Online Appendix

Table A1

	Weekend commencing Friday night									*Weekend commencing Saturday day*								
	Day starts at 7am			Day starts at 8am			Day starts at 9am			Day starts at 7am			Day starts at 8am			Day starts at 9am		
	Night (N)	*Weekend (D)*	*NxD*	*Night (N)*	*Weekend (D)*	*NxD*	*Night (N)*	*Weekend (D)*	*NxD*	*Night (N)*	*Weekend (D)*	*NxD*	*Night (N)*	*Weekend (D)*	*NxD*	*Night (N)*	*Weekend (D)*	*NxD*
Female	0.2073	0.1092	0.1297	0.2381	0.0789	0.1161	0.3809	0.0689	0.0431	0.0718	0.0052	0.7575	0.1102	0.0068	0.5411	0.1857	0.0047	0.3197
Age	0.7106	0.0673	0.5721	0.8443	0.0435	0.5232	0.7677	0.0531	0.5434	0.7368	0.0610	0.6098	0.8272	0.0517	0.4814	0.7391	0.0466	0.5887
Graduate	0.0323	0.8805	0.0877	0.0222	0.8816	0.0529	0.0570	0.9029	0.1185	0.0346	0.9385	0.1036	0.0318	0.8554	0.1097	0.0504	0.9933	0.0954
Over $35k	0.0043	0.9937	0.6005	0.0050	0.9910	0.4967	0.0811	0.8761	0.9241	0.0018	0.5372	0.2583	0.0027	0.6703	0.2649	0.0664	0.7082	0.7537
Democrat	0.9774	0.4731	0.8938	0.8893	0.5925	0.9443	0.9408	0.9940	0.7448	0.9612	0.5098	0.8508	0.8890	0.5986	0.9386	0.7214	0.5232	0.3395
God	0.3575	0.2767	0.1974	0.5304	0.2741	0.1777	0.0609	0.2787	0.3829	0.3346	0.2325	0.2411	0.5315	0.2740	0.1800	0.0589	0.2599	0.4118
Risk	0.0148	0.1185	0.0378	0.0025	0.1281	0.0455	0.0061	0.1313	0.0951	0.0321	0.3854	0.1672	0.0061	0.3948	0.1843	0.0147	0.4296	0.3425
Trust	0.3771	0.1204	0.3894	0.4663	0.1370	0.6019	0.1257	0.1934	0.8280	0.2529	0.0343	0.7747	0.3390	0.0461	0.9930	0.0680	0.0519	0.3869
Log(Exp.)	0.0000	0.0001	0.4154	0.0000	0.0001	0.4029	0.0000	0.0001	0.3575	0.0000	0.0000	0.7719	0.0000	0.0000	0.6425	0.0000	0.0000	0.6879
Log(Time)	0.0000	0.0046	0.0275	0.0000	0.0067	0.0752	0.0000	0.0086	0.0301	0.0000	0.0001	0.2570	0.0000	0.0004	0.3512	0.0000	0.0003	0.2377
Passed all	0.0917	0.0011	0.8379	0.2242	0.0012	0.6859	0.3319	0.0025	0.2947	0.0746	0.0006	0.9783	0.2017	0.0008	0.7719	0.2368	0.0005	0.5547
Usual time	0.0000	0.0000	0.4092	0.0000	0.0000	0.4877	0.0000	0.0000	0.2972	0.0000	0.0007	0.0382	0.0000	0.0011	0.0411	0.0000	0.0013	0.0210
DG	0.0863	0.8364	0.7901	0.0990	0.8545	0.5196	0.1310	0.7389	0.2825	0.0227	0.1480	0.3295	0.0293	0.1663	0.5772	0.0435	0.1398	0.9442
PD	0.2486	0.4186	0.4180	0.4063	0.4633	0.6932	0.5239	0.4345	0.8204	0.1296	0.9584	0.1195	0.2596	0.9264	0.3021	0.2824	0.8768	0.2477
CH	0.0337	0.1627	0.3386	0.0469	0.1489	0.5892	0.0434	0.0709	0.5625	0.0244	0.0925	0.5090	0.0428	0.1266	0.6526	0.0516	0.1029	0.4570
HO	0.5256	0.3181	0.1901	0.6015	0.2623	0.2460	0.5393	0.2822	0.4243	0.6573	0.1570	0.3771	0.6896	0.1630	0.3790	0.6705	0.1376	0.7028
3P	0.1765	0.4749	0.7002	0.2594	0.4639	0.6474	0.2761	0.5542	0.9881	0.2099	0.6168	0.8633	0.2843	0.5474	0.7435	0.2517	0.4749	0.8873
AP	0.2517	0.0173	0.7634	0.2721	0.0178	0.8495	0.6073	0.0205	0.8664	0.1456	0.0027	0.3512	0.1701	0.0031	0.4356	0.3996	0.0029	0.6094
CRT	0.1261	0.0002	0.7105	0.2880	0.0001	0.5600	0.5295	0.0002	0.5520	0.2231	0.0024	0.2723	0.4590	0.0025	0.1788	0.7226	0.0019	0.2083
TD	0.5160	0.4164	0.3892	0.5843	0.4323	0.2578	0.4738	0.4795	0.0929	0.7941	0.2236	0.2425	0.7572	0.2372	0.4027	0.8830	0.2037	0.7621
O	0.0060	0.5676	0.0200	0.0035	0.6013	0.0185	0.0060	0.4877	0.0568	0.0205	0.6969	0.1737	0.0133	0.6208	0.1821	0.0231	0.6937	0.4162
C	0.0006	0.6066	0.4451	0.0002	0.5708	0.5205	0.0088	0.5370	0.4705	0.0003	0.9815	0.2116	0.0001	0.8438	0.3133	0.0036	0.9506	0.1632
E	0.9034	0.8914	0.9489	0.6718	0.8233	0.7592	0.8552	0.8667	0.5405	0.8707	0.8206	0.9783	0.6898	0.8635	0.7220	0.8680	0.8861	0.5274
A	0.0902	0.9853	0.8034	0.0735	0.9071	0.8348	0.1367	0.7089	0.7454	0.0419	0.4496	0.5986	0.0271	0.3907	0.4433	0.0432	0.3955	0.1223
N	0.0005	0.2476	0.2710	0.0007	0.2812	0.2099	0.0168	0.3248	0.2605	0.0002	0.0679	0.0766	0.0003	0.0890	0.0606	0.0057	0.0715	0.0521

Table A1. Significance levels of two-way ANOVAS on each of the demographic variables of the study. Cells highlighted in light gray have a p-value of 0.05 or less; cells highlighted in dark gray have a p-value of 0.001 or less (Bonferroni corrected; 0.05/50). DG: Dictator Game; PD: Prisoner's dilemma; CH: Charity task; HO: Honesty task; 3P: (Prosocial) Third-party punishment; AP: (Antisocial) Third-party punishment; TD: (log) Time discounting task. CRT: Cognitive reflective task; O: Openness; C: Conscientiousness; E: Extraversion; A: Agreeableness; N: Neuroticism.

