>	3.900	41.498	57.148
ALCO	Abby	23.292 <sup>a</sup>	4.569	14.123	32.460

	Review	Tim	14.900 <sup>a</sup>	5.365	4.134	25.666
NASA_Performance	ARNE Review	Abby	45.417 <sup>a</sup>	7.506	30.355	60.479
		Tim	42.396 <sup>a</sup>	6.042	30.273	54.519
	ALCO Review	Abby	36.771 <sup>a</sup>	7.078	22.567	50.975
		Tim	33.067 <sup>a</sup>	8.312	16.387	49.746
NASA_Effort	ARNE Review	Abby	54.821 <sup>a</sup>	4.084	46.625	63.017
		Tim	55.260 <sup>a</sup>	3.287	48.664	61.857
	ALCO Review	Abby	51.688 <sup>a</sup>	3.852	43.959	59.416
		Tim	50.067 <sup>a</sup>	4.523	40.991	59.143
NASA_Frustration	ARNE Review	Abby	34.405 <sup>a</sup>	6.026	22.314	46.496
		Tim	30.990 <sup>a</sup>	4.850	21.258	40.722
	ALCO Review	Abby	29.187 <sup>a</sup>	5.682	17.785	40.590
		Tim	22.267 <sup>a</sup>	6.672	8.877	35.656
NASA_Score	ARNE Review	Abby	46.766 <sup>a</sup>	3.956	38.827	54.704
		Tim	44.635 <sup>a</sup>	3.184	38.246	51.025
	ALCO Review	Abby	41.987 <sup>a</sup>	3.731	34.501	49.473
		Tim	35.418 <sup>a</sup>	4.381	26.627	44.209

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag risk facet, reviewing task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	10.086	1	76.565	.002
Recall	Welch	1.164	1	77.990	.284
FMeasure	Welch	5.150	1	76.409	.026
Duration	Welch	.227	1	73.141	.635
FirstActDet	Welch	22.681	1	56.191	.000
LastActDet	Welch	1.544	1	75.159	.218
ProcDur	Welch	449.987	1	43.289	.000
FixRel	Welch	.001	1	67.520	.975
FixIrrel	Welch	1.388	1	57.993	.244
AvDurRelFix	Welch	2.692	1	62.770	.106
AvDurIrrelFix	Welch	3.761	1	64.243	.057
TotSac	Welch	8.672	1	76.407	.004
Sac2Key	Welch	4.144	1	71.991	.045
AvAttention	Welch	.334	1	70.989	.565
AvMentWL	Welch	1.554	1	64.954	.217
AvFam	Welch	1.724	1	66.499	.194
AvSCL	Welch	.034	1	72.226	.855
HRVar_RMSSD	Welch	73.422	1	56.121	.000
HRVar_NN50	Welch	16.872	1	74.970	.000
NASA_MD	Welch	2.127	1	53.101	.151
NASA_PD	Welch	15.918	1	45.478	.000
NASA_TD	Welch	12.140	1	48.978	.001
NASA_Performance	Welch	6.659	1	74.855	.012
NASA_Effort	Welch	15.518	1	65.707	.000
NASA_Frustration	Welch	11.692	1	66.444	.001
NASA_Score	Welch	3.430	1	59.817	.069

