

**Environmental Predictors of Within-Person Changes in Callous-Unemotional Traits
among Justice-Involved Male Adolescents**

Supplemental Material

Supplemental Table 1. Descriptive statistics for CU traits, environmental conditions, and offending by time

	Age 15		Age 16		Age 17		Age 18		Age 19		Age 20		Age 21	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
CU Traits	33.111	6.401	33.315	6.264	32.829	5.666	32.781	6.417	32.280	6.193	32.733	6.274	32.553	6.213
Grandiose- Manipulative	39.71	10.99	39.66	10.81	38.96	10.50	39.08	10.56	37.61	10.79	37.82	10.45	38.14	10.77
Impulsive- Irresponsible	35.32	8.00	35.11	8.21	34.55	7.67	34.41	7.77	33.65	8.06	32.94	8.03	32.64	8.89
Negative Parenting	0.626	0.417	0.652	0.421	0.644	0.394	0.679	0.428	0.663	0.413	0.668	0.424	0.735	0.419
Antisocial Peers	1.440	1.185	1.519	1.285	1.514	1.086	1.625	1.213	1.491	1.270	1.393	1.069	1.222	0.906
Community Violence	1.652	2.237	1.832	2.196	1.553	1.980	1.743	2.098	1.489	2.020	1.308	1.845	1.076	1.851
Neighborhood Disorder	2.328	0.759	2.348	0.761	2.315	0.775	2.355	0.788	2.350	0.806	2.360	0.791	2.366	0.823
Offending	2.873	4.188	2.699	3.626	2.564	3.523	2.481	3.558	1.993	2.969	1.644	2.659	1.106	1.618

Supplemental Table 2. Differences in study variables between participants with and without complete data.

Callous-Unemotional				Impulsive-Irresponsible			Grandiose-Manipulative			Community Violence			Neighborhood Disorder			Offending		
t	df	p		t	df	p	t	df	p	t	df	p	t	df	p	t	df	p
15	1.318	156	0.189	2.112	156	0.036	1.482	156	0.141	1.662	156	0.099	-0.262	156	0.794	1.306	156	0.194
16	-1.488	344	0.138	-2.509	344	0.013	-2.307	344	0.022	-0.291	344	0.771	-0.063	344	0.950	-0.542	344	0.588
17	0.547	562	0.585	0.255	562	-0.062	-0.109	562	0.914	2.236	562	0.026	-0.066	562	0.948	0.481	562	0.631
18	0.363	776	0.717	-0.062	776	0.951	-0.591	776	0.555	0.035	776	0.972	-0.127	776	0.899	0.708	776	0.479
19	-0.948	730	0.344	-1.805	730	0.072	-0.065	730	0.949	0.794	730	0.428	1.695	730	0.091	-0.736	730	0.462
20	-1.950	251	0.052	-1.346	251	0.180	-1.757	251	0.080	0.603	251	0.547	-0.122	251	0.903	-1.333	251	0.184
21	0.752	64	0.455	0.704	64	0.484	0.040	64	0.968	-0.485	64	0.629	-1.614	64	0.111	-0.266	64	0.791
Negative Parenting				Parental Warmth			Parental Hostility			Antisocial Peers			Interpersonal Support			Antisocial Influence		
t	df	p		t	df	p	t	df	p	t	df	p	t	df	p	t	df	p
15	0.223	156	0.824	-0.507	156	0.613	-0.463	156	0.644	0.958	156	0.340	-	-	-	0.118	156	0.907
16	-0.667	344	0.506	0.333	344	0.739	-1.059	344	0.290	-1.976	344	0.049	-	-	-	-1.640	344	0.102
17	-2.947	562	0.003	2.782	562	0.006	-1.576	562	0.116	0.243	562	0.808	-	-	-	-0.592	562	0.554
18	-1.423	776	0.155	1.915	776	0.056	0.385	776	0.701	-2.965	776	0.003	-	-	-	-2.635	776	0.009
19	-2.960	730	0.003	2.998	730	0.003	-0.926	730	0.355	1.168	730	0.243	-	-	-	-0.679	730	0.498
20	-2.907	251	0.004	3.020	251	0.003	-1.062	251	0.289	1.186	251	0.237	-	-	-	-0.440	251	0.660
21	-1.164	64	0.249	0.300	64	0.765	-2.062	64	0.043	1.405	64	0.165	-	-	-	0.416	64	0.679

Note. Bolded text represents significant ($p < 0.05$) estimates. Of the seven timepoints examined, 85.58% of analytic sample had no missing data. Of the participants with missing data, 10.62% were missing data at one timepoint, 3.02% at two timepoints, 0.68% at three timepoints, and 0.10% missed five timepoints. Using t-tests, we examined whether those with (coded as 1) or without (coded as 0) any missing data significantly differed in any of the study variables at each timepoint. Negative t-values indicate those with missing data have lower mean levels than those without missing data. Missing data was not associated with CU traits at any timepoint. There

were some differences in negative parenting, antisocial peers, and community violence between those with and without missing data, however these differences were not consistent across timepoints or between variables. There was no missing data for Interpersonal Support.

