

# Falk Lieder, Publication List

## JOURNAL ARTICLES

34. Reynante, B. M., Wilcox, J. E., Stephenson, O. L., **Lieder, F.**, & Lacopo, C. (2024). Metachangemaking: An Interdisciplinary Synthesis of Research on Cultivating Changemakers. *Journal of Moral Education*. doi:10.1080/03057240.2024.2342274
33. Krueger, P.M.<sup>1</sup>, Callaway, F.<sup>1</sup>, Gul, S., Griffiths, T. L.\* & **Lieder, F.\*** (2024). Identifying Resource-Rational Heuristics for Risky Choice. *Psychological Review*. Advance online publication. <https://doi.org/10.1037/rev0000456> <sup>1</sup>Joint first-authorship \*Joint senior-authorship.
32. **Lieder, F.**<sup>1</sup>, Chen, P.-Z.<sup>1</sup>, Prentice, M., Amo, V., & Tosic, M. (2024). Gamification of Behavior Change: Mathematical Principle and Proof-of-Concept Study. *JMIR Serious Games*, <https://doi.org/10.2196/43078> <sup>1</sup> Joint first-authorship.
31. Wirzberger, M., Lado, A., Prentice, M., Oreshnikov, I., Passy, J.-C., Stock, A., & **Lieder, F.** (2024). Optimal feedback improves behavioral focus during self-regulated computer-based work. *Scientific Reports*, 14(3134). <https://doi.org/10.1038/s41598-024-53388-3>
30. Reichman, D.\* & **Lieder, F.\***, Bourgin, D. D.\* , Talmon, N., & Griffiths, T. L. (2023). The computational challenges of pursuing multiple goals: network structure of goal systems predicts human performance. *Cognitive Science*, 47(8). doi:10.1111/cogs.13330
29. Becker, F., Wirzberger, M., Pammer-Schindler, V., Srinivas, S., & **Lieder, F.** (2023). Systematic metacognitive reflection helps people discover far-sighted decision strategies: a process-tracing experiment. *Judgment and Decision Making*, 18, E15. doi:10.1017/jdm.2023.16
28. Skirzynski, J., Jain, Y. R., & **Lieder, F.** (2023). Automatic discovery and description of human planning strategies. *Behavior Research Methods*, 56, 1065–1103. <https://doi.org/10.3758/s13428-023-02062-z>
27. Amo, V., Prentice, M., & **Lieder, F.** (2023). A gamified mobile app that helps people develop the metacognitive skills to cope with stressful situations and difficult emotions: Formative assessment of the InsightApp. *JMIR Formative Research*, textit7, e44429. <https://doi.org/10.2196/44429>
26. **Lieder, F.**, Prentice, M., & Corwin-Renner, E. R. (2022). An interdisciplinary synthesis of research on understanding and promoting well-doing. *Social and Personality Psychology Compass*, 16, e12704. <https://doi.org/10.1111/spc3.12704>
25. Becker, F., Skirzynski, J., van Opheusden, B., & **Lieder, F.** (2022). Boosting human decision-making with AI-generated decision aids. *Computational Brain & Behavior*, |textit5, 467–490. <https://doi.org/10.1007/s42113-022-00149-y>
24. Mehta, A., Jain, Y. R., Kemturi, A., Stojcheski, J., Consul, S., Tosic, M., & **Lieder, F.** (2022). Leveraging machine learning to automatically derive robust decision strategies from imperfect models of the real world. *Computational Brain & Behavior*, 5, 343–377. <https://doi.org/10.1007/s42113-022-00141-6>
23. Callaway, F., Jain, Y. R., van Opheusden, B., Krueger, P. M., Das, P., Iwama, G., Gul, S., Becker, F., Griffiths, T. L., & **Lieder, F.** (2022). Leveraging artificial intelligence to improve people's planning strategies. *Proceedings of the National Academy of Sciences*, 119(12), e2117432119. doi:10.1073/pnas.2117432119
22. Consul, S.<sup>1</sup>, Heindrich, L.<sup>1</sup>, Stojcheski, J., & **Lieder, F.** (2022). Improving human decision-making by discovering efficient strategies for hierarchical planning. *Computational Brain & Behavior*, 5(2), 185–216. doi:10.1007/s42113-022-00128-3
21. Jain, Y. R., Callaway, F., Griffiths, T. L., Dayan, P., He, R., Krueger, P. M., & **Lieder, F.** (2022). A Computational process-tracing method for measuring people's planning strategies and how they change over time. *Behavior Research Methods*. doi:10.3758/s13428-022-01789-5

