20	GameID Le	agueIndex Age	e HoursPer	rWeek TotalHou	rs APM	SelectByHotkeys
Variables:	AssignToHotkeys	UniqueHotkeys	MinimapAttacks	MinimapRightClic	s NumberOfPACs	
	GapBetweenPACs	ActionLatency	ActionsInPAC	TotalMapExplored	WorkersMade	UniqueUnitsMade
	ComplexUnitsMade	ComplexAbilities	Used			_

Simple Statistics							
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	
GameID	3395	4805	2720	16313017	52.00000	10095	
LeagueIndex	3395	4.18409	1.51733	14205	1.00000	8.00000	
Age	3340	21.64790	4.20634	72304	16.00000	44.00000	
HoursPerWeek	3339	15.91075	11.96291	53126	0	168.00000	
TotalHours	3338	960.42181	17318	3205888	3.00000	1000000	
APM	3395	117.04695	51.94529	397374	22.05960	389.83140	
SelectByHotkeys	3395	0.00430	0.00528	14.59395	0	0.04309	
AssignToHotkeys	3395	0.0003736	0.0002249	1.26829	0	0.00175	
UniqueHotkeys	3395	4.36465	2.36033	14818	0	10.00000	
MinimapAttacks	3395	0.0000983	0.0001659	0.33375	0	0.00302	
MinimapRightClicks	3395	0.0003874	0.0003770	1.31535	0	0.00404	
NumberOfPACs	3395	0.00346	0.0009923	11.75650	0.0006790	0.00797	
GapBetweenPACs	3395	40.36156	17.15357	137028	6.66670	237.14290	
ActionLatency	3395	63.73940	19.23887	216395	24.09360	176.37210	
ActionsInPAC	3395	5.27299	1.49484	17902	2.03890	18.55810	
TotalMapExplored	3395	22.13166	7.43172	75137	5.00000	58.00000	
WorkersMade	3395	0.00103	0.0005190	3.50257	0.0000770	0.00515	
UniqueUnitsMade	3395	6.53402	1.85770	22183	2.00000	13.00000	
ComplexUnitsMade	3395	0.0000594	0.0001111	0.20177	0	0.0009023	
ComplexAbilitiesUsed	3395	0.0001419	0.0002652	0.48168	0	0.00308	

0.27102

<.0001

0.32218

0.65124

-0.57527

-0.72240

<.0001

3395

<.0001

3395

<.0001

3395

<.0001

3395

3395

<.0001

0.14337

0.39851

-0.30429

-0.41539

<.0001

3395

<.0001

3395

<.0001

3395

<.0001

3395

3395

0.9597

0.00766

0.6581

0.03958

-0.02064

-0.03570

0.0392

3338

0.2331

3338

0.0222

3338

3338

3338

## The CORR Procedure

#### **Pearson Correlation Coefficients** Prob > |r| under H0: Rho=0 **Number of Observations** GameID LeagueIndex **HoursPerWeek TotalHours** Age **APM** SelectByHotkeys GameID 1.00000 0.10260 0.08886 -0.025460.00418 0.15969 0.16080 <.0001 <.0001 0.1414 0.8093 <.0001 <.0001 3395 3395 3340 3339 3395 3338 3395 LeagueIndex 0.10260 1.00000 -0.12782 0.21798 0.02388 0.66231 0.49060 <.0001 <.0001 <.0001 0.1677 <.0001 <.0001 3395 3395 3340 3339 3338 3395 3395 -0.21056 -0.13118 Age 0.08886 -0.12782 1.00000 -0.18451 -0.01663<.0001 <.0001 <.0001 0.3368 <.0001 <.0001 3340 3340 3340 3339 3338 3340 3340 **HoursPerWeek** -0.02546 0.21798 -0.18451 1.00000 0.20578 0.02431 0.24684 0.1414 <.0001 <.0001 0.1603 <.0001 <.0001 3339 3339 3339 3339 3338 3339 3339 **TotalHours** 0.00418 0.02388 -0.01663 0.02431 1.00000 0.07285 0.08183 0.8093 0.1677 0.3368 0.1603 <.0001 <.0001 3338 3338 3338 3338 3338 3338 3338 **APM** 0.15969 0.66231 -0.21056 0.24684 0.07285 1.00000 0.84069 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3340 3339 3338 3395 3395 -0.13118 SelectByHotkeys 0.16080 0.49060 0.20578 0.08183 0.84069 1.00000 <.0001 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3340 3395 3339 3338 3395 3395 AssignToHotkeys 0.136180.53112 -0.10561 0.158420.04241 0.57842 0.50453 <.0001 <.0001 <.0001 <.0001 0.0143 <.0001 <.0001 3395 3395 3340 3339 3338 3395 3395 **UniqueHotkeys** 0.11737 0.35121 0.01545 0.07020 0.00932 0.36170 0.30210 <.0001 <.0001 0.3722 <.0001 0.5905 <.0001 <.0001 3395 3395 3340 3395 3339 3338 3395 **MinimapAttacks** 0.07404 0.31254 0.04339 0.08405 0.00087 0.19716