Table A2

	Day versus Night			Weekday versus Weekend		
	α=0.05	*α=0.007*	*α=0.0024*	*α=0.05*	*α=0.007*	*α=0.0024*
DG ($0.50)	0.032	0.040	0.044	0.030	0.038	0.042
PD ($0.40)	0.056	0.071	0.078	0.062	0.078	0.086
CH ($60)	0.027	0.034	0.037	0.030	0.037	0.041
HO ($0.50)	0.037	0.047	0.051	0.039	0.050	0.055
3P ($0.10)	0.054	0.068	0.075	0.061	0.077	0.085
AP ($0.10)	0.014	0.018	0.020	0.005	0.006	0.007
TD (2.98)	0.027	0.034	0.037	0.029	0.037	0.040

Table A2 Power analysis calculation for the incentivized tasks in the day versus night and weekday versus weekend comparisons. The default power is set to 0.80 and the level of alpha is set to three levels of conservativeness of Bonferroni correction: α=0.05, or uncorrected; α=0.007, corrected for one comparison or 0.05/7; and α=0.0024, corrected for 3 comparisons or 0.05/21. DG: Dictator Game; PD: Prisoner's dilemma; CH: Charity task; HO: Honesty task; 3P: (Prosocial) Third-party punishment; AP: (Antisocial) Third-party punishment; TD: (log) Time discounting task. Numbers in parenthesis represent the endowment available in each task.

Table A3

	DG	*PD*	*CH*	*HO*	*3P*	*AP*	*TD*
Night (N)							
Weekend (W)							
Female	0.107*						
	(0.044)						
Age	0.006**			0.012***			-0.006***
	(0.002)			(0.002)			(0.002)
Graduate							-0.288***
							(0.043)
Over $35k							
Democrat				-0.031*	0.051**		0.029*
				(0.014)	(0.016)		(0.13)
God					0.028**		
					(0.011)		
Risk			0.025**				0.025**
			(0.008)				(0.009)
Trust	0.048**	0.078***	0.060***				-0.029*
	(0.014)	(0.016)	(0.013)				(0.013)
Log(experience)	-0.097***	-0.167***	-0.108***	-0.077**	-0.090**		0.064**
	(0.023)	(0.028)	(0.023)	(0.022)	(0.027)		(0.024)
Log(time taken)	0.641***	0.546***	0.797***	0.328**			-0.276*
	(0.127)	(0.145)	(0.119)	(0.120)			(0.129)
Passed all			-0.118**				-0.118**
			(0.044)				(0.045)
Usual time		0.139*		-0.109*			
		(0.062)		(0.054)			
CRT correct	-0.049**		-0.074***			-0.060***	-0.129***
	(0.019)		(0.018)			(0.014)	(0.019)
O							
C	-0.056**	-0.067**					
	(0.017)	(0.019)					
E				-0.034**			
				(0.013)			
A	0.068***	0.007**					
	(0.019)	(0.002)					
N				-0.043**			
				(0.015)			
Constant	-2.149***	-1.590***	-2.285***	-0.614	-0.240*	-0.138***	1.114***
	(0.385)	(0.440)	(0.367)	(0.371)	(0.118)	(0.036)	(0.393)
N	1980	1623	2230	2228	1410	1410	2220
R^2	0.072	0.065	0.083	0.043	0.017	0.017	0.079

Table A3 (OLS) Regression results. Stepwise forward estimation for models with demographic and personality controls. *** $p<0.001$; ** $p<0.01$; * $p<0.05$. We performed preliminary regressions with a night and weekend interaction, none of them were significant. All controls had pairwise correlations within a ±0.37 range. DG: Dictator Game; PD: Prisoner's dilemma; CH: Charity task; HO: Honesty task; 3P: (Prosocial) Third-party punishment; AP: (Antisocial) Third-party punishment; TD: (log) Time discounting task. CRT: Cognitive reflective task; O: Openness; C: Conscientiousness; E: Extraversion; A: Agreeableness; N: Neuroticism.

Table A4

	Time bin (T)	Day (D)	T x D
Female	0.1776	0.0529	0.1965
Age	0.0004	0.3852	0.6717
Graduate	0.1873	0.1709	0.3381
Over $35k	0.048	0.5024	0.6489
Democrat	0.9717	0.1157	0.9559
God	0.3152	0.2085	0.5644
Risk	0.0506	0.471	0.7739
Trust	0.1065	0.2129	0.5479
Log(Exp.)	0	0.0001	0.9659
Log(Time)	0	0.0028	0.1025
Passed all	0.3164	0	0.9026
Usual time	0	0.0021	0.0927
DG	0.0397	0.6571	0.7607
PD	0.7158	0.0735	0.6446
CH	0.0015	0.1671	0.184
HO	0.5756	0.2469	0.6672
3P	0.1632	0.5621	0.561
AP	0.6257	0.1369	0.4013
CRT	0.2738	0.0015	0.6787
TD	0.7576	0.2488	0.1313
O	0.0535	0.7414	0.6437
C	0.0009	0.6122	0.3798
E	0.5395	0.6705	0.2418
A	0.0784	0.6428	0.2371
N	0.0124	0.103	0.4529

Table A4 Significance levels of two-way ANOVAS on each of the demographics and tasks of the study. Time bin includes: *morning* (8am-2pm); *afternoon* (2pm-8pm); *evening* (8pm-2am); and *pre-dawn* (2am-8am). Day of the week includes the seven-day week (Monday-Sunday). Cells highlighted in light gray have a p-value of 0.05 or less. Cells highlighted in dark gray have a p-value of 0.001 or less (Bonferroni corrected; 0.05/50). DG: Dictator Game; PD: Prisoner's dilemma; CH: Charity task; HO: Honesty task; 3P: (Prosocial) Third-party punishment; AP: (Antisocial) Third-party punishment; TD: (log) Time discounting task. CRT: Cognitive reflective task; O: Openness; C: Conscientiousness; E: Extraversion; A: Agreeableness; N: Neuroticism.