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag risk facet, reviewing task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.643	1	.643	8.556	.005
	Within Groups	5.864	78	.075		
	Total	6.507	79			
Recall	Between Groups	.077	1	.077	1.027	.314
	Within Groups	5.852	78	.075		
	Total	5.929	79			
FMeasure	Between Groups	.333	1	.333	4.359	.040
	Within Groups	5.955	78	.076		
	Total	6.288	79			
Duration	Between Groups	16164.541	1	16164.541	.219	.641
	Within Groups	5749715.647	78	73714.303		
	Total	5765880.188	79			
FirstActDet	Between Groups	78739.028	1	78739.028	25.048	.000
	Within Groups	245196.459	78	3143.544		
	Total	323935.488	79			
LastActDet	Between Groups	105075.415	1	105075.415	1.457	.231
	Within Groups	5623616.573	78	72097.648		
	Total	5728691.988	79			
ProcDur	Between Groups	20379.447	1	20379.447	557.264	.000
	Within Groups	2852.503	78	36.571		
	Total	23231.950	79			
FixRel	Between Groups	.018	1	.018	.001	.975
	Within Groups	1447.045	78	18.552		
	Total	1447.063	79			
FixIrrel	Between Groups	38618.010	1	38618.010	1.512	.223
	Within Groups	1992793.933	78	25548.640		
	Total	2031411.943	79			
AvDurRelFix	Between Groups	13113.881	1	13113.881	2.827	.097
	Within Groups	361844.064	78	4639.026		
	Total	374957.946	79			
AvDurIrrelFix	Between Groups	134519.567	1	134519.567	3.905	.052
	Within Groups	2686942.834	78	34447.985		
	Total	2821462.400	79			
TotSac	Between Groups	747.396	1	747.396	7.339	.008
	Within Groups	7943.354	78	101.838		
	Total	8690.750	79			
Sac2Key	Between Groups	590.259	1	590.259	4.040	.048
	Within Groups	11395.291	78	146.093		
	Total	11985.550	79			
AvAttention	Between Groups	.014	1	.014	.329	.568
	Within Groups	3.244	78	.042		
	Total	3.258	79			
AvMentWL	Between Groups	.078	1	.078	1.604	.209
	Within Groups	3.794	78	.049		
	Total	3.872	79			
AvFam	Between Groups	.089	1	.089	1.760	.189
	Within Groups	3.939	78	.050		
	Total	4.028	79			
AvSCL	Between Groups	668.860	1	668.860	.033	.857
	Within Groups	1586521.890	78	20340.024		

	Total	1587190.750	79			
HRVar_RMSSD	Between Groups	13560.614	1	13560.614	54.216	.000
	Within Groups	19509.552	78	250.122		
	Total	33070.166	79			
HRVar_NN50	Between Groups	4984.703	1	4984.703	15.957	.000
	Within Groups	24365.204	78	312.374		
	Total	29349.907	79			
NASA_MD	Between Groups	407.989	1	407.989	2.408	.125
	Within Groups	13216.699	78	169.445		
	Total	13624.688	79			
NASA_PD	Between Groups	4651.843	1	4651.843	19.284	.000
	Within Groups	18815.345	78	241.222		
	Total	23467.188	79			
NASA_TD	Between Groups	7583.459	1	7583.459	14.237	.000
	Within Groups	41546.228	78	532.644		
	Total	49129.688	79			
NASA_Performance	Between Groups	3744.504	1	3744.504	6.306	.014
	Within Groups	46315.184	78	593.784		
	Total	50059.688	79			
NASA_Effort	Between Groups	2582.286	1	2582.286	15.932	.000
	Within Groups	12642.714	78	162.086		
	Total	15225.000	79			
NASA_Frustration	Between Groups	4443.185	1	4443.185	11.935	.001
	Within Groups	29036.815	78	372.267		
	Total	33480.000	79			
NASA_Score	Between Groups	621.957	1	621.957	3.683	.059
	Within Groups	13171.615	78	168.867		
	Total	13793.572	79			