<.0001

0.04658

0.08964

-0.10257

-0.08722

<.0001

3395

<.0001

3395

<.0001

3395

0.0066

3395

**MinimapRightClicks** 

NumberOfPACs

**GapBetweenPACs** 

ActionLatency

3395

<.0001

0.23323

0.61219

-0.55325

-0.67394

<.0001

3395

<.0001

3395

<.0001

3395

<.0001

3395

3395

0.0121

-0.01958

-0.19728

<.0001

0.11202

0.24035

<.0001

3340

<.0001

3340

3340

0.2579

3340

3340

<.0001

0.04942

0.17495

-0.13377

-0.18877

<.0001

3339

<.0001

3339

<.0001

3339

0.0043

3339

3339

#### **Pearson Correlation Coefficients** Prob > |r| under H0: Rho=0 **Number of Observations** MinimapRightClicks AssignToHotkeys UniqueHotkeys **MinimapAttacks NumberOfPACs** GameID 0.13618 0.11737 0.07404 0.04658 0.08964 <.0001 <.0001 <.0001 0.0066 <.0001 3395 3395 3395 3395 3395 LeagueIndex 0.531120.35121 0.31254 0.23323 0.61219 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 Age -0.10561 0.01545 0.04339 -0.01958-0.19728<.0001 0.3722 0.0121<.0001 0.2579 3340 3340 3340 3340 3340 **HoursPerWeek** 0.15842 0.07020 0.08405 0.04942 0.17495 <.0001 <.0001 <.0001 0.0043 <.0001 3339 3339 3339 3339 3339 **TotalHours** 0.042410.00932 0.00087 0.00766 0.03958 0.0143 0.5905 0.9597 0.6581 0.0222 3338 3338 3338 3338 3338 **APM** 0.57842 0.36170 0.27102 0.32218 0.65124 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 SelectByHotkeys 0.50453 0.30210 0.19716 0.14337 0.39851 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 AssignToHotkeys 1.00000 0.42024 0.24220 0.19304 0.48673 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 UniqueHotkeys 0.42024 1.00000 0.18059 0.14158 0.37208 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **MinimapAttacks** 0.24220 0.18059 1.00000 0.24227 0.17734 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **MinimapRightClicks** 0.193040.14158 0.24227 1.00000 0.17614 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **NumberOfPACs** 0.48673 0.37208 0.17734 0.17614 1.00000 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **GapBetweenPACs** -0.39689 -0.24282-0.23763 -0.25447 -0.50626 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **ActionLatency** -0.48219 -0.32310 -0.19990 -0.23066 -0.82033 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395

