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Correction: Comparing apples to apples: an environmental criminology analysis of the effects of heat and rain on violent crimes in Boston

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Correction to: *Palgrave Communications* <https://doi.org/10.1057/s41599-018-0188-3>, published online 20 November 2018.

The original version of this Article contained errors in the abstract.

Please see the incorrect version below.

Weather characteristics have been suggested by many social scientists to influence criminality. A recent study suggested that climate change may *cause* a substantial increase in criminal activities during the twenty-first century. The additional number of crimes *due to* climate have been ethoroughly discussed the first draft of the paper. Allstimated by associational models, which are not optimal to quantify *causal* impacts of weather conditions on criminality. Using the Rubin Causal Model and crime data reported daily between 2012 and 2017, this study examines whether changes in heat index, a proxy for apparent temperature, and rainfall occurrence, influence the number of violent crimes in Boston. On average, more crimes are reported on temperate days compared to extremely cold days, and on dry days compared to rainy days. However, no significant differences in the number of crimes between extremely hot days versus less warm days could be observed. The results suggest that weather forecasts could be integrated into crime prevention programs in Boston. The weather–crime relationship should be taken into account when assessing the economic, sociological, or medical impact of climate change. Researchers and policy makers interested in the effects of environmental exposures or policy interventions on crime should consider data analyses conducted with causal inference approaches.

These errors have now been corrected in both the PDF and HTML versions of the original Article.

Please see the corrected version of the abstract below.

Weather characteristics have been suggested by many social scientists to influence criminality. According to a recent study, climate change may *cause* a substantial increase in criminal activities during the twenty-first century. The additional number of crimes *due to* climate have been estimated by associational models, which are not optimal to quantify *causal* impacts of weather conditions on criminality. Using the Rubin Causal Model and crime data reported daily between 2012 and 2017, this study examines whether changes in heat index, a proxy for apparent temperature, and rainfall occurrence, influence the number of violent crimes in Boston. On average, more crimes are reported on temperate days compared to extremely cold days, and on dry days compared to rainy days. However, no significant differences in the number of crimes between extremely hot days versus less warm days could be observed. The results suggest that weather forecasts could be integrated into crime prevention programs in Boston. The weather–crime relationship should be taken into account when assessing the economic, sociological, or medical impact of climate change. Researchers and policy makers interested in the effects of environmental exposures or policy interventions on crime should consider a causal inference approach to analyze their data.

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