# Task \* Risk - use case templates, GenderMag risk facet, reviewing task

Dependent Variable	Task	Risk	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Review	Abby	.607 <sup>a</sup>	.050	.508	.707
		Tim	.362 <sup>a</sup>	.046	.269	.455
	ALCO Review	Abby	.937 <sup>a</sup>	.063	.810	1.064
		Tim	.784 <sup>a</sup>	.048	.686	.881
Recall	ARNE Review	Abby	.593 <sup>a</sup>	.057	.478	.708
		Tim	.506 <sup>a</sup>	.053	.399	.613
	ALCO Review	Abby	.872 <sup>a</sup>	.073	.726	1.018
		Tim	.853 <sup>a</sup>	.056	.741	.965
FMeasure	ARNE Review	Abby	.599 <sup>a</sup>	.053	.493	.705
		Tim	.412 <sup>a</sup>	.049	.313	.511
	ALCO Review	Abby	.893 <sup>a</sup>	.067	.758	1.029
		Tim	.819 <sup>a</sup>	.052	.716	.923
Duration	ARNE Review	Abby	781.202 <sup>a</sup>	30.429	720.142	842.263
		Tim	802.781 <sup>a</sup>	28.345	745.903	859.659
	ALCO Review	Abby	275.480 <sup>a</sup>	38.733	197.757	353.203
		Tim	309.118 <sup>a</sup>	29.631	249.659	368.577
FirstActDet	ARNE Review	Abby	166.714 <sup>a</sup>	11.917	142.802	190.627
		Tim	117.750 <sup>a</sup>	11.101	95.475	140.025
	ALCO Review	Abby	182.560 <sup>a</sup>	15.169	152.122	212.998
		Tim	145.819 <sup>a</sup>	11.604	122.534	169.105
LastActDet	ARNE Review	Abby	731.655 <sup>a</sup>	28.515	674.435	788.874
		Tim	801.938 <sup>a</sup>	26.562	748.637	855.238
	ALCO Review	Abby	236.260 <sup>a</sup>	36.297	163.425	309.095
		Tim	302.078 <sup>a</sup>	27.767	246.359	357.797
ProcDur	ARNE Review	Abby	39.940 <sup>a</sup>	1.740	36.448	43.433
		Tim	7.281 <sup>a</sup>	1.621	4.028	10.535
	ALCO Review	Abby	39.220 <sup>a</sup>	2.215	34.774	43.666
		Tim	7.040 <sup>a</sup>	1.695	3.639	10.441
FixRel	ARNE Review	Abby	10.150 <sup>a</sup>	.192	9.764	10.536
		Tim	10.288 <sup>a</sup>	.179	9.929	10.648
	ALCO Review	Abby	1.846 <sup>a</sup>	.245	1.354	2.337
		Tim	1.975 <sup>a</sup>	.187	1.599	2.351
FixIrrel	ARNE Review	Abby	299.170 <sup>a</sup>	20.635	257.763	340.578
		Tim	261.527 <sup>a</sup>	19.222	222.956	300.098
	ALCO Review	Abby	4.103 <sup>a</sup>	26.266	-48.604	56.810
		Tim	2.392 <sup>a</sup>	20.094	-37.929	42.713
AvDurRelFix	ARNE Review	Abby	103.361 <sup>a</sup>	9.394	84.510	122.212
		Tim	94.371 <sup>a</sup>	8.751	76.811	111.930
	ALCO Review	Abby	197.520 <sup>a</sup>	11.958	173.525	221.515
		Tim	179.628 <sup>a</sup>	9.148	161.272	197.985
AvDurlrelFix	ARNE Review	Abby	250.618 <sup>a</sup>	26.838	196.763	304.473
		Tim		25.000	162.652	262.985