#### **Pearson Correlation Coefficients** Prob > |r| under H0: Rho=0 **Number of Observations** TotalMapExplored **ActionsInPAC GapBetweenPACs** ActionLatency WorkersMade GameID -0.10257 -0.087220.04726 0.03231 -0.01164 0.0059 0.0598 <.0001 <.0001 0.4979 3395 3395 3395 3395 3395 LeagueIndex -0.55325 -0.67394 0.14312 0.22068 0.29564 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 0.24035 Age 0.11202 -0.04541 -0.02460 -0.09210<.0001 <.0001 0.0087 <.0001 0.1551 3340 3340 3340 3340 3340 **HoursPerWeek** -0.13377-0.188770.09509 0.06500 0.05062 <.0001 <.0001 <.0001 0.0002 0.0034 3339 3339 3339 3339 3339 **TotalHours** -0.02064-0.03570 0.01070 0.02049 0.01483 0.2331 0.0392 0.5365 0.2367 0.3918 3338 3338 3338 3338 3338 **APM** -0.57527 -0.72240 0.38399 0.22075 0.34969 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 SelectByHotkeys -0.30429 -0.41539 0.16328 0.08348 0.14172 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 AssignToHotkeys -0.39689 -0.48219 0.09367 0.19293 0.18307 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 UniqueHotkeys -0.24282 -0.32310 -0.01640 0.26465 0.10814 <.0001 <.0001 0.3394 <.0001 <.0001 3395 3395 3395 3395 3395 **MinimapAttacks** -0.23763 -0.199900.07762 0.13480 0.16639 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **MinimapRightClicks** -0.25447 -0.23066 0.30751 0.17259 0.20659 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **NumberOfPACs** -0.50626 -0.82033 -0.23202 0.46028 0.27789 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **GapBetweenPACs** 1.00000 0.68940 -0.31107 -0.09533 -0.23542 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **ActionLatency** 0.68940 1.00000 -0.11022 -0.34331 -0.30917 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395

Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations						
	UniqueUnitsMade	ComplexUnitsMade	ComplexAbilitiesUsed			
GameID	0.02120	-0.02710	0.00325			
	0.2168	0.1144	0.8500			
	3395	3395	3395			
LeagueIndex	0.13351	0.14883	0.14573			
	<.0001	<.0001	<.0001			
	3395	3395	3395			
Age	0.02302	-0.08024	-0.06574			
	0.1835	<.0001	0.0001			
	3340	3340	3340			
HoursPerWeek	0.03855	0.05933	0.07470			
	0.0259	0.0006	<.0001			
	3339	3339	3339			
TotalHours	-0.00238	-0.00715	-0.00631			
	0.8907	0.6795	0.7155			
	3338	3338	3338			
APM	0.10084	0.13614	0.13159			
	<.0001	<.0001	<.0001			
	3395	3395	3395			
SelectByHotkeys	0.00612	0.04400	0.06104			
	0.7215	0.0103	0.0004			
	3395	3395	3395			
AssignToHotkeys	0.13283	0.14460	0.15441			
	<.0001	<.0001	<.0001			
	3395	3395	3395			
UniqueHotkeys	0.22503	0.11036	0.10245			
	<.0001	<.0001	<.0001			
	3395	3395	3395			
MinimapAttacks	0.12083	0.04024	0.04453			
	<.0001	0.0190	0.0095			
	3395	3395	3395			
MinimapRightClicks	0.14870	0.09161	0.09065			
	<.0001	<.0001	<.0001			
	3395	3395	3395			
NumberOfPACs	0.30630	0.18148	0.16829			
	<.0001	<.0001	<.0001			
	3395	3395	3395			
GapBetweenPACs	-0.08486	-0.07466	-0.09057			
	<.0001	<.0001	<.0001			
	3395	3395	3395			
ActionLatency	-0.21261	-0.18641	-0.18437			
	<.0001	<.0001	<.0001			
	3395	3395	3395			

