

### **Supplement S3 to:**

#### **Alisha I. Qamar, Leonie Gronwald, Nina Timmesfeld, and Hans H. Diebner: Local Sociostructural Predictors of COVID-19 Incidence in Germany**

The following series of figures shows age-stratified (3 age classes, *age*) locally observed **cumulative** incidences of 3 pre-defined epidemic periods (*p*) versus eight socioeconomic/geopolitical parameters (*socioeco*), respectively. The eight parameters are:

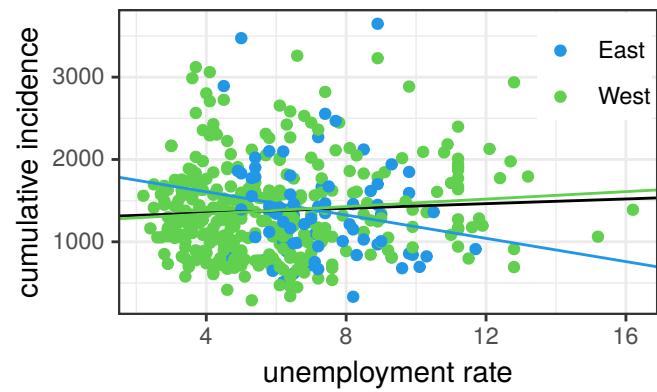
- unemployment rate
- proportion of protection seekers
- proportion social benefit claimants
- per capita income
- proportion with higher education level
- proportion with middle education level
- proportion with low education level
- population density (inhabitants per square kilometre)

Specifically, each panel depicts a scatterplot of cumulative incidence for a pair [*p, age*] by one of the socioeconomic parameters (*socioeco*) for 411 German rural districts. Data points corresponding to East German districts are depicted in blue, West German districts in green. Three linear regression lines are shown for the full set of points (black), only the East German (blue), and only the West German (green) parts, respectively.

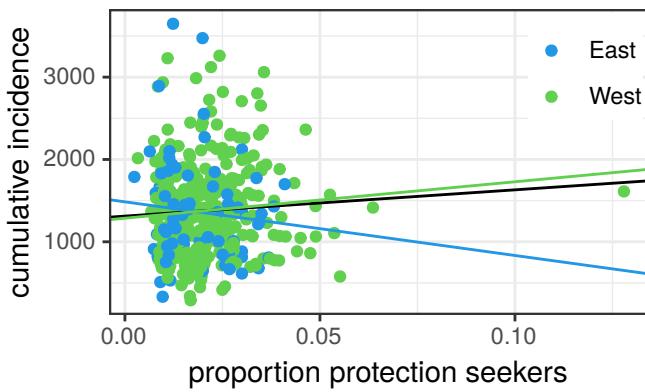
The header of each page contains the given pair [*p, age*], 9 in total, and each panel is labeled by the name of the selected *socioeco*.