			212.819 <sup>a</sup>		
TotSac	ALCO Review	Abby	485.560 <sup>a</sup>	34.162	417.008
		Tim	431.884 <sup>a</sup>	26.135	379.442
TotSac	ARNE Review	Abby	87.952 <sup>a</sup>	2.412	83.112
		Tim	91.219 <sup>a</sup>	2.247	86.710
TotSac	ALCO Review	Abby	91.820 <sup>a</sup>	3.071	85.658
		Tim	97.550 <sup>a</sup>	2.349	92.836
Sac2Key	ARNE Review	Abby	7.690 <sup>a</sup>	1.962	3.753
		Tim	13.531 <sup>a</sup>	1.828	9.864
Sac2Key	ALCO Review	Abby	28.120 <sup>a</sup>	2.497	23.109
		Tim	30.813 <sup>a</sup>	1.911	26.979
AvAttention	ARNE Review	Abby	.761 <sup>a</sup>	.037	.687
		Tim	.741 <sup>a</sup>	.034	.671
AvAttention	ALCO Review	Abby	.596 <sup>a</sup>	.047	.502
		Tim	.604 <sup>a</sup>	.036	.532
AvMentWL	ARNE Review	Abby	.829 <sup>a</sup>	.044	.740
		Tim	.878 <sup>a</sup>	.041	.795
AvMentWL	ALCO Review	Abby	.528 <sup>a</sup>	.056	.415
		Tim	.663 <sup>a</sup>	.043	.576
AvFam	ARNE Review	Abby	.629 <sup>a</sup>	.046	.537
		Tim	.678 <sup>a</sup>	.042	.593
AvFam	ALCO Review	Abby	.328 <sup>a</sup>	.058	.212
		Tim	.471 <sup>a</sup>	.044	.382
AvSCL	ARNE Review	Abby	488.060 <sup>a</sup>	38.733	410.336
		Tim	522.062 <sup>a</sup>	36.080	449.663
AvSCL	ALCO Review	Abby	523.680 <sup>a</sup>	49.303	424.747
		Tim	567.849 <sup>a</sup>	37.717	492.164
HRVar_RMSSD	ARNE Review	Abby	16.374 <sup>a</sup>	4.319	7.708
		Tim	50.696 <sup>a</sup>	4.023	42.623
HRVar_RMSSD	ALCO Review	Abby	23.050 <sup>a</sup>	5.497	12.019
		Tim	48.788 <sup>a</sup>	4.205	40.349
HRVar_NN50	ARNE Review	Abby	10.833 <sup>a</sup>	4.721	1.359
		Tim	35.316 <sup>a</sup>	4.398	26.491
HRVar_NN50	ALCO Review	Abby	20.609 <sup>a</sup>	6.010	8.549
		Tim	31.789 <sup>a</sup>	4.597	22.564
NASA_MD	ARNE Review	Abby	69.524 <sup>a</sup>	2.927	63.650
		Tim	69.844 <sup>a</sup>	2.726	64.373
NASA_MD	ALCO Review	Abby	49.600 <sup>a</sup>	3.726	42.124
		Tim	56.576 <sup>a</sup>	2.850	50.857
NASA_PD	ARNE Review	Abby	25.000 <sup>a</sup>	3.535	17.906
		Tim	14.531 <sup>a</sup>	3.293	7.923
NASA_PD	ALCO Review	Abby	21.600 <sup>a</sup>	4.500	12.570
		Tim	8.597 <sup>a</sup>	3.443	1.689
NASA_TD	ARNE Review	Abby	65.119 <sup>a</sup>	4.507	56.075
		Tim	42.813 <sup>a</sup>	4.198	34.388
NASA_TD	ALCO	Abby	24.400 <sup>a</sup>	5.737	12.888
					35.912

	Review	Tim	17.354 <sup>a</sup>	4.389	8.547	26.161
NASA_Performance	ARNE Review	Abby	55.833 <sup>a</sup>	6.983	41.822	69.845
		Tim	33.281 <sup>a</sup>	6.504	20.229	46.333
	ALCO Review	Abby	45.400 <sup>a</sup>	8.888	27.565	63.235
		Tim	29.063 <sup>a</sup>	6.800	15.418	42.707
NASA_Effort	ARNE Review	Abby	50.298 <sup>a</sup>	3.800	42.673	57.922
		Tim	59.219 <sup>a</sup>	3.539	52.117	66.321
	ALCO Review	Abby	43.900 <sup>a</sup>	4.836	34.195	53.605
		Tim	55.542 <sup>a</sup>	3.700	48.117	62.966
NASA_Frustration	ARNE Review	Abby	42.321 <sup>a</sup>	5.605	31.073	53.569
		Tim	24.062 <sup>a</sup>	5.221	13.585	34.540
	ALCO Review	Abby	32.100 <sup>a</sup>	7.135	17.783	46.417
		Tim	23.042 <sup>a</sup>	5.458	12.089	33.995
NASA_Score	ARNE Review	Abby	51.349 <sup>a</sup>	3.680	43.964	58.734
		Tim	40.625 <sup>a</sup>	3.428	33.746	47.504
	ALCO Review	Abby	40.796 <sup>a</sup>	4.685	31.396	50.196
		Tim	38.626 <sup>a</sup>	3.584	31.435	45.817