Table A5

	Female	Age	Graduate	> $35k	Pol. Party	God	Risk	Trust	Log(Exp)	Log(Time)	Comp.	Usual
Time of day												
14:00-19:59	-0.023	-0.269	-0.010	-0.004	0.027	-0.064	0.191	0.102	-0.153**	0.010	-0.005	-0.055*
	(0.029)	(0.654)	(0.029)	(0.029)	(0.088)	(0.145)	(0.146)	(0.090)	(0.055)	(0.010)	(0.029)	(0.023)
20:00-01:59	0.022	-1.308*	-0.023	-0.056*	0.036	0.013	0.406**	0.055	-0.327***	0.040***	-0.021	-0.126***
	(0.028)	(0.637)	(0.028)	(0.028)	(0.086)	(0.142)	(0.142)	(0.087)	(0.054)	(0.010)	(0.028)	(0.022)
02:00-07:59	0.040	1.499*	-0.062*	-0.065*	0.004	0.209	0.254	-0.119	-0.288***	0.057***	-0.050	-0.137***
	(0.030)	(0.683)	(0.030)	(0.030)	(0.092)	(0.152)	(0.153)	(0.094)	(0.058)	(0.011)	(0.030)	(0.024)
Day of the week												
Tuesday	0.011	-0.103	0.090*	0.042	0.005	0.304	-0.065	0.121	0.025	0.012	0.028	0.000
	(0.039)	(0.885)	(0.039)	(0.039)	(0.119)	(0.197)	(0.197)	(0.121)	(0.075)	(0.014)	(0.039)	(0.031)
Wednesday	-0.041	0.091	0.018	-0.004	0.190	0.116	0.011	0.036	0.102	0.011	0.137***	-0.014
	(0.039)	(0.889)	(0.039)	(0.039)	(0.120)	(0.198)	(0.198)	(0.122)	(0.075)	(0.014)	(0.039)	(0.031)
Thursday	0.029	0.576	0.062	0.049	0.268*	0.011	0.067	0.196	0.041	0.011	0.066	-0.043
	(0.039)	(0.888)	(0.039)	(0.039)	(0.120)	(0.198)	(0.198)	(0.122)	(0.075)	(0.014)	(0.039)	(0.031)
Friday	0.028	-0.033	0.082*	0.060	-0.018	0.366	0.212	0.226	-0.117	0.041**	0.029	-0.070*
	(0.040)	(0.894)	(0.039)	(0.039)	(0.121)	(0.199)	(0.200)	(0.123)	(0.075)	(0.014)	(0.039)	(0.031)
Saturday	0.095*	1.729	0.034	0.031	0.046	0.396*	0.150	0.067	-0.211**	0.028*	-0.026	-0.113***
	(0.039)	(0.891)	(0.039)	(0.039)	(0.120)	(0.198)	(0.199)	(0.122)	(0.075)	(0.014)	(0.039)	(0.031)
Sunday	0.039	0.586	0.064	-0.009	0.105	0.357	0.291	-0.020	-0.162*	0.050***	-0.032	-0.066*
	(0.039)	(0.885)	(0.039)	(0.039)	(0.119)	(0.197)	(0.197)	(0.121)	(0.074)	(0.014)	(0.039)	(0.031)
Constant	0.468***	33.841***	0.425***	0.442***	4.445***	3.549***	4.465***	4.328***	2.680***	2.877***	0.499***	0.924***
	(0.033)	(0.748)	(0.033)	(0.033)	(0.101)	(0.166)	(0.167)	(0.102)	(0.063)	(0.012)	(0.033)	(0.026)
N	2336	2334	2334	2336	2336	2336	2336	2336	2313	2336	2336	2336
R^2	0.008	0.010	0.006	0.006	0.005	0.006	0.006	0.006	0.032	0.025	0.013	0.029

Table A5 (OLS) Regression results of the demographics of the study. *** $p<0.001$; ** $p<0.01$; * $p<0.05$.

Table A6

	DG	PD	CH	HO	3P	AP	CRT	TD	O	C	E	A	N
Time of day													
14:00-19:59	-0.100	0.461	1.233	0.538	-0.356	0.011	0.049	0.034	-0.079	-0.078	-0.094	-0.064	0.047
	(0.789)	(1.076)	(0.816)	(0.898)	(0.273)	(0.080)	(0.069)	(0.040)	(0.073)	(0.073)	(0.095)	(0.070)	(0.086)
20:00-01:59	0.497	0.266	1.081	-0.304	-0.112	0.062	-0.007	0.004	0.113	-0.194**	0.029	-0.172*	-0.214*
	(0.771)	(1.069)	(0.794)	(0.873)	(0.266)	(0.078)	(0.067)	(0.039)	(0.071)	(0.071)	(0.092)	(0.068)	(0.084)
02:00-07:59	2.040*	1.348	3.252***	0.914	0.220	0.093	-0.093	0.034	0.009	-0.290***	-0.051	-0.090	-0.119
	(0.835)	(1.156)	(0.853)	(0.938)	(0.290)	(0.085)	(0.072)	(0.041)	(0.076)	(0.076)	(0.099)	(0.073)	(0.090)
Day of the week													
Tuesday	-0.555	0.485	-0.331	-0.097	-0.211	-0.144	-0.046	-0.098	0.028	0.035	0.037	0.098	0.083
	(1.069)	(1.478)	(1.104)	(1.215)	(0.374)	(0.109)	(0.094)	(0.054)	(0.098)	(0.099)	(0.128)	(0.095)	(0.117)
Wednesday	-0.610	-0.477	-1.795	-0.594	-0.374	-0.067	-0.006	-0.009	0.040	0.187	0.054	0.160	0.204
	(1.070)	(1.464)	(1.109)	(1.221)	(0.364)	(0.106)	(0.094)	(0.054)	(0.099)	(0.099)	(0.129)	(0.095)	(0.118)
Thursday	-0.847	-0.920	-0.549	-1.730	-0.246	-0.112	0.002	-0.016	0.094	0.175	-0.109	0.102	0.264*
	(1.071)	(1.487)	(1.108)	(1.220)	(0.369)	(0.108)	(0.094)	(0.054)	(0.099)	(0.099)	(0.129)	(0.095)	(0.117)
Friday	0.941	3.445*	0.433	0.540	0.154	-0.108	-0.124	-0.109*	0.157	0.120	0.015	0.118	0.152
	(1.082)	(1.507)	(1.115)	(1.227)	(0.382)	(0.111)	(0.095)	(0.054)	(0.099)	(0.099)	(0.129)	(0.096)	(0.118)
Saturday	-0.229	-0.136	-0.401	-0.754	0.013	0.173	-0.255**	-0.021	0.092	0.123	0.118	0.122	0.042
	(1.086)	(1.511)	(1.112)	(1.223)	(0.382)	(0.111)	(0.094)	(0.054)	(0.099)	(0.099)	(0.129)	(0.095)	(0.118)
Sunday	0.348	-0.110	1.216	1.299	-0.425	-0.052	-0.296**	-0.028	0.031	0.084	-0.068	0.057	-0.038
	(1.077)	(1.539)	(1.103)	(1.214)	(0.373)	(0.109)	(0.094)	(0.054)	(0.098)	(0.098)	(0.128)	(0.095)	(0.117)
Constant	13.641***	16.547***	10.332***	17.632***	2.537***	0.195*	1.626***	-1.906***	4.989***	5.386***	3.659***	5.235***	4.909***
	(0.906)	(1.251)	(0.933)	(1.028)	(0.314)	(0.091)	(0.079)	(0.045)	(0.083)	(0.083)	(0.108)	(0.080)	(0.099)
N	2061	1689	2336	2333	1462	1462	2336	2326	2322	2318	2324	2309	2320
R^2	0.006	0.008	0.010	0.004	0.006	0.009	0.011	0.002	0.005	0.006	0.003	0.004	0.010

Table A6 (OLS) Regression results of economic and personality tasks. *** $p<0.001$; ** $p<0.01$; * $p<0.05$. DG: Dictator Game; PD: Prisoner's dilemma; CH: Charity task; HO: Honesty task; 3P: (Prosocial) Third-party punishment; AP: (Antisocial) Third-party punishment; TD: (log) Time discounting task. CRT: Cognitive reflective task; O: Openness; C: Conscientiousness; E: Extraversion; A: Agreeableness; N: Neuroticism.