# Cum. Incidence (kids) vs socioeconomic parameter [41-60]

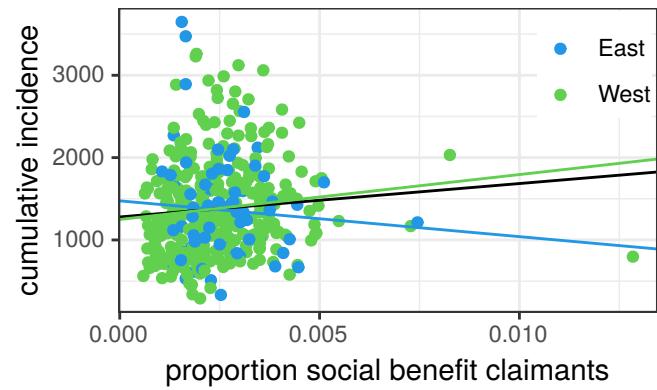
Unemployment Rate



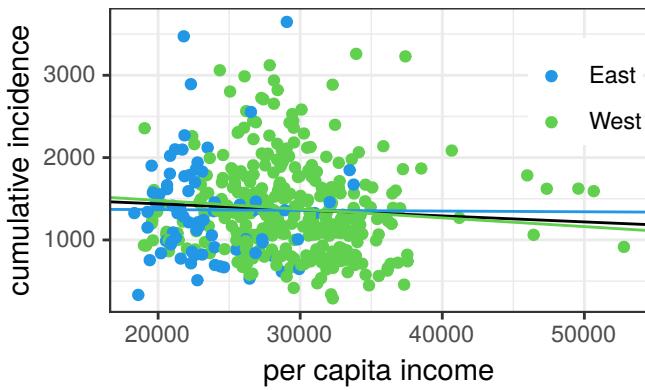
Protection Seekers



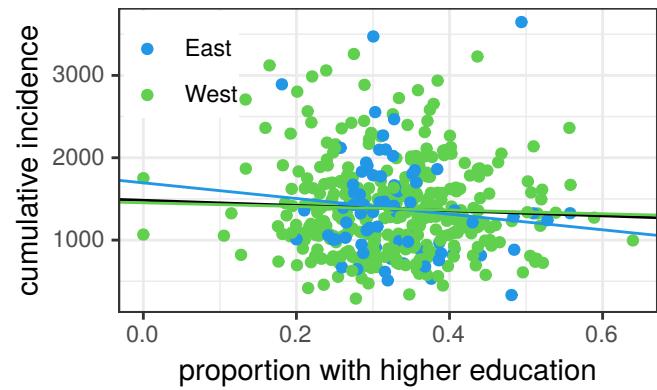
Social Benefit Claimants



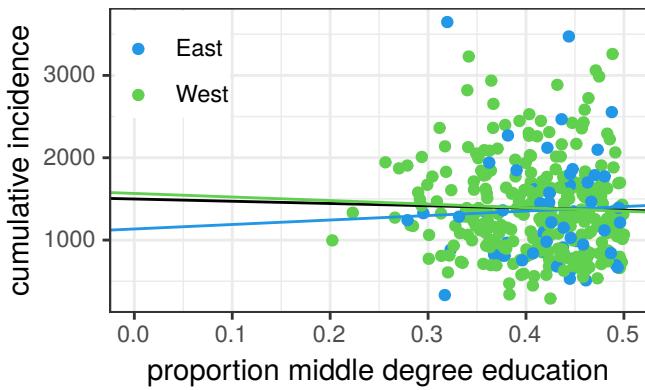
Per Capita Income



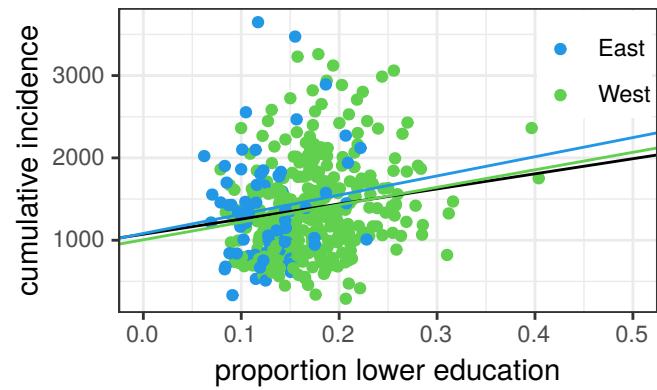
Higher Education



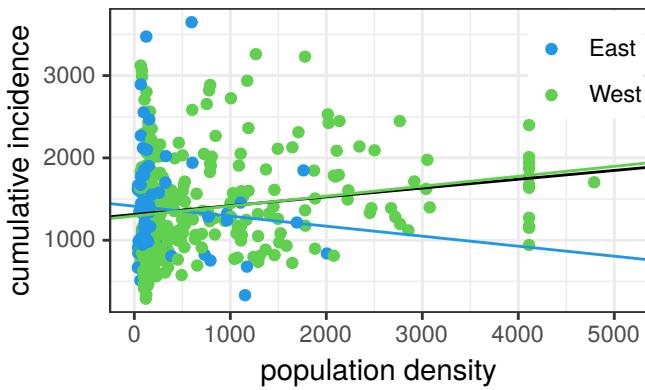
Middle Degree Education



Lower Education

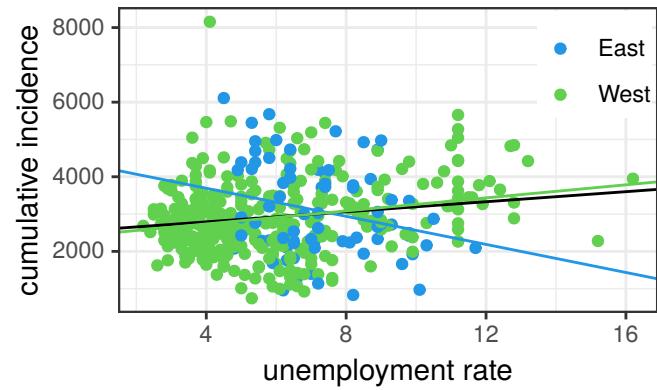


Population Density

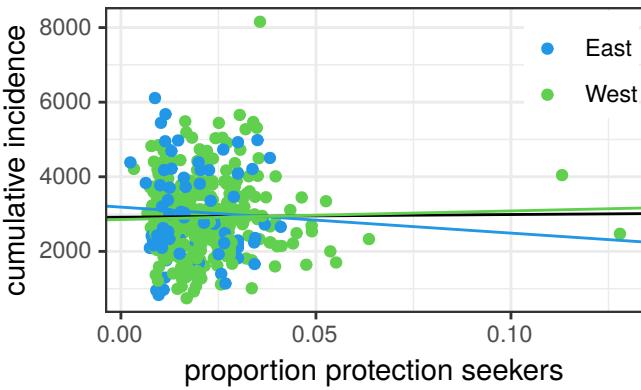


# Cum. Incidence (juveniles) vs socioeconomic parameter [41-60]

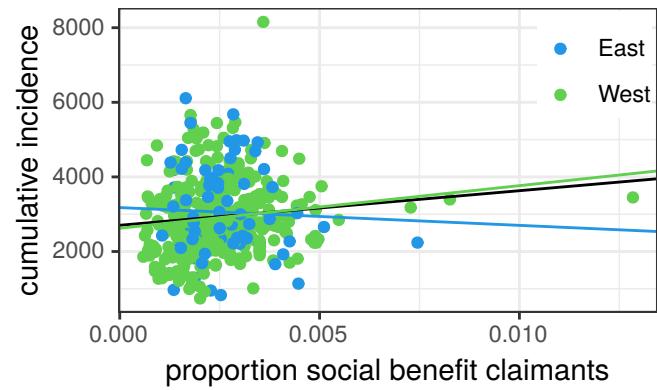
Unemployment Rate



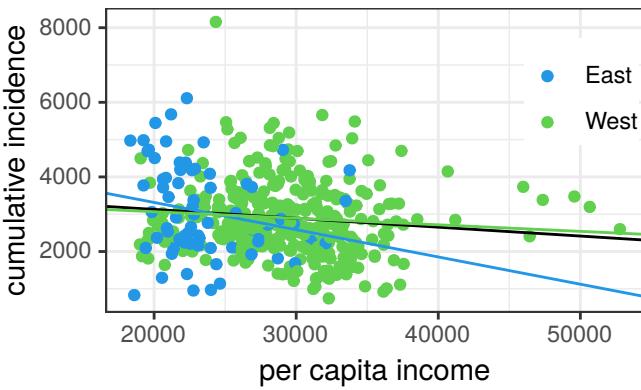