a. Based on modified population marginal mean.

**Robust Tests of Equality of Means - use case templates,  
GenderMag learning style facet, reviewing task**

		Statistic <sup>a</sup>	df1	df2	Sig.
Precision	Welch	.114	1	49.772	.737
Recall	Welch	.205	1	61.951	.653
FMeasure	Welch	.093	1	53.633	.762
Duration	Welch	1.782	1	48.707	.188
FirstActDet	Welch	.458	1	60.630	.501
LastActDet	Welch	2.224	1	48.635	.142
ProcDur	Welch	2.899	1	48.970	.095
FixRel	Welch	2.814	1	52.117	.099
FixIrrel	Welch	2.382	1	49.685	.129
AvDurRelFix	Welch	1.624	1	58.831	.208
AvDurIrrelFix	Welch	1.623	1	58.104	.208
TotSac	Welch	5.596	1	49.424	.022
Sac2Key	Welch	3.642	1	59.514	.061
AvAttention	Welch	7.323	1	70.225	.009
AvMentWL	Welch	1.426	1	65.059	.237
AvFam	Welch	1.214	1	66.427	.274
AvSCL	Welch	1.079	1	58.456	.303
HRVar_RMSSD	Welch	2.406	1	46.878	.128
HRVar_NN50	Welch	2.289	1	53.557	.136
NASA_MD	Welch	1.599	1	57.476	.211
NASA_PD	Welch	.430	1	56.896	.515
NASA_TD	Welch	.381	1	60.123	.539
NASA_Performance	Welch	.748	1	59.323	.390
NASA_Effort	Welch	.237	1	52.334	.628
NASA_Frustration	Welch	.726	1	54.040	.398
NASA_Score	Welch	.002	1	60.499	.967

a. Asymptotically F distributed.

**ANOVA - use case templates, GenderMag learning style facet, reviewing task**

		Sum of Squares	df	Mean Square	F	Sig.
Precision	Between Groups	.010	1	.010	.119	.731
	Within Groups	6.497	78	.083		
	Total	6.507	79			
Recall	Between Groups	.014	1	.014	.181	.672
	Within Groups	5.915	78	.076		
	Total	5.929	79			
FMeasure	Between Groups	.007	1	.007	.091	.763
	Within Groups	6.280	78	.081		
	Total	6.288	79			
Duration	Between Groups	135886.842	1	135886.842	1.883	.174
	Within Groups	5629993.346	78	72179.402		
	Total	5765880.188	79			
FirstActDet	Between Groups	1698.177	1	1698.177	.411	.523
	Within Groups	322237.311	78	4131.248		
	Total	323935.487	79			
LastActDet	Between Groups	167712.308	1	167712.308	2.352	.129
	Within Groups	5560979.680	78	71294.611		
	Total	5728691.987	79			
ProcDur	Between Groups	874.564	1	874.564	3.051	.085
	Within Groups	22357.386	78	286.633		
	Total	23231.950	79			
FixRel	Between Groups	50.611	1	50.611	2.827	.097
	Within Groups	1396.452	78	17.903		
	Total	1447.063	79			
FixIrrel	Between Groups	62573.758	1	62573.758	2.479	.119
	Within Groups	1968838.185	78	25241.515		
	Total	2031411.943	79			
AvDurRelFix	Between Groups	7037.784	1	7037.784	1.492	.226
	Within Groups	367920.161	78	4716.925		
	Total	374957.946	79			
AvDurIrrelFix	Between Groups	53397.295	1	53397.295	1.505	.224
	Within Groups	2768065.105	78	35488.014		
	Total	2821462.400	79			
TotSac	Between Groups	606.122	1	606.122	5.848	.018
	Within Groups	8084.628	78	103.649		
	Total	8690.750	79			
Sac2Key	Between Groups	488.997	1	488.997	3.318	.072
	Within Groups	11496.553	78	147.392		
	Total	11985.550	79			
AvAttention	Between Groups	.227	1	.227	5.841	.018
	Within Groups	3.031	78	.039		
	Total	3.258	79			
AvMentWL	Between Groups	.059	1	.059	1.213	.274
	Within Groups	3.813	78	.049		
	Total	3.872	79			
AvFam	Between Groups	.052	1	.052	1.016	.317
	Within Groups	3.976	78	.051		
	Total	4.028	79			
AvSCL	Between Groups	20016.919	1	20016.919	.996	.321
	Within Groups	1567173.831	78	20091.972		