Supplemental Table 3. Associations between Antisocial Peers and CU Traits by Community Violence and Neighborhood Disorder

	Antisocial Peers				
	b	SE	t	p	95% CI
Low Neighborhood Disorder (-1SD)					
Low Community Violence (-1SD)	0.811	0.206	3.930	0.000	0.406 1.215
Average Community Violence (Mean)	0.566	0.163	3.460	0.001	0.246 0.886
High Community Violence	0.321	0.202	1.590	0.111	-0.074 0.716
Average Neighborhood Disorder (Mean)					
Low Community Violence (-1SD)	0.839	0.147	5.700	0.000	0.550 1.127
Average Community Violence (Mean)	0.742	0.116	6.400	0.000	0.515 0.970
High Community Violence (+1SD)	0.646	0.134	4.820	0.000	0.383 0.909
High Neighborhood Disorder (+1SD)					
Low Community Violence (-1SD)	0.867	0.187	4.620	0.000	0.499 1.234
Average Community Violence (Mean)	0.919	0.139	6.620	0.000	0.647 1.191
High Community Violence (+1SD)	0.971	0.138	7.040	0.000	0.701 1.242

Note. Bolded text represents significant ($p < 0.05$) estimates. Post-hoc analysis indicated that greater exposure to antisocial peers was generally associated with increases in CU traits across levels of community violence and neighborhood disorder. However, there was no significant association between antisocial peers and CU traits when youth reported both high (+1 SD) levels of community violence and low levels of neighborhood disorder (+1 SD).

Supplemental Table 4. Associations among Negative Parenting, Neighborhood Disorder, and CU Traits by Community Violence and Age

	Negative Parenting						Neighborhood Disorder					
	b	SE	t	p	95% CI		b	SE	t	p	95% CI	
Low Community Violence (-1 SD)												
15	-0.047	0.866	-0.050	0.956	-1.745	1.650	0.178	0.490	0.360	0.717	-0.782	1.137
16	0.689	0.658	1.050	0.295	-0.601	1.978	0.234	0.382	0.610	0.540	-0.514	0.983
17	1.425	0.497	2.870	0.004	0.451	2.398	0.290	0.299	0.970	0.331	-0.295	0.876
18	2.161	0.437	4.940	0.000	1.303	3.018	0.347	0.265	1.310	0.191	-0.173	0.867
19	2.897	0.517	5.610	0.000	1.884	3.909	0.403	0.298	1.350	0.176	-0.181	0.988
20	3.633	0.688	5.280	0.000	2.285	4.981	0.460	0.381	1.210	0.227	-0.287	1.206
21	4.369	0.900	4.850	0.000	2.604	6.133	0.516	0.489	1.060	0.291	-0.441	1.474
Average Community Violence (Mean)												
15	1.246	0.626	1.990	0.046	0.020	2.472	0.954	0.361	2.640	0.008	0.247	1.662
16	1.464	0.482	3.040	0.002	0.519	2.410	0.712	0.287	2.480	0.013	0.150	1.274
17	1.683	0.375	4.490	0.000	0.949	2.417	0.470	0.232	2.030	0.043	0.015	0.924
18	1.901	0.338	5.620	0.000	1.239	2.563	0.227	0.212	1.070	0.284	-0.188	0.643
19	2.119	0.393	5.390	0.000	1.349	2.890	-0.015	0.237	-0.060	0.949	-0.479	0.449
20	2.338	0.511	4.570	0.000	1.336	3.339	-0.257	0.295	-0.870	0.382	-0.835	0.320
21	2.556	0.659	3.880	0.000	1.265	3.847	-0.500	0.371	-1.350	0.177	-1.226	0.226
High Community Violence (+1 SD)												
15	2.539	0.877	2.900	0.004	0.820	4.258	1.731	0.498	3.470	0.001	0.754	2.708
16	2.240	0.654	3.430	0.001	0.959	3.521	1.190	0.380	3.130	0.002	0.446	1.935
17	1.941	0.482	4.030	0.000	0.996	2.886	0.649	0.291	2.230	0.026	0.079	1.219
18	1.641	0.429	3.820	0.000	0.800	2.483	0.108	0.262	0.410	0.682	-0.407	0.622
19	1.342	0.532	2.520	0.012	0.300	2.384	-0.434	0.312	-1.390	0.165	-1.046	0.179
20	1.043	0.727	1.430	0.151	-0.382	2.467	-0.975	0.413	-2.360	0.018	-1.784	-0.165
21	0.744	0.959	0.780	0.438	-1.137	2.624	-1.516	0.536	-2.830	0.005	-2.567	-0.465

Note. Bolded text represents significant ($p < 0.05$) estimates. The three-way interaction among negative parenting, community violence, and age was significant—the relation between CU traits and parents strengthened as youth aged and were exposed to low community violence.