Protection Seekers



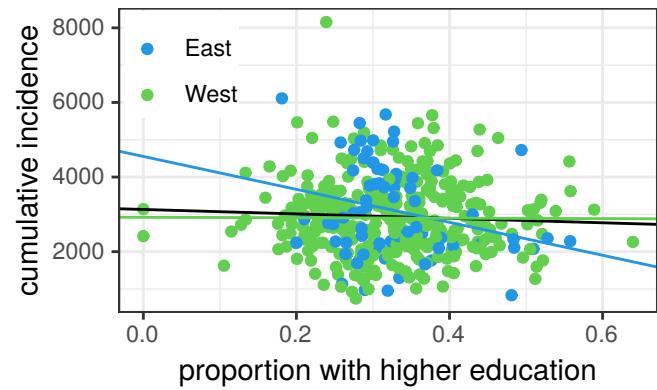
Social Benefit Claimants



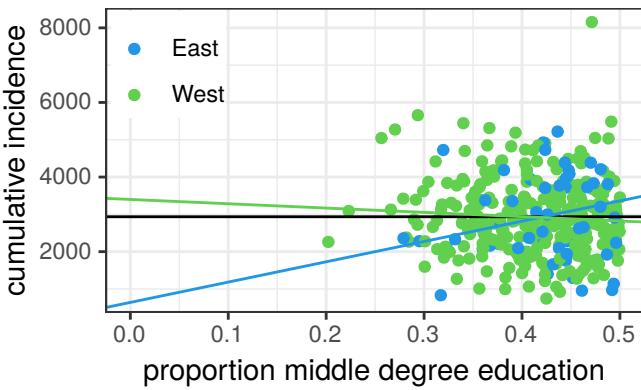
Per Capita Income



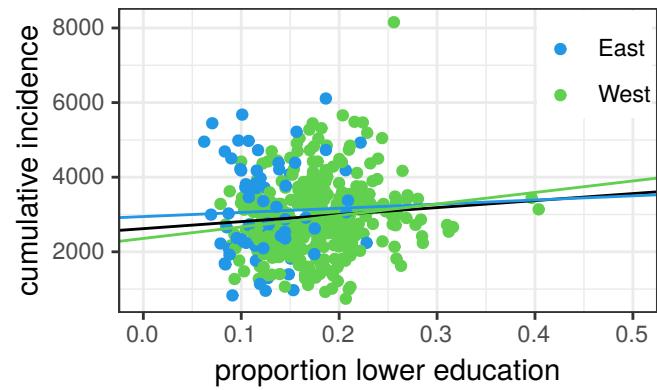
Higher Education



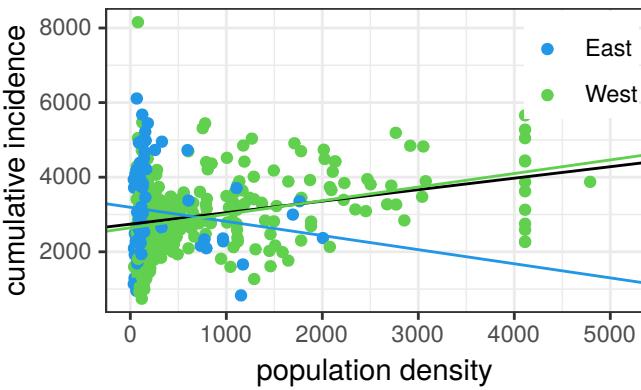
Middle Degree Education



Lower Education

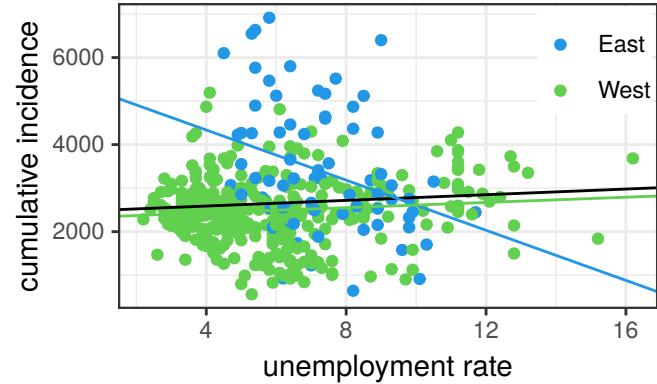


Population Density

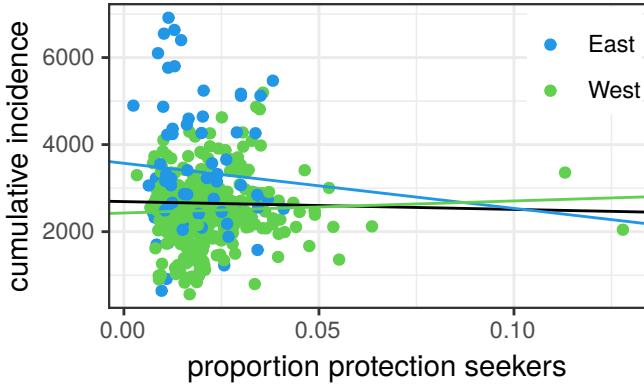


# Cum. Incidence (adults) vs socioeconomic parameter [41-60]

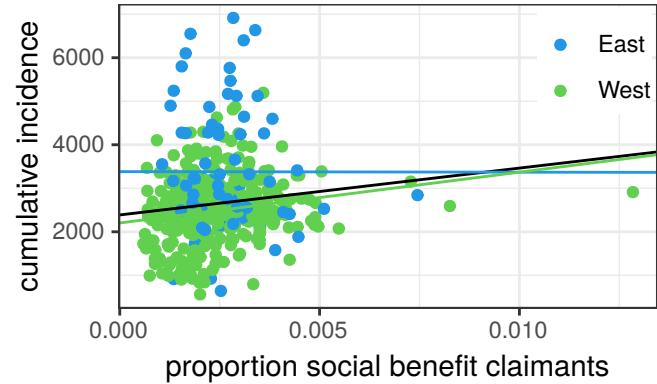
Unemployment Rate



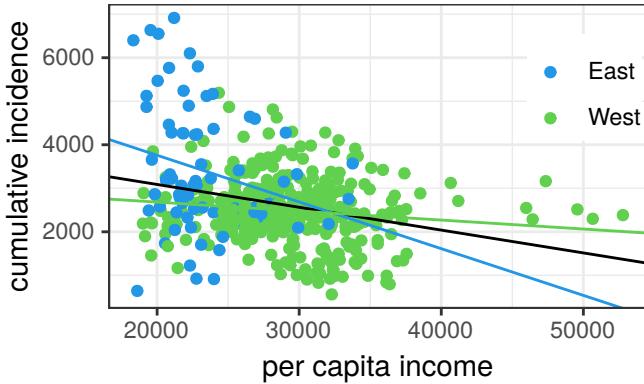
Protection Seekers



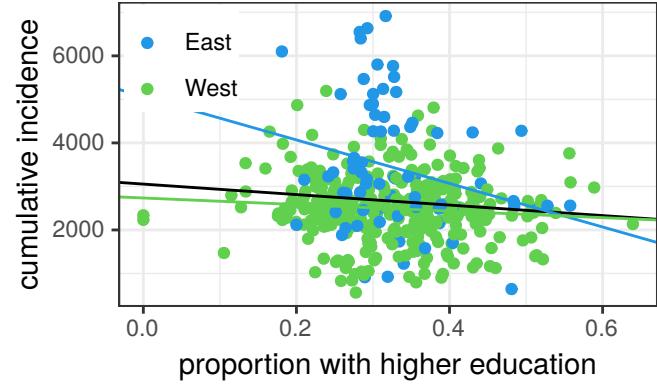
Social Benefit Claimants



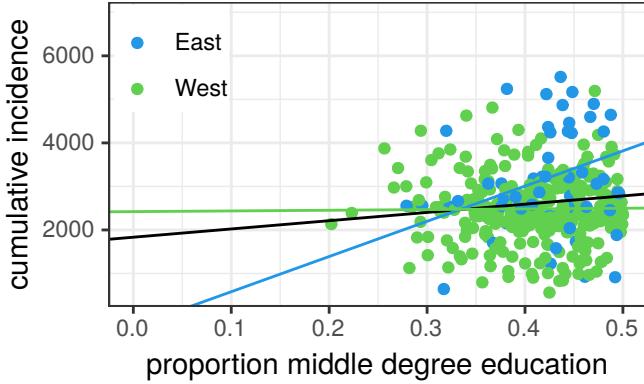