	Total	1587190.750	79			
HRVar_RMSSD	Between Groups	1073.684	1	1073.684	2.617	.110
	Within Groups	31996.482	78	410.211		
	Total	33070.166	79			
HRVar_NN50	Between Groups	824.010	1	824.010	2.253	.137
	Within Groups	28525.897	78	365.717		
	Total	29349.907	79			
NASA_MD	Between Groups	256.134	1	256.134	1.494	.225
	Within Groups	13368.553	78	171.392		
	Total	13624.688	79			
NASA_PD	Between Groups	121.206	1	121.206	.405	.526
	Within Groups	23345.982	78	299.307		
	Total	23467.188	79			
NASA_TD	Between Groups	216.200	1	216.200	.345	.559
	Within Groups	48913.487	78	627.096		
	Total	49129.688	79			
NASA_Performance	Between Groups	434.775	1	434.775	.683	.411
	Within Groups	49624.913	78	636.217		
	Total	50059.688	79			
NASA_Effort	Between Groups	46.209	1	46.209	.237	.627
	Within Groups	15178.791	78	194.600		
	Total	15225.000	79			
NASA_Frustration	Between Groups	302.013	1	302.013	.710	.402
	Within Groups	33177.987	78	425.359		
	Total	33480.000	79			
NASA_Score	Between Groups	.279	1	.279	.002	.968
	Within Groups	13793.292	78	176.837		
	Total	13793.572	79			