Table A7

	Female	Age	Graduate	> $35k	Pol. Party	God	Risk	Trust	Log(Exp)	Log(Time)	Comp.	Usual
Participant order	0.000**	0.000	0.000	0.000	0.000	0.000	0.000*	0.000	-0.000***	0.000**	-0.000**	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant	0.453***	34.597***	0.445***	0.431***	4.537***	3.677***	4.550***	4.442***	2.717***	2.906***	0.563***	0.860***
	(0.021)	(0.468)	(0.021)	(0.021)	(0.063)	(0.104)	(0.104)	(0.064)	(0.039)	(0.007)	(0.021)	(0.016)
N	2336	2334	2334	2336	2336	2336	2336	2336	2313	2336	2336	2336
R^2	0.003	0.001	0.000	0.000	0.000	0.001	0.003	0.000	0.000	0.004	0.004	0.007

Table A7 (OLS) Regression results of each of the demographics included in this study. *** $p<0.001$; ** $p<0.01$; * $p<0.05$ (Bonferroni corrections at the 0.001 level; 0.05/50).

Table A8

	DG	PD	CH	HO	3P	AP	CRT	TD	O	C	E	A	N
Participant order	0.001	0.000	0.002***	0.001	0.000**	0.000	-0.000***	0.000	0.000	0.000	0.000	-0.000***	0.000
	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant	13.097***	17.160***	9.646***	16.706***	1.839***	0.200***	1.703***	-1.939***	5.098***	5.373***	3.602***	5.434***	5.027***
	(0.559)	(0.773)	(0.582)	(0.640)	(0.192)	(0.056)	(0.049)	(0.028)	(0.052)	(0.052)	(0.067)	(0.050)	(0.062)
N	2061	1689	2336	2333	1462	1462	2336	2326	2322	2318	2324	2309	2320
R^2	0.002	0.000	0.005	0.001	0.005	0.000	0.009	0.000	0.000	0.000	0.000	0.008	0.001

Table A8 (OLS) Regression results of economic and personality tasks. *** $p<0.001$; ** $p<0.01$; * $p<0.05$ (Bonferroni corrections at the 0.001 level; 0.05/50). DG: Dictator Game; PD: Prisoner's dilemma; CH: Charity task; HO: Honesty task; 3P: (Prosocial) Third-party punishment; AP: (Antisocial) Third-party punishment; TD: (log) Time discounting task. CRT: Cognitive reflective task; O: Openness; C: Conscientiousness; E: Extraversion; A: Agreeableness; N: Neuroticism.

Figure A1

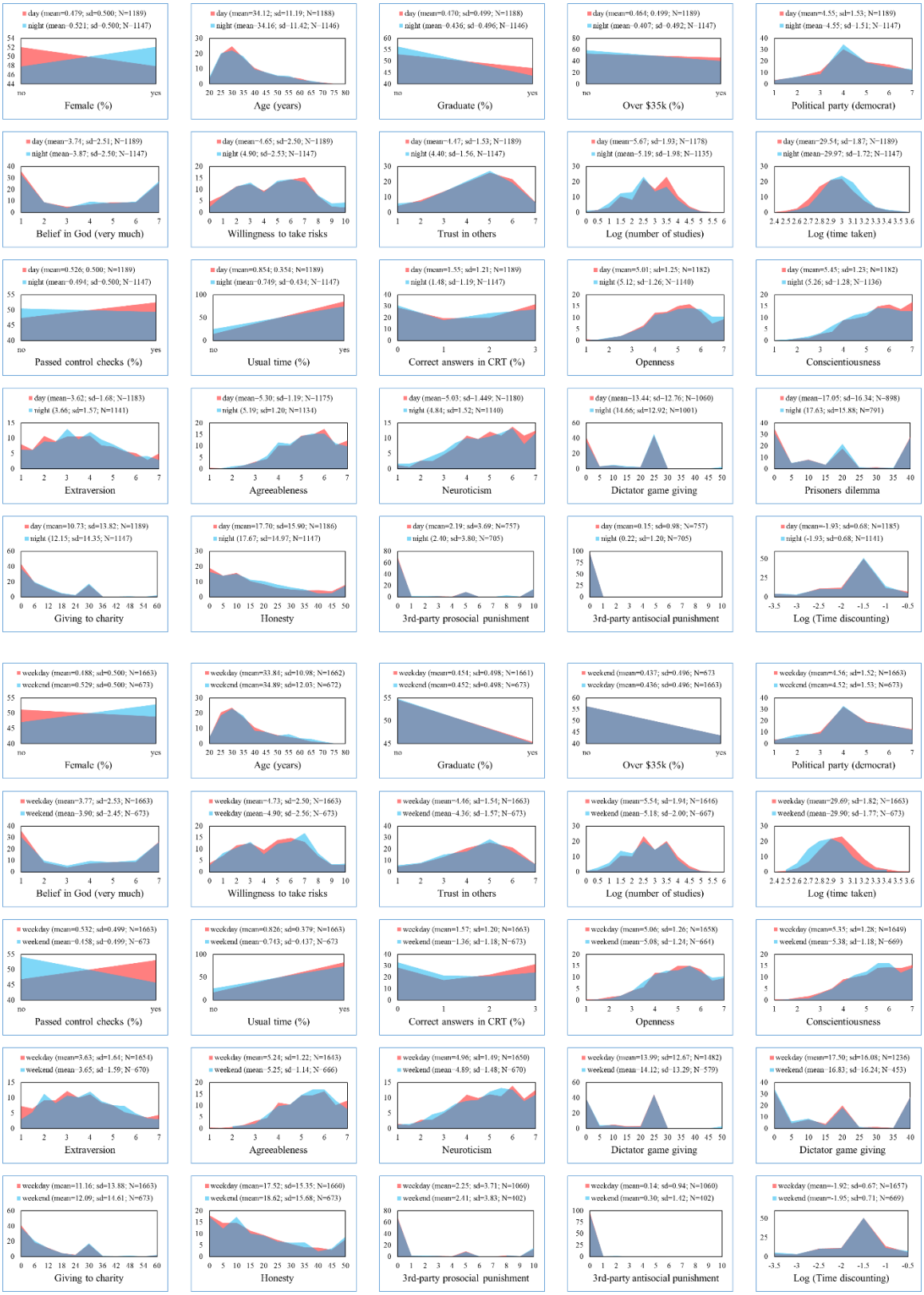


Figure A1 Histogram of frequencies of each of the variables studied, by day vs night, and weekday vs weekend

