The Science of Contemplative Practice & the Practice of Contemplative Science

Aaron J. Godlaski, PhD

Centre College

Agenda

- Science & Practice
- Conducting research in Contemplative Science (CS).
- Conceptualizing and communicating CS.
- Identity in CS.

Science & Practice

- Mutually-informative endeavors
- Areas-of-concern
  - CP in the laboratory vs. the classroom
  - Practitioner vs. scholar vs. scientist
  - Fidelity vs. freedom
- Basic & applied research, scholarship, and assessment are necessary components of a legitimate field of Contemplative Studies.
- Dichotomy vs. dialectic

Dichotomy vs. Dialectic

Dichotomy

- Limits communication.
- Leads to poorly-informed. research & practice
- Limits mutual growth of CP & CS.
- Follows a traditional paradigm of bifurcating pedagogy and research.

Dialectic

- Fosters communication.
- Research informs practice informs research…
- Mutual growth and legitimacy.
- Honors a contemplative identity.

Conducting Research

- “You study meditation, right?”
  - Is a bit like asking a biologist if they study life.
- Component-process approach
  - Reduces methodological complexity
  - Explores both process and outcome
- Begins with intra-/inter-personal experience and intention.
  - Personal practice experiences
  - Collaborative conversations

Conducting Research

- Qualitative
  - An evaluation of motivation and process in a short course on Buddhism and meditation (Godlaski, 2011).
  - Applications of contemplative practices in Chinese language learning (Anderson & Godlaski, *in preparation*)
- Quantitative
  - Cardiac physiologic effects of brief breath awareness training (Godlaski et al., 2013).
  - Physiology of Emotion Regulation (Godlaski et al., 2014)
  - The Gratitude Project (pilot complete)
  - Physiologic and Immunologic effects of *Forest Bathing* (森林浴) in the United States (*in development*)
  - The Gethsemane Project: A multi-method study of contemplative practice in Catholic monastics (*call me if this sounds like fun.*)

Lessons from Qualitative Research

- The intentionality of participants is important.
- Teachers should take the process slowly.
  - Personal practice
  - Meet students where they are
  - Recognize development at multiple levels
    - Within practice
    - Within person
    - Within project

- Exploration and understanding of 1st person experiences is necessary for effective quantitative research in contemplative science and pedagogy.

Lessons from Quantitative Research

- The intentionality of the researcher is important.
  - Extends to training with research students
- Reducing, categorizing, & labeling can be both productive and disruptive.
- Use of self-report can lack reliability & validity.
- Potentially fruitful future directions
  - Mixed-model
    - Neurophenomenology
  - Component process analysis

Putting Lessons into Practice

- Student training
  - Scientific literature
    - Object under study
    - Contemplative practice
  - 1st person practice
    - Contemplative practice
    - Object under study
- Project development
  - Collaborative and integrative
  - Student engagement in developing and piloting methodology

Putting Lessons into Practice

- Goals
  - Rigorous scientific training
  - Incorporation of 1st person methods in personal development and research practice
    - Recognition of personal and systemic biases in research

- Future directions
  - Multi-disciplinary contemplative science training for students
  - Collaborative assessment of undergraduate research experience
  - International research/practice collaboration

- Precedents
  - Brown Contemplative Studies
  - U. Michigan BA Jazz & Contemplative Studies
  - B. Alan Wallace's work on "contemplative science"