Supplemental Table 5. Fixed effect regression models with environmental conditions predicting Grandiose-Manipulative traits

	Model 1						Model 2						Model 3						Model 4					
	b	SE	t	p	95% CI		b	SE	t	p	95% CI		b	SE	t	p	95% CI		b	SE	t	p	95% CI	
Age	-0.81	0.13	-6.45	0.00	-1.05	-0.56	-0.77	0.13	-6.18	0.00	-1.02	-0.53	-0.77	0.13	-6.19	0.00	-1.02	-0.53	-0.78	0.13	-6.24	0.00	-1.03	-0.54
Negative Parenting	2.76	0.56	4.93	0.00	1.66	3.86	2.62	0.56	4.70	0.00	1.53	3.72	2.72	0.57	4.75	0.00	1.60	3.84	2.74	0.57	4.78	0.00	1.61	3.86
Antisocial Peers	1.38	0.18	7.58	0.00	1.02	1.74	1.28	0.19	6.73	0.00	0.91	1.66	1.21	0.19	6.26	0.00	0.83	1.59	1.18	0.19	6.07	0.00	0.80	1.56
Community Violence	-0.20	0.11	-1.85	0.06	-0.42	0.01	-0.07	0.12	-0.55	0.58	-0.30	0.17	-0.07	0.12	-0.56	0.58	-0.30	0.17	-0.07	0.12	-0.61	0.54	-0.31	0.16
Neighborhood Disorder	0.69	0.35	1.97	0.05	0.00	1.38	0.60	0.35	1.72	0.09	-0.08	1.29	0.50	0.36	1.40	0.16	-0.20	1.21	0.53	0.36	1.47	0.14	-0.18	1.24
Offending	0.19	0.08	2.51	0.01	0.04	0.34	0.20	0.08	2.67	0.01	0.05	0.36	0.21	0.08	2.69	0.01	0.06	0.36	0.21	0.08	2.76	0.01	0.06	0.36
Negative Parenting x Antisocial Peers							0.67	0.34	1.96	0.05	0.00	1.34	0.60	0.35	1.73	0.08	-0.08	1.27	0.47	0.35	1.34	0.18	-0.22	1.17
Negative Parenting x Community Violence							-0.29	0.22	-1.32	0.19	-0.71	0.14	-0.30	0.23	-1.33	0.18	-0.75	0.14	-0.32	0.23	-1.41	0.16	-0.77	0.13
Negative Parenting x Neighborhood Disorder							-1.16	0.61	-1.91	0.06	-2.35	0.03	-0.96	0.61	-1.58	0.11	-2.16	0.23	-1.16	0.62	-1.86	0.06	-2.38	0.06
Antisocial Peers x Community Violence							-0.14	0.06	-2.36	0.02	-0.26	-0.02	-0.19	0.06	-2.93	0.00	-0.31	-0.06	-0.18	0.06	-2.87	0.00	-0.31	-0.06
Antisocial Peers x Neighborhood Disorder							0.73	0.20	3.65	0.00	0.34	1.12	0.63	0.21	3.04	0.00	0.23	1.04	0.62	0.21	2.99	0.00	0.21	1.03
Neighborhood Disorder x Community Violence							-0.20	0.13	-1.59	0.11	-0.45	0.05	-0.31	0.13	-2.33	0.02	-0.58	-0.05	-0.33	0.14	-2.47	0.01	-0.60	-0.07
Negative Parenting x Antisocial Peers x Community Violence													0.10	0.15	0.69	0.49	-0.19	0.39	0.03	0.15	0.22	0.82	-0.26	0.33
Negative Parenting x Antisocial Peers x Neighborhood Disorder													-0.27	0.38	-0.70	0.48	-1.02	0.48	-0.32	0.38	-0.83	0.41	-1.07	0.43
Negative Parenting x Neighborhood Disorder x Community Violence													-0.30	0.25	-1.18	0.24	-0.80	0.20	-0.45	0.27	-1.66	0.10	-0.99	0.08
Antisocial Peers x Neighborhood Disorder x Community Violence													0.19	0.07	2.62	0.01	0.05	0.33	0.20	0.07	2.74	0.01	0.06	0.34
Negative Parenting x Antisocial Peers x Community Violence x Neighborhood Disorder																			0.25	0.16	1.55	0.12	-0.07	0.57

Note. Bolded text represents significant ($p < 0.05$) estimates. Affiliation with antisocial peers was not significantly related to Grandiose-Manipulative traits when youth were simultaneously exposed to high community violence and low neighborhood disorder.

Supplemental Table 6. Fixed effect regression models with environmental conditions and age interactions predicting Grandiose-Manipulative traits