#### **Pearson Correlation Coefficients** Prob > |r| under H0: Rho=0 **Number of Observations GameID** LeagueIndex **HoursPerWeek TotalHours APM** SelectByHotkeys Age ActionsInPAC -0.04541 0.04726 0.14312 0.09509 0.01070 0.38399 0.16328 0.0059 <.0001 0.0087 <.0001 <.0001 0.5365 <.0001 3395 3395 3340 3339 3338 3395 3395 0.22075 **TotalMapExplored** 0.03231 0.22068-0.02460 0.065000.02049 0.08348 0.0598 <.0001 0.1551 0.00020.2367 <.0001 <.0001 3395 3395 3340 3339 3338 3395 3395 WorkersMade 0.05062 0.14172 -0.01164 0.29564 -0.09210 0.01483 0.34969 0.4979 <.0001 <.0001 0.00340.3918 <.0001 <.0001 3395 3395 3340 3339 3338 3395 3395 **UniqueUnitsMade** 0.021200.13351 0.02302 0.03855 -0.00238 0.10084 0.006120.2168 <.0001 0.1835 0.0259 0.8907 <.0001 0.7215 3395 3395 3340 3339 3338 3395 3395 ComplexUnitsMade -0.02710 0.14883-0.08024 0.05933 -0.00715 0.13614 0.044000.1144 <.0001 <.0001 0.0006 0.6795 <.0001 0.0103 3395 3395 3340 3339 3338 3395 3395 ComplexAbilitiesUsed 0.00325 0.14573 -0.06574 0.07470 -0.00631 0.13159 0.06104

0.8500

3395

<.0001

3395

0.0001

3340

<.0001

3339

0.7155

3338

<.0001

3395

0.0004

3395

#### **Pearson Correlation Coefficients** Prob > |r| under H0: Rho=0 **Number of Observations** AssignToHotkeys **MinimapAttacks** MinimapRightClicks **NumberOfPACs** UniqueHotkeys ActionsInPAC 0.09367 -0.01640 0.13480 0.30751 -0.23202 <.0001 0.3394 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **TotalMapExplored** 0.19293 0.26465 0.166390.172590.46028 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 WorkersMade 0.183070.108140.077620.206590.27789<.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 UniqueUnitsMade 0.132830.22503 0.120830.148700.30630 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 ComplexUnitsMade 0.144600.110360.040240.09161 0.18148<.0001 <.0001 0.0190 <.0001 <.0001 3395 3395 3395 3395 3395 ComplexAbilitiesUsed 0.154410.102450.044530.090650.16829 <.0001 <.0001 0.0095<.0001 <.0001 3395 3395 3395 3395 3395

#### **Pearson Correlation Coefficients** Prob > |r| under H0: Rho=0 **Number of Observations** ActionLatency **GapBetweenPACs ActionsInPAC** TotalMapExplored WorkersMade ActionsInPAC -0.31107 -0.11022 1.00000 -0.15722 0.25180 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 **TotalMapExplored** -0.09533 -0.34331 -0.15722 1.000000.13151 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 WorkersMade 1.00000 -0.23542 -0.30917 0.251800.13151 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 UniqueUnitsMade -0.08486 -0.21261 -0.13370 0.57277 0.11350 <.0001 <.0001 <.0001 <.0001 <.0001 3395 3395 3395 3395 3395 ComplexUnitsMade -0.07466 -0.18641 0.05272 0.30776 0.20364<.0001 <.0001 <.0001 0.0021 <.0001 3395 3395 3395 3395 3395 ComplexAbilitiesUsed -0.09057 -0.18437 0.054540.24826 0.10194<.0001 <.0001 0.0015<.0001 <.0001 3395 3395 3395 3395 3395

Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations						
	UniqueUnitsMade	ComplexUnitsMade	ComplexAbilitiesUsed			
ActionsInPAC	-0.13370 <.0001 3395	0.05272 0.0021 3395	0.05454 0.0015 3395			
TotalMapExplored	0.57277 <.0001 3395	0.30776 <.0001 3395	0.24826 <.0001 3395			
WorkersMade	0.11350 <.0001 3395	0.20364 <.0001 3395	0.10194 <.0001 3395			
UniqueUnitsMade	1.00000 3395	0.38150 <.0001 3395	0.29183 <.0001 3395			
ComplexUnitsMade	0.38150 <.0001 3395	1.00000 3395	0.61668 <.0001 3395			
ComplexAbilitiesUsed	0.29183 <.0001 3395	0.61668 <.0001 3395	1.00000 3395			

