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

		Statistic ^a	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			
AvDurIrrelFix	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	1000	.501
	Total	2.627	78	.001		
AvFam	Between Groups	.006	1	.006	.217	.642
diii	Within Groups	1.972	<u>'</u> 77	.026	.211	.0-12
	Total	1.978	78	.020		
AvSCL	Between Groups	4424.444	1	4424.444	.209	.649
/ WOOL	Within Groups	1627538.290	77	21136.861	.203	.048

	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

					95% Cor Inte	
Dependent Variable	Task	Motivation	Mean	Std. Error	Lower Bound	Upper Bound
Precision	ARNE	Abby	.735 ^a	.061	.614	.85
	Modify	Tim	.730 ^a	.047	.635	.82
	ALCO	Abby	.866 ^a	.056	.753	.979
	Modify	Tim	.860 ^a	.057	.746	.975
Recall	ARNE	Abby	.704 ^a	.069	.566	.842
	Modify	Tim	.717 ^a	.054	.609	.824
	ALCO	Abby	.846 ^a	.064	.718	.974
	Modify	Tim	.911 ^a	.065	.781	1.042
FMeasure	ARNE	Abby	.714 ^a	.064	.586	.84
	Modify	Tim	.720 ^a	.050	.620	.819
	ALCO	Abby	.852 ^a	.059	.733	.970
	Modify	Tim	.881 ^a	.060	.761	1.002
Duration	ARNE	Abby	576.810 ^a	34.937	506.637	646.983
	Modify	Tim	590.456 ^a	27.257	535.709	645.202
	ALCO	Abby	519.018 ^a	32.486	453.767	584.269
	Modify	Tim	491.524 ^a	33.002	425.237	557.81
FirstActDet	ARNE	Abby	121.833 ^a	14.553	92.603	151.06
	Modify	Tim	132.641 ^a	11.354	109.836	155.44
	ALCO Modify	Abby	52.445 ^a	13.532	25.266	79.62
		Tim	100.286 ^a	13.747	72.674	127.897
LastActDet	ARNE Modify	Abby	549.464 ^a	35.029	479.107	619.82
		Tim	571.546 ^a	27.328	516.656	626.437
	ALCO	Abby	494.075 ^a	32.572	428.653	559.497
	Modify	Tim	472.000 ^a	33.089	405.539	538.46
ProcDur	ARNE	Abby	27.345 ^a	1.880	23.568	31.122
	Modify	Tim	18.909 ^a	1.467	15.963	21.856
	ALCO	Abby	24.943 ^a	1.749	21.431	28.455
	Modify	Tim	19.524 ^a	1.776	15.956	23.092
FixRel	ARNE	Abby	10.160 ^a	.231	9.697	10.623
	Modify	Tim	10.294 ^a	.180	9.933	10.656
	ALCO	Abby	4.018 ^a	.214	3.588	4.449
	Modify	Tim	4.155 ^a	.218	3.717	4.592
FixIrrel	ARNE	Abby	250.417 ^a	22.187	205.854	294.98
	Modify	Tim	308.308 ^a	17.309	273.541	343.075
	ALCO	Abby	5.520 ^a	20.631	-35.918	46.957
	Modify	Tim	3.043 ^a	20.958	-39.052	45.139
AvDurRelFix	ARNE	Abby	88.407 ^a	11.708	64.891	111.923
	Modify	Tim	109.202 ^a	9.134	90.855	127.548
	ALCO	Abby	146.857 ^a	10.887	124.990	168.724
	Modify	Tim	125.292 ^a	11.060	103.078	147.506
AvDurIrrelFix	ARNE	Abby	201.693 ^a	33.692	134.021	269.364
	Modify	Tim		26.285	207.014	312.604

			259.809 ^a			
	ALCO	Abby	436.570 ^a	31.328	373.645	499.496
	Modify	Tim	371.875 ^a	31.826	307.951	435.799
TotSac	ARNE	Abby	83.167 ^a	3.340	76.458	89.875
	Modify	Tim	81.204 ^a	2.606	75.970	86.437
	ALCO	Abby	87.467 ^a	3.106	81.230	93.705
	Modify	Tim	89.619 ^a	3.155	83.282	95.956
Sac2Key	ARNE	Abby	9.357 ^a	2.760	3.813	14.901
	Modify	Tim	13.193 ^a	2.153	8.867	17.518
	ALCO	Abby	15.323 ^a	2.567	10.168	20.479
	Modify	Tim	19.429 ^a	2.607	14.192	24.666
AvAttention	ARNE	Abby	.690 ^a	.046	.598	.783
	Modify	Tim	.620 ^a	.036	.547	.692
	ALCO	Abby	.664 ^a	.043	.578	.750
	Modify	Tim	.700 ^a	.043	.613	.787
AvMentWL	ARNE	Abby	.696 ^a	.055	.585	.807
	Modify	Tim	.580 ^a	.043	.494	.667
	ALCO	Abby	.548 ^a	.051	.445	.651
	Modify	Tim	.667 ^a	.052	.562	.772
AvFam	ARNE	Abby	.782 ^a	.046	.690	.874
	Modify	Tim	.680 ^a	.036	.608	.752
	ALCO Modify	Abby	.566 ^a	.043	.481	.652
	Modify	Tim	.657 ^a	.043	.570	.744
AvSCL	ARNE Modify	Abby	488.083 ^a	39.016	409.718	566.449
		Tim	530.154 ^a	30.439	469.015	591.292
	ALCO Modify	Abby	537.706 ^a	36.279	464.837	610.575
	Widdily	Tim	480.452 ^a	36.855	406.427	554.478
HRVar_RMSSD	ARNE Modify	Abby	27.058 ^a	6.260	14.485	39.631
		Tim	36.605 ^a	4.884	26.796	46.414
	ALCO Modify	Abby	35.123 ^a	5.821	23.432	46.814
	····ouiiy	Tim	26.141 ^a	5.913	14.264	38.018
HRVar_NN50	ARNE Modify	Abby	12.721 ^a	6.580	495	25.937
		Tim	32.337 ^a	5.133	22.026	42.647
	ALCO Modify	Abby	29.410 ^a	6.118	17.121	41.699
		Tim	24.448 ^a	6.215	11.963	36.932
NASA_MD	ARNE Modify	Abby	42.500 ^a	2.175	38.131	46.869
		Tim	47.815 ^a	1.697	44.407	51.223
	ALCO Modify	Abby	40.473 ^a	2.022	36.411	44.536
		Tim	49.405 ^a	2.055	45.278	53.531
NASA_PD	ARNE Modify	Abby	21.071 ^a	3.665	13.709	28.434
		Tim	15.130 ^a	2.860	9.386	20.873
	ALCO Modify	Abby	13.587 ^a	3.408	6.741	20.433
		Tim	10.476 ^a	3.462	3.522	17.431
NASA_TD	ARNE Modify	Abby	35.893 ^a	3.061	29.745	42.040
		Tim	15.731 ^a	2.388	10.935	20.528
	ALCO	Abby	16.807 ^a	2.846	11.090	22.523

	Modify	Tim	18.810 ^a	2.891	13.002	24.617
NASA_Performance	ARNE	Abby	60.833 ^a	6.585	47.607	74.059
	Modify	Tim	49.704 ^a	5.137	39.385	60.022
	ALCO	Abby	63.345 ^a	6.123	51.046	75.643
	Modify	Tim	51.429 ^a	6.220	38.935	63.922
NASA_Effort	ARNE	Abby	39.881 ^a	3.444	32.963	46.799
	Modify	Tim	45.167 ^a	2.687	39.770	50.564
	ALCO Modify	Abby	38.580 ^a	3.203	32.147	45.012
		Tim	46.071 ^a	3.253	39.537	52.606
NASA_Frustration	ARNE	Abby	35.357 ^a	5.730	23.847	46.867
	Modify	Tim	16.722 ^a	4.471	7.743	25.702
	ALCO	Abby	25.492 ^a	5.328	14.790	36.195
	Modify	Tim	20.357 ^a	5.413	9.485	31.230
NASA_Score	ARNE	Abby	39.256 ^a	2.699	33.834	44.678
	Modify	Tim	31.711 ^a	2.106	27.482	35.941
	ALCO	Abby	33.047 ^a	2.510	28.006	38.089
	Modify	Tim	32.758 ^a	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 ^a	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	dietributo	4			

