



***Compass Interdisciplinary
Virtual Conference***
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COMMENTARY ON:

**Climate–Suicide Relationships: A Research Problem in Need of
Geographic Methods and Cross-Disciplinary Perspectives**

P. Grady Dixon
Mississippi State University

and

Adam J. Kalkstein
United States Military Academy

This study summarized literature and called for greater research efforts on the relationship between suicide and climate. Although I read this manuscript with interest, the comments below are intended to help initiate discussion on this manuscript (via the Compass Interdisciplinary Virtual Conference) as well as help the authors improve the overall organization and clarity of the article.

General Comments:

1. I would like to see more background on suicide statistics. I know the authors provided a context for the study, but what is the general trend of suicides? Are they increasing, decreasing, remaining steady? It would be nice to see a graph or figure with suicides over time for as much time as the data allows. Then we could take a look at different particular regions/countries throughout the world, if data permit.
2. Although I thought the manuscript was generally well-written, the authors included the abbreviation “etc.” many times. I think the article would benefit by removing those abbreviations.

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3. I did not realize this article was reviewing literature on suicide-climate until I was about half way through the piece. I think it would be helpful to state in the abstract and the introduction that the article reviews literature on suicide-climate. Perhaps the authors can add a sentence in the introduction explicitly stating the purpose of the article (to review key/contradictory findings of climate-related suicide).
4. I agree with the authors' argument regarding the unique position of geographers and climatologists to investigate spatial and temporal dimensions of climate and suicide. That being said, however, I would like to see more depth on: 1) the psychology of suicide; and 2) the influence of the environment on psychological health. How does local environment/climate correlate not just with suicide, but also with depression, anxiety, stress, among other factors? So, in addition to the literature grounded in geography, I would like to see a few more paragraphs on psychology and human health and well-being.

Compass Directed Questions:

1. What contribution does the article make to the existing literature?

-I believe this article makes a valuable contribution to existing literature on climate-suicide. For example, the authors are quick to point out the contradictory and inconclusive nature of the literature. This effort, however, reviews a broad base of literature on climate-suicide, and in doing so, reveals the complexity of the subject. Another strength of the article is the review of methodologies currently in use or well-suited for studying suicide and climate.

2. Which points in the article would you challenge?

-I agree that this topic needs greater research efforts to better understand relationships between suicide and the natural environment. I also agree that multiple spatial and temporal resolutions are critical to tease out variability among different datasets. I would challenge the authors, however, to seek out mortality counts for the given study area. Many local health departments (e.g. Arizona Department of Health Services) will collaborate with the scientific community. With a dataset on total mortality for a given spatial (e.g. county, state) and temporal scale, the authors could identify cause of death (based on ICD codes), and then carryout some statistical analysis, such as baseline and seasonal mortality figures, all mortality, suicide mortality, and these records could be paired with local meteorological conditions. Indeed, privacy is an issue but I would encourage the authors to pursue these data sources.

3. What is the future for this area of research? How do you think the field could/should develop?

-I believe there is substantial room for growth in research on suicide and climate. As the authors pointed out, the environment has long been considered a strong influence on human health and well-being, yet many studies of climate-suicide remain disjointed and inconclusive. Additional studies at various spatial and temporal scales should help resolve some of the current research challenges. Two particular areas that could help the field develop are: 1) an interdisciplinary approach; and 2) data standardization. The authors already extolled the relative lack of contributions to suicide-climate outside of the mental health community; however, utilizing the expertise of geographers, sociologists, psychologists, among other scientists may provide valuable insights into suicide and climate. I support the call for more collaborative and interdisciplinary research efforts. The second item that may help the field develop is through the improvement of data collection and analysis. I recognize that suicide data is highly sensitive, but it is critically important to have some standards for analyzing and/or collecting data in order to address some current research challenges. I have experience working with ICD (International Classification of Disease) codes which can be available upon request from local health departments. Studying suicide codes (X70), and seeking partnerships with public, private, or government groups may help organize data integration and/or standardization.