# Task \* LearningStyle - use case templates, GenderMag learning style facet, reviewing task

Dependent Variable	Task	LearningStyle	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Precision	ARNE Review	Abby	.470 <sup>a</sup>	.052	.366	.574
		Tim	.484 <sup>a</sup>	.042	.399	.568
	ALCO Review	Abby	.949 <sup>a</sup>	.069	.810	1.088
		Tim	.777 <sup>a</sup>	.045	.686	.867
Recall	ARNE Review	Abby	.555 <sup>a</sup>	.060	.435	.675
		Tim	.537 <sup>a</sup>	.048	.440	.634
	ALCO Review	Abby	.928 <sup>a</sup>	.080	.768	1.088
		Tim	.818 <sup>a</sup>	.052	.714	.923
FMeasure	ARNE Review	Abby	.500 <sup>a</sup>	.055	.389	.611
		Tim	.499 <sup>a</sup>	.045	.409	.589
	ALCO Review	Abby	.929 <sup>a</sup>	.074	.782	1.077
		Tim	.797 <sup>a</sup>	.048	.700	.893
Duration	ARNE Review	Abby	783.719 <sup>a</sup>	31.753	720.003	847.435
		Tim	802.988 <sup>a</sup>	25.660	751.498	854.479
	ALCO Review	Abby	264.000 <sup>a</sup>	42.316	179.087	348.913
		Tim	316.293 <sup>a</sup>	27.651	260.807	371.779
FirstActDet	ARNE Review	Abby	130.823 <sup>a</sup>	12.435	105.870	155.776
		Tim	151.774 <sup>a</sup>	10.049	131.609	171.939
	ALCO Review	Abby	163.200 <sup>a</sup>	16.572	129.946	196.454
		Tim	157.919 <sup>a</sup>	10.829	136.190	179.649
LastActDet	ARNE Review	Abby	767.875 <sup>a</sup>	29.755	708.166	827.584
		Tim	770.583 <sup>a</sup>	24.046	722.332	818.835
	ALCO Review	Abby	245.480 <sup>a</sup>	39.654	165.908	325.052
		Tim	296.315 <sup>a</sup>	25.912	244.320	348.311
ProcDur	ARNE Review	Abby	19.469 <sup>a</sup>	1.816	15.824	23.113
		Tim	26.012 <sup>a</sup>	1.468	23.067	28.957
	ALCO Review	Abby	18.520 <sup>a</sup>	2.420	13.663	23.377
		Tim	19.978 <sup>a</sup>	1.582	16.804	23.151
FixRel	ARNE Review	Abby	10.308 <sup>a</sup>	.201	9.905	10.711
		Tim	10.127 <sup>a</sup>	.162	9.802	10.453
	ALCO Review	Abby	1.666 <sup>a</sup>	.267	1.129	2.203
		Tim	2.087 <sup>a</sup>	.175	1.737	2.438
FixIrrel	ARNE Review	Abby	284.566 <sup>a</sup>	21.533	241.358	327.774
		Tim	272.840 <sup>a</sup>	17.401	237.923	307.758
	ALCO Review	Abby	4.134 <sup>a</sup>	28.696	-53.448	61.716
		Tim	2.373 <sup>a</sup>	18.751	-35.254	39.999
AvDurRelFix	ARNE Review	Abby	100.675 <sup>a</sup>	9.803	81.004	120.346
		Tim	96.156 <sup>a</sup>	7.922	80.259	112.052
	ALCO Review	Abby	179.180 <sup>a</sup>	13.064	152.965	205.395
		Tim	191.091 <sup>a</sup>	8.537	173.961	208.221
AvDurlrelFix	ARNE Review	Abby	235.716 <sup>a</sup>	28.006	179.518	291.914
		Tim		22.632	179.035	269.865