5 Variables: APM SelectByHotkeys NumberOfPACs GapBetweenPACs ActionLatency

Simple Statistics							
Variable N Mean Std Dev Sum Minimum Maximu						Maximum	
APM	3395	117.04695	51.94529	397374	22.05960	389.83140	
SelectByHotkeys	3395	0.00430	0.00528	14.59395	0	0.04309	
NumberOfPACs	3395	0.00346	0.0009923	11.75650	0.0006790	0.00797	
GapBetweenPACs	3395	40.36156	17.15357	137028	6.66670	237.14290	
ActionLatency	3395	63.73940	19.23887	216395	24.09360	176.37210	

Pearson Correlation Coefficients, N = 3395 Prob >  r  under H0: Rho=0									
	APM SelectByHotkeys NumberOfPACs GapBetweenPACs ActionLaten								
APM	1.00000	0.84069 <.0001	0.65124 <.0001	-0.57527 <.0001	-0.72240 <.0001				
SelectByHotkeys	0.84069 <.0001	1.00000	0.39851 <.0001	-0.30429 <.0001	-0.41539 <.0001				
NumberOfPACs	0.65124 <.0001	0.39851 <.0001	1.00000	-0.50626 <.0001	-0.82033 <.0001				
GapBetweenPACs	-0.57527 <.0001	-0.30429 <.0001	-0.50626 <.0001	1.00000	0.68940 <.0001				
ActionLatency	-0.72240 <.0001	-0.41539 <.0001	-0.82033 <.0001	0.68940 <.0001	1.00000				

7	APM	SelectByHotkeys	NumberOfPACs	GapBetweenPACs	ActionLatency	ComplexAbilitiesUsed
Variables:	ComplexUnits	sMade				

Simple Statistics							
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	
APM	3395	117.04695	51.94529	397374	22.05960	389.83140	
SelectByHotkeys	3395	0.00430	0.00528	14.59395	0	0.04309	
NumberOfPACs	3395	0.00346	0.0009923	11.75650	0.0006790	0.00797	
GapBetweenPACs	3395	40.36156	17.15357	137028	6.66670	237.14290	
ActionLatency	3395	63.73940	19.23887	216395	24.09360	176.37210	
ComplexAbilitiesUsed	3395	0.0001419	0.0002652	0.48168	0	0.00308	
ComplexUnitsMade	3395	0.0000594	0.0001111	0.20177	0	0.0009023	

Pearson Correlation Coefficients, N = 3395 Prob >  r  under H0: Rho=0							
	APM SelectByHotkeys NumberOfPACs GapBetweenPA						
APM	1.00000	0.84069 <.0001	0.65124 <.0001	-0.57527 <.0001			
SelectByHotkeys	0.84069 <.0001	1.00000	0.39851 <.0001	-0.30429 <.0001			
NumberOfPACs	0.65124 <.0001	0.39851 <.0001	1.00000	-0.50626 <.0001			
GapBetweenPACs	-0.57527 <.0001	-0.30429 <.0001	-0.50626 <.0001	1.00000			
ActionLatency	-0.72240 <.0001	-0.41539 <.0001	-0.82033 <.0001	0.68940 <.0001			
ComplexAbilitiesUsed	0.13159 <.0001	0.06104 0.0004	0.16829 <.0001	-0.09057 <.0001			
ComplexUnitsMade	0.13614 <.0001	0.04400 0.0103	0.18148 <.0001	-0.07466 <.0001			

Pearson Correlation Coefficients, N = 3395 Prob >  r  under H0: Rho=0							
ActionLatency ComplexAbilitiesUsed ComplexUnitsMa							
APM	-0.72240 <.0001	0.13159 <.0001	0.13614 <.0001				
SelectByHotkeys	-0.41539 <.0001	0.06104 0.0004	0.04400 0.0103				
NumberOfPACs	-0.82033 <.0001	0.16829 <.0001	0.18148 <.0001				
GapBetweenPACs	0.68940 <.0001	-0.09057 <.0001	-0.07466 <.0001				
ActionLatency	1.00000	-0.18437 <.0001	-0.18641 <.0001				
ComplexAbilitiesUsed	-0.18437 <.0001	1.00000	0.61668 <.0001				
ComplexUnitsMade	-0.18641 <.0001	0.61668 <.0001	1.00000				