Figure A2

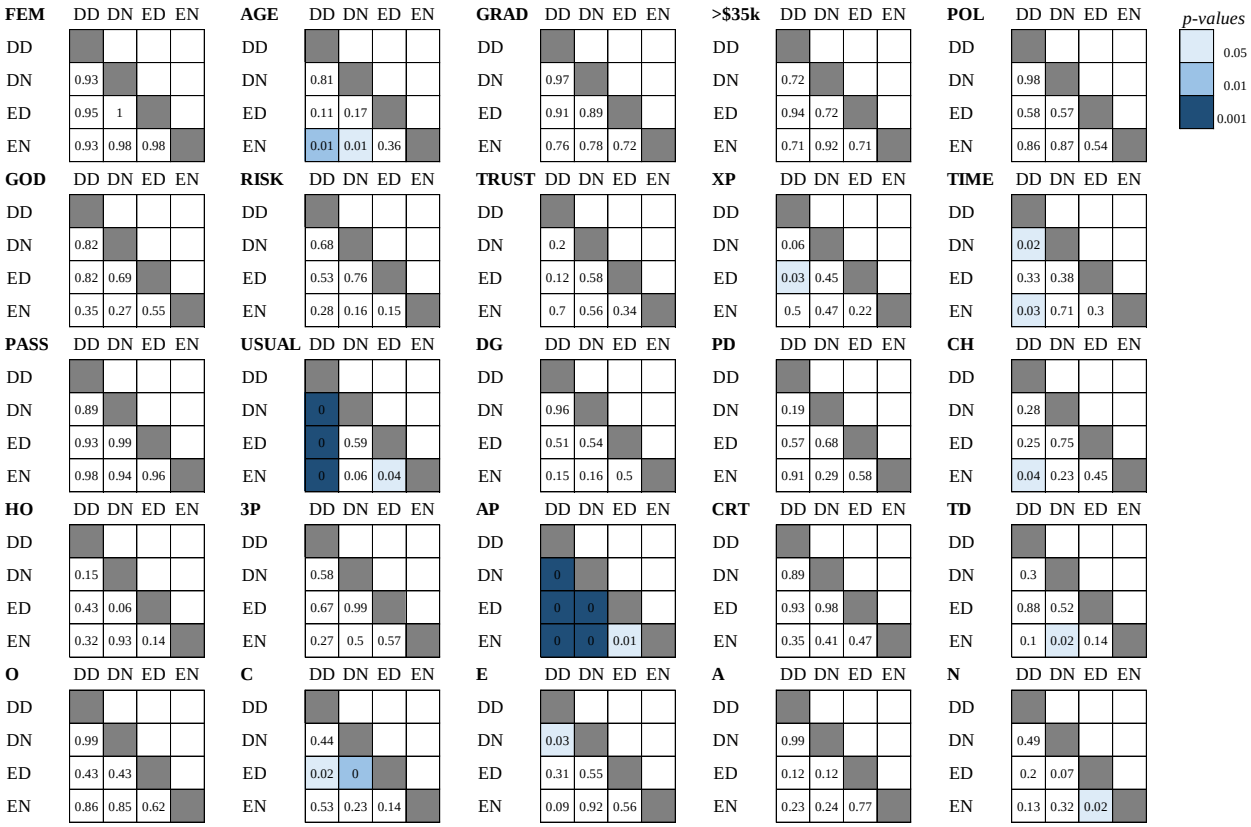


Figure A2 Variance-comparison tests between nights and weekends; p-values reported. DD: Weekday day; DN: Weekday night; ED: Weekend day; EN: Weekend night. DG: Dictator Game; PD: Prisoner's dilemma; CH: Charity task; HO: Honesty task; 3P: (Prosocial) Third-party punishment; AP: (Antisocial) Third-party punishment; TD: (log) Time discounting task. CRT: Cognitive reflective task; O: Openness; C: Conscientiousness; E: Extraversion; A: Agreeableness; N: Neuroticism.

Figure A3

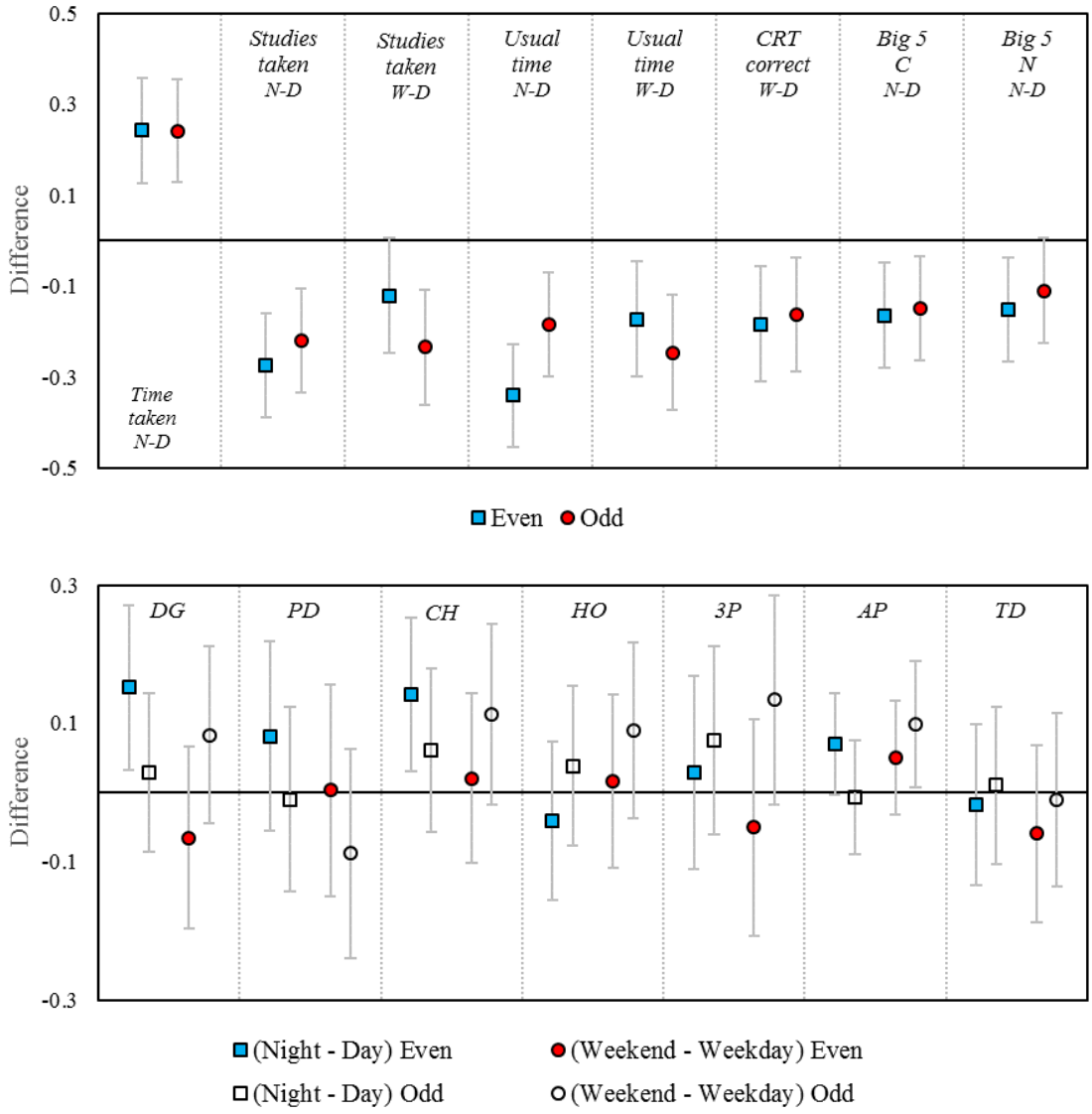


Figure A3 Differences in demographics, economic game behavior, and personality traits, by order of participation (even/odd); 95% confidence intervals reported. Variables standardized to ensure equivalent distributions; positive values in the figure indicate higher values of the dependent variable during the day *vs.* the night, and weekday *vs.* weekend. DG: Dictator Game; PD: Prisoner's dilemma; CH: Charity task; HO: Honesty task; 3P: (Prosocial) Third-party punishment; AP: (Antisocial) Third-party punishment; TD: (log) Time discounting task. CRT: Cognitive reflective task; C: Conscientiousness; N: Neuroticism.