Per Capita Income



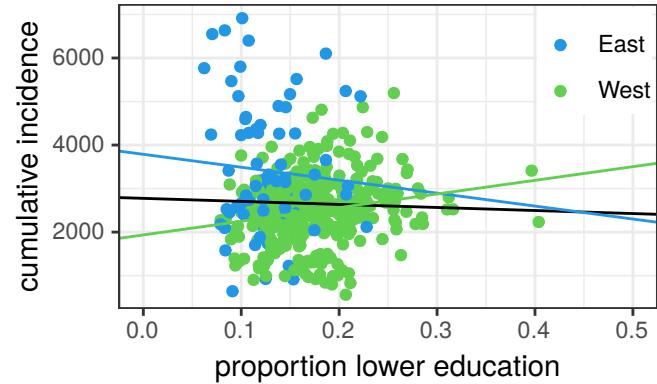
Higher Education



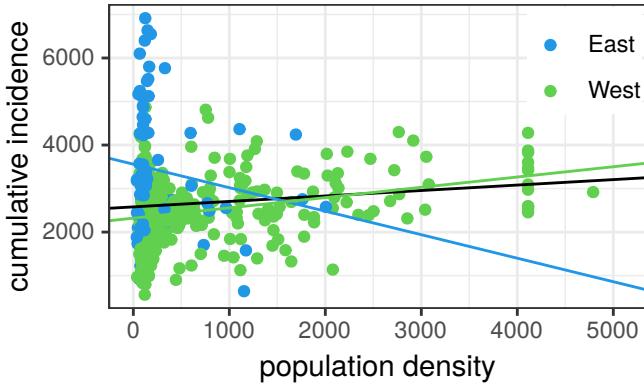
Middle Degree Education



Lower Education

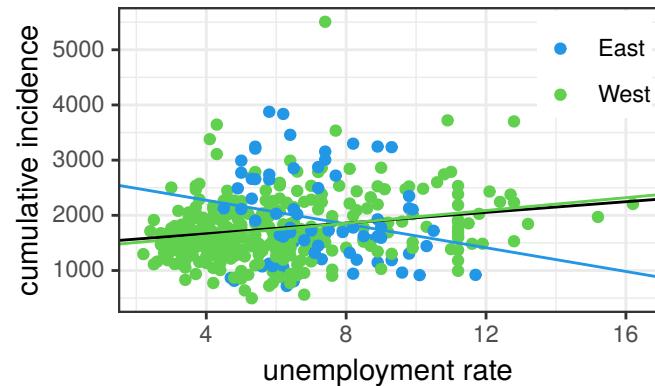


Population Density

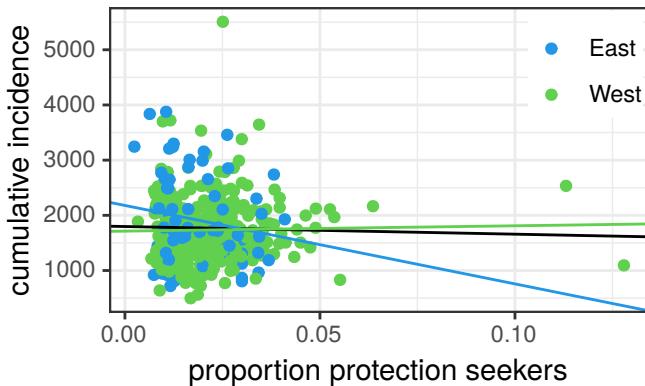


# Cum. Incidence (kids) vs socioeconomic parameter [61-80]

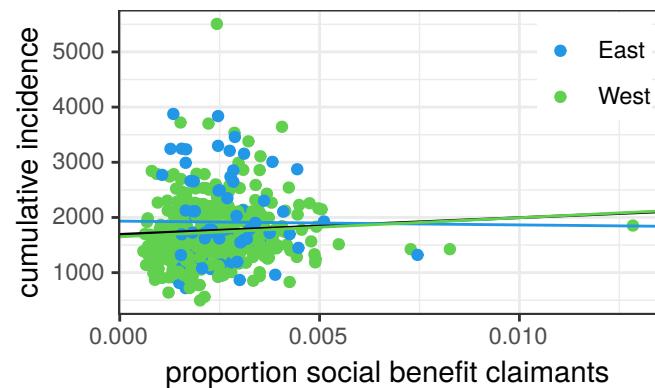
Unemployment Rate



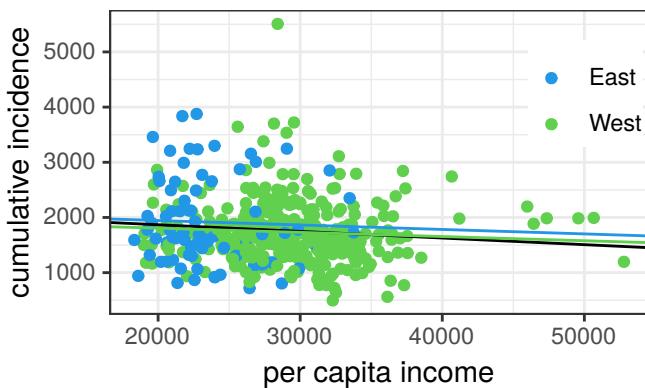
Protection Seekers



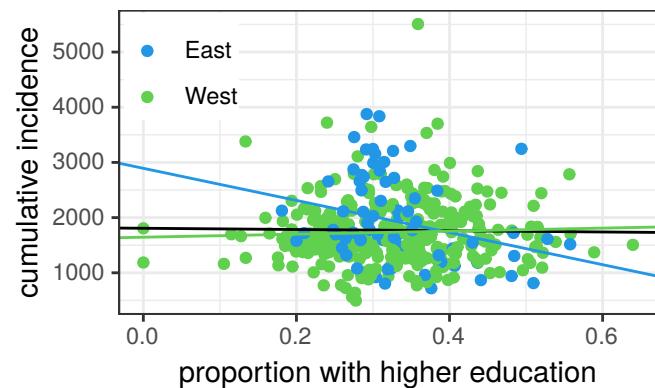
Social Benefit Claimants



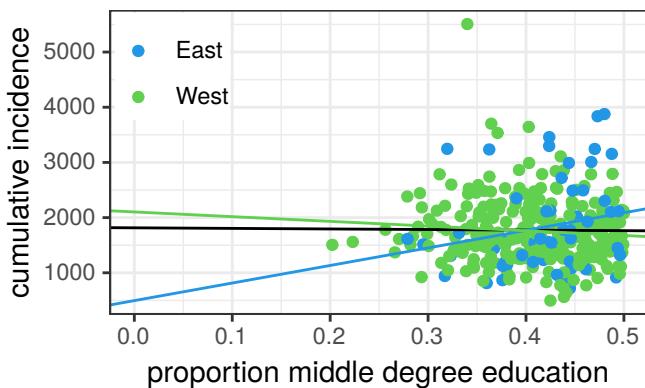
Per Capita Income



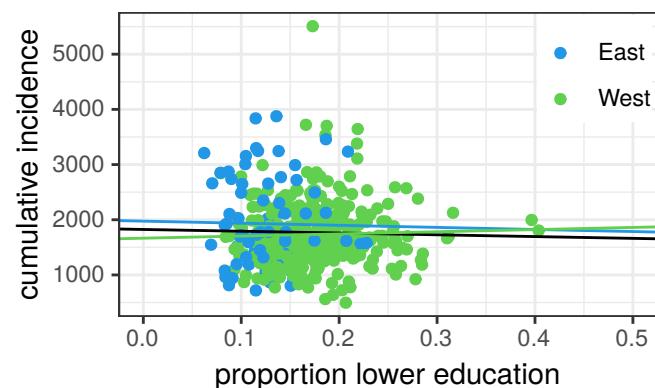
Higher Education



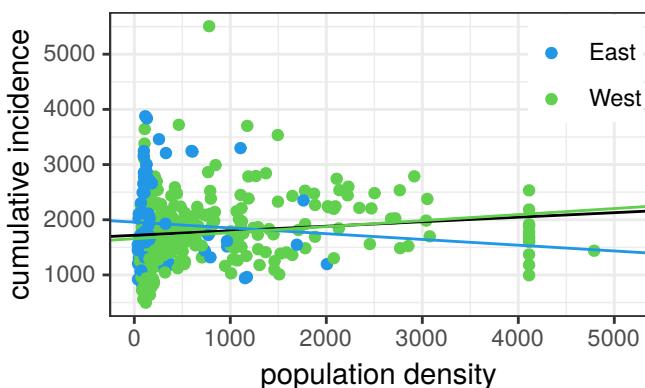
Middle Degree Education