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
1100541	Within Groups	19661.989	 77	255.351	10.002	.002
	Total	22216.000	78	200.001		
FixRel	Between Groups	56.952	1	56.952	5.808	.018
	Within Groups	755.024	<u>.</u> 77	9.806	0.000	.010
	Total	811.976	78	3.000		
FixIrrel	Between Groups	11233.982	1	11233.982	.429	.514
TIMITO	Within Groups	2016725.857	<u>'</u> 77	26191.245	.420	.014
	Total	2027959.839	78	20101.240		
AvDurRelFix	Between Groups	27435.050	1	27435.050	12.372	.001
Avbuillellix	Within Groups	170744.677	77	2217.463	12.572	.001
	Total	198179.727	78	2217.403		
AvDurlrrelFix	Between Groups	289697.241	1	289697.241	12.470	.001
Avbuilleirix	Within Groups	1788847.788	77	23231.789	12.470	.001
	Total	2078545.028	78	23231.709		
TotSac	Between Groups	261.242	1	261.242	2.214	.141
TOLGAC			77		2.214	. 14 1
	Within Groups Total	9084.302	78	117.978		
001/		9345.544		274.445	4.004	025
Sac2Key	Between Groups	374.415	1	374.415	4.631	.035
	Within Groups	6224.800	77	80.842		
A A11 1:	Total	6599.215	78	4.050	47.005	
AvAttention	Between Groups	1.258	1	1.258	47.665	.000
	Within Groups	2.032	77	.026		
	Total	3.290	78		0.05:	
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

		mod	lification t	ask		
					95% Co	
Dependent Variable	Task	InformationProcessing	Mean	Std. Error	Lower Bound	Upper Bound
Precision	ARNE	Abby	.689 ^a	.053	.583	.796
	Modify	Tim	.787 ^a	.052	.683	.892
	ALCO	Abby	.963 ^a	.063	.838	1.089
	Modify	Tim	.777 ^a	.052	.672	.882
Recall	ARNE	Abby	.647 ^a	.060	.526	.767
	Modify	Tim	.794 ^a	.059	.675	.912
	ALCO	Abby	.950 ^a	.071	.808	1.092
	Modify	Tim	.822 ^a	.059	.703	.941
FMeasure	ARNE	Abby	.664 ^a	.056	.553	.776
	Modify	Tim	.785 ^a	.055	.676	.895
	ALCO	Abby	.952 ^a	.066	.821	1.084
	Modify	Tim	.795 ^a	.055	.685	.905
Duration	ARNE	Abby	544.122 ^a	30.595	482.671	605.574
	Modify	Tim	636.381 ^a	30.023	576.079	696.683
	ALCO	Abby	480.667 ^a	36.104	408.149	553.185
	Modify	Tim	524.397 ^a	30.114	463.912	584.881
FirstActDet	ARNE	Abby	125.678 ^a	12.744	100.081	151.275
	Modify	Tim	130.786 ^a	12.506	105.667	155.904
ALCO Modify	ALCO	Abby	62.500 ^a	15.039	32.293	92.707
	Modify	Tim	91.668 ^a	12.544	66.473	116.862
LastActDet	ARNE	Abby	525.315 ^a	30.675	463.702	586.928
	Modify	Tim	608.905 ^a	30.101	548.444	669.365
	ALCO	Abby	460.875 ^a	36.199	388.167	533.583
	Modify	Tim	500.457 ^a	30.193	439.814	561.101
ProcDur	ARNE	Abby	18.807 ^a	1.647	15.500	22.115
	Modify	Tim	27.476 ^a	1.616	24.231	30.722
	ALCO	Abby	19.792 ^a	1.943	15.889	23.695
	Modify	Tim	23.939 ^a	1.621	20.684	27.195
FixRel	ARNE	Abby	10.422 ^a	.202	10.017	10.828
	Modify	Tim	9.996 ^a	.198	9.598	10.394
	ALCO	Abby	4.423 ^a	.238	3.945	4.902
	Modify	Tim	3.808 ^a	.199	3.408	4.207
FixIrrel	ARNE	Abby	245.058 ^a	19.429	206.033	284.083
	Modify	Tim	331.739 ^a	19.066	293.443	370.034
	ALCO	Abby	7.004 ^a	22.928	-39.049	53.057
	Modify	Tim	1.771 ^a	19.124	-36.640	40.182
AvDurRelFix	ARNE	Abby	86.489 ^a	10.253	65.895	107.082
	Modify	Tim	117.610 ^a	10.061	97.401	137.818
	ALCO	Abby	112.479 ^a	12.099	88.177	136.781
	Modify	Tim	154.758 ^a	10.092	134.489	175.028
AvDurlrrelFix	ARNE	Abby	196.781 ^a	29.504	137.520	256.042
			100.701	-		

Tim	403.370 518.603 87.764 88.051 95.558 94.409 15.103 17.907 20.604 24.592 .830 .603 .837 .713
Tim 460.275a 29.040 401.946 TotSac ARNE Modify Tim 82.286a 2.870 76.521 ALCO Modify Tim 88.625a 3.452 81.692 Tim 88.627a 2.879 82.845 Sac2Key ARNE Modify Tim 13.143a 2.372 8.379 ALCO Modify Tim 19.813a 2.372 8.379 AVAttention ARNE Modify Tim 19.813a 2.379 15.034 AvAttention ARNE Modify Tim .524a .040 .668 AvMentWL Abby .742a .048 .646 Modify Tim .634a .040 .554 AvMentWL ARNE Modify Tim .550a .047 .455 AVMentWL ARNE Modify Tim .554a .048 .459 AvFam ARNE Modify Tim .554a .040 .713 AvFam ARNE Modify Tim .556a .039 .556 ALCO Modify Tim .5636a .039 .556 ALCO Abby .679a .047 .584	87.764 88.051 95.558 94.409 15.103 17.907 20.604 24.592 .830 .603 .837
Modify Tim 82.286a 2.870 76.521	88.051 95.558 94.409 15.103 17.907 20.604 24.592 .830 .603
ALCO Modify Tim 82.286a 2.870 76.521 ALCO Modify Tim 88.625a 3.452 81.692 Tim 88.627a 2.879 82.845 Sac2Key ARNE Modify Tim 13.143a 2.372 8.379 ALCO Modify Tim 19.813a 2.372 8.379 AVAttention ARNE Modify Tim 19.813a 2.379 15.034 AvAttention ARNE Modify Tim .524a .040 .444 ALCO Modify Tim .634a .040 .554 AvMentWL ARNE Modify Tim .550a .047 .455 ALCO Modify Tim .554a .048 .459 AvFam ARNE Modify Tim .554a .048 .459 AvFam ARNE Modify Tim .5554a .048 .459 AklCO Abby .794a .040 .713 AvFam ARNE Modify Tim .5554a .048 .459 AklCO Abby .794a .040 .713 AvFam ARNE Modify Tim .5554a .048 .459 Alco Abby .794a .040 .713 AvFam ARNE Modify Tim .556a .039 .556 Alco Abby .794a .047 .584	95.558 94.409 15.103 17.907 20.604 24.592 .830 .603
Modify Tim 88.627a 2.879 82.845	94.409 15.103 17.907 20.604 24.592 .830 .603
Sac2Key	15.103 17.907 20.604 24.592 .830 .603
Modify Tim 13.143a 2.372 8.379	17.907 20.604 24.592 .830 .603
ALCO Abby 14.875a 2.852 9.146	20.604 24.592 .830 .603 .837
Nodify Tim 19.813a 2.379 15.034	24.592 .830 .603 .837
AvAttention ARNE Modify Tim Abby Tim Abby Tim Abby Tim ALCO Modify Tim Abby Tim Tim Tim Tim Tim Tim Tim Ti	.830 .603
Modify Tim .524a .040 .444	.603
Tim .524a .040 .444	.837
Modify Tim .634a .040 .554 AvMentWL ARNE Abby Abby .694a .048 .597 ALCO Modify Abby .679a .057 .564 Modify Tim .554a .048 .459 AvFam ARNE Modify Abby .794a .040 .713 Modify Tim .636a .039 .556 ALCO Abby .679a .047 .584	
AvMentWL ARNE Modify AvMentWL ARNE Modify Tim .634a .040 .554 .694a .048 .597 .550a .047 .455 ALCO Modify Tim .550a .047 .455 ALCO Modify Tim .554a .048 .459 AvFam ARNE Modify Tim .636a .039 .556 ALCO Abby .679a .047 .584	.713
Modify Tim .550a .047 .455 ALCO Modify Abby Tim .679a .057 .564 AvFam ARNE Modify Abby .794a .040 .713 Modify Tim .636a .039 .556 ALCO Abby .679a .047 .584	-
ALCO Abby .679a .047 .455 ALCO Modify Tim .550a .047 .455 AVFam ARNE Modify Tim .554a .048 .459 AVFam Abby .794a .040 .713 Modify Tim .636a .039 .556 ALCO Abby .679a .047 .584	.791
Modify Tim .516 AvFam ARNE Modify Abby .794a .040 .713 Modify Tim .636a .039 .556 ALCO Abby .679a .047 .584	.645
AvFam ARNE Abby .794a .040 .713 Modify Tim .636a .039 .556 ALCO Abby .679a .047 .584	.794
Modify Tim .636 ^a .039 .556 ALCO Abby .679 ^a .047 .584	.650
ALCO Abby .636 ^a .039 .556 ALCO Abby .679 ^a .047 .584	.875
	.715
	.774
Modify Tim .561 ^a .040 .481	.640
	622.770
Modify Tim 457.238 ^a 33.528 389.895	524.581
	664.984
Modify Tim 440.772 ^a 33.629 373.225	508.318
HRVar_RMSSD ARNE Abby 35.016 ^a 5.482 24.005	46.026
Modify Tim 29.102 ^a 5.379 18.297	39.906
ALCO Abby 40.120 ^a 6.469 27.127	53.113
Modify Tim 21.858 ^a 5.396 11.021	32.695
HRVar_NN50 ARNE Abby 19.573 ^a 5.762 7.999	31.146
Modify Tim 29.132 ^a 5.654 17.775	40.489
ALCO Abby 27.320 ^a 6.800 13.662	40.978
Modify Tim 26.239 ^a 5.671 14.848	37.631
NASA_MD ARNE Abby 46.148 ^a 1.905 42.323	49.974
Modify Tim 44.643 ^a 1.869 40.889	48.397
ALCO Abby 46.875 ^a 2.248 42.360	51.390
Modify Tim 43.918 ^a 1.875 40.152	47.683
NASA_PD ARNE Abby 15.685 ^a 3.210 9.238	22.132
Modify Tim 20.357 ^a 3.150 14.030	26.684
ALCO Abby 6.875 ^a 3.788733	14.483
Modify Tim 16.229 ^a 3.159 9.884	
NASA_TD ARNE Abby 30.870 ^a 2.680 25.487	22.575
Modify Tim 16.429 ^a 2.630 11.146	22.575 36.254
ALCO Abby 24.375 ^a 3.163 18.022	
	36.254

