UNCERTAINTY REGULATION, EMOTION REGULATION, AND CREATIVITY

STATEMENT OF RESEARCH PROJECT

Successfully tackling the uncertainty—i.e., a state of not knowing for sure due to lacking or hard-to-process information (Grote, 2009)—present in one's environment is a prerequisite for successful creative production. Indeed, creativity often creeps through the cracks of and changes to one's current mental models, perspectives, and status quo. In other words, dealing with (instead of avoiding), and even introducing uncertainty into a given situation may help boost various facets and stages of the creative process, such as idea generation, idea development, idea evaluation, and innovation implementation. Yet, embracing uncertainty and engaging in creativity conflicts with the basic human need to reduce uncertainty (Kramer, 1999). Hence, this project addresses the following research question: How, when, and why does uncertainty regulation affect creativity? Specifically, the project would build on the recently developed construct of uncertainty mindset, defined as one's beliefs about the nature of uncertainty (Magni et al., 2023), and inquire questions such as the following:

(1) How do between-person and within-person variations in uncertainty mindset affect various facets of creativity? For example, does a belief that uncertainty is (also) an opportunity facilitate engagement (and success) in creative efforts?

(2) How and when can people's uncertainty mindset be altered? Specifically, can positive interventions help broaden people's beliefs about uncertainty (e.g., seeing uncertainty not just as a threat, but also as an opportunity and as something that one can proactively change the level of), such that people's responses to given situations will be more constructive through a more effective uncertainty regulation process?

(3) Under which conditions is the effect of uncertainty mindset on creativity weaker/stronger, or even changing directionality? For example, do task characteristics, availability of resources to buffer the risks inherent in uncertainty, or other individual characteristics alter the mechanisms of uncertainty regulation and their effect on creativity? Or does the nature of uncertainty (chosen vs. imposed) and the domain uncertainty is experienced in (e.g., professional vs. personal) affect the relationship?

(4) Which psychological mechanisms link uncertainty regulation and creativity? For example, do the effects of uncertainty regulation on creativity operate through affective mechanisms (e.g., altering discrete emotions, or emotion regulation processes), cognitive mechanisms (e.g., psychological safety, sense of power), and behavioral mechanisms (e.g., rule-bending, information seeking)?

(5) Which other relevant outcomes (e.g., affective and cognitive well-being) result from uncertainty regulation processes?

(6) How do the proposed uncertainty regulation processes develop across the life span? For example, do younger vs. older adults consistently differ in their uncertainty mindsets, uncertainty attitudes, goal prioritization (e.g., exploration vs. emotional meaning), and ensuing regulatory mechanisms?

<u>References</u>

Grote, G. (2009). Management of uncertainty: Theory and application in the design of systems and organizations. Springer.

Kramer, M. W. (1999). Motivation to reduce uncertainty: A reconceptualization of uncertainty reduction theory. Management Communication Quarterly, 13(2), 305–316.

Magni, F., Gerlach, A., Pfrombeck, J., Zaniboni, S., Strittmatter, L. E., & Grote, G. (2023). Mind the Unknown: Development and Validation of the Uncertainty Mindset. Academy of Management Proceedings, 2023(1), 13059. https://www.research-collection.ethz.ch/handle/20.500.11850/640411

SCOPE OF WORK FOR SELECTED PHD STUDENT

The student would conduct work in relation to the research questions and theoretical frameworks outlined above. Specifically, the student would be expected to:

(1) Review the recent literatures on uncertainty, uncertainty regulation, self-regulation, creativity and creative processes, as well as other relevant literatures depending on the mechanisms and boundary conditions under analysis;

(2) Contribute to the research project by suggesting additional research questions, including the analysis of additional mechanisms and boundary conditions to the ones listed here, as well as suggesting relevant contexts of study and data collection. The student could potentially propose related independent variables and outcomes to study related to the context of this project;

(3) Identify and collect relevant data in the lab, online, and in the field. The supervisor has conducted some pilot studies that can serve as a baseline that the student can use to build a research program on;

(4) Produce, with the help of the supervisors, relevant research materials such as experimental materials, surveys, interventions, interview guidelines, and more, depending on the nature of the research work to be conducted;

(5) Analyze the data according to the most recent standards and relying on the most appropriate methods based on the nature (e.g., quantitative vs. qualitative, longitudinal vs. time-lagged vs. cross-sectional, multi-level vs. single-level) of the data collected;

(6) Take a leading role in producing papers to submit to academic journals, conferences, practice outlets, and more;

(7) In later stages, develop expertise in the field of research and acquire legitimacy as an expert in the study of uncertainty regulation, creativity, and more, as well as create relevant connections with other scholars that may contribute to the research project;

(8) Potentially assist the supervisors, thesis advisory committee members, and other scholars with ongoing, relevant research projects, as well as propose, start, and lead other research projects based on the student's research interests and expertise.