		224.450 <sup>a</sup>			
TotSac	ALCO Review	Abby	430.540 <sup>a</sup>	37.322	355.647
		Tim	466.272 <sup>a</sup>	24.388	417.334
TotSac	ARNE Review	Abby	87.729 <sup>a</sup>	2.517	82.678
		Tim	91.940 <sup>a</sup>	2.034	87.858
TotSac	ALCO Review	Abby	91.980 <sup>a</sup>	3.355	85.248
		Tim	97.450 <sup>a</sup>	2.192	93.051
Sac2Key	ARNE Review	Abby	11.333 <sup>a</sup>	2.047	7.225
		Tim	10.202 <sup>a</sup>	1.654	6.882
Sac2Key	ALCO Review	Abby	27.500 <sup>a</sup>	2.728	22.025
		Tim	31.200 <sup>a</sup>	1.783	27.622
AvAttention	ARNE Review	Abby	.736 <sup>a</sup>	.039	.659
		Tim	.765 <sup>a</sup>	.031	.703
AvAttention	ALCO Review	Abby	.710 <sup>a</sup>	.051	.607
		Tim	.533 <sup>a</sup>	.034	.465
AvMentWL	ARNE Review	Abby	.870 <sup>a</sup>	.046	.777
		Tim	.838 <sup>a</sup>	.037	.763
AvMentWL	ALCO Review	Abby	.600 <sup>a</sup>	.061	.477
		Tim	.618 <sup>a</sup>	.040	.537
AvFam	ARNE Review	Abby	.670 <sup>a</sup>	.048	.574
		Tim	.638 <sup>a</sup>	.038	.561
AvFam	ALCO Review	Abby	.400 <sup>a</sup>	.063	.273
		Tim	.426 <sup>a</sup>	.041	.343
AvSCL	ARNE Review	Abby	522.219 <sup>a</sup>	40.418	441.115
		Tim	487.881 <sup>a</sup>	32.662	422.339
AvSCL	ALCO Review	Abby	483.080 <sup>a</sup>	53.863	374.996
		Tim	593.224 <sup>a</sup>	35.197	522.596
HRVar_RMSSD	ARNE Review	Abby	40.719 <sup>a</sup>	4.506	31.676
		Tim	27.776 <sup>a</sup>	3.642	20.468
HRVar_RMSSD	ALCO Review	Abby	36.985 <sup>a</sup>	6.006	24.934
		Tim	40.079 <sup>a</sup>	3.924	32.204
HRVar_NN50	ARNE Review	Abby	27.583 <sup>a</sup>	4.927	17.697
		Tim	19.671 <sup>a</sup>	3.981	11.682
HRVar_NN50	ALCO Review	Abby	27.335 <sup>a</sup>	6.565	14.160
		Tim	27.585 <sup>a</sup>	4.290	18.977
NASA_MD	ARNE Review	Abby	70.417 <sup>a</sup>	3.054	64.288
		Tim	68.869 <sup>a</sup>	2.468	63.916
NASA_MD	ALCO Review	Abby	52.300 <sup>a</sup>	4.070	44.132
		Tim	54.889 <sup>a</sup>	2.660	49.552
NASA_PD	ARNE Review	Abby	19.687 <sup>a</sup>	3.689	12.285
		Tim	19.107 <sup>a</sup>	2.981	13.125
NASA_PD	ALCO Review	Abby	10.200 <sup>a</sup>	4.916	.335
		Tim	15.722 <sup>a</sup>	3.212	9.276
NASA_TD	ARNE Review	Abby	52.083 <sup>a</sup>	4.703	42.646
		Tim	54.524 <sup>a</sup>	3.801	46.897
NASA_TD	ALCO	Abby	9.100 <sup>a</sup>	6.268	-3.477
					21.677

	Review	Tim	26.917 <sup>a</sup>	4.096	18.698	35.135
NASA_Performance	ARNE Review	Abby	40.052 <sup>a</sup>	7.286	25.431	54.673
		Tim	48.095 <sup>a</sup>	5.888	36.280	59.911
	ALCO Review	Abby	30.500 <sup>a</sup>	9.710	11.015	49.985
		Tim	38.375 <sup>a</sup>	6.345	25.643	51.107
NASA_Effort	ARNE Review	Abby	55.625 <sup>a</sup>	3.965	47.669	63.581
		Tim	54.405 <sup>a</sup>	3.204	47.975	60.834
	ALCO Review	Abby	48.700 <sup>a</sup>	5.284	38.097	59.303
		Tim	52.542 <sup>a</sup>	3.453	45.613	59.470
NASA_Frustration	ARNE Review	Abby	31.979 <sup>a</sup>	5.849	20.242	43.716
		Tim	33.274 <sup>a</sup>	4.727	23.789	42.759
	ALCO Review	Abby	19.200 <sup>a</sup>	7.795	3.558	34.842
		Tim	31.104 <sup>a</sup>	5.094	20.883	41.325
NASA_Score	ARNE Review	Abby	44.974 <sup>a</sup>	3.840	37.268	52.680
		Tim	46.379 <sup>a</sup>	3.103	40.151	52.606
	ALCO Review	Abby	35.722 <sup>a</sup>	5.118	25.452	45.992
		Tim	41.797 <sup>a</sup>	3.344	35.086	48.508

a. Based on modified population marginal mean.