	Modify	Tim	12.323 ^a	2.638	7.024	17.621
NASA_Performance	ARNE	Abby	57.944 ^a	5.766	46.362	69.527
	Modify	Tim	50.238 ^a	5.659	38.872	61.604
	ALCO	Abby	63.958 ^a	6.805	50.290	77.626
	Modify	Tim	50.903 ^a	5.676	39.502	62.303
NASA_Effort	ARNE	Abby	43.037 ^a	3.016	36.979	49.095
	Modify	Tim	42.619 ^a	2.960	36.674	48.564
	ALCO Modify	Abby	42.708 ^a	3.559	35.559	49.857
		Tim	42.532 ^a	2.969	36.570	48.495
NASA_Frustration	ARNE	Abby	30.333 ^a	5.018	20.254	40.413
	Modify	Tim	17.857 ^a	4.924	7.966	27.748
	ALCO	Abby	33.333 ^a	5.922	21.439	45.228
	Modify	Tim	13.636 ^a	4.939	3.716	23.557
NASA_Score	ARNE	Abby	37.336 ^a	2.364	32.589	42.084
	Modify	Tim	32.024 ^a	2.320	27.365	36.683
	ALCO	Abby	36.354 ^a	2.790	30.751	41.957
	Modify	Tim	29.924 ^a	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 ^a	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
AvDurlrrelFix	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	0.20	
	Total	2078545.028	78			
TotSac	Between Groups	312.608	1	312.608	2.665	.107
101040	Within Groups	9032.936	 77	117.311	2.000	
	Total	9345.544	78			
Sac2Key	Between Groups	9.948	1	9.948	.116	.734
oueznio,	Within Groups	6589.267	 77	85.575	.110	
	Total	6599.215	78	30.010		
AvAttention	Between Groups	.505	1	.505	13.962	.000
7 W RESTRICT	Within Groups	2.785	<u>.</u> 77	.036	10.002	.000
	Total	3.290	78	.000		
AvMentWL	Between Groups	.021	1	.021	.626	.431
/ WIVIOIITY L	Within Groups	2.606	77	.021	.020	. .
	Total	2.627	78	.034		
AvFam	Between Groups	.020		.020	.798	.375
AVI alli		1.957	77		.190	.315
	Within Groups			.025		
	Total	1.978	78			
AvSCL	Between Groups	3074.380	1	3074.380	.145	.704

	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

					95% Cor Inte	
Dependent Variable	Task	SelfEfficacy	Mean	Std. Error	Lower Bound	Upper Bound
Precision	ARNE	Abby	.796 ^a	.049	.698	.89
	Modify	Tim	.625 ^a	.058	.510	.74
	ALCO	Abby	.873 ^a	.054	.765	.98
	Modify	Tim	.847 ^a	.060	.727	.96
Recall	ARNE	Abby	.753 ^a	.056	.641	.86
	Modify	Tim	.641 ^a	.065	.510	.77
	ALCO	Abby	.893 ^a	.061	.770	1.01
	Modify	Tim	.863 ^a	.068	.727	.99
FMeasure	ARNE	Abby	.770 ^a	.051	.667	.87
	Modify	Tim	.630 ^a	.061	.508	.75
	ALCO	Abby	.878 ^a	.056	.765	.99
	Modify	Tim	.851 ^a	.063	.725	.97
Duration	ARNE	Abby	575.050 ^a	28.293	518.221	631.87
	Modify	Tim	600.211 ^a	33.306	533.314	667.10
	ALCO	Abby	497.458 ^a	31.037	435.119	559.79
	Modify	Tim	515.022 ^a	34.474	445.778	584.26
FirstActDet	ARNE	Abby	144.217 ^a	11.785	120.545	167.88
	Modify	Tim	100.739 ^a	13.873	72.874	128.60
	ALCO	Abby	78.875 ^a	12.928	52.908	104.84
	Modify	Tim	77.135 ^a	14.360	48.292	105.97
LastActDet	ARNE	Abby	550.992 ^a	28.368	494.013	607.97
	Modify	Tim	580.042 ^a	33.393	512.969	647.11
	ALCO	Abby	474.406 ^a	31.118	411.904	536.90
	Modify	Tim	494.640 ^a	34.565	425.214	564.06
ProcDur	ARNE	Abby	24.058 ^a	1.523	21.000	27.11
	Modify	Tim	20.169 ^a	1.793	16.569	23.77
	ALCO	Abby	23.052 ^a	1.670	19.697	26.40
	Modify	Tim	20.382 ^a	1.856	16.655	24.10
FixRel	ARNE	Abby	10.172 ^a	.187	9.797	10.54
	Modify	Tim	10.341 ^a	.220	9.900	10.78
	ALCO	Abby	4.098 ^a	.205	3.686	4.50
	Modify	Tim	4.082 ^a	.228	3.625	4.53
FixIrrel	ARNE	Abby	284.993 ^a	17.968	248.904	321.08
	Modify	Tim	279.627 ^a	21.151	237.144	322.11
	ALCO	Abby	4.945 ^a	19.710	-34.644	44.53
	Modify	Tim	2.973 ^a	21.893	-41.001	46.94
AvDurRelFix	ARNE	Abby	100.317 ^a	9.482	81.272	119.36
	Modify	Tim	99.750 ^a	11.161	77.332	122.16
	ALCO	Abby	120.693 ^a	10.401	99.802	141.58
	Modify	Tim	158.528 ^a	11.553	135.323	181.73
AvDurIrrelFix	ARNE	Abby	236.392 ^a	27.285	181.589	291.19
	Modify	Tim		32.119	166.523	295.54

