

AFFECTIVE SCIENCE

Psychology M1308.000500 – Section 001

Professor: Dr. Sowon Hahn

Spring 2023, Wednesdays 14:00-16:50

Building # 16 M203

Course Description:

In this seminar, we will review recent research that combines affective and cognitive approaches to understand human mind and behavior. Over the past few decades, researchers have begun to characterize the neural systems that extend from primitive affective response such as fight or flight to the complex emotion experienced by humans including guilt, envy, empathy, and social pain. We will discuss articles in the areas of affective neuroscience, emotional regulation, decision making, social behavior, and well-being. In addition to contributing to weekly seminar, students will be required to write a research proposal on the topic of their choice selected from the class discussion.

Course Requirements:

Class discussion Contribution to class will be worth 50% of your final grade. Students will be required to generate 3-5 discussion questions and major issues from each article prior to each class. Students will also take responsibility for leading the discussion. Leading the discussion will entail the followings: 1) summarizing the key points to be gleaned from the articles, 2) using the discussion questions posted by other students to facilitate in-depth discussion. Leading the discussion (or we can call it presentation) will be worth 20% of your grade.

Paper Constituting 30% of the final grade, students will write a paper of their chosen topic within the field of affective science. The paper should have a proposal format, evaluating current body of research and proposing a new study. Papers should be double-spaced with 1-inch margins and 11-pt standard font, and recommended to be about 10-12 pages long.

Schedule of Topics (subject to revision)

* All the articles will be distributed online.

Week 1: March 8

Introduction

Week 2: March 15

Emotion and Reason

- Sacks, O. (1995). An Anthropologist on Mars: Seven Paradoxical Tales “The Case of the Colorblind Painter” & “An Anthropologist on Mars”
- Damasio, A. (1985). *Descartes’ Error: Emotion, Reason, and the Human Brain*. Chapters 1-2
- Diener, E., & Seligman, M. E. (2002). Very happy people. *Psychological Science*, 13(1), 81-84.

Week 3: March 22

Theories of Emotion

- Barrett, L. F. (2006). Are emotions natural kinds?. *Perspectives on psychological science*, 1(1), 28-58.

- Ortony, A., & Turner, T. J. (1990). What's basic about basic emotions?. *Psychological review*, 97(3), 315.
- Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological review*, 110(1), 145-172s.

Week 4: March 29

Emotion and Decision Making

- Schwarz, N. (2000). Emotion, cognition, and decision making. *Cognition & Emotion*, 14(4), 433-440.
- Naqvi, N., Shiv, B., & Bechara, A. (2006). The role of emotion in decision making: A cognitive neuroscience perspective. *Current directions in psychological science*, 15(5), 260-264
- Sanfey, A. G., Rilling, J. K., Aronson, J. A., Nystrom, L. E., & Cohen, J. D. (2003). The neural basis of economic decision-making in the ultimatum game. *Science*, 300, 1755-1758.

Week 5: April 5

Social Behavior

- Woolley et al. (2010). Evidence for a collective intelligence factor in the performance of human groups. *Science*, 330, 686-688.
- Coan, J. A., Schaefer, H. S., & Davidson, R. J. (2006). Lending a hand: Social regulation of the neural response to threat. *Psychological Science*, 17, 1032-1039.
- Pronin, E. (2008). How we see ourselves and how we see others. *Science*, 320(5880), 1177-1180.

Week 6: April 12

Empathy

- Singer, T., & Lamm, C. (2009). The social neuroscience of empathy. *Annals of the New York Academy of Sciences*, 1156(1), 81-96.
- Iacoboni, M. (2009). Imitation, empathy, and mirror neurons. *Annual review of psychology*, 60, 653-670.
- Goldstein, T. R., & Winner, E. (2012). Enhancing empathy and theory of mind. *Journal of cognition and development*, 13(1), 19-37.
- Mar, R. A., & Oatley, K. (2008). The function of fiction is the abstraction and simulation of social experience. *Perspectives on psychological science*, 3(3), 173-192.