Lower Education

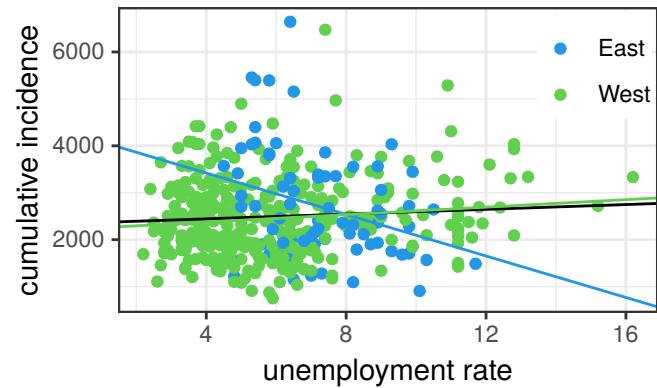


Population Density

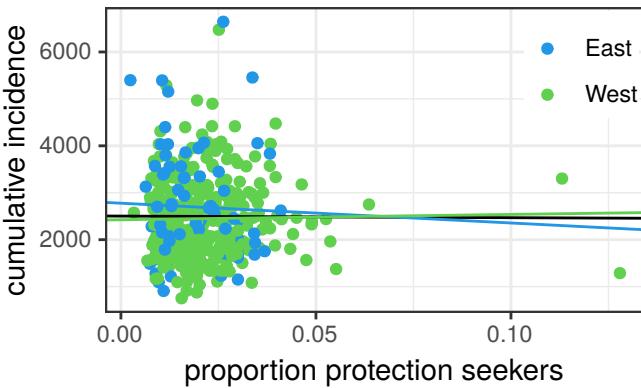


# Cum. Incidence (juveniles) vs socioeconomic parameter [61-80]

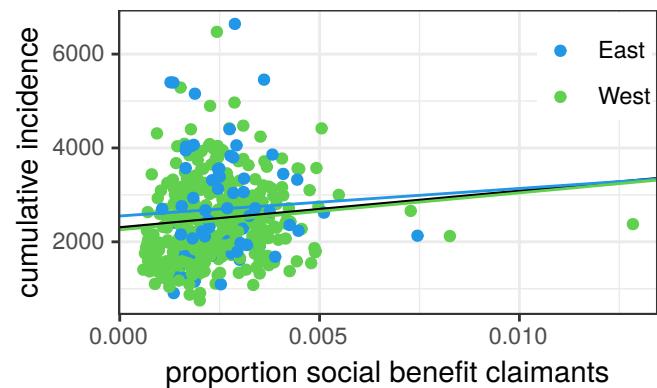
Unemployment Rate



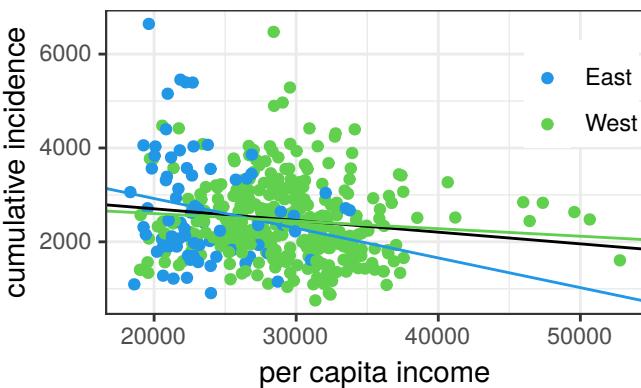
Protection Seekers



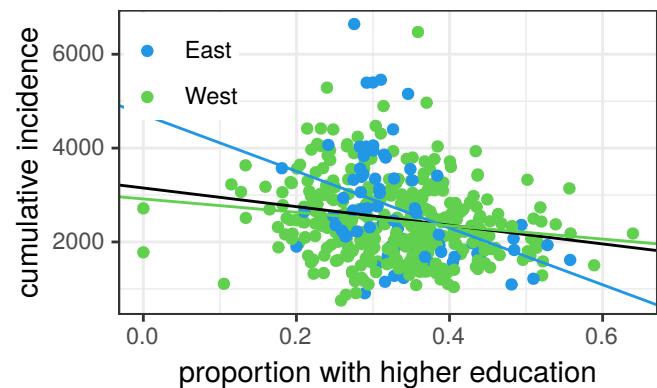
Social Benefit Claimants



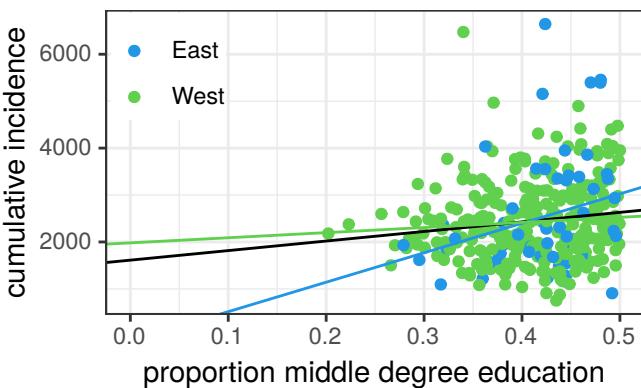
Per Capita Income



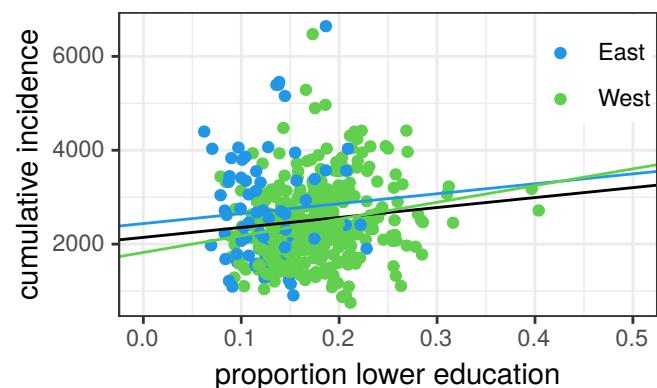
Higher Education



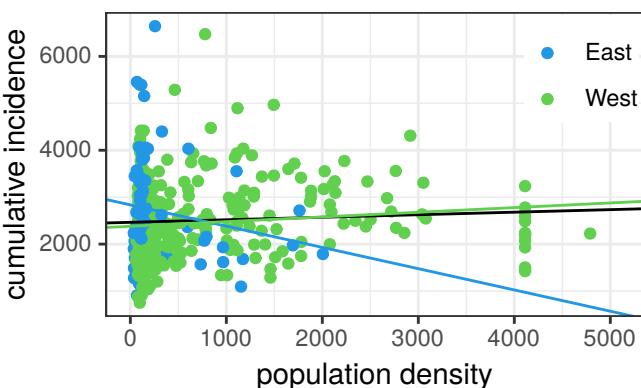
Middle Degree Education



Lower Education

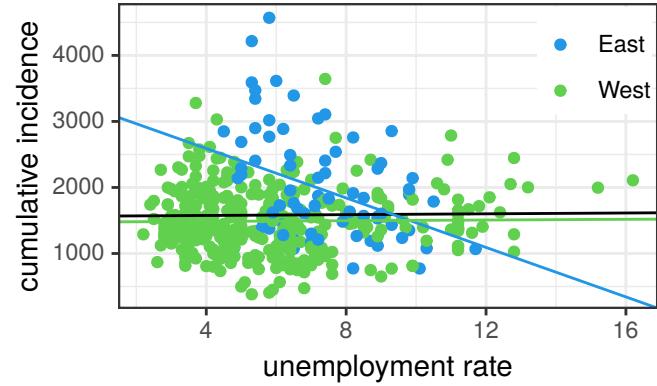


Population Density

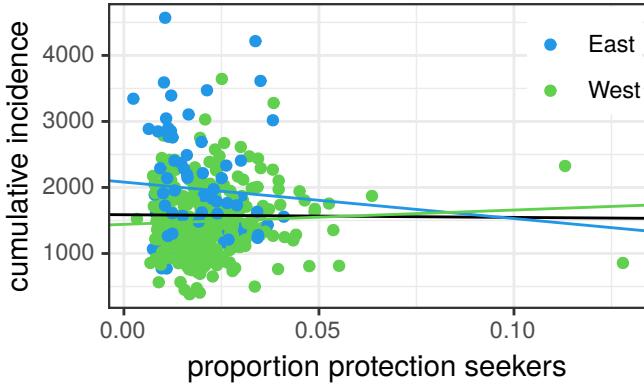