ALCO Modify Tim				231.035 ^a			
Time			Abby	358.078 ^a	29.930	297.961	418.195
Modify Tim		Modify	Tim	471.585 ^a	33.246	404.809	538.360
Maching Mach	TotSac		Abby	81.283 ^a	2.705	75.851	86.716
Modify Tim		Modify	Tim	83.361 ^a	3.184	76.966	89.756
Sac2Key			Abby	86.885 ^a	2.967	80.926	92.845
Modify Tim		Modify	Tim	91.411 ^a	3.296	84.791	98.031
AVAITEMITION ALCO Abby Abby 17.406a 2.452 12.481 22.331 Tim 17.738a 2.724 12.267 23.209 AVAITEMITION ARNE Modify Tim 7.77a 0.044 6.19 7.95 ALCO Abby 7.94a 0.041 7.112 8.76 Tim 5.507a 0.045 1.416 5.598 AVMentWL ARNE Modify Tim 6.659a 0.053 0.553 0.765 ALCO Modify Tim 5.83aa 0.055 0.473 0.692 AVAITEMITION ALCO Abby 7.14a 0.037 0.639 7.799 ALCO ALCO Abby 7.14a 0.037 0.639 7.799 Tim 7.43aa 0.044 0.655 0.830 7.899 Tim 7.43aa 0.044 0.655 0.830 7.899 Tim 7.43aa 0.044 0.655 0.830 7.899 Tim 7.43aa 0.044 0.655 0.830 0.049 0.44 0.655 0.830 0.949 0.44 0.655 0.830 0.949 0.44 0.655 0.830 0.949 0.44 0.655 0.830 0.949 0.44 0.655 0.830 0.949 0.44 0.655 0.830 0.949 0.44 0.655 0.830 0.949 0.44 0.655 0.830 0.949	Sac2Key		Abby	11.833 ^a	2.235	7.343	16.323
Modify Tim 17.738a 2.724 12.267 23.299		Modify	Tim	10.983 ^a	2.631	5.698	16.269
AvAttention ARNE Modify AvFam AvSCL ARNE Modify Tim 17.738* Abby			Abby	17.406 ^a	2.452	12.481	22.331
Modify Tim		Modify	Tim	17.738 ^a	2.724	12.267	23.209
ALCO Modify Abby	AvAttention		Abby	.617 ^a	.037	.542	.692
Modify Tim .507a .045 .416 .598		Modify	Tim	.707 ^a	.044	.619	.795
AVMentWL ARNE Modify Tim			Abby	.794 ^a	.041	.712	.876
Modify Tim .659a .053 .553 .765 ALCO Abby .630a .049 .532 .729 Tim .583a .055 .473 .692 AVFam ARNE Modify Tim .743a .044 .655 .830 ALCO Abby .622a .041 .540 .704 Tim .605a .045 .514 .696 AVSCL ARNE Modify Tim .521.481a 37.194 446.774 596.188 ALCO Abby .505.908a 31.597 442.444 569.372 Tim .516.947a 38.499 439.619 594.275 HRVar_RMSSD ARNE Modify Tim .32.422a .5561 .17.783 40.121 Tim .25.799a .6.273 .13.200 .38.398 ALCO Modify Tim .25.799a .6.273 .13.200 .38.398 ALCO Modify Tim .27.944a .6.493 .14.903 .40.985 NASA_MD ARNE Modify Tim .27.944a .6.493 .14.903 .40.985 NASA_PD ARNE Modify Tim .40.750a .2.073 .36.585 .44.915 Tim .43.818a .2.146 .39.507 .48.129 NASA_TD ARNE Modify Tim .40.750a .3.698 .40.91 .40.91 .40.91 Tim .40.750a .3.698 .40.91 .40.91 .40.91 .40.91 .40.91 .40.91 ARNE Modify Tim .40.750a .3.698 .40.91		Modify	Tim	.507 ^a	.045	.416	.598
Tim 6,659 0,53 0,553 0,765 ALCO Abby 6,300 0,49 0,532 0,729 Tim 0,583 0,055 0,473 0,692 AvFam ARNE Abby 0,714 0,037 0,639 0,789 Tim 0,743 0,044 0,655 0,830 ALCO Abby 0,622 0,041 0,540 0,704 Tim 0,605 0,045 0,514 0,696 AvSCL ARNE Abby 505,908 31,597 442,444 569,372 Tim 521,481 37,194 446,774 596,188 ALCO Abby 500,583 34,660 430,966 570,200 Tim 516,947 38,499 439,619 594,275 HRVar_RMSSD ARNE Abby 27,744 5,069 17,562 37,927 Tim 40,235 5,967 28,249 52,221 ALCO Abby 28,952 5,561 17,783 40,121 Tim 32,422 6,177 20,015 44,828 HRVar_NN50 ARNE Abby 22,528 5,329 11,825 33,231 Tim 25,799 6,273 13,200 38,398 ALCO Abby 25,984 5,845 14,244 37,725 Tim 27,944 6,493 14,903 40,985 NASA_MD ARNE Abby 46,198 1,932 42,317 50,079 Modify Tim 43,818 2,146 39,507 48,129 NASA_PD ARNE Abby 7,448 3,256 9,908 13,988 Modify Tim 18,250 3,617 11,790 26,319 NASA_TD ARNE Abby 7,448 3,256 9,908 13,988 Tim 19,055 3,617 11,790 26,319 NASA_TD ARNE Abby 29,208 2,479 24,230 34,187 Tim 16,792 2,918 10,931 22,652	AvMentWL		Abby	.614 ^a	.045	.524	.704
ALCO Modify Tim .583a .049 .532 .729		Modify	Tim		.053	.553	.765
AVFam AVFam ARNE Modify Tim .583 ^a .055 .473 .692 AVFam ARNE Modify Tim .743 ^a .044 .655 .830 ALCO Modify Tim .605 ^a .045 .514 .696 AVSCL ARNE Modify Tim .605 ^a .045 .514 .696 AVSCL ARNE Modify Tim .605 ^a .045 .514 .696 AVSCL ARNE Modify Tim .605 ^a .045 .514 .696 AVSCL ARNE Modify Tim .605 ^a .045 .514 .696 AVSCL ALCO Modify Tim .605 ^a .045 .514 .696 AVSCL ALCO Modify Tim .605 ^a .045 .514 .696 AVSCL ALCO Modify Tim .621.481 ^a .37.194 .446.774 .596.188 .409.966 .570.200 AUSCO Modify Tim .616.947 ^a .38.499 .439.619 .594.275 .409 .4023a ^a .5.069 .17.562 .37.927 .4023a ^a .5.069 .17.783 .40.121 .40.23a ^a .5.967 .28.249 .52.221 .40.121 .40.23a ^a .40.221 .40.23a ^a .40.121 .40.23a ^a .40.20 .40.2			Abby	.630 ^a	.049	.532	.729
Modify Tim .743a .044 .655 .830		Modify	Tim	.583 ^a	.055	.473	.692
NASA_PD NASA_TD NASA	AvFam	Modify ————————————————————————————————————	Abby	.714 ^a	.037	.639	.789
Modify Tim .605a .045 .514 .696			Tim	.743 ^a	.044	.655	.830
AVSCL ARNE Modify Abby 505.908a 31.597 442.444 569.372 Tim 521.481a 37.194 446.774 596.188 ALCO Modify Tim 516.947a 38.499 439.619 594.275 HRVar_RMSSD ARNE Modify Tim 40.235a 5.967 28.249 52.221 ALCO Modify Tim 32.422a 6.177 20.015 44.828 HRVar_NN50 ARNE Modify Tim 25.799a 6.273 13.200 38.398 ALCO Modify Tim 27.944a 6.493 14.903 40.985 NASA_MD ARNE Modify Tim 40.750a 2.073 36.585 44.915 ALCO Modify Tim 18.250a 3.494 11.231 25.269 ALCO Modify Tim 19.055a 3.617 11.790 26.319 NASA_TD ARNE Modify Tim 19.055a 3.617 11.790 26.319 Tim 19.055a 2.918 10.931 22.652			Abby	.622 ^a	.041	.540	.704
Modify Tim 521.481a 37.194 446.774 596.188 ALCO Modify Tim 516.947a 38.499 439.619 594.275 HRVar_RMSSD ARNE Modify Tim 40.235a 5.967 28.249 52.221 ALCO Modify Tim 32.422a 6.177 20.015 44.828 HRVar_NN50 ARNE Modify Tim 25.79ga 6.273 13.200 38.398 ALCO Modify Tim 27.944a 6.493 14.903 40.985 NASA_MD ARNE Modify Tim 40.750a 2.073 36.585 44.915 ALCO Abby 46.198a 1.932 42.317 50.079 Modify Tim 43.818a 2.146 39.507 48.129 NASA_PD ARNE Modify Tim 18.250a 3.494 11.231 25.269 ALCO Modify Tim 19.055a 3.617 11.790 26.319 NASA_TD ARNE Modify Tim 19.055a 2.918 10.931 22.652		Modify	Tim	.605 ^a	.045	.514	.696
Tim 521.4818 37.194 446.774 596.188 ALCO Modify Tim 516.9478 38.499 439.619 594.275 HRVar_RMSSD ARNE Modify Tim 40.2358 5.967 28.249 52.221 ALCO Modify Tim 32.4228 5.561 17.783 40.121 Tim 25.7998 6.273 13.200 38.398 ALCO Modify Tim 27.9448 6.493 14.903 40.985 NASA_PD ARNE Modify Tim 43.8188 2.146 39.507 48.129 NASA_TD ARNE Modify Tim 19.0558 3.617 11.790 26.319 NASA_TD ARNE Modify Tim 19.0558 2.918 10.931 22.652 ALCO Modify Tim 16.7928 2.918 10.931 22.652 NASA_TD ARNE Modify Tim 16.7928 2.918 10.931 22.652 ALCO Modify Tim 16.7928 2.918 10.931 22.652 NASA_TD ARNE Modify Tim 16.7928 2.918 10.931 22.652 ALCO Modify Tim 16	AvSCL		Abby	505.908 ^a	31.597	442.444	569.372
HRVar_RMSSD ARNE Modify Tim 516.947a 38.499 439.619 594.275		Modify	Tim	521.481 ^a	37.194	446.774	596.188
HRVar_RMSSD ARNE Modify Abby 27.744a 5.069 17.562 37.927			Abby	500.583 ^a	34.660	430.966	570.200
Modify Tim 40.235a 5.967 28.249 52.221		Modify	Tim	516.947 ^a	38.499	439.619	594.275
Tim 40.235a 5.967 28.249 52.221	HRVar_RMSSD		Abby	27.744 ^a	5.069	17.562	37.927
Modify Tim 32.422a 6.177 20.015 44.828		Modify	Tim	40.235 ^a	5.967	28.249	52.221
HRVar_NN50 ARNE Modify Tim 25.799a 6.273 13.200 38.398 ALCO Modify Tim 25.984a 5.845 14.244 37.725 Tim 27.944a 6.493 14.903 40.985 NASA_MD ARNE Modify Tim 40.750a 43.818a 2.146 39.507 48.129 NASA_PD ARNE Modify Tim 43.818a 2.146 39.507 48.129 NASA_PD ARNE Modify Tim 18.250a 3.494 11.231 25.269 ALCO Modify Tim 19.055a 3.617 11.790 26.319 NASA_TD ARNE Modify Tim 40.750a 2.073 36.585 44.915 39.507 48.129 19.055a 3.617 11.790 26.319 NASA_TD ARNE Modify Tim 19.055a 2.918 10.931 22.652			Abby	28.952 ^a	5.561	17.783	40.121
Modify Tim 25.799a 6.273 13.200 38.398		Modify	Tim	32.422 ^a	6.177	20.015	44.828
NASA_PD ARNE Modify ABby Modify Tim 18.250a 3.494 11.231 25.269 NASA_TD ARNE Modify Tim 19.055a 3.617 11.790 26.319 NASA_TD ARNE Modify Tim Abby Modify Tim 16.792a 2.918 10.931 22.652 ALCO Modify Tim Abby Modify Tim 16.792a 2.918 10.931 22.652 ALCO Modify Tim Abby Modify Tim 16.792a 2.918 10.931 22.652 ALCO Modify Tim Abby Modify Tim 16.792a 2.918 10.931 22.652 ALCO Modify Tim 16.792a 2.918 10.931 22.652 ALCO Modify Tim 16.792a 2.918 10.931 22.652 ALCO Modify Tim 16.792a 2.918 10.931 22.652 ARNE Modify Tim 16.792a 2.918 10.931 22.652 ARNE Modify Tim 16.792a 2.918 10.931 22.652 ALCO Modify Tim 16.792a 2.918 10.931 22.652 ARNE M	HRVar_NN50		Abby	22.528 ^a	5.329	11.825	33.231
NASA_MD ARNE Modify Abby Tim 27.944a 6.493 14.903 40.985 NASA_MD ARNE Modify Abby Abby Abby Abby Abby Abby Abby Abby		Modify	Tim	25.799 ^a	6.273	13.200	38.398
NASA_MD ARNE Modify Tim Abby 48.333a 1.761 44.795 51.871 ALCO Modify Tim Abby 46.198a 1.932 42.317 50.079 Modify Tim A3.818a 2.146 39.507 48.129 NASA_PD ARNE Modify Tim Abby 17.417a 2.968 11.454 23.379 Modify Tim 18.250a 3.494 11.231 25.269 ALCO Modify Tim 19.055a 3.617 11.790 26.319 NASA_TD ARNE Modify Tim ABby 29.208a 2.479 24.230 34.187 Tim 16.792a 2.918 10.931 22.652			Abby	25.984 ^a	5.845	14.244	37.725
Modify Tim 40.750a 2.073 36.585 44.915		iviodity	Tim	27.944 ^a	6.493	14.903	40.985
Tim 40.750 ^a 2.073 36.585 44.915 ALCO Modify Abby 46.198 ^a 1.932 42.317 50.079 Tim 43.818 ^a 2.146 39.507 48.129 NASA_PD ARNE Modify Abby 17.417 ^a 2.968 11.454 23.379 Tim 18.250 ^a 3.494 11.231 25.269 ALCO Modify Abby 7.448 ^a 3.256 .908 13.988 NASA_TD ARNE Modify Abby 29.208 ^a 2.479 24.230 34.187 Modify Tim 16.792 ^a 2.918 10.931 22.652	NASA_MD		Abby	48.333 ^a	1.761	44.795	51.871
Modify Tim 43.818 ^a 2.146 39.507 48.129 NASA_PD ARNE Modify Abby 17.417 ^a 2.968 11.454 23.379 ALCO Modify Abby 7.448 ^a 3.256 .908 13.988 NASA_TD ARNE Modify Abby 29.208 ^a 2.479 24.230 34.187 Modify Tim 16.792 ^a 2.918 10.931 22.652			Tim	40.750 ^a	2.073	36.585	44.915
NASA_PD ARNE Modify Tim Abby Tim 18.250a ALCO Modify Tim 19.055a ARNE Modify Tim ARNE Modify Tim ARNE Modify Tim 19.055a ARNE Modify Tim ARNE Modify Tim 16.792a 2.968 11.454 23.379 11.231 25.269 24.230 34.187 16.792a 2.918 10.931 22.652			Abby	46.198 ^a	1.932	42.317	50.079
Modify Tim 18.250 ^a 3.494 11.231 25.269 ALCO Modify Abby 7.448 ^a 3.256 .908 13.988 Tim 19.055 ^a 3.617 11.790 26.319 NASA_TD ARNE Modify Abby 29.208 ^a 2.479 24.230 34.187 Modify Tim 16.792 ^a 2.918 10.931 22.652		iviodity	Tim	43.818 ^a	2.146	39.507	48.129
Tim 18.250 ^a 3.494 11.231 25.269 ALCO Modify Abby 7.448 ^a 3.256 .908 13.988 Tim 19.055 ^a 3.617 11.790 26.319 NASA_TD ARNE Modify Abby 29.208 ^a 2.479 24.230 34.187 Modify Tim 16.792 ^a 2.918 10.931 22.652	NASA_PD		Abby	17.417 ^a	2.968	11.454	23.379
Modify Tim 19.055 ^a 3.617 11.790 26.319 NASA_TD ARNE Modify Tim 29.208 ^a 2.479 24.230 34.187 16.792 ^a 2.918 10.931 22.652		iviodity	Tim	18.250 ^a	3.494	11.231	25.269
NASA_TD ARNE Abby 29.208 ^a 2.479 24.230 34.187 Modify Tim 16.792 ^a 2.918 10.931 22.652			Abby	7.448 ^a	3.256	.908	13.988
Modify Tim 16.792 ^a 2.918 10.931 22.652		iviodity	Tim	19.055 ^a	3.617	11.790	26.319
Tim 16.792 ^a 2.918 10.931 22.652	NASA_TD		Abby	29.208 ^a	2.479	24.230	34.187
ALCO Abby 16.615 ^a 2.719 11.153 22.076		Modify	Tim	16 792 ^a	2.918	10.931	22.652
				10.702			
		ALCO		16.615 ^a	2.719	11.153	22.076