Week 7: April 19

Emotion and Happiness

- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success?. *Psychological bulletin*, 131(6), 803.
- Pressman, S. D., & Cohen, S. (2005). Does positive affect influence health?. *Psychological bulletin*, 131(6), 925.
- Seligman, M. E., & Csikszentmihalyi, M. (2000). *Positive psychology: An introduction* (Vol. 55, No. 1, p. 5). American Psychological Association.
- Mineo, L. (2017). Good genes are nice, but joy is better. *The Harvard Gazette*, 11.

Week 8: April 26

Music and Emotion

- Zatorre, R. J., & Salimpoor, V. N. (2013). From perception to pleasure: music and its neural substrates. *Proceedings of the National Academy of Sciences*, *110*(supplement_2), 10430-10437.
- Salimpoor, V. N., Benovoy, M., Larcher, K., Dagher, A., & Zatorre, R. J. (2011). Anatomically distinct dopamine release during anticipation and experience of peak emotion to music. *Nature neuroscience*, *14*(2), 257-262.
- Thompson, W. F., Schellenberg, E. G., & Husain, G. (2001). Arousal, mood, and the Mozart effect. *Psychological science*, *12*(3), 248-251.
- Dieterich-Hartwell, R. (2017). Dance/movement therapy in the treatment of post traumatic stress: A reference model. *The arts in psychotherapy*, *54*, 38-46.

Week 9: April 28

Emotion and Cognition

- Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition and Emotion*, *19*(3), 313-332.
- Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological inquiry*, *26*(1), 1-26.
- Pessoa, L. (2008). On the relationship between emotion and cognition. *Nature reviews neuroscience*, *9*(2), 148-158.

Week 10: May 3

Emotion and Money

- Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative?. *Journal of personality and social psychology*, *36*(8), 917.
- Wald, C. (2008). Crazy money. *Science*, *322*, 1624-1626.
- Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the national academy of sciences*, *107*(38), 16489-16493.
- Dunn, E. W., Gilbert, D. T., & Wilson, T. D. (2011). If money doesn't make you happy, then you probably aren't spending it right. *Journal of Consumer Psychology*, *21*(2), 115-125.

Week 11: May 10

Emotion and Intelligence

- Csikszentmihalyi, M. (2014). *Society, culture, and person: A systems view of creativity* (pp. 47-61). Springer Netherlands.
- Dietrich, A. (2004). The cognitive neuroscience of creativity. *Psychonomic bulletin & review*, *11*(6), 1011-1026.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality*, *9*(3), 185-211.

Week 12: May 17

Fear Learning

- Ohman, A. Mineka, S. (2003). The malicious serpent: Snake as a prototypical stimulus for an evolved module of fear. *Current directions in Psychological Science*, *12* 5-9.
- Tamir, M. & Ford, B. (2009). Choosing to be afraid: preferences for fear as a function of goal pursuit. *Emotion*, *9*, 488-497.
- LaBar, K. S. (2007). Beyond Fear: Emotional memory mechanisms in the human brain. *Current Directions in Psychological Science*, *16*, 173-177.

Week 13: May 24**Emotion and Artificial Intelligence**

- Nass, C., Steuer, J., & Tauber, E. R. (1994, April). Computers are social actors. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 72-78).
- Assuncao, G., Patrao, B., Castelo-Branco, M., & Menezes, P. (2022). An Overview of Emotion in Artificial Intelligence. *IEEE Transactions on Artificial Intelligence*.
- Hortensius, R., Hekele, F., & Cross, E. S. (2018). The perception of emotion in artificial agents. *IEEE Transactions on Cognitive and Developmental Systems*, 10(4), 852-864.
- Bostrom, N., & Yudkowsky, E. (2018). The ethics of artificial intelligence. In *Artificial intelligence safety and security* (pp. 57-69). Chapman and Hall/CRC.

Week 14: May 31**Student Proposal Presentation****Week 15: June 7****Student Proposal Presentation**