# Cum. Incidence (adults) vs socioeconomic parameter [61-80]

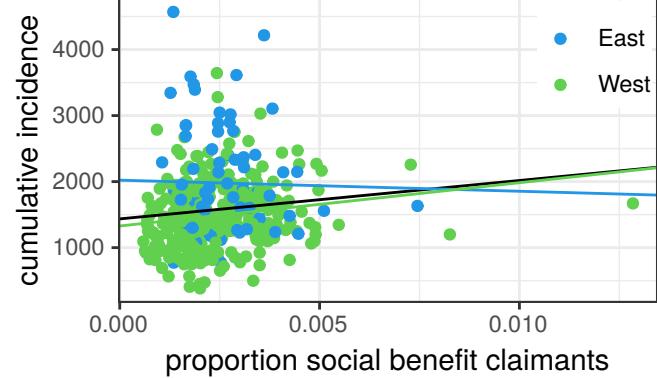
Unemployment Rate



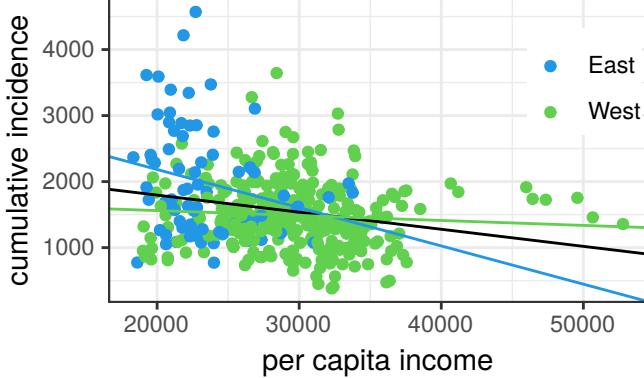
Protection Seekers



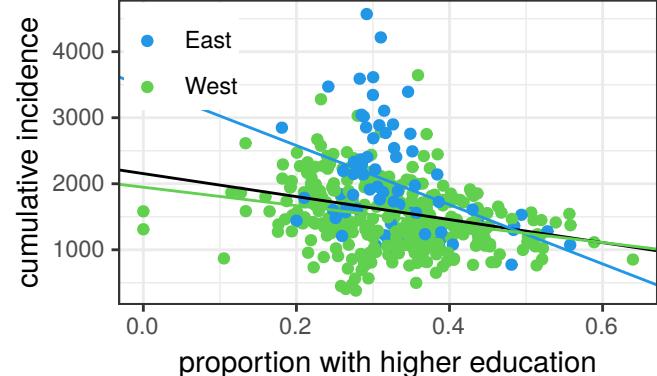
Social Benefit Claimants



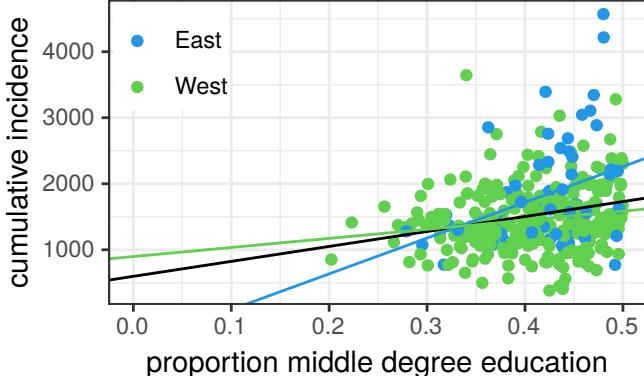
Per Capita Income



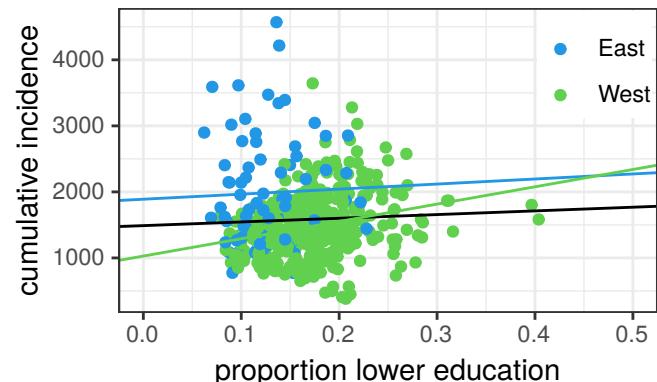
Higher Education



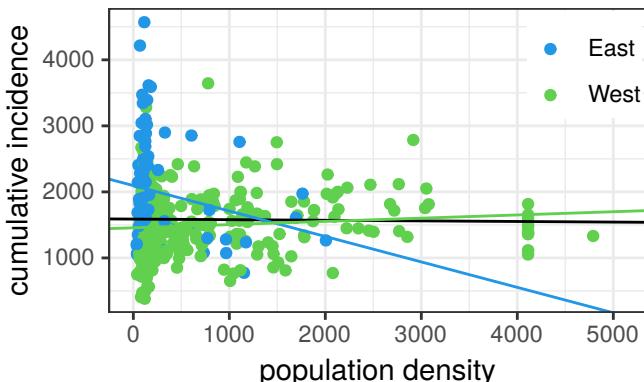
Middle Degree Education



Lower Education

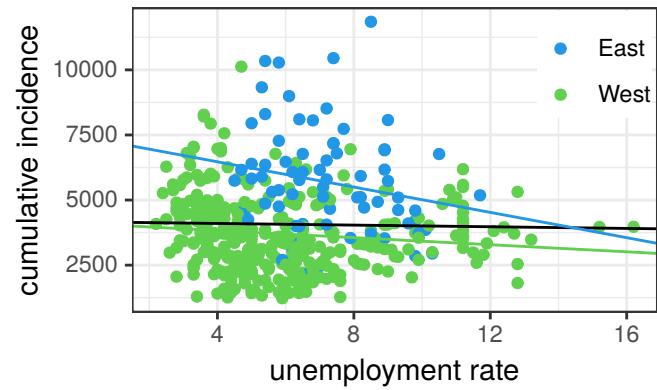


Population Density

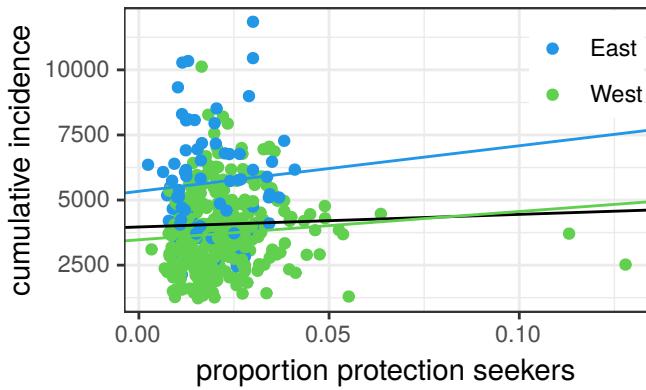


# Cum. Incidence (kids) vs socioeconomic parameter [81-100]

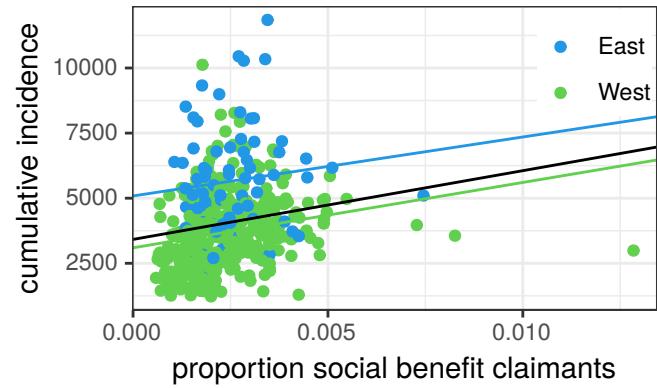
Unemployment Rate



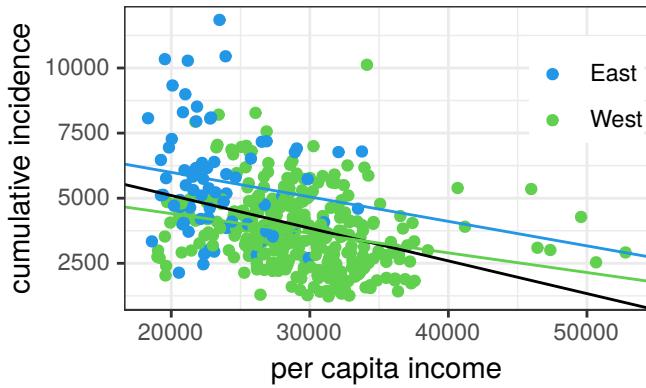