	Modify	Tim	19.918 ^a	3.020	13.852	25.984
NASA_Performance	ARNE	Abby	57.083 ^a	5.333	46.372	67.794
	Modify	Tim	50.389 ^a	6.277	37.780	62.998
	ALCO	Abby	56.719 ^a	5.850	44.969	68.468
	Modify	Tim	57.264 ^a	6.498	44.213	70.315
NASA_Effort	ARNE	Abby	45.000 ^a	2.789	39.398	50.602
	Modify	Tim	39.278 ^a	3.283	32.683	45.873
	ALCO	Abby	42.656 ^a	3.060	36.511	48.802
	Modify	Tim	42.545 ^a	3.399	35.719	49.372
NASA_Frustration	ARNE	Abby	30.000 ^a	4.641	20.679	39.321
	Modify	Tim	16.333 ^a	5.463	5.361	27.306
	ALCO	Abby	23.750 ^a	5.091	13.525	33.975
	Modify	Tim	21.091 ^a	5.655	9.733	32.448
NASA_Score	ARNE	Abby	37.840 ^a	2.186	33.450	42.231
	Modify	Tim	30.299 ^a	2.573	25.130	35.467
	ALCO	Abby	32.231 ^a	2.398	27.414	37.047
	Modify	Tim	33.948 ^a	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 ^a	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
AvDurlrrelFix	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	0.000	
	Total	1142338.835	78	10100.001		
ProcDur	Between Groups	19548.468	1	19548.468	564.279	.000
1100001	Within Groups	2667.532	<u>'</u> 77	34.643	004.273	.000
	Total	22216.000	78	34.043		
FixRel	Between Groups	10.240	1	10.240	.983	.324
I IXIXGI	Within Groups	801.736	77	10.240	.900	.02-
	Total	811.976	78	10.412		
FixIrrel	Between Groups	43459.860	1	43459.860	1.686	.198
TAITO	Within Groups				1.000	. 190
		1984499.980	77	25772.727		
A. DD - IE:	Total	2027959.839	78	40004.004	05.000	000
AvDurRelFix	Between Groups	48691.034	1	48691.034	25.080	.000
	Within Groups	149488.693	77	1941.412		
	Total	198179.727	78		21.221	
AvDurIrrelFix	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	.00
	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 RiskPerson Mean Error Bound Bound Bound Person Person ARNE Modify Abby 8.58° 0.61 .736 9.81 Precision ALCQ ALCQ Abby .983° .065 .763 1.024 7.28 Recall ARNE Modify Abby .856° .069 .617 .893 Recall ALCQ Modify 717 .937 .937 .937 .937 FMeasure ARNE Modify Abby .882° .074 .734 .1030 Modify 71m .880° .057 .767 .994 FMeasure ARNE Modify .10m .856° .049 .655° .751 .991 Modify 71m .856° .052 .749 .952 .749 Modify 11m .856° .058 .751 .991 Modify 11m .856° .052 .474 .101 Modify 21m		<u></u>	e case templ	-,		95% Co	nfidence rval
Modify Tim	Dependent Variable	Task	RiskPersona	Mean			
ALCO	Precision		Abby	.859 ^a	.061	.736	.981
Modify Tim		Modify	Tim	.634 ^a	.047	.540	.728
Recall			Abby	.893 ^a	.065	.763	1.024
Modify Tim		Modify	Tim	.837 ^a	.050	.737	.937
ALCO Abby ABB2 ABB2 ABB2 ABB2 ABB3	Recall		Abby	.756 ^a	.069	.617	.895
Modify Tim		Modify	Tim	.676 ^a	.053	.569	.783
Modify Abby ABBa ABBa			Abby	.882 ^a	.074	.734	1.030
Modify Tim		Modify	Tim	.880 ^a	.057	.767	.994
Name	FMeasure		Abby	.803 ^a	.064	.675	.932
Modify Tim		Modify	Tim	.650 ^a	.049	.552	.749
No. No.			Abby	.881 ^a	.068	.744	1.018
Modify Tim 597.530a 27.047 543.203 651.856 ALCO		Modify	Tim	.856 ^a	.052	.751	.961
Tim 597.530a 27.047 543.203 651.856 ALCO	Duration		Abby	567.714 ^a	35.205	497.004	638.425
Modify Tim 517.368a 28.774 459.573 575.163 575.163 153.000a 14.664 123.546 182.454 108.400a 11.266 85.771 131.029 15.646 70.474 133.326 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 33.822 81.970 11.986 35.049 644.988 450.033a 37.660 374.390 525.676 460.033a 46.449 46.047		Modify	Tim	597.530 ^a	27.047	543.203	651.856
FirstActDet ARNE Modify Tim			Abby	488.867 ^a	37.562	413.422	564.312
Modify Tim 108.400a 11.266 85.771 131.029		Modify	Tim	517.368 ^a	28.774	459.573	575.163
Tim	FirstActDet		Abby	153.000 ^a	14.664	123.546	182.454
Nodify Tim 57.896a 11.986 33.822 81.970		Modify	Tim	108.400 ^a	11.266	85.771	131.029
Tim 57.896a 11.986 33.822 81.970			Abby	101.900 ^a	15.646	70.474	133.326
Modify Tim 590.519a 27.118 536.049 644.988 ALCO Modify Tim 509.750a 28.850 451.804 567.696 FrocDur ARNE Modify Tim 7.011a 1.456 4.087 9.935 ALCO Modify Tim 7.618a 1.549 4.507 10.729 Tim 10.386a .179 10.028 10.745 ALCO Modify Tim 4.315a .190 3.934 4.697 ALCO Modify Tim 245.975a 17.177 211.475 280.475 ALCO Modify Tim 3.750a 18.273 -32.952 40.453 AVDurRelFix ARNE Modify Tim 88.424a 9.064 70.218 106.630 ALCO Modify Tim 88.424a 9.643 107.258 145.994 AVDurIrrelFix ARNE Modify Tim 126.626a 9.643 107.258 145.994 ANDUROITITITITY ANDUROITITITY ANDUROITITY ANDURO		Modify	Tim	57.896 ^a	11.986	33.822	81.970
ProcDur ARNE Abby Abby	LastActDet		Abby	525.071 ^a	35.297	454.175	595.968
Modify Tim 509.750a 28.850 451.804 567.696			Tim	590.519 ^a	27.118	536.049	644.988
ProcDur			Abby	450.033 ^a	37.660	374.390	525.676
Modify Tim 7.011a 1.456 4.087 9.935		Modify	Tim	509.750 ^a	28.850	451.804	567.696
Tim 7.011a 1.456 4.087 9.935 ALCO Modify Tim 7.618a 1.549 4.507 10.729 FixRel ARNE Modify Tim 10.386a .179 10.028 10.745 ALCO Modify Tim 4.315a .190 3.934 4.697 FixIrrel ARNE Modify Tim 245.975a 17.177 211.475 280.475 ALCO Modify Tim 3.750a 18.273 -32.952 40.453 AVDurRelFix ARNE Modify Tim 88.424a 9.064 70.218 106.630 ALCO Modify Tim 126.626a 9.643 107.258 145.994 AVDurIrrelFix ARNE Modify Tim 126.626a 9.643 107.258 145.994 AVDurIrrelFix ARNE Modify Modify 126.626a 33.950 213.646 350.026	ProcDur		Abby	42.643 ^a	1.895	38.837	46.449
Nodify Tim 7.618a 1.549 4.507 10.729		Modify	Tim	7.011 ^a	1.456	4.087	9.935
FixRel ARNE Modify Tim 7.618a 1.549 4.507 10.729 10.729 Tim 10.042a .232 9.575 10.509 Tim 10.386a .179 10.028 10.745 ALCO Modify Tim 4.315a .190 3.934 4.697 FixIrrel ARNE Modify Tim 245.975a 17.177 211.475 280.475 ALCO Modify Tim 3.750a 18.273 -32.952 40.453 AVDurRelFix ARNE Modify ARNE Modify Tim ARNE Modify ARNE Modify Tim ARNE Modify			Abby	38.833 ^a	2.022	34.773	42.894
Modify Tim 10.386a .179 10.028 10.745		Modify	Tim	7.618 ^a	1.549	4.507	10.729
ALCO Modify Tim 10.386a .179 10.028 10.745 ALCO Modify Tim 4.315a .190 3.934 4.697 FixIrrel ARNE Modify Tim 245.975a 17.177 211.475 280.475 ALCO Modify Tim 3.750a 18.273 -32.952 40.453 AvDurRelFix ARNE Modify Tim 88.424a 9.064 70.218 106.630 ALCO Modify Tim 126.626a 9.643 107.258 145.994 AvDurIrrelFix ARNE Modify Abby Abby 281.836a 33.950 213.646 350.026	FixRel		Abby	10.042 ^a	.232	9.575	10.509
Modify Tim 4.315a .190 3.934 4.697		Modify	Tim	10.386 ^a	.179	10.028	10.745
FixIrrel ARNE Modify Tim Abby 330.560a 22.357 285.655 375.465 245.975a 17.177 211.475 280.475 ALCO Modify Tim 3.750a 18.273 -32.952 40.453 AvDurRelFix ARNE Modify Tim 88.424a 9.064 70.218 106.630 ALCO Modify Tim 126.626a 9.643 107.258 145.994 AvDurIrrelFix ARNE Modify Tim 281.836a 33.950 213.646 350.026			Abby	3.831 ^a	.248	3.333	4.329
Modify Tim 245.975a 17.177 211.475 280.475 ALCO Abby 4.695a 23.854 -43.217 52.606 Modify Tim 3.750a 18.273 -32.952 40.453 AvDurRelFix ARNE Abby 115.121a 11.798 91.425 138.818 Modify Tim 88.424a 9.064 70.218 106.630 ALCO Abby 145.300a 12.588 120.017 170.583 Modify Tim 126.626a 9.643 107.258 145.994 AvDurIrrelFix ARNE Abby 281.836a 33.950 213.646 350.026 Modify Tim 126.626a 33.950 213.646 350.026 Modify Tim 245.836a 33.950 213.646 350.026 Modify Tim 245.836a 33.950 213.646 350.026 AvDurIrrelFix ARNE Abby 281.836a 33.950 213.646 350.026 Modify Tim 245.836a 33.950 213.646 350.026 AvDurIrrelFix ARNE Abby 281.836a 33.950		Modify	Tim	4.315 ^a	.190	3.934	4.697
ALCO Modify Tim 245.975 ^a 17.177 211.475 280.475 ALCO Modify Tim 3.750 ^a 18.273 -32.952 40.453 AvDurRelFix ARNE Modify Tim 88.424 ^a 9.064 70.218 106.630 ALCO Modify Tim 126.626 ^a 9.643 107.258 145.994 AvDurIrrelFix ARNE Modify ARNE Modify ARNE Modify Tim 281.836 ^a 33.950 213.646 350.026	FixIrrel		Abby	330.560 ^a	22.357	285.655	375.465
Modify Tim 3.750 ^a 18.273 -32.952 40.453 AvDurRelFix ARNE Modify Abby 115.121 ^a 11.798 91.425 138.818 ALCO Modify Tim 88.424 ^a 9.064 70.218 106.630 ALCO Modify Abby 145.300 ^a 12.588 120.017 170.583 126.626 ^a 9.643 107.258 145.994 AvDurIrrelFix ARNE Modify Abby 281.836 ^a 33.950 213.646 350.026		Modify	Tim	245.975 ^a	17.177	211.475	280.475
AvDurRelFix ARNE Abby 115.121a 11.798 91.425 138.818 AvDurRelFix ARNE Abby 115.121a 11.798 91.425 138.818 ALCO Abby 145.300a 12.588 120.017 170.583 AvDurIrrelFix ARNE Abby 281.836a 33.950 213.646 350.026			Abby	4.695 ^a	23.854	-43.217	52.606
Modify Tim 88.424 ^a 9.064 70.218 106.630 ALCO Abby 145.300 ^a 12.588 120.017 170.583 Modify Tim 126.626 ^a 9.643 107.258 145.994 AvDurIrrelFix ARNE Abby 281.836 ^a 33.950 213.646 350.026		Modify	Tim	3.750 ^a	18.273	-32.952	40.453
ALCO Abby 145.300 ^a 12.588 120.017 170.583 Modify Tim 126.626 ^a 9.643 107.258 145.994 AvDurIrrelFix ARNE Abby 281.836 ^a 33.950 213.646 350.026	AvDurRelFix		Abby	115.121 ^a	11.798	91.425	138.818
Modify Tim 126.626 ^a 9.643 107.258 145.994 AvDurIrrelFix ARNE Abby 281.836 ^a 33.950 213.646 350.026		Modify	Tim	88.424 ^a	9.064	70.218	106.630
AvDurlrrelFix ARNE Abby 281.836 ^a 33.950 213.646 350.026			Abby	145.300 ^a	12.588	120.017	170.583
Modify		Modify	Tim	126.626 ^a	9.643	107.258	145.994
Modify	AvDurIrrelFix		Abby		33.950	213.646	350.026
		Modify	Tim		26.083	145.086	249.866