	Model 5						Model 6						Model 7						Model 8					
	b	SE	t	p	95% CI		b	SE	t	p	95% CI		b	SE	t	p	95% CI		b	SE	t	p	95% CI	
Age	-0.80	0.13	-6.36	0.00	-1.05	-0.56	-0.68	0.14	-4.90	0.00	-0.95	-0.41	-0.67	0.14	-4.80	0.00	-0.95	-0.40	-0.67	0.14	-4.78	0.00	-0.95	-0.40
Negative Parenting	2.73	1.03	2.65	0.01	0.71	4.75	2.82	1.04	2.73	0.01	0.79	4.86	3.46	1.13	3.07	0.00	1.25	5.67	3.43	1.13	3.04	0.00	1.22	5.65
Antisocial Peers	1.75	0.36	4.82	0.00	1.04	2.46	1.68	0.38	4.37	0.00	0.93	2.43	1.49	0.40	3.71	0.00	0.70	2.27	1.46	0.41	3.60	0.00	0.67	2.26
Community Violence	-0.36	0.21	-1.73	0.08	-0.76	0.05	-0.41	0.23	-1.79	0.07	-0.85	0.04	-0.33	0.24	-1.40	0.16	-0.80	0.13	-0.34	0.24	-1.44	0.15	-0.81	0.13
Neighborhood Disorder	1.28	0.60	2.15	0.03	0.11	2.45	1.28	0.60	2.14	0.03	0.11	2.45	1.51	0.63	2.39	0.02	0.27	2.75	1.54	0.64	2.43	0.02	0.30	2.79
Offending	0.19	0.08	2.51	0.01	0.04	0.34	0.21	0.08	2.68	0.01	0.06	0.36	0.20	0.08	2.61	0.01	0.05	0.36	0.21	0.08	2.63	0.01	0.05	0.36
Negative Parenting x Age	0.01	0.30	0.02	0.98	-0.58	0.59	-0.09	0.30	-0.30	0.76	-0.68	0.50	-0.23	0.33	-0.70	0.49	-0.88	0.42	-0.22	0.33	-0.66	0.51	-0.87	0.43
Antisocial Peers x Age	-0.13	0.11	-1.18	0.24	-0.34	0.08	-0.15	0.11	-1.29	0.20	-0.37	0.08	-0.11	0.12	-0.97	0.33	-0.34	0.12	-0.11	0.12	-0.94	0.35	-0.34	0.12
Community Violence x Age	0.05	0.06	0.83	0.41	-0.07	0.17	0.12	0.07	1.83	0.07	-0.01	0.26	0.10	0.07	1.49	0.14	-0.03	0.24	0.11	0.07	1.50	0.13	-0.03	0.24
Neighborhood Disorder x Age	-0.20	0.16	-1.23	0.22	-0.52	0.12	-0.24	0.16	-1.46	0.14	-0.56	0.08	-0.35	0.18	-2.00	0.05	-0.70	-0.01	-0.35	0.18	-2.01	0.05	-0.70	-0.01
Negative Parenting x Antisocial Peers							-0.02	0.79	-0.03	0.98	-1.57	1.52	-0.36	0.81	-0.44	0.66	-1.95	1.23	-0.32	0.84	-0.38	0.70	-1.98	1.33
Negative Parenting x Community Violence							0.61	0.49	1.26	0.21	-0.34	1.57	0.78	0.55	1.43	0.15	-0.29	1.86	0.77	0.55	1.41	0.16	-0.30	1.85
Negative Parenting x Neighborhood Disorder							-0.80	1.27	-0.63	0.53	-3.30	1.69	-0.52	1.31	-0.39	0.69	-3.08	2.05	-0.53	1.37	-0.39	0.70	-3.21	2.15
Antisocial Peers x Community Violence							-0.13	0.14	-0.94	0.35	-0.41	0.15	-0.13	0.16	-0.80	0.42	-0.45	0.19	-0.13	0.16	-0.81	0.42	-0.45	0.19
Antisocial Peers x Neighborhood Disorder							0.65	0.47	1.39	0.17	-0.27	1.56	0.90	0.50	1.80	0.07	-0.08	1.88	0.89	0.50	1.79	0.07	-0.09	1.87
Neighborhood Disorder x Community Violence							0.38	0.27	1.40	0.16	-0.15	0.91	0.29	0.28	1.03	0.30	-0.27	0.85	0.30	0.30	0.99	0.32	-0.29	0.89
Negative Parenting x Antisocial Peers x Age							0.25	0.24	1.06	0.29	-0.22	0.72	0.33	0.24	1.36	0.17	-0.15	0.81	0.29	0.26	1.14	0.25	-0.21	0.80
Negative Parenting x Community Violence x Age							-0.31	0.15	-2.05	0.04	-0.61	-0.01	-0.36	0.17	-2.13	0.03	-0.69	-0.03	-0.36	0.17	-2.13	0.03	-0.70	-0.03
Negative Parenting x Neighborhood Disorder x Age							-0.10	0.37	-0.26	0.79	-0.82	0.63	-0.07	0.38	-0.19	0.85	-0.83	0.68	-0.11	0.40	-0.28	0.78	-0.91	0.68
Antisocial Peers x Community Violence x Age							-0.01	0.04	-0.20	0.84	-0.09	0.07	-0.02	0.05	-0.39	0.70	-0.11	0.07	-0.02	0.05	-0.39	0.70	-0.11	0.07
Antisocial Peers x Neighborhood Disorder x Age							0.01	0.15	0.07	0.94	-0.27	0.29	-0.10	0.16	-0.67	0.51	-0.41	0.20	-0.10	0.16	-0.66	0.51	-0.41	0.20
Neighborhood Disorder x Community Violence x Age							-0.20	0.08	-2.42	0.02	-0.36	-0.04	-0.21	0.09	-2.44	0.02	-0.38	-0.04	-0.21	0.09	-2.39	0.02	-0.39	-0.04
Negative Parenting x Antisocial Peers x Community Violence													-0.43	0.40	-1.06	0.29	-1.21	0.36	-0.39	0.41	-0.93	0.35	-1.19	0.42
Negative Parenting x Antisocial Peers x Neighborhood Disorder													-1.68	1.01	-1.66	0.10	-3.67	0.30	-1.70	1.02	-1.67	0.10	-3.70	0.30
Negative Parenting x Neighborhood Disorder x Community Violence													0.08	0.65	0.12	0.90	-1.20	1.36	0.02	0.70	0.02	0.98	-1.35	1.38
Antisocial Peers x Neighborhood Disorder x Community Violence													0.04	0.19	0.19	0.85	-0.34	0.41	0.04	0.19	0.21	0.84	-0.34	0.42

