

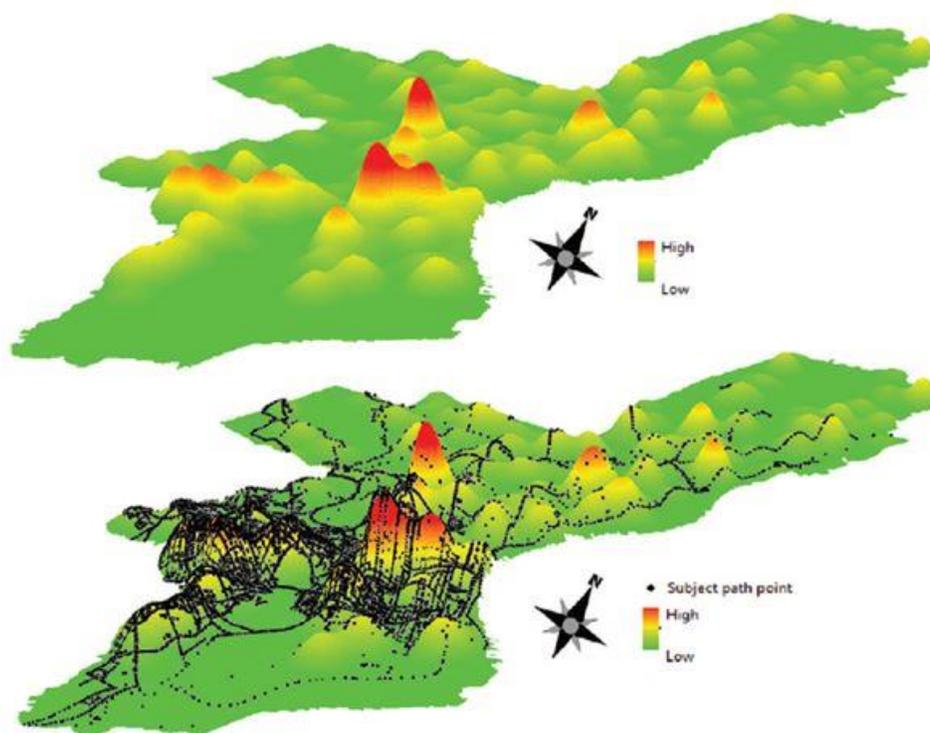
Figure S1. A screenshot of the data collection application as it appeared on the screen of a laptop computer

The screenshot displays a data collection application interface. On the left, there is a form with fields for Interview ID (grant1), Creation Time (11/6/2008 1:21:09 PM), Last Update (11/6/2008 2:22:24 PM), Interviewer (Luke), and a Remarks text area. Below the form are buttons for 'Delete Interview' and 'Add New Interview', a page indicator '0 of 9 Interviews', and a search bar for '3400 SPRUCE ST' with a 'Find Address' button. The main area is an aerial map of a residential neighborhood with street names like 65TH, 66TH, 67TH, 68TH, 69TH, CHESTER, ALLMAN, REGENCY, KING STRESSING, UPLAND, BRIMSON, and GREENWAY. A red pin is located on the map. Below the map is a toolbar with navigation icons and a view selector set to 'Aerial'. At the bottom is a data table with 15 rows of activity logs.

PathSeqID	DateAndTime	TransMode	Remarks	Activity	Safety	Weapon	Substance	Companion	IsIndoors	IsPointOfInjury
1	10/24/2008 07:00:00 AM	None	at home	waking up	10	none	cigarettes	mom, sister, cousin	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	10/24/2008 07:15:00 AM	None	at home	eating breakfast, getting ready for school	10	none	cigarettes	mom, sister	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	10/24/2008 07:30:00 AM	On Foot	leaving for school	walking	7	none	none	None	<input type="checkbox"/>	<input type="checkbox"/>
4	10/24/2008 07:31:00 AM	On Foot	walking to bus	walking	7	none	none	none	<input type="checkbox"/>	<input type="checkbox"/>
5	10/24/2008 07:32:00 AM	On Foot	walking to bus	walking	7	none	none	none	<input type="checkbox"/>	<input type="checkbox"/>
6	10/24/2008 07:32:30 AM	On Foot	walking to bus	walking	7	none	none	none	<input type="checkbox"/>	<input type="checkbox"/>
7	10/24/2008 07:33:00 AM	On Foot	walking to bus	walking	7	none	none	none	<input type="checkbox"/>	<input type="checkbox"/>
8	10/24/2008 07:34:00 AM	On Foot	walking to bus	walking	6	none	Alcohol	some guys	<input type="checkbox"/>	<input type="checkbox"/>
9	10/24/2008 07:35:00 AM	On Foot	walking to bus	walking	5	none	Alcohol, marijuana	guys on corner	<input type="checkbox"/>	<input type="checkbox"/>
10	10/24/2008 07:35:30 AM	On Foot	walking to bus	walking	5	none	alcohol, marijuana	guys on corner	<input type="checkbox"/>	<input type="checkbox"/>
11	10/24/2008 07:36:00 AM	On Foot	walking to bus	walking	6	none	marijuana	guys	<input type="checkbox"/>	<input type="checkbox"/>
12	10/24/2008 07:38:00 AM	On Foot	walking to bus	walking	7	none	none	none	<input type="checkbox"/>	<input type="checkbox"/>
13	10/24/2008 07:39:30 AM	On Foot	walking to bus	walking	7	none	none	none	<input type="checkbox"/>	<input type="checkbox"/>
14	10/24/2008 07:40:13 AM	None	waiting for bus	standing	7	none	none	couple people	<input type="checkbox"/>	<input type="checkbox"/>
15	10/24/2008 07:50:00 AM	SEPTA Bus	on bus	Sitting	9	none	none	passengers	<input type="checkbox"/>	<input type="checkbox"/>