			197.476 ^a			
	ALCO	Abby	431.900 ^a	36.223	359.144	504.656
	Modify	Tim	375.878 ^a	27.748	320.144	431.613
TotSac	ARNE	Abby	79.286 ^a	3.366	72.526	86.046
	Modify	Tim	84.222 ^a	2.586	79.029	89.416
	ALCO	Abby	84.433 ^a	3.591	77.221	91.646
	Modify	Tim	92.220 ^a	2.751	86.695	97.745
Sac2Key	ARNE	Abby	7.000 ^a	2.781	1.413	12.587
	Modify ALCO	Tim	15.026 ^a	2.137	10.734	19.318
		Abby	14.433 ^a	2.968	8.473	20.394
	Modify	Tim	20.192 ^a	2.273	15.625	24.758
AvAttention	ARNE	Abby	.664 ^a	.046	.571	.757
	Modify	Tim	.640 ^a	.036	.568	.712
	ALCO	Abby	.747 ^a	.049	.647	.846
	Modify	Tim	.629 ^a	.038	.553	.705
AvMentWL	ARNE	Abby	.579 ^a	.056	.467	.690
	Modify	Tim	.672 ^a	.043	.586	.758
	ALCO	Abby	.510 ^a	.059	.391	.629
	Modify	Tim	.699 ^a	.046	.608	.791
AvFam	ARNE Modify	Abby	.679 ^a	.046	.586	.771
		Tim	.761 ^a	.036	.689	.832
	ALCO	Abby	.527 ^a	.049	.428	.626
	Modify	Tim	.691 ^a	.038	.615	.767
AvSCL	ARNE	Abby	461.857 ^a	39.315	382.891	540.823
	Modify	Tim	550.552 ^a	30.205	489.883	611.221
	ALCO	Abby	461.350 ^a	41.947	377.097	545.603
	Modify	Tim	545.900 ^a	32.134	481.358	610.443
HRVar_RMSSD	ARNE Modify	Abby	16.509 ^a	6.308	3.840	29.179
	Modify	Tim	44.810 ^a	4.846	35.076	54.543
	ALCO Modify	Abby	16.534 ^a	6.730	3.017	30.052
	Wiodily	Tim	42.074 ^a	5.156	31.719	52.429
HRVar_NN50	ARNE Modify	Abby	17.061 ^a	6.630	3.743	30.378
		Tim	28.961 ^a	5.094	18.730	39.193
	ALCO Modify	Abby	24.380 ^a	7.074	10.171	38.589
	widding	Tim	28.759 ^a	5.419	17.874	39.644
NASA_MD	ARNE Modify	Abby	43.571 ^a	2.192	39.169	47.973
		Tim	46.981 ^a	1.684	43.599	50.364
	ALCO Modify	Abby	41.667 ^a	2.338	36.970	46.363
		Tim	48.382 ^a	1.791	44.784	51.980
NASA_PD	ARNE Modify	Abby	18.571 ^a	3.694	11.153	25.990
		Tim	17.074 ^a	2.838	11.374	22.774
	ALCO Modify	Abby	11.333 ^a	3.941	3.418	19.249
		Tim	12.408 ^a	3.019	6.344	18.472
NASA_TD	ARNE Modify	Abby	32.857 ^a	3.084	26.662	39.052
		Tim	18.093 ^a	2.370	13.333	22.852
	ALCO	Abby	20.083 ^a	3.291	13.474	26.693

