

**Socio-economic disparities in social distancing during the  
COVID-19 pandemic in the United States**

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**Supplementary material**

Table S1: Statistical details for the linear mixed models. For each combination of predictor, response variable, and social distancing measure, we provide the t-value and the p-value.

Model	Variable	Distance traveled		Visitation rate		Encounters rate	
		<i>t</i>	<i>p</i>	<i>t</i>	<i>p</i>	<i>t</i>	<i>p</i>
<b>Mean value in phase iii</b>	Proportion poor	11.1	<0.001	7.92	<0.001	5.51	<0.001
	Proportion essential	6.19	<0.001	4.15	<0.001	5	<0.001
	Population density	-9.85	<0.001	-6.52	<0.001	-6.8	<0.001
	Proportion Black	-3.15	0.002	-7.39	<0.001	-1.08	0.28
<b>Slope in phase ii</b>	Proportion poor	16.1	<0.001	10.2	<0.001	5.6	<0.001
	Proportion essential	6.05	<0.001	4.21	<0.001	0.72	0.47
	Population density	-16	<0.001	-7.52	<0.001	-3.88	<0.001
	Proportion Black	-4.48	<0.001	-5.58	<0.001	-0.1	0.92
<b>Slope in phase iv</b>	Proportion poor	6.65	<0.001	2.6	0.009	-1.28	0.2
	Proportion essential	-4.78	<0.001	-1.26	0.21	1.79	0.07
	Population density	-3.98	<0.001	-5.05	<0.001	-4.99	<0.001
	Proportion Black	-3.61	<0.001	-6.95	<0.001	-0.49	0.62

Table S2: Statistical details for a linear mixed model of distance traveled and the mean value in phase iii including interactions between the proportion of Black population and the poverty status, the proportion of Black population and the essential status, and the poverty status and the essential status. For each response variable and interaction, we provide the t-value and the p-value. All response variables are scaled to zero mean and unit variance before model run.

Model	Variable	Distance traveled	
		<i>t</i>	<i>p</i>
Mean value in phase iii	Proportion poor	11.1	<0.001
	Proportion essential	7.59	<0.001
	Population density	-9.70	<0.001
	Proportion Black	-4.02	<0.001
	Proportion poor : proportion Black	1.84	0.065
	Proportion poor : proportion essential	-6.08	<0.001
	Proportion Black : proportion essential	3.32	0.001

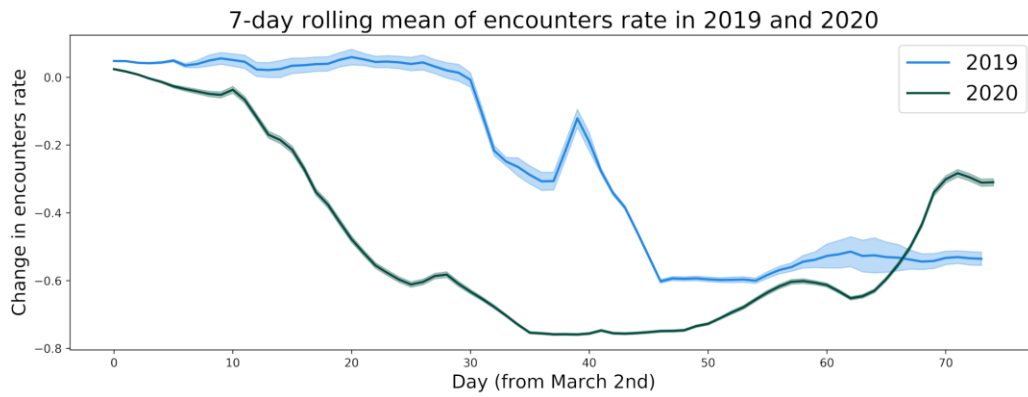


Figure S1: **The seasonality of encounters:** We show a 7-day rolling mean of the encounters rate from March 2nd onward for 2019 (blue) and 2020 (green). The solid line represents the mean and the shaded area two standard errors of the mean.