Note: Data are hypothetical since individuals' location-specific data are never shown for confidentiality reasons.

Figure S2. An illustration of how activity path data were appended to geographic data layers based on latitude and longitude coordinates of subjects' activities



Raster surface layer of the level of a risk factor in the urban landscape as demonstrated using off-premise alcohol outlets (*top*). Raster surface layer of the urban landscape overlaid with path points marking locations of the daily activities of 298 study subjects (*bottom*)

Figure S3. Differences, in standard deviation units, between the maximum and minimum level of exposure to features of the environment experienced by subjects during daily activities. The number in each figure is the proportion of subjects who experienced a highest level of exposure to a variable that was at least one standard deviation greater than the lowest level of exposure to the variable.

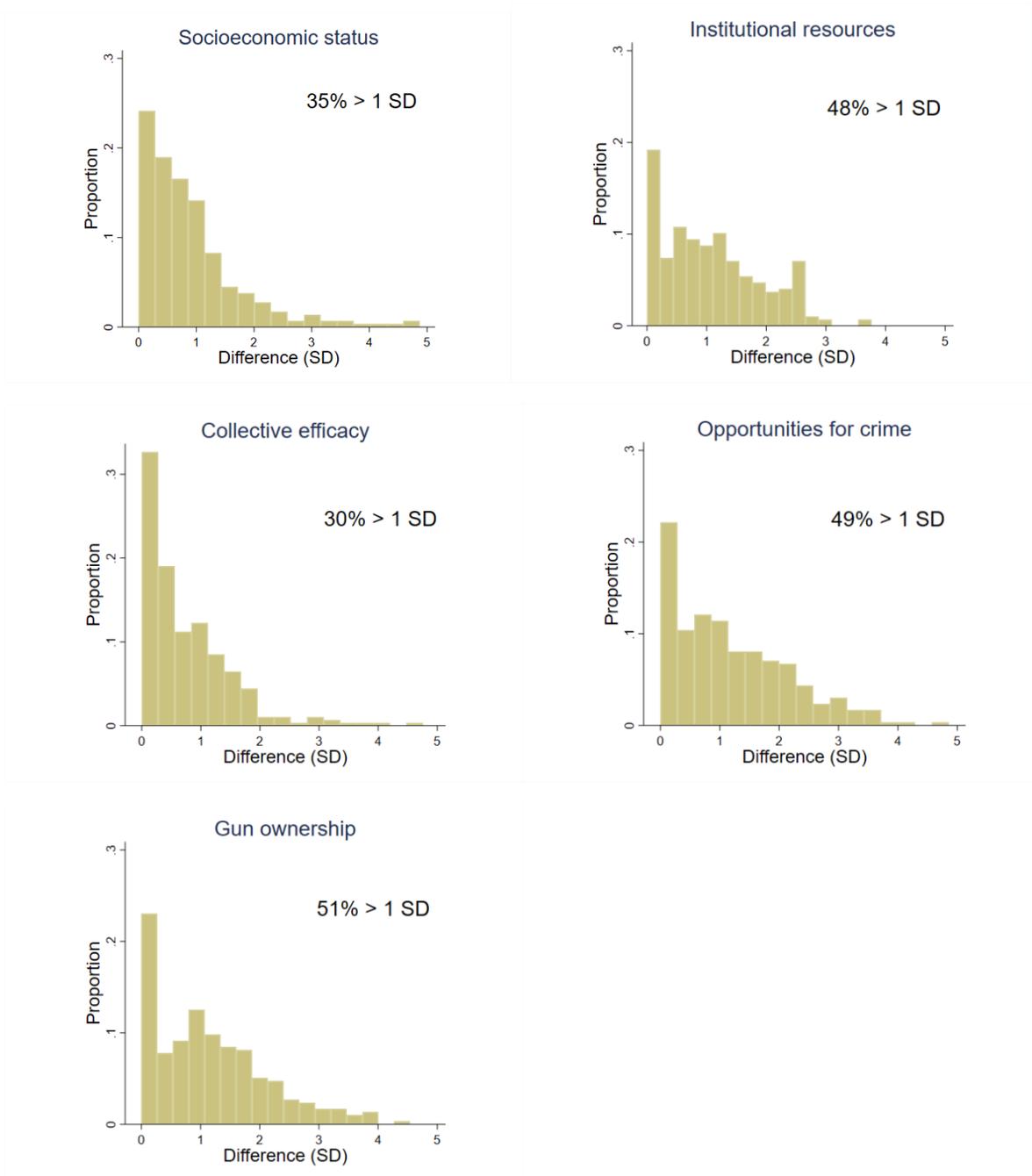


Figure S4. Mean levels of exposure to 11 situational variables experienced by study subjects during 10-minute window over the 8 hours preceding and including the time of assault (left-most point in each graph). We applied a Theil-Sen estimator to the series of points for each variable, which tested the null hypothesis that the average slope over the eight-hour period was zero. The result is reported in the upper left corner of each plot:

* $p < 0.05$, ** $p < 0.01$, *** $P < 0.001$, n/s non-significant.