Figure A4

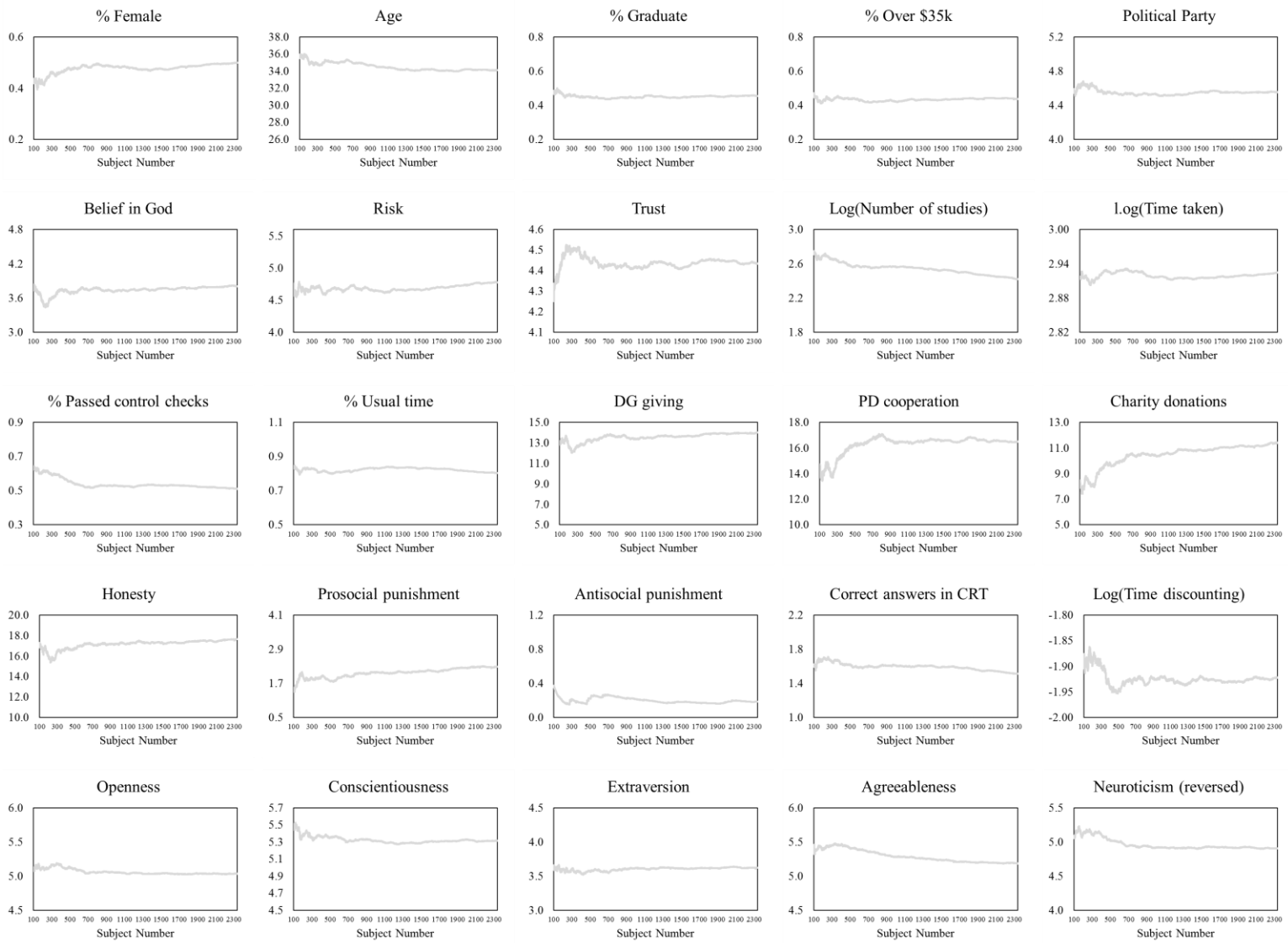


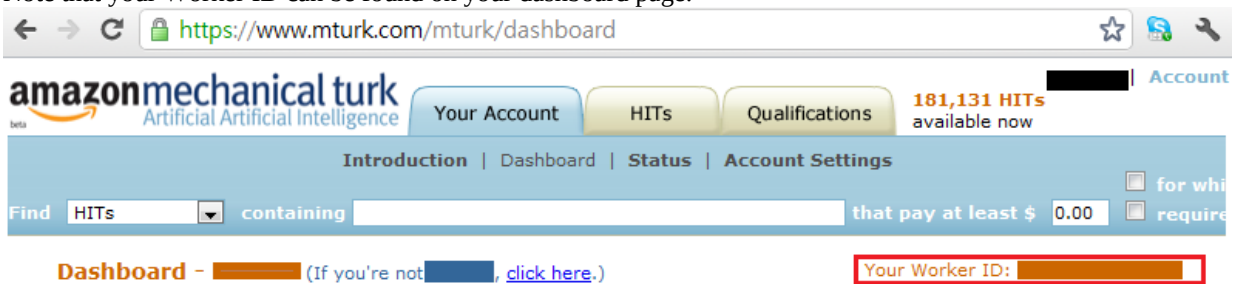
Figure A4 Cumulative average of each of the demographics and tasks of this study, by the chronological order of participation.

Experimental Instructions

Breaks between pages shown as long lines.

To begin, please enter your Amazon Mechanical Turk Worker ID here:
(Please see below for where you can find your Worker ID.)
Your Worker ID starts with the letter A and has 12-14 letters or numbers. It is NOT your email address. If we do not have your correct Worker ID we will not be able to pay you.

Note that your Worker ID can be found on your dashboard page:



This experiment consists of several sections. In each section you will be called to make one or more decisions. We don't want what happens in one section to affect your decisions in another. So at the end of the study we will randomly choose one section and use its outcomes to determine your bonus payment.
Thus, because only one interaction will count, but you don't know which one it will be, you should treat each decision as if it is the only one that matters for your final payoff.
When you are ready for the first section, press >> to continue.