Protection Seekers



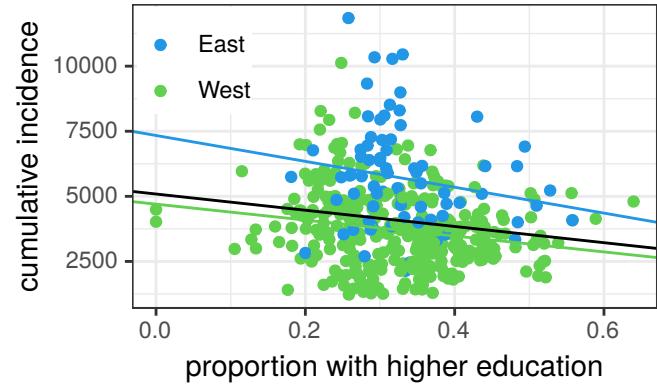
Social Benefit Claimants



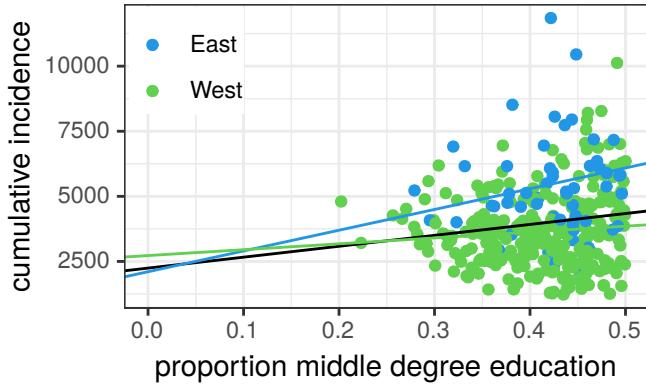
Per Capita Income



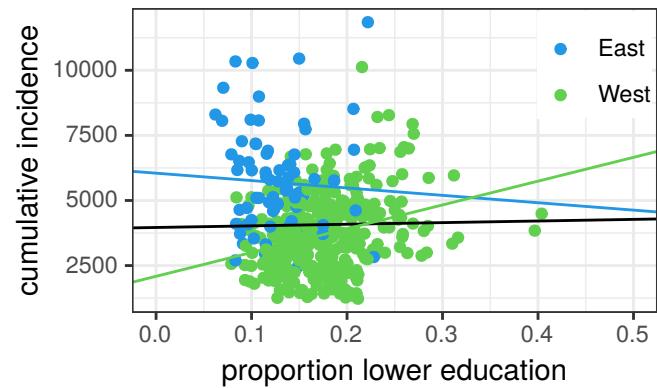
Higher Education



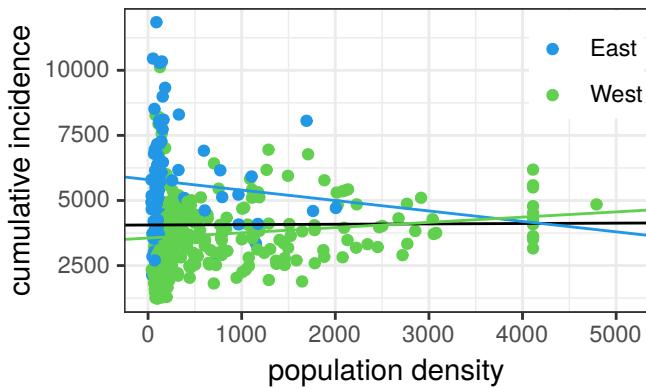
Middle Degree Education



Lower Education

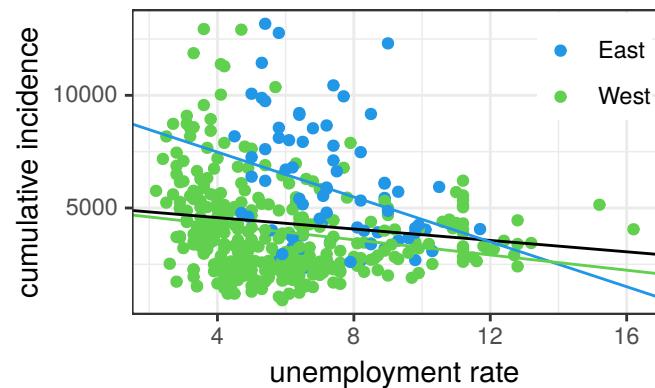


Population Density

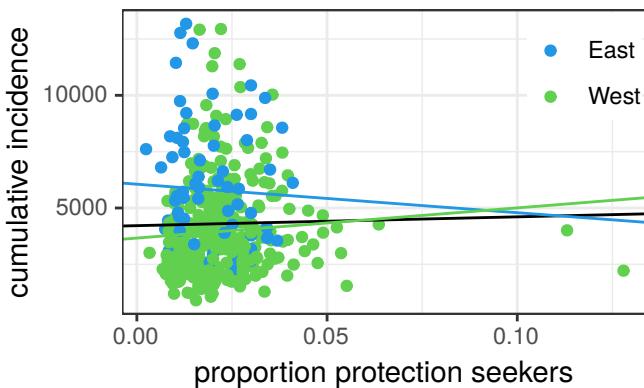


# Cum. Incidence (juveniles) vs socioeconomic parameter [81-100]

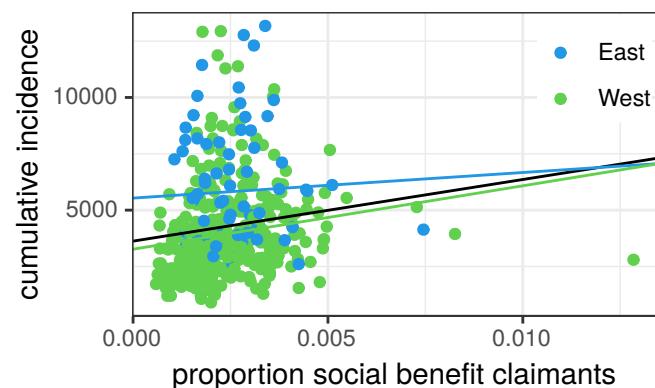
Unemployment Rate



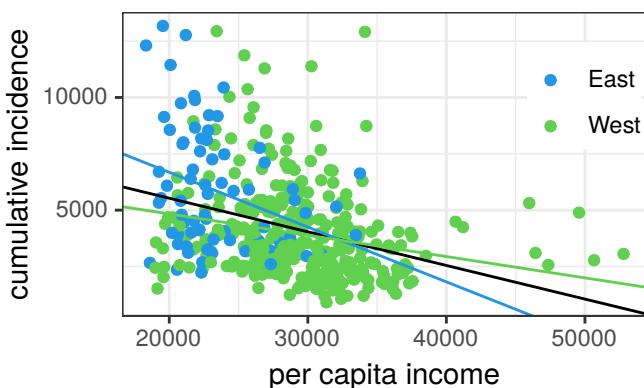
Protection Seekers



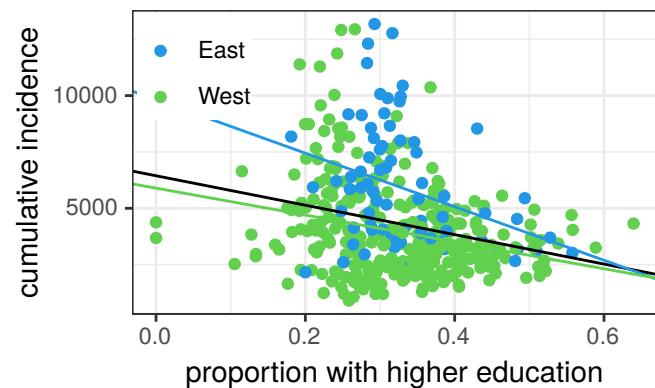
Social Benefit Claimants



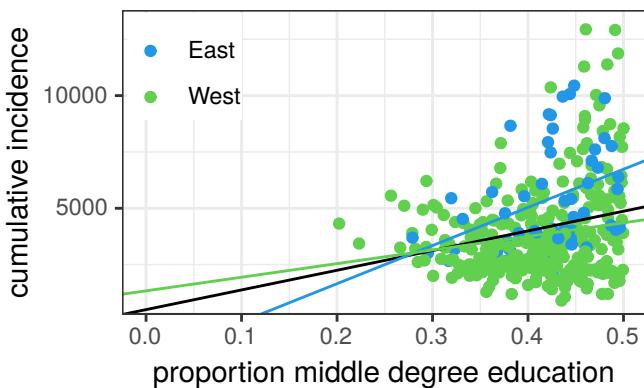