Negative Parenting x Antisocial Peers x Community Violence x Age	0.16	0.12	1.35	0.18	-0.07	0.38	0.13	0.12	1.06	0.29	-0.11	0.37
Negative Parenting x Antisocial Peers x Neighborhood Disorder x Age	0.45	0.32	1.42	0.16	-0.17	1.08	0.45	0.32	1.39	0.17	-0.18	1.07
Negative Parenting x Neighborhood Disorder x Community Violence x Age	-0.12	0.21	-0.59	0.56	-0.53	0.29	-0.13	0.22	-0.61	0.54	-0.56	0.29
Antisocial Peers x Neighborhood Disorder x Community Violence x Age	0.06	0.06	0.95	0.34	-0.06	0.17	0.06	0.06	0.97	0.33	-0.06	0.17
Negative Parenting x Antisocial Peers x Community Violence x Neighborhood Disorder							0.01	0.51	0.01	0.99	-1.00	1.01
Negative Parenting x Antisocial Peers x Community Violence x Neighborhood Disorder x Age							0.05	0.15	0.34	0.73	-0.25	0.35

Note. Bolded text represents significant ($p < 0.05$) estimates. Similar to CU traits, exposure to community violence and age moderated the associations between negative parenting and Grandiose-Manipulative traits, as well as neighborhood disorder and Grandiose-Manipulative traits.

Supplemental Table 7. Fixed effect regression models with environmental conditions predicting Impulsive-Irresponsible traits

	Model 1						Model 2						Model 3						Model 4					
	b	SE	t	p	95% CI		b	SE	t	p	95% CI		b	SE	t	p	95% CI		b	SE	t	p	95% CI	
Age	-0.50	0.09	-5.33	0.00	-0.69	-0.32	-0.48	0.09	-5.10	0.00	-0.67	-0.30	-0.48	0.09	-5.10	0.00	-0.67	-0.30	-0.48	0.09	-5.11	0.00	-0.67	-0.30
Negative Parenting	1.91	0.42	4.54	0.00	1.08	2.73	1.90	0.42	4.51	0.00	1.07	2.72	1.93	0.43	4.47	0.00	1.08	2.78	1.94	0.43	4.47	0.00	1.09	2.78
Antisocial Peers	1.07	0.14	7.84	0.00	0.81	1.34	1.03	0.14	7.19	0.00	0.75	1.31	1.03	0.15	7.06	0.00	0.75	1.32	1.03	0.15	6.99	0.00	0.74	1.32
Community Violence	0.06	0.08	0.68	0.50	-0.11	0.22	0.14	0.09	1.63	0.10	-0.03	0.32	0.14	0.09	1.56	0.12	-0.04	0.32	0.14	0.09	1.55	0.12	-0.04	0.32
Neighborhood Disorder	0.27	0.26	1.02	0.31	-0.25	0.79	0.24	0.26	0.92	0.36	-0.28	0.76	0.20	0.27	0.74	0.46	-0.33	0.73	0.20	0.27	0.75	0.45	-0.33	0.74
Offending	0.24	0.06	4.11	0.00	0.12	0.35	0.23	0.06	4.03	0.00	0.12	0.35	0.23	0.06	4.04	0.00	0.12	0.35	0.24	0.06	4.05	0.00	0.12	0.35
Negative Parenting x Antisocial Peers							0.10	0.26	0.39	0.69	-0.40	0.61	0.05	0.26	0.21	0.84	-0.46	0.56	0.03	0.27	0.13	0.90	-0.49	0.56
Negative Parenting x Community Violence							-0.35	0.16	-2.16	0.03	-0.67	-0.03	-0.35	0.17	-2.04	0.04	-0.69	-0.01	-0.35	0.17	-2.05	0.04	-0.69	-0.02
Negative Parenting x Neighborhood Disorder							-0.63	0.46	-1.37	0.17	-1.52	0.27	-0.58	0.46	-1.27	0.21	-1.48	0.32	-0.61	0.47	-1.30	0.19	-1.53	0.31
Antisocial Peers x Community Violence							0.01	0.05	0.24	0.81	-0.08	0.10	0.00	0.05	-0.07	0.95	-0.10	0.09	0.00	0.05	-0.06	0.96	-0.10	0.09
Antisocial Peers x Neighborhood Disorder							0.30	0.15	1.99	0.05	0.00	0.60	0.24	0.16	1.54	0.12	-0.07	0.55	0.24	0.16	1.53	0.13	-0.07	0.55
Neighborhood Disorder x Community Violence							-0.28	0.09	-2.99	0.00	-0.47	-0.10	-0.31	0.10	-3.01	0.00	-0.51	-0.11	-0.31	0.10	-3.03	0.00	-0.51	-0.11
Negative Parenting x Antisocial Peers x Community Violence													0.04	0.11	0.35	0.73	-0.18	0.26	0.03	0.12	0.24	0.81	-0.20	0.25
Negative Parenting x Antisocial Peers x Neighborhood Disorder													0.21	0.29	0.72	0.47	-0.36	0.77	0.20	0.29	0.69	0.49	-0.37	0.77
Negative Parenting x Neighborhood Disorder x Community Violence													-0.22	0.19	-1.17	0.24	-0.60	0.15	-0.25	0.21	-1.20	0.23	-0.65	0.16
Antisocial Peers x Neighborhood Disorder x Community Violence													0.06	0.05	1.03	0.30	-0.05	0.16	0.06	0.06	1.05	0.29	-0.05	0.17
Negative Parenting x Antisocial Peers x Community Violence X Neighborhood Disorder																			0.04	0.12	0.32	0.75	-0.20	0.28