	Modify	Tim	16.001 ^a	2.521	10.938	21.064
NASA_Performance	ARNE	Abby	62.500 ^a	6.635	49.173	75.827
	Modify	Tim	48.407 ^a	5.098	38.168	58.647
	ALCO	Abby	60.750 ^a	7.080	46.530	74.970
	Modify	Tim	53.653 ^a	5.423	42.760	64.546
NASA_Effort	ARNE	Abby	39.643 ^a	3.471	32.672	46.614
	Modify	Tim	45.352 ^a	2.666	39.996	50.707
	ALCO Modify	Abby	38.333 ^a	3.703	30.896	45.771
		Tim	46.282 ^a	2.837	40.585	51.980
NASA_Frustration	ARNE	Abby	31.071 ^a	5.774	19.473	42.670
	Modify	Tim	20.056 ^a	4.436	11.145	28.966
	ALCO	Abby	25.833 ^a	6.161	13.459	38.208
	Modify	Tim	20.065 ^a	4.720	10.585	29.545
NASA_Score	ARNE	Abby	38.036 ^a	2.720	32.572	43.499
	Modify	Tim	32.660 ^a	2.090	28.463	36.858
	ALCO	Abby	33.000 ^a	2.902	27.171	38.829
	Modify	Tim	32.799 ^a	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 ^a	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
AvDurlrrelFix	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	dictributo	4			