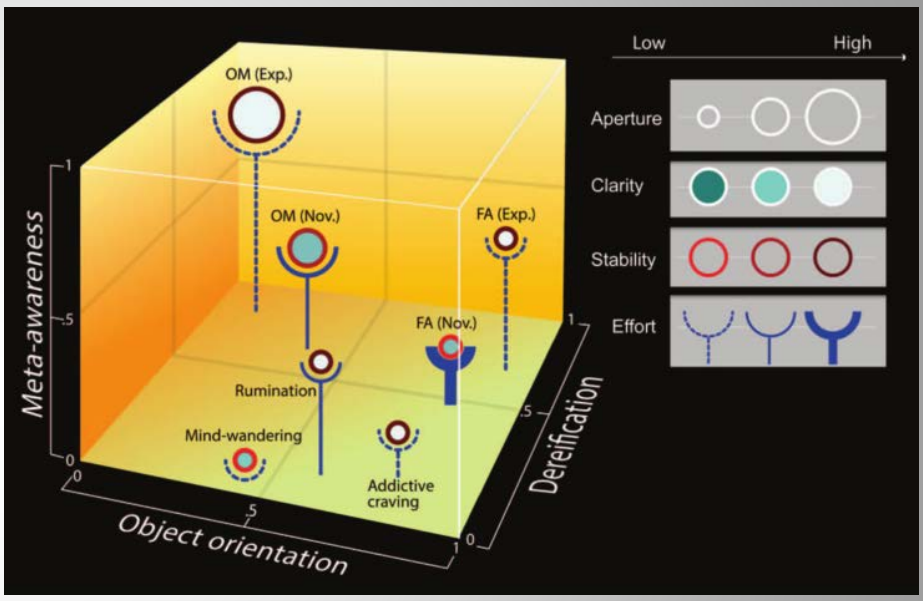
Identity in Contemplative Science

- Challenges
  - Publication bias
  - The taboo of subjectivity
  - Quantifying the ineffable

- Science without ego
  - Being clear about intentionality
  - Sharing mistakes
  - Learning from errors

Conceptualizing and Communicating Contemplative Science

- Addresses problems in studying contemplative practice
  - Fuzzy terminology
  - Process of contemplative training
- Uses
  - Operationalization
  - Heuristic framework to map experience
  - Generate testable hypotheses



From Lutz, Jha, Dunne, & Saron, 2015

Conceptualizing and Communicating Contemplative Science

- Scientific data may be the most efficacious and accessible language for explaining potential positive effects.
  - Caveat: Not all findings are broadly applicable, much work remains to be done.
- Critical 1st and 3rd person perspectives should be highlighted

Recommended Readings

- Coburn, T., Grace, F., Klein, A., Komjathy L., Roth, H., Simmers-Brown, J. (2011). Contemplative Pedagogy: FAQ. *Teaching Theology and Religion,* 14(2), 167-174.
- Davidson, R. J., & Kaszniak, A. W. (2015). Conceptual and methodological issues in research on mindfulness and meditation. *American Psychologist*, *70*(7), 581–592.
- Dietert, R. R., & Dietert, J. (2013). *Science Sifting: Tools for Innovation in Science and Technology*. World Scientific.
- Holzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. (2011). How Does Mindfulness Meditation Work? Proposing Mechanisms of Action From a Conceptual and Neural Perspective. *Perspectives on Psychological Science*, *6*(6), 537–559.
- Lutz, A., Jha, A. P., Dunne, J. D., & Saron, C. D. (2015). Investigating the Phenomenological Matrix of Mindfulness-Related Practices From a Neurocognitive Perspective. *American Psychologist*, *70*(7), 632–658.
- Monshat, K., Khong, B., Hassed, C., Vella-Brodrick, D., Norrish, J., Burns, J., & Herrman, H. (2013). "A conscious control over life and my emotions:" mindfulness practice and healthy young people. A qualitative study. *The Journal of Adolescent Health : Official Publication of the Society for Adolescent Medicine*, *52*(5), 572–7.
- Oman, D., Shapiro, S. L., Thoresen, C. E., Flinders, T., Driskill, J. D., & Plante, T. G. (2007). Learning from Spiritual Models and Meditation: A Randomized Evaluation of a College Course. *Pastoral Psychology*, *55*(4), 473–493.
- Roth, H. (2008). Against cognitive imperialism. *Religion East and West*, *8*, 1-23.
- Roth, H. (2006). Contemplative studies: Prospects for a new field. *The Teachers College Record*, *108*(9), 1787–1815.
- Shapiro, S., Brown, K., & Astin, J. (2011). Toward the integration of meditation into higher education: A review of research evidence. *Teachers College Record*, *113*(3), 493–528.
- Tang, Y.-Y., Holzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Review Neuroscience*, *16*, 213.
- Varela, F., Thompson, E., & Rosch, E. (1991). *The Embodied Mind: Cognitive science and the human experience*. MIT Press.
- Yamada, K., & Victor, T. L. (2012). The Impact of Mindful Awareness Practices on College Student Health, Well-being, and Capacity for Learning: a pilot study. *Psychology Learning & Teaching*, *11*(2), 139.