

ASEM 2405: Annotated Bibliography

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Categorized Annotations

Wright and Bower (1992) Different mood states lead individuals to subjectively judge the probability of future events. Unsuspected mood biases might directly impact a decision and its consequences. [**P**]

Hockey et al. (2000) Both natural moods and induced moods were found to have relatively small impacts on risky decision evaluation when compared to the influence of fatigue. However, an interaction was also found between state anxiety and fatigue, such that anxious individuals preferred safer options than non-anxious individuals when fatigue levels were low or moderate. [**P**]

Yuen and Lee (2003) Induced elated, neutral or depressed mood states correlated to risky-taking tendencies during Choice Dilemmas Questionnaire. Depressed mood less likely to take risks than those in neutral or elated mood. [**P**]

Must et al. (2006) Severely depressed individuals tend to perform worse than non-depressed individuals on modified Iowa Gambling Task with large punishments and large future payouts. The results are based upon medicated individuals with diagnosed major depressive disorder, and further work needs to qualify results for unmedicated depressed individuals. [**P, N**]

van Knippenberg et al. (2010) Groups make decisions often without taking full advantage of distributed information amongst group members, and affective state may be a factor to explain this suboptimal group strategy. Positive group mood associates to lower probabilities of utilizing distributed information than neutral or negative group moods, leading to lower quality decisions. [**P, E**]

Von Helversen et al. (2011) Since previous work on the influence of depression on decisions was inconclusive due to task variation, a complex sequential task was administered to individuals with, without, and recovering from a major depressive episode. Generally, depressed individuals were more likely to decide rationally compared to non-depressed and recovering patients. [**P**]

de Vries et al. (2012) When no trade-offs are present and a logical rule can be derived for a dominant choice, individuals in positive moods tend to make less logical and worse choices. Conversely, negative moods lead individuals to stick to logical rule-based decision strategies even after experiencing bad outcomes repeatedly. [**P, E**]

Morgan et al. (2013) Risk-taking might be decreased by eliciting positive moods over negative moods in the workplace. In particular, certain moods directly and indirectly influence risky decisions related to safety-critical work. [**P, E**]

Vinckier et al. (2018) The ventrolateral prefrontal cortex (vmPFC) and anterior insula (aIns) are correlated to changes to mood levels based on fMRI validation of a neuro-computational model. At onset of choices, higher vmPFC activity predicts overweighting of potential gains, while higher aIns activity predicts overweighting of potential losses. [N]

Proposals

- 1 Numerous studies point to the decreased risky behaviors observed in individuals and groups with negative mood states (de Vries et al., 2012; van Knippenberg et al., 2010; Von Helversen et al., 2011; Yuen & Lee, 2003). However, certain domain-specific findings (Morgan et al., 2013) demonstrate positive mood states to increase risk aversion. Given the domain-specific contradiction to other evidence, the direction of mood state may be insufficient as an indicator of willingness to take risks. The particular domain could interact with the effect of mood state due to the occupations' cognitive requirements. To investigate this, we might recruit samples of individuals in varied occupations and randomly assign to conditions of induced positive, neutral, and negative mood states. Between conditions, subjects play a simple trade-off task with both risky and conservative options. Analyzing results by occupational group and by mood state might demonstrate and corroborate interactions like those found in previous domain-specific work.
- 2 Depressed individuals tend to fair worse than non-depressed other in a modified Iowa Gambling Task with large future punishments and large future rewards (Must et al., 2006). However, medications for depression may alter the behaviors expected from non-medicated depressed individuals. Since certain emotion regulation strategies tend to lead to more rational decisions, a cognitive-behavioral approach to depression treatment might alter decision-making behaviors of depressed individuals relative to non-depressed individuals. This could be examined by administering a similar modified Iowa Gambling Task as the aforementioned study to depressed individuals undergoing cognitive-behavioral therapies, medication therapies, or both medication and cognitive-behavioral therapies. Analysis might demonstrate whether a multi-modality treatment method produces improved decision-making than those undergoing only one.

References

- de Vries, M., Holland, R. W., Corneille, O., Rondeel, E., & Witteman, C. L. (2012). Mood effects on dominated choices: Positive mood induces departures from logical rules. *Journal of Behavioral Decision Making*, 25(1), 74–81. <https://doi.org/10.1002/bdm.716>
- Hockey, G. R., Maule, A. J., Clough, P. J., & Bdzola, L. (2000). Effects of negative mood states on risk in everyday decision making. *Cognition and Emotion*, 14(6), 823–855. <https://doi.org/10.1080/02699930050156654>
- Morgan, J. I., Jones, F. A., & Harris, P. R. (2013). Direct and indirect effects of mood on risk decision making in safety-critical workers. *Accident Analysis and Prevention*, 50, 472–482. <https://doi.org/10.1016/j.aap.2012.05.026>
- Must, A., Szabó, Z., Bódi, N., Szász, A., Janka, Z., & Kéri, S. (2006). Sensitivity to reward and punishment and the prefrontal cortex in major depression. *Journal of Affective Disorders*, 90(2-3), 209–215. <https://doi.org/10.1016/j.jad.2005.12.005>
- van Knippenberg, D., Kooij-de Bode, H. J., & van Ginkel, W. P. (2010). The Interactive Effects of Mood and Trait Negative Affect in Group Decision Making. *Organization Science*, 21(3), 731–744. <https://doi.org/10.1287/orsc.1090.0461>

- Vinckier, F., Rigoux, L., Oudiette, D., & Pessiglione, M. (2018). Neuro-computational account of how mood fluctuations arise and affect decision making. *Nature Communications*, 9(1), 1–12. <https://doi.org/10.1038/s41467-018-03774-z>
- Von Helversen, B., Wilke, A., Johnson, T., Schmid, G., & Klapp, B. (2011). Performance Benefits of Depression: Sequential Decision Making in a Healthy Sample and a Clinically Depressed Sample. *Journal of Abnormal Psychology*, 120(4), 962–968. <https://doi.org/10.1037/a0023238>
- Wright, W. F., & Bower, G. H. (1992). Mood effects on subjective probability assessment. *Organizational Behavior and Human Decision Processes*, 52(2), 276–291. [https://doi.org/10.1016/0749-5978\(92\)90039-A](https://doi.org/10.1016/0749-5978(92)90039-A)
- Yuen, K. S., & Lee, T. M. (2003). Could mood state affect risk-taking decisions? *Journal of Affective Disorders*, 75(1), 11–18. [https://doi.org/10.1016/S0165-0327\(02\)00022-8](https://doi.org/10.1016/S0165-0327(02)00022-8)