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	2.0.0		
FixRel	Between Groups	54.553	1	54.553	5.546	.021
TIXICE	Within Groups	757.423	77	9.837	0.010	.021
	Total	811.976	78	0.007		
FixIrrel	Between Groups	90154.191	1	90154.191	3.582	.062
FIXITE	Within Groups	1937805.648	<u>'</u> 77	25166.307	3.302	.002
	Total	2027959.839	78	23100.307		
AvDurRelFix	Between Groups	13669.423	1	13669.423	5.705	.019
AVDUINEIFIX	Within Groups	184510.304	77	2396.238	3.703	.018
	Total	198179.727	78	2390.230		
AvDurIrrelFix			1	172011 156	6.947	.010
AVDUITTEIFIX	Between Groups	172011.156 1906533.873	77	172011.156 24760.180	0.947	.010
	Within Groups Total	2078545.028	78	24700.100		
T-+0		11.196		44.400	000	700
TotSac	Between Groups		1	11.196	.092	.762
	Within Groups	9334.348	77	121.225		
001/	Total	9345.544	78	242.250	2.500	111
Sac2Key	Between Groups	212.350	1	212.350	2.560	.114
	Within Groups	6386.865	77	82.946		
A A	Total	6599.215	78	000	F F07	004
AvAttention	Between Groups	.222	1	.222	5.567	.021
	Within Groups	3.068	77	.040		
A 84 (14)	Total	3.290	78		22.1	
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

			task			
					95% Co Inte	nfidence rval
Dependent Variable	Task	LearningStyle	Mean	Std. Error	Lower Bound	Upper Bound
Precision	ARNE	Abby	.743 ^a	.071	.599	.886
	Modify	Tim	.727 ^a	.044	.639	.816
	ALCO	Abby	.872 ^a	.060	.751	.993
	Modify	Tim	.855 ^a	.054	.746	.964
Recall	ARNE	Abby	.714 ^a	.081	.551	.876
	Modify	Tim	.710 ^a	.050	.610	.810
	ALCO	Abby	.879 ^a	.068	.742	1.016
	Modify	Tim	.883 ^a	.061	.760	1.007
FMeasure	ARNE	Abby	.723 ^a	.075	.573	.873
	Modify	Tim	.715 ^a	.046	.622	.807
	ALCO	Abby	.873 ^a	.063	.746	1.000
	Modify	Tim	.863 ^a	.057	.749	.977
Duration	ARNE	Abby	575.900 ^a	41.147	493.254	658.546
	Modify	Tim	588.388 ^a	25.334	537.503	639.273
	ALCO	Abby	516.728 ^a	34.733	446.964	586.492
	Modify	Tim	493.487 ^a	31.276	430.668	556.306
FirstActDet	ARNE	Abby	134.633 ^a	17.139	100.208	169.059
	Modify	Tim	124.858 ^a	10.553	103.662	146.053
	ALCO Modify	Abby	82.150 ^a	14.468	53.090	111.210
		Tim	74.825 ^a	13.028	48.658	100.992
LastActDet	ARNE Modify ALCO Modify	Abby	555.967 ^a	41.255	473.104	638.829
		Tim	564.576 ^a	25.401	513.557	615.594
		Abby	494.617 ^a	34.824	424.670	564.564
		Tim	471.536 ^a	31.358	408.551	534.520
ProcDur	ARNE	Abby	19.933 ^a	2.215	15.485	24.382
	Modify	Tim	23.812 ^a	1.364	21.073	26.551
	ALCO	Abby	22.111 ^a	1.869	18.356	25.866
	Modify	Tim	21.951 ^a	1.683	18.570	25.332
FixRel	ARNE Modify ALCO Modify	Abby	10.218 ^a	.272	9.672	10.763
		Tim	10.244 ^a	.167	9.908	10.580
		Abby	4.196 ^a	.229	3.736	4.657
		Tim	4.003 ^a	.206	3.588	4.417
FixIrrel	ARNE Modify	Abby	301.735 ^a	26.130	249.251	354.219
		Tim	274.456 ^a	16.088	242.142	306.771
	ALCO Modify	Abby	3.433 ^a	22.058	-40.871	47.737
		Tim	4.832 ^a	19.862	-35.062	44.726
AvDurRelFix	ARNE Modify ALCO Modify	Abby	107.608 ^a	13.789	79.912	135.304
		Tim	96.693 ^a	8.490	79.641	113.746
		Abby	129.203 ^a	11.640	105.824	152.582
		Tim	140.424 ^a	10.481	119.372	161.476
AvDurIrrelFix	ARNE	Abby	252.725 ^a	39.680	173.025	332.425
			202.120		-	

	Modify	Tim	226.046 ^a	24.431	176.975	275.117
	ALCO Modify	Abby	383.608 ^a	33.495	316.331	450.885
		Tim	417.271 ^a	30.161	356.691	477.851
TotSac	ARNE	Abby	83.167 ^a	3.934	75.266	91.067
	Modify	Tim	81.561 ^a	2.422	76.696	86.425
	ALCO	Abby	91.406 ^a	3.320	84.736	98.075
	Modify	Tim	86.244 ^a	2.990	80.238	92.249
Sac2Key	ARNE	Abby	12.700 ^a	3.251	6.170	19.230
	Modify	Tim	10.976 ^a	2.002	6.956	14.996
	ALCO	Abby	20.183 ^a	2.744	14.672	25.695
	Modify	Tim	15.263 ^a	2.471	10.300	20.226
AvAttention	ARNE	Abby	.657 ^a	.054	.548	.766
	Modify	Tim	.648 ^a	.033	.581	.715
	ALCO	Abby	.622 ^a	.046	.530	.714
	Modify	Tim	.736 ^a	.041	.654	.819
AvMentWL	ARNE	Abby	.640 ^a	.065	.509	.771
	Modify	Tim	.627 ^a	.040	.546	.707
	ALCO	Abby	.638 ^a	.055	.527	.748
	Modify	Tim	.590 ^a	.049	.491	.689
AvFam	ARNE	Abby	.740 ^a	.054	.631	.849
	Modify	Tim	.718 ^a	.033	.651	.785
	ALCO	Abby	.643 ^a	.046	.552	.735
	Modify	Tim	.591 ^a	.041	.509	.674
AvSCL	ARNE	Abby	545.967 ^a	45.951	453.672	638.261
	Modify	Tim	496.194 ^a	28.292	439.368	553.020
	ALCO Modify	Abby	572.128 ^a	38.788	494.219	650.037
	iviouity	Tim	450.948 ^a	34.927	380.794	521.102
HRVar_RMSSD	ARNE Modify	Abby	32.613 ^a	7.372	17.805	47.421
		Tim	32.344 ^a	4.539	23.227	41.462
	ALCO Modify	Abby	34.084 ^a	6.223	21.584	46.584
	Widdity	Tim	27.032 ^a	5.604	15.776	38.287
HRVar_NN50	ARNE Modify	Abby	24.721 ^a	7.749	9.156	40.286
		Tim	23.316 ^a	4.771	13.732	32.899
	ALCO Modify	Abby	27.946 ^a	6.542	14.807	41.085
		Tim	25.703 ^a	5.890	13.872	37.534
NASA_MD	ARNE Modify	Abby	52.000 ^a	2.562	46.855	57.145
		Tim	42.530 ^a	1.577	39.362	45.698
	ALCO Modify	Abby	46.806 ^a	2.162	42.462	51.149
		Tim	43.977 ^a	1.947	40.066	47.888
NASA_PD	ARNE Modify	Abby	12.000 ^a	4.317	3.329	20.671
		Tim	20.333 ^a	2.658	14.995	25.672
	ALCO Modify	Abby	13.139 ^a	3.644	5.820	20.458
		Tim	10.860 ^a	3.281	4.270	17.451
NASA_TD	ARNE Modify	Abby	25.000 ^a	3.605	17.760	32.240
		Tim	24.348 ^a	2.219	19.891	28.806
	ALCO	Abby	27.028 ^a	3.043	20.916	33.140

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

a. Based on modified population marginal mean.