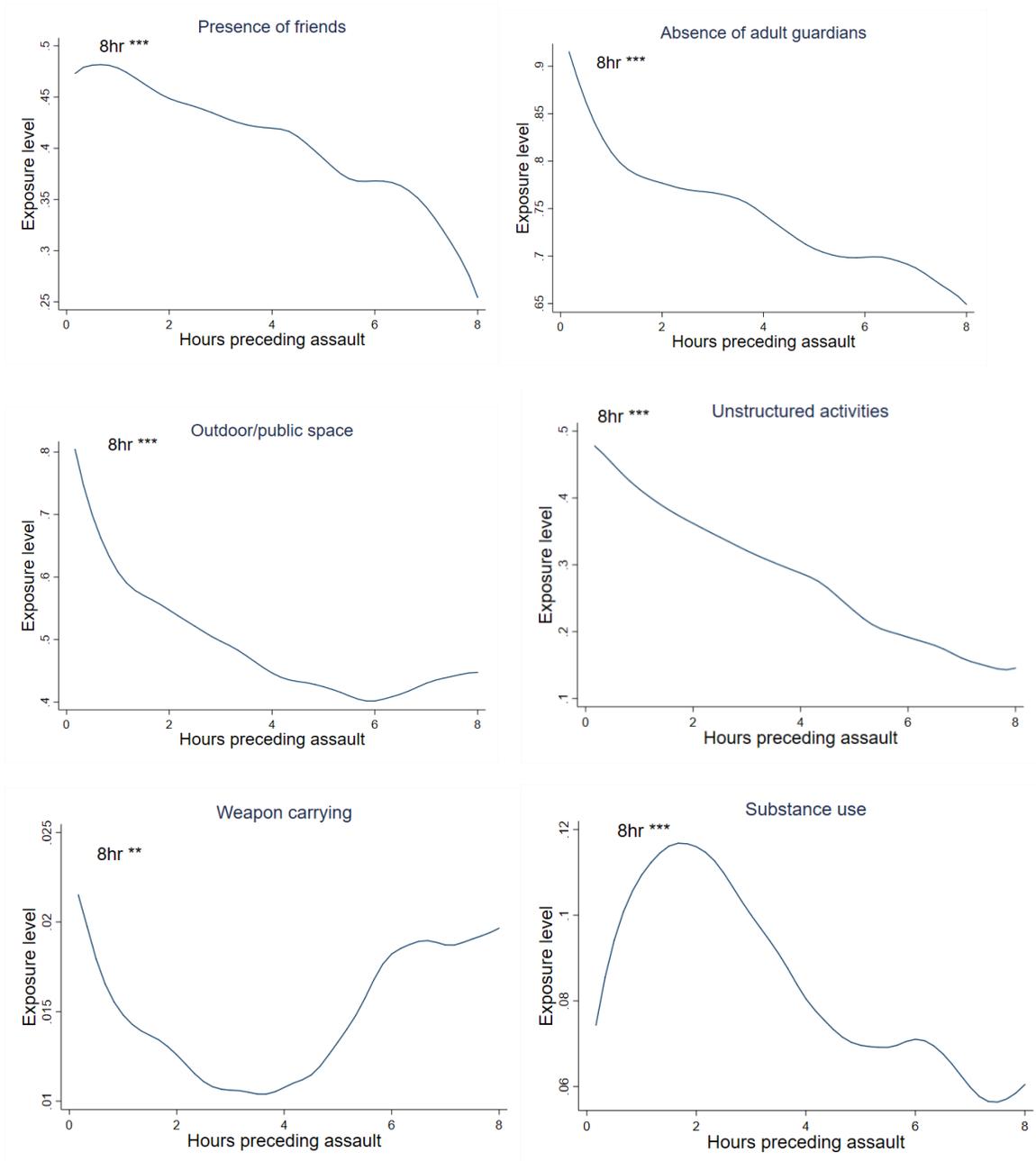


Figure S4 (continued). Mean levels of exposure to 11 situational variables experienced by study subjects during 10-minute window over the 8 hours preceding and including the time of assault (left-most point in each graph). We applied a Theil-Sen estimator to the series of points for each variable, which tested the null hypothesis that the average slope over the eight-hour period was zero. The result is reported in the upper left corner of each plot:

* $p < 0.05$, ** $p < 0.01$, *** $P < 0.001$, n/s non-significant.