Note. Bolded text represents significant ($p < 0.05$) estimates. The association between Impulsive-Irresponsible traits and antisocial peers strengthened as neighborhood disorder increased. The association between Impulsive-Irresponsible traits and community violence was only significant for youth exposed to low levels of neighborhood disorder.

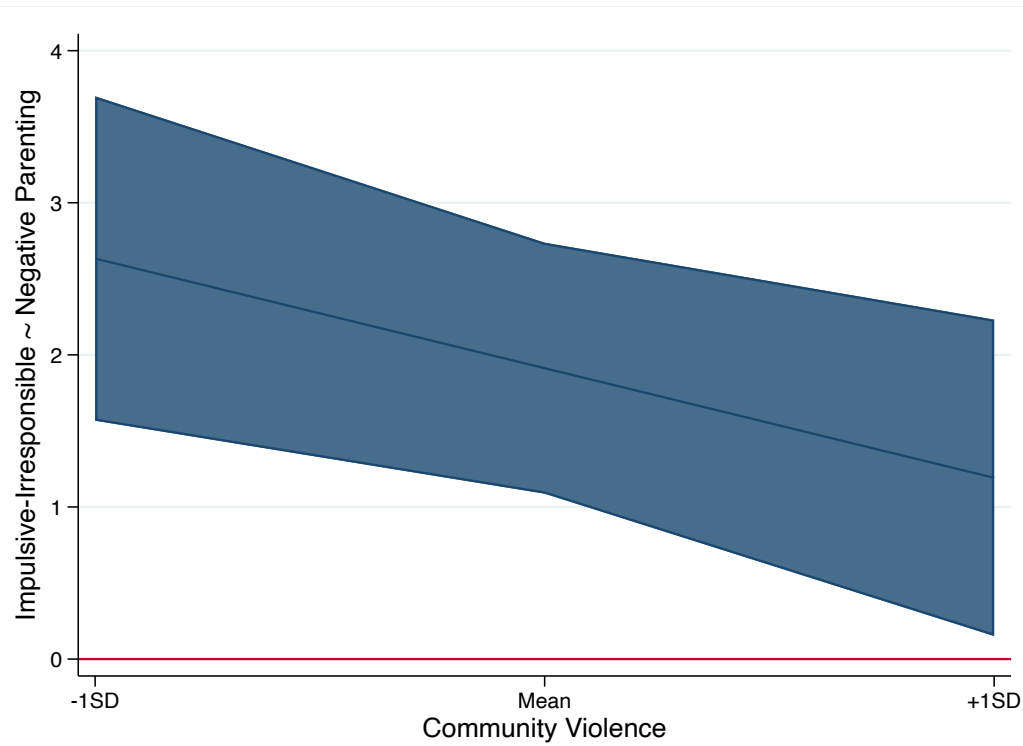
Supplemental Table 8. Fixed effect regression models with environmental conditions and age interactions predicting Impulsive-Irresponsible traits