New Section
In this section, you will play in a three-person game. You have been randomly assigned to interact with two other MTurk workers. You will be Player 3. The other people will be Players 1 and 2. All three of you receive this same set of instructions. You cannot participate in this interaction again: you can only play this game once.
In addition to the payment you each receive for participating in this HIT, you can earn more as a bonus, as follows:
In Stage 1:
• Player 1 is given 50 cents.
• Player 1 decides how many of the 50 cents to share with Player 2. Player 1 can share either 0 or 25 cents.
• Player 3 receives 50 cents (no matter what Player 1 chooses).
In Stage 2:
• Player 3 can then spend up to 10 cents to reduce Player 1's bonus. For every cent Player 3 spends, Player 1 loses 3 cents.
Player 1's total bonus is therefore the money Player 1 keeps minus the money Player 3 causes Player 1 to lose.
Player 2's total bonus is therefore the money Player 1 transfers to Player 2.
Player 3's total bonus is therefore 50 cents minus the money Player 3 spends on reducing Player 1's bonus.

Please answer the following questions, to make sure you understand the game. <u>You MUST answer ALL questions correctly to receive your bonus!</u>

Imagine that Player 1 is deciding whether or not to share with Player 2.
If Player 3 does not decide to reduce Player 1's bonus, which decision will result in Player 1 earning the highest payoff?
- ❍ Player 1 deciding to share
- ❍ Player 1 deciding NOT to share
- ❍ Neither - Player 1's payoff is not influenced by this decision

Imagine that Player 1 is deciding whether or not to share with Player 2. Which decision will result in Player 2 earning the highest payoff?

- ❍ Player 1 deciding to share
- ❍ Player 1 deciding NOT to share
- ❍ Neither - Player 2's payoff is not influenced by this decision

Imagine that Player 3 is deciding whether or not to reduce Player 1's bonus. Which decision will result in Player 1 earning the highest payoff?

- ❍ Player 3 deciding to reduce Player 1's bonus
- ❍ Player 3 deciding NOT to reduce Player 1's bonus
- ❍ Neither - Player 1's payoff is not influenced by your decision
- ❍

Imagine that Player 3 is deciding whether or not to reduce Player 1's bonus. Which decision will result in Player 3 earning the highest payoff?

- ❍ Player 3 deciding to reduce Player 1's bonus
- ❍ Player 3 deciding NOT to reduce Player 1's bonus
- ❍ Neither - your payoff is not influenced by your decision

The game is now in Stage 2. As Player 3, you have received 50 cents. You now have the option to spend up to 10 cents to reduce Player 1's total bonus.
Remember, for every 1 cent you spend, Player 1 loses 3 cents.
You can base your decision on Player 1's choice in Stage 1.
How many of your 50 cents (if any) would you like to spend on reducing Player 1's bonus if…

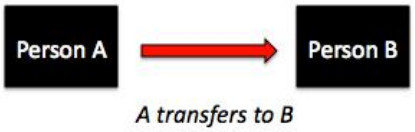
	0 cents	1 cent	2 cents	3 cents	4 cents	5 cents	6 cents	7 cents	8 cents	9 cents	10 cents
Player 1 chose to keep 50 cents and give 0 cents to Player 2?	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Player 1 chose to keep 25 cents and give 25 cents to Player 2?	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

<u>The choice that you make on this page will determine how much bonus you and Player 1 actually receive.</u>
Once the HIT is over, we will calculate bonuses and you will be told what Player 1 chose in Stage 1.
We will see how much you wanted to spend to reduce Player 1's bonus given Player 1's actual choice. Then, we will reduce Player 1's bonus based on that decision. We will also determine your bonus based on that decision.

New Section
In this section one participant selected randomly from this study can earn $60.
How much of this $60 bonus you would like to donate to Oxfam if you win it?
(Oxfam is a non-governmental organization that focuses on hunger, poverty, and similar global issues. You will keep the money that you do not donate.)

- ❍ $0
- ❍ $6
- ❍ $12
- ❍ $18
- ❍ $24
- ❍ $30
- ❍ $36
- ❍ $42
- ❍ $48
- ❍ $54
- ❍ $60

New Section
In this section you are matched with one other brand new person.
One of you will be person A, one of you will be person B.
Person A starts with 50 cents and person B starts with 0.
This interaction has one single decision:
1) Person A will choose how many of the 50 cents to transfer to person B
Person B will get the number of points A transfers and A will get to keep the rest.
The graphic below shows a summary of the interaction:



You MUST answer these questions correctly to receive your bonus! For person A, what transfer maximizes person B's payoff?
- ❍ 0
- ❍ 10
- ❍ 20
- ❍ 30
- ❍ 40
- ❍ 50
- ❍ All transfer levels earn the same amount

For person A, what transfer maximizes person A's payoff?
- ❍ 0
- ❍ 10
- ❍ 20
- ❍ 30
- ❍ 40
- ❍ 50
- ❍ All transfer levels earn the same amount

Person A
If you are person A in the interaction, how much will you transfer to person B?
- ❍ 0
- ❍ 5
- ❍ 10
- ❍ 15
- ❍ 20
- ❍ 25
- ❍ 30
- ❍ 35
- ❍ 40
- ❍ 45
- ❍ 50

New Section
In this task, your pay will be determined by whether you correctly guess a randomly drawn number between 1 and 20. Please read the instructions.

On the next page, you will see a randomly generated number between 1 and 20. Before seeing the number, you will be asked to guess the number you are about to see (a number between 1-20). After seeing the number, you will report whether your guess was correct or incorrect.
Your bonus for this task will be paid as follows:
-- If your guess is correct, you will earn $0.50
-- For every number by which you are off, you will earn $0.05 less
-- If you are off by 10 or more numbers, you will earn $0.00
For Example:
The random number is 5.
If you would guess 6, you would earn $0.45.
If you would guess 1, you would earn $0.30.
If you would guess 15, you would earn $0.00.

Please guess which number between 1 and 20 you are about to see.
When you have made a guess, go to the next page.

The number is **XX**.

- ❍ I guessed CORRECTLY $0.50
- ❍ I was off by 1 $0.45
- ❍ I was off by 2 $0.40
- ❍ I was off by 3 $0.35
- ❍ I was off by 4 $0.30
- ❍ I was off by 5 $0.25
- ❍ I was off by 6 $0.20
- ❍ I was off by 7 $0.15
- ❍ I was off by 8 $0.10
- ❍ I was off by 9 $0.05
- ❍ I was off by 10 or more $0.00

New Section
You have been randomly assigned to interact with another MTurk worker. Both of you receive this same set of instructions. You cannot participate in this study more than once.

Both of you are given 40 cents for this interaction. You each decide how much of your 40 cents to keep for yourself, and how much (if any) to give to the other person.
Any money you give to the other person will be doubled. Thus, for every 1 cent you give to the other person, he or she will receive 2 cents.
If both of you choose to give away all of your 40 cents, each of you will double your money: each of you will earn 80 cents.
But if the other person sends all of his or her 40 cents to you, while you keep all of your 40 cents for yourself, you will earn 120 cents, while the other person will earn 0 cents.
No matter what the other person chooses, you earn the most by keeping all of your money.
The other person is REAL and will really make a decision – there is no deception in this study.
Once you and the other person have chosen how much to give, the interaction is over.

You MUST answer these questions correctly to receive your bonus! How many cents would you give to the other person in order to maximize the other person's earnings?

- ❍ 0
- ❍ 10
- ❍ 20
- ❍ 30
- ❍ 40

How many cents would you give to the other person in order to maximize your own earnings?

