Stanford



Natalie Herbert

Social Science Research Scholar, Earth System Science

Bio

BIO

NATALIE HERBERT is a Research Scientist in the Department of Earth Systems Science at the Doerr School of Sustainability. Her research investigates decision-making in the face of environmental risk. She completed her Ph.D. in 2020 at the Annenberg School for Communication, where she researched health and science communication with a focus on communicating scientific uncertainty. Natalie was a Christine Mirzayan Science and Technology Policy Graduate Fellow at the National Academies of Sciences, Engineering, and Medicine.

ACADEMIC APPOINTMENTS

- Social Science Research Scholar, Earth System Science

PROFESSIONAL EDUCATION

- PhD, Annenberg School for Communication, University of Pennsylvania , Communication (2020)
- MA, Annenberg School for Communication, University of Pennsylvania , Communication
- BA, University of California, Los Angeles , Political Science

Publications

PUBLICATIONS

- **Risk perception, but not response efficacy, linked risk communication to protective action during an atmospheric river in California.** *PNAS nexus*
  Ng, M., Schumacher, A., Ram, N., Herbert, N., Wong-Parodi, G., Prestley, R., Morss, R., Demuth, J. L.
  2026; 5 (11): pgag332
- **Risk perception and decision-making during multiple climate hazards** *CURRENT OPINION IN ENVIRONMENTAL SUSTAINABILITY*
  Santana, F. N., Herbert, N.
  2026; 83
- **Building adaptive capacity of US Gulf Coast city practitioners to extreme weather events.** *PNAS nexus*
  Wong-Parodi, G., Herbert, N., Fendrich, S. J., Basaraba, A. B., Domingue, S. J., Goto, E. A., Hernandez, P., Harrison, T., Jagannathan, K., Jorns, J. L., Kalafatis, A. S., Maillard, L., Petersen, et al
  2026; 5 (10): pgag330
- **Subjective attribution, experiences, behaviors, and climate policy support during increasingly risky storms** *CELL REPORTS SUSTAINABILITY*
  Wong-Parodi, G., Ng, M., Herbert, N., Prestley, R., Walpole, H., Schumacher, A., Morss, R., Demuth, J. L.
  2026; 3 (3)
- **Adaptive strategies to extreme climate events among riverine communities in Sirajganj, Bangladesh** *DISCOVER ENVIRONMENT*

Jahan, F., Momo, J., Herbert, N., Goldberg, L., Shoab, A., Yeamin, A., Heitmann, G., Rahman, M., Chung, J., Parodi, G.
2026; 4 (1)

- **Scaling up actionable climate knowledge.** *Proceedings of the National Academy of Sciences of the United States of America*
  Lemos, M. C., Maillard, L., Herbert, N., Domingue, S. J., Jagannathan, K., Wong-Parodi, G., Goto, E. A., Gill, D., Van Berkel, D., Kalafatis, S., Jorns, J. L., Basaraba, A., Harrison, et al
  2025; 122 (50): e2515771122

- **Examining individuals' protective behavioral decision-making dynamics over repeated risks of heat waves in the American West** *JOURNAL OF RISK RESEARCH*
  Ng, M., Herbert, N., Ram, N., Wong-Parodi, G.
  2025

- **Examining the Temporal Dynamics of Risk Communication During Extreme Weather Events: Insights From a Scoping Review.** *Risk analysis : an official publication of the Society for Risk Analysis*
  Ng, M., Schumacher, A., Herbert, N., Wong-Parodi, G., Ram, N., Demuth, J.
  2025

- **How self-efficacy and response efficacy change with risk and adaptation behaviors during tropical cyclones** *JOURNAL OF ENVIRONMENTAL PSYCHOLOGY*
  Herbert, N., Ng, M., Demuth, J., Schumacher, A., Walpole, H., Morss, R., Wong-Parodi, G.
  2025; 107

- **Flooding and elevated prenatal depression in rural Bangladesh: A mixed methods study.** *PLOS global public health*
  Hanif, S., Momo, J. E., Jahan, F., Goldberg, L., Herbert, N., Yeamin, A., Shoab, A. K., Akhter, R. M., Roy, S. K., Heitmann, G. B., Ercumen, A., Rahman, M., Tofail, et al
  2025; 5 (7): e0004792

- **Bridging incremental to transformative hazard management strategies on the Tule River Indian Reservation** *ENVIRONMENTAL RESEARCH: HEALTH*
  Herbert, N., Beckman, C., Vera, K., Coles, E., Kim, T., Cho, S., Wong-Parodi, G.
  2025; 3 (1)

- **Collecting Longitudinal, Perishable Social Science Observations during Hurricanes** *BULLETIN OF THE AMERICAN METEOROLOGICAL SOCIETY*
  Demuth, J. L., Schumacher, A. B., Morss, R. E., Wong-Parodi, G., Herbert, N., Walpole, H. D., Alland, J. J.
  2025; 106 (1): E167-E196

- **Flooding and elevated prenatal depression in a climate-sensitive community in rural Bangladesh: a mixed methods study.** *medRxiv : the preprint server for health sciences*
  Hanif, S., Momo, J. E., Jahan, F., Goldberg, L., Herbert, N., Yeamin, A., Shoab, A. K., Akhter, R. M., Roy, S. K., Heitmann, G. B., Ercumen, A., Rahman, M., Tofail, et al
  2024

- **Leveraging the humanity of randomized controlled trials for actionability** *CELL REPORTS SUSTAINABILITY*
  Wong-Parodi, G., Domingue, S., Harrison, T., Herbert, N., Maillard, L., Lemos, M.
  2024; 1 (5)

- **Descriptive social norms, social support, and behavioral response to climate-related and co-occurring health hazards** *JOURNAL OF RISK RESEARCH*
  Santana, F. N., Herbert, N., Wong-Parodi, G.
  2024

- **Improving adaptation to wildfire smoke and extreme heat in frontline communities: evidence from a community-engaged pilot study in the San Francisco Bay Area** *ENVIRONMENTAL RESEARCH LETTERS*
  Herbert, N., Beckman, C., Cannedy, C., Cao, J., Cho, S., Fischer, S., Huang, S., Kramer, S. J., Lopez, O., Lopez, S., Ouyang, D., Suckale, J., Wulf-Saena, et al
  2023; 18 (7)

- **Centering equity and sustainability in climate adaptation funding** *Environmental Research: Climate*
  Berlin Rubin, N., Bower, E. R., Herbert, N., Santos, B. S., Wong-Parodi, G.

2023; 2 (3)

- **The role of information avoidance in managing uncertainty from conflicting recommendations about electronic cigarettes** *Communication Monographs*
  Yang, Q., Herbert, N., Yang, S., Alber, J., Ophir, Y., Cappella, J. N.
  2020: 263-285

- **Leveraging immersive technology to expand access to opioid overdose reversal training in community settings: Results from a randomized controlled equivalence trial** *DRUG AND ALCOHOL DEPENDENCE*
  Herbert, N., Axson, S., Siegel, L., Cassidy, K., Hoyt-Brennan, A., Whitney, C., Herens, A., Giordano, N. A.
  2020; 214: 108160

- **Support or competition? How online social networks increase physical activity: A randomized controlled trial.** *Preventive medicine reports*
  Zhang, J., Brackbill, D., Yang, S., Becker, J., Herbert, N., Centola, D.
  2016; 4: 453-8