Per Capita Income



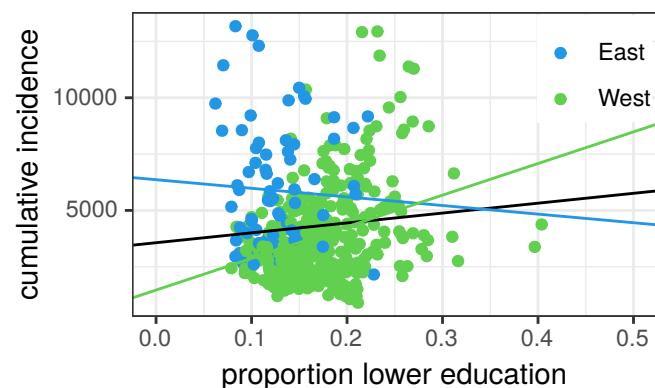
Higher Education



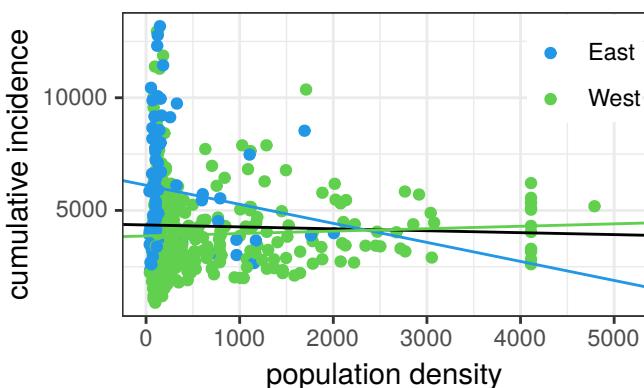
Middle Degree Education



Lower Education

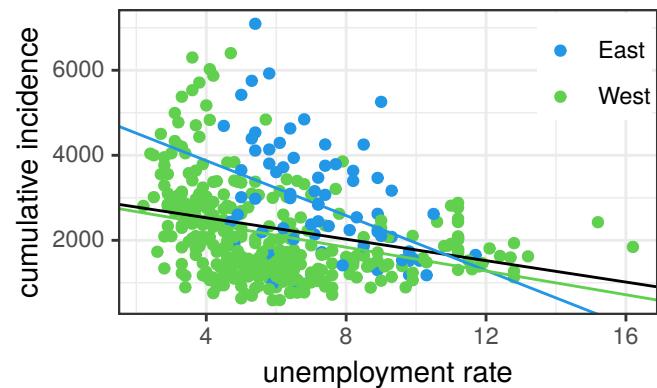


Population Density

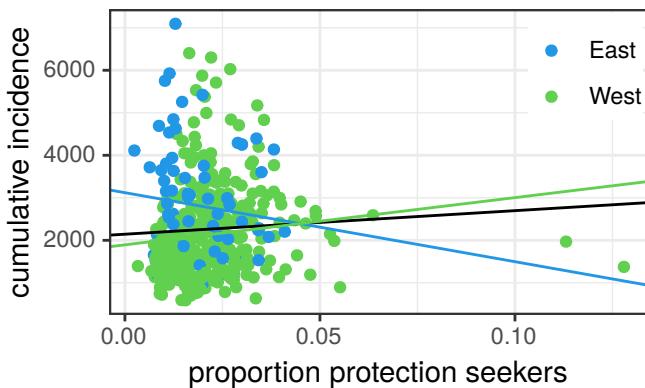


# Cum. Incidence (adults) vs socioeconomic parameter [81-100]

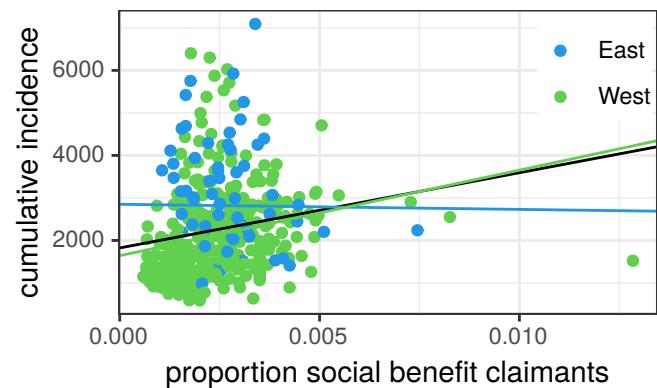
Unemployment Rate



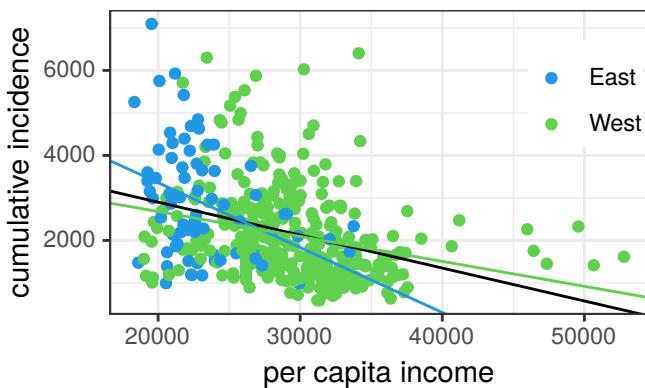
Protection Seekers



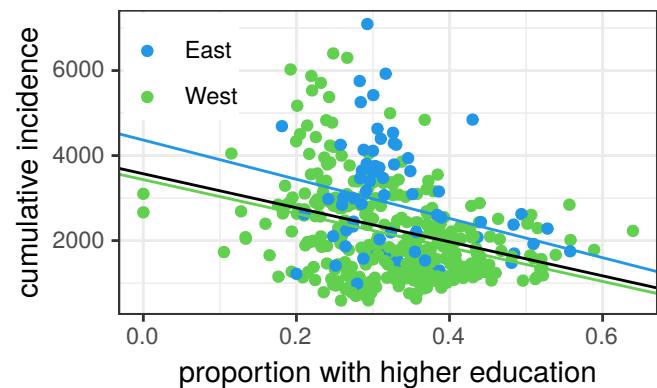
Social Benefit Claimants



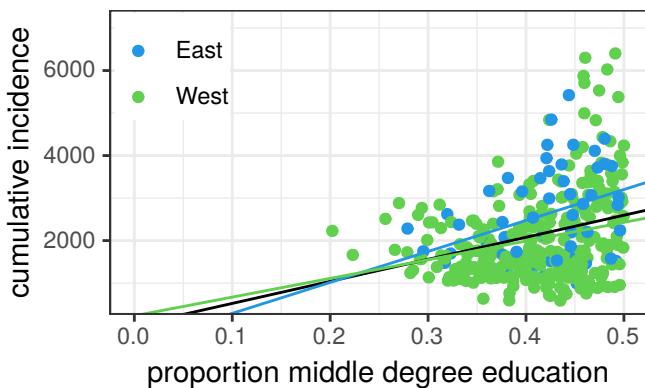
Per Capita Income



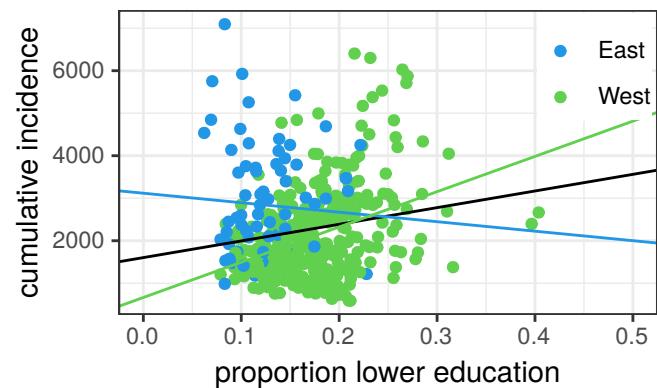
Higher Education



Middle Degree Education



Lower Education



Population Density