- ❍ 0
- ❍ 10
- ❍ 20
- ❍ 30
- ❍ 40

Please choose how many cents you will send to the other person:

_____

New Section

In this section one participant selected randomly from this study can earn up to $60. Please read the following paragraphs carefully.

For each of the following 10 questions you decide whether you prefer to be paid a certain amount today or a larger amount later. You must select one option for each question.

At the end of the study one participant and one question will be selected randomly. The winner will receive the associated bonus according to the choice made.

Please answer the questions quickly and honestly.

1. Would you rather have
   - ❍ $54 Today
   - ❍ $55 in 117 Days

2. Would you rather have
   - ❍ $47 Today
   - ❍ $50 in 160 Days

3. Would you rather have
   - ❍ $25 Today
   - ❍ $60 in 14 Days

4. Would you rather have
   - ❍ $40 Today
   - ❍ $55 in 62 Days

5. Would you rather have
   - ❍ $27 Today
   - ❍ $50 in 21 Days

6. Would you rather have
   - ❍ $49 Today
   - ❍ $60 in 89 Days

7. Would you rather have
   - ❍ $34 Today
   - ❍ $50 in 30 Days

8. Would you rather have
   - ❍ $54 Today
   - ❍ $60 in 111 Days

9. Would you rather have
   - ❍ $20 Today
   - ❍ $55 in 7 Days

Here are a number of personality traits that may or may not apply to you. Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

I see myself as:

Extraverted, enthusiastic.
- ❍ 1 - Disagree strongly
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Agree strongly

Critical, quarrelsome.
- ❍ 1 - Disagree strongly
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Agree strongly

Dependable, self-disciplined.
- ❍ 1 - Disagree strongly
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Agree strongly

Anxious, easily upset.
- ❍ 1 - Disagree strongly
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Agree strongly

Open to new experiences, complex.
- ❍ 1 - Disagree strongly
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Agree strongly

Reserved, quiet.
- ❍ 1 - Disagree strongly
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Agree strongly

Sympathetic, warm.
- ❍ 1 - Disagree strongly
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Agree strongly

Disorganized, careless.
- ❍ 1 - Disagree strongly
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Agree strongly

Calm, emotionally stable.
- ❍ 1 - Disagree strongly
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Agree strongly

Conventional, uncreative.
- ❍ 1 - Disagree strongly
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Agree strongly

In this section you will be asked three questions. Please do your best to answer as accurately as possible.

The ages of Mark and Adam add up to 28 years total. Mark is 20 years older than Adam. How many years old is Adam?

If it takes 10 second for 10 printers to print out 10 pages of paper, how many seconds will it take 50 printers to print out 50 pages of paper?

On a loaf of bread, there is a patch of mold. Every day, the patch doubles in size. If it takes 40 days for the patch to cover the entire loaf of bread, how many days would it take for the patch to cover half of the loaf of bread?

What is your age?

Gender?
- ❍ Male
- ❍ Female

Highest level of education completed:
- ❍ Less than a high school degree
- ❍ High School Diploma
- ❍ Vocational Training
- ❍ Attended College
- ❍ Bachelor's Degree
- ❍ Graduate Degree
- ❍ Unknown

Please choose the category that describes the total amount of income you earned in 2013. Consider all forms of income, including salaries, tips, interest and dividend payments, scholarship support, student loans, parental support, social security, alimony, and child support, and others.
- ❍ Under $5,000
- ❍ $5,000-$10,000
- ❍ $10,001-$15,000
- ❍ $15,001-$25,000
- ❍ $25,001-$35,000
- ❍ $35,001-$50,000
- ❍ $50,001-$65,000
- ❍ $65,001-$80,000
- ❍ $80,001-$100,000
- ❍ Over $100,000

How do you see yourself: are you generally a person who is fully prepared to take risks or do you try to avoidtaking risks?
- ❍ 0 - Not at all willing to take risks
- ❍ 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7
- ❍ 8
- ❍ 9
- ❍ 10 - Very willing to take risks

To what extent do you feel you can trust other people that you interact with in your daily life?
- ❍ 1 - Very little
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very much

I would rather do something that requires little thought than something that is sure to challenge my thinking abilities.
- ❍ 1 - Very untrue
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5 - Very true

I trust my initial feelings about people.
- ❍ 1 - Very untrue
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5 - Very true

Which US political party do you identify with more strongly?
- ❍ 1-Strongly Republican
- ❍ 2
- ❍ 3
- ❍ 4-Neutral
- ❍ 5
- ❍ 6
- ❍ 7-Strongly Democrat

How strongly do you believe in the existence of a God or Gods?
- ❍ 1 - Very little
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very much

In the text box below, please describe why you made the decisions that you did in this study.

Please indicate your current degree of emotion, meaning such characteristics as how pleasant or unpleasant you feel.
- ❍ 1: extremely sad
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7
- ❍ 8
- ❍ 9: extremely happy

Politically, how conservative are you in terms of social issues
- ❍ 1 - Very liberal
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6 - Very conservative

Politically, how conservative are you in terms of fiscal issues
- ❍ 1 - Very liberal
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6 - Very conservative

When you fly, which type of seat do you prefer?
- ❍ Aisle
- ❍ Window
- ❍ Middle
- ❍ Don't have a preference
- ❍ Don't fly

Do you usually work on HITs at this time of the day?
- ❍ Yes
- ❍ No

Do you smoke?
- ❍ No
- ❍ Yes

What is your marital status?
- ❍ Single, never married
- ❍ Married or domestic partnership
- ❍ Widowed
- ❍ Divorced
- ❍ Separated

Are you currently...?
- ❍ Employed for wages
- ❍ Self-employed
- ❍ Out of work and looking for work
- ❍ Out of work but not currently looking for work
- ❍ A homemaker
- ❍ A student
- ❍ Military
- ❍ Retired
- ❍ Unable to work

About how many surveys/studies have you participated in on MTurk before?

About how many surveys/studies have you participated with us (online research studies)?

Please let us know how much you have participated in the following types of HITs on Amazon Mechanical Turk:

	Never	Rarely	Sometimes	Often	All of the Time
Transcribe audio or video	❍	❍	❍	❍	❍
Review text or video	❍	❍	❍	❍	❍
Answer survey questions	❍	❍	❍	❍	❍
Divide money between yourself and others	❍	❍	❍	❍	❍
Edit text (e.g. for English as a 2nd language writers)	❍	❍	❍	❍	❍
Find contact info (e.g. phone number, address, etc.)	❍	❍	❍	❍	❍
Website content review	❍	❍	❍	❍	❍
Write an essay	❍	❍	❍	❍	❍

To what extent have you previously participated in other studies like to this one (i.e. that involve the dividing up of money)?

- ❍ 1 - Nothing like this scenario
- ❍ 2
- ❍ 3 - Something like this scenario
- ❍ 4
- ❍ 5 - Exactly this scenario

Unlike some other requesters on Mechanical Turk, we never use deception in our studies. Your actions and the actions of others in the study really did affect the bonuses that other individuals will earn. For our own records, to what extent did you believe that the other people were real when making your decision?

- ❍ 1 - Very skeptical that others were real
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7 - Very confident that others were real