	Model 5						Model 6						Model 7						Model 8					
	b	SE	t	p	95% CI		b	SE	t	p	95% CI		b	SE	t	p	95% CI		b	SE	t	p	95% CI	
Age	-0.50	0.09	-5.26	0.00	-0.69	-0.31	-0.43	0.10	-4.12	0.00	-0.64	-0.23	-0.43	0.11	-4.05	0.00	-0.64	-0.22	-0.43	0.11	-3.99	0.00	-0.63	-0.22
Negative Parenting	1.95	0.78	2.52	0.01	0.43	3.47	1.99	0.78	2.55	0.01	0.46	3.52	2.42	0.85	2.84	0.01	0.75	4.10	2.41	0.85	2.82	0.01	0.73	4.08
Antisocial Peers	0.86	0.27	3.13	0.00	0.32	1.39	0.87	0.29	2.99	0.00	0.30	1.44	0.73	0.30	2.40	0.02	0.13	1.32	0.74	0.31	2.40	0.02	0.14	1.34
Community Violence	-0.04	0.16	-0.25	0.80	-0.34	0.27	-0.07	0.17	-0.43	0.67	-0.41	0.26	-0.11	0.18	-0.59	0.55	-0.46	0.25	-0.11	0.18	-0.64	0.53	-0.47	0.24
Neighborhood Disorder	0.26	0.45	0.59	0.56	-0.62	1.14	0.41	0.45	0.90	0.37	-0.48	1.29	0.63	0.48	1.32	0.19	-0.30	1.57	0.65	0.48	1.36	0.18	-0.29	1.59
Offending	0.24	0.06	4.19	0.00	0.13	0.36	0.25	0.06	4.24	0.00	0.13	0.36	0.25	0.06	4.17	0.00	0.13	0.36	0.24	0.06	4.14	0.00	0.13	0.36
Negative Parenting x Age	-0.02	0.22	-0.10	0.92	-0.46	0.42	-0.05	0.23	-0.20	0.84	-0.49	0.40	-0.17	0.25	-0.67	0.50	-0.66	0.32	-0.16	0.25	-0.64	0.52	-0.65	0.33
Antisocial Peers x Age	0.07	0.08	0.90	0.37	-0.09	0.23	0.06	0.09	0.67	0.51	-0.11	0.22	0.09	0.09	1.02	0.31	-0.08	0.26	0.09	0.09	0.99	0.32	-0.09	0.26
Community Violence x Age	0.04	0.05	0.78	0.44	-0.05	0.13	0.08	0.05	1.51	0.13	-0.02	0.18	0.08	0.05	1.55	0.12	-0.02	0.19	0.08	0.05	1.59	0.11	-0.02	0.19
Neighborhood Disorder x Age	0.01	0.12	0.06	0.95	-0.23	0.25	-0.05	0.12	-0.44	0.66	-0.30	0.19	-0.14	0.13	-1.02	0.31	-0.40	0.13	-0.14	0.13	-1.04	0.30	-0.40	0.12
Negative Parenting x Antisocial Peers							-0.03	0.59	-0.05	0.96	-1.20	1.14	-0.08	0.61	-0.12	0.90	-1.28	1.13	-0.01	0.64	-0.02	0.98	-1.26	1.24
Negative Parenting x Community Violence							-0.35	0.37	-0.95	0.35	-1.07	0.37	-0.27	0.41	-0.65	0.51	-1.08	0.54	-0.27	0.42	-0.66	0.51	-1.09	0.54
Negative Parenting x Neighborhood Disorder							0.95	0.96	0.99	0.32	-0.93	2.83	0.69	0.99	0.69	0.49	-1.25	2.62	0.78	1.03	0.75	0.45	-1.25	2.80
Antisocial Peers x Community Violence							0.00	0.11	-0.04	0.97	-0.21	0.21	-0.02	0.12	-0.16	0.87	-0.26	0.22	-0.02	0.12	-0.19	0.85	-0.27	0.22
Antisocial Peers x Neighborhood Disorder							0.02	0.35	0.06	0.95	-0.67	0.71	0.12	0.38	0.31	0.76	-0.63	0.86	0.11	0.38	0.30	0.76	-0.63	0.86
Neighborhood Disorder x Community Violence							0.19	0.20	0.91	0.37	-0.22	0.59	0.20	0.22	0.92	0.36	-0.22	0.62	0.22	0.23	0.98	0.33	-0.22	0.67
Negative Parenting x Antisocial Peers x Age							0.03	0.18	0.18	0.86	-0.32	0.39	0.04	0.18	0.21	0.83	-0.32	0.40	0.02	0.19	0.08	0.94	-0.36	0.40
Negative Parenting x Community Violence x Age							0.01	0.12	0.08	0.93	-0.22	0.24	-0.03	0.13	-0.21	0.84	-0.28	0.23	-0.03	0.13	-0.20	0.85	-0.28	0.23
Negative Parenting x Neighborhood Disorder x Age							-0.51	0.28	-1.80	0.07	-1.05	0.04	-0.37	0.29	-1.26	0.21	-0.94	0.20	-0.40	0.31	-1.32	0.19	-1.00	0.20
Antisocial Peers x Community Violence x Age							0.00	0.03	0.11	0.91	-0.06	0.07	0.00	0.04	0.14	0.89	-0.06	0.07	0.01	0.04	0.15	0.88	-0.06	0.08
Antisocial Peers x Neighborhood Disorder x Age							0.10	0.11	0.87	0.38	-0.12	0.31	0.04	0.12	0.36	0.72	-0.19	0.27	0.04	0.12	0.37	0.71	-0.19	0.27
Neighborhood Disorder x Community Violence x Age							-0.16	0.06	-2.58	0.01	-0.28	-0.04	-0.17	0.07	-2.62	0.01	-0.30	-0.04	-0.18	0.07	-2.61	0.01	-0.31	-0.04
Negative Parenting x Antisocial Peers x Community Violence													0.17	0.30	0.56	0.58	-0.43	0.77	0.20	0.31	0.63	0.53	-0.41	0.81
Negative Parenting x Antisocial Peers x Neighborhood Disorder													-1.04	0.77	-1.36	0.17	-2.54	0.46	-1.07	0.77	-1.39	0.17	-2.59	0.44
Negative Parenting x Neighborhood Disorder x Community Violence													-0.66	0.49	-1.34	0.18	-1.63	0.31	-0.62	0.53	-1.17	0.24	-1.65	0.41
Antisocial Peers x Neighborhood Disorder x Community Violence													0.06	0.14	0.42	0.68	-0.22	0.35	0.07	0.15	0.45	0.66	-0.22	0.35

