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Naturalistic Decision Making Under Uncertainty:  
Theoretical and Methodological Developments – An Introduction to  
the Special Section

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The aim of this Special Section is to share with a broader audience some of the recent theoretical and methodological developments in research conducted in the traditions of Naturalistic Decision Making (NDM) and Macrocognition. Our intention is for papers to present applied research related to decision making and other macrocognitive processes, such as sensemaking, that was conducted in uncertain environments and in naturalistic and simulated settings. In particular, we invited exemplary research from any domain characterized by varying degrees of ambiguity and information availability, where events are often unexpected or novel, and that push the boundaries of current capability, skill, safety and/or security to the brink of failure. In today's workplace these features of uncertain environments contribute to the complexity of cognitive work and present considerable challenges to scientific theory and methodology.

This Special Section is comprised of one invited theoretical paper followed by five empirical reports of findings from original research that advance theory, extend current or present new macrocognitive models, or develop new methodology applicable to studying decision making under uncertainty. Several of these papers were previously presented at the 13<sup>th</sup> Bi-Annual International NDM Conference (University of Bath UK, 20-23 June 2017) and we have greatly enjoyed the process of reviewing and editing the development of these papers. We hope that JARMAC readers find these developments in NDM (Gore, Flin, Stanton & Wong, 2015; Klein, 2011) and macrocognition (Ward et al., 2016) thoughtful examples of how our 30-year long community of scientific researchers and practitioners continues to develop.

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## **References**

- Gore, J. and Ward. P. (Eds.). (2017). *Proceedings of the 13th International Conference on Naturalistic Decision Making 2017*, Bath.: 270-272. ISBN 978-0-86197-194-7
- Gore, J., Flin, R., Stanton, N., & Wong, W. (2015). Applications for Naturalistic Decision Making. In J. Gore, R. Flin, N. Stanton, & W. Wong (Eds) *Applications of Naturalistic Decision Making Special Issue of the Journal of Occupational & Organizational Psychology*, 88, 223-230.
- Klein, G. A (2011). *Streetlights & Shadows: Searching for the Keys to Adaptive Decision Making*. MIT Press.
- Ward, P., Hoffman, R. R., Conway, G., Schraagen, J. M., Peebles, D., Hutton, R., & Petushek, E. (Eds.). (2016). Macro cognition: The science and engineering of sociotechnical work systems. *Frontiers in Psychology (Cognitive Science Section)*, 8 (515) doi: 10.3389/fpsyg.2017.00515