Negative Parenting x Antisocial Peers x Community Violence x Age	-0.03	0.09	-0.36	0.72	-0.20	0.14	-0.04	0.09	-0.47	0.64	-0.22	0.14
Negative Parenting x Antisocial Peers x Neighborhood Disorder x Age	0.37	0.24	1.55	0.12	-0.10	0.84	0.38	0.24	1.57	0.12	-0.10	0.85
Negative Parenting x Neighborhood Disorder x Community Violence x Age	0.15	0.16	0.94	0.35	-0.16	0.46	0.13	0.16	0.80	0.42	-0.19	0.45
Antisocial Peers x Neighborhood Disorder x Community Violence x Age	0.00	0.04	0.02	0.98	-0.09	0.09	0.00	0.04	0.01	0.99	-0.09	0.09
Negative Parenting x Antisocial Peers x Community Violence x Neighborhood Disorder							-0.12	0.39	-0.31	0.76	-0.88	0.64
Negative Parenting x Antisocial Peers x Community Violence x Neighborhood Disorder x Age							0.04	0.12	0.38	0.70	-0.18	0.27

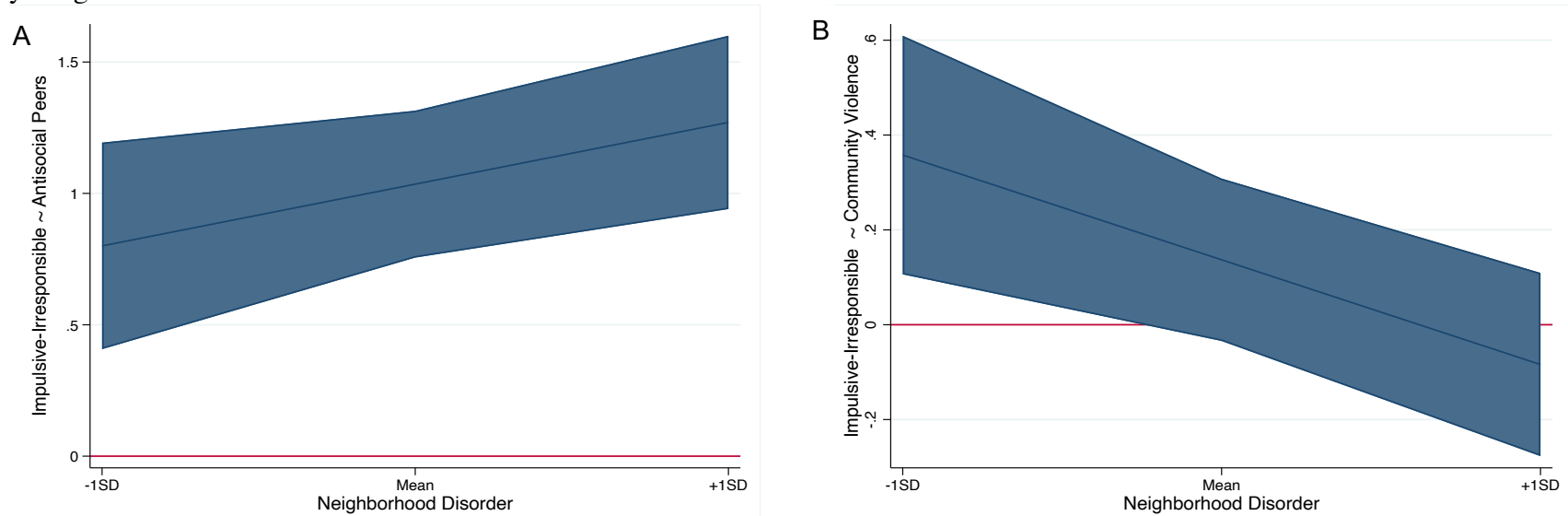
Note. Bolded text represents significant ($p < 0.05$) estimates. Exposure to community violence and age moderated the association between neighborhood disorder and Impulsive-Irresponsible traits.

Supplemental Figure 1. Association between Negative Parenting and Impulsive-Irresponsible Traits, Moderated by Violence Exposure.



Note. Figure depicts the predicted regression coefficient (solid blue line) and 95% CI band for negative parenting by level of community violence. Negative parenting was associated with increases in Impulsive-Irresponsible traits, however the strength of the association weakened as community violence increased.

Supplemental Figure 2. Association between Antisocial Peers, Community Violence, and Impulsive-Irresponsible Traits, Moderated by Neighborhood Disorder.



Note. Figure depicts the predicted regression coefficient (solid blue line) and 95% CI band for (A) antisocial peers and (B) community violence by level of neighborhood disorder. The association between Impulsive-Irresponsible traits and antisocial peers strengthened as neighborhood disorder increased. The association between Impulsive-Irresponsible traits and community violence was only significant for youth exposed to low levels of neighborhood disorder.