20. Callaway, F., van Opheusden, B., Gul, S., Das, P., Krueger, P. M., Griffiths, T. L.\* & **Lieder, F.**\* (2022). Rational use of cognitive resources in human planning. *Nature Human Behaviour*. <https://doi.org/10.1038/s41562-022-01332-8> \* Joint senior authorship.
19. Prystawski, B., Mohnert, F., Tošić, M., & **Lieder, F.** (2021). Resource-rational models of human goal pursuit. *Topics in Cognitive Science*. doi:10.1111/tops.12562
18. **Lieder, F.**, & Iwama, G. (2021). Toward a formal theory of proactivity. *Cognitive, Affective, & Behavioral Neuroscience*, 21, 490–508. doi:10.3758/s13415-021-00884-y
17. Skirzynski, J., Becker, F., & **Lieder, F.** (2021). Automatic discovery of interpretable planning strategies. *Machine Learning*, 110, 2641–2683. doi:10.1007/s10994-021-05963-2
16. Bustamante, L.\* **Lieder, F.**\*, Musslick, S., Shenhav, A., & Cohen, J. D. (2021). Learning to overexert cognitive control in a Stroop task. *Cognitive, Affective, & Behavioral Neuroscience*, 21, 453–471. doi:10.3758/s13415-020-00845-x
15. Milli, S., **Lieder, F.**, & Griffiths, T. L. (2021). A rational reinterpretation of dual process theories. *Cognition*, 217, 104881. doi:10.1016/j.cognition.2021.104881
14. **Lieder, F.**, & Griffiths, T. L. (2020). Advancing rational analysis to the algorithmic level. *Behavioral and Brain Sciences*, 43, e27. doi:10.1017/S0140525X19002012
13. **Lieder, F.**, & Griffiths, T. L. (2020). Resource-rational analysis: Understanding human cognition as the optimal use of limited computational resources. *Behavioral and Brain Sciences*, 43, e1. doi:10.1017/S0140525X1900061X
12. **Lieder, F.**, Chen, O., Krueger, P. M., & Griffiths, T. L. (2019). Cognitive prostheses for goal achievement. *Nature Human Behavior*, 3, 1096–1106. doi:10.1038/s41562-019-0672-9
11. Griffiths, T. L., Callaway, F., Chang, M., Grant, E., Krueger, P. M., & **Lieder, F.** (2019). Doing more with less: Meta-reasoning and meta-learning in humans and machines. *Current Opinion in Behavioral Sciences*, 29, 24–30. doi:10.1016/j.cobeha.2019.01.005
10. **Lieder, F.**, Griffiths, T. L., & Hsu, M. (2018). Overrepresentation of extreme events in decision making reflects rational use of cognitive resources. *Psychological Review*, 125, 1–32. doi:10.1037/rev0000074
9. **Lieder, F.**, Shenhav, A., Musslick, S., & Griffiths, T. L. (2018). Rational metareasoning and the plasticity of cognitive control. *PLoS Computational Biology*, 14, e1006043. doi:10.1371/journal.pcbi.1006043
8. **Lieder, F.**, Griffiths, T. L., Huys, Q. J. M., & Goodman, N. D. (2018). The anchoring bias reflects rational use of cognitive resources. *Psychonomic Bulletin & Review*, 25, 322–349. doi:10.3758/s13423-017-1286-8
7. **Lieder, F.**, Griffiths, T. L., Huys, Q. J. M., & Goodman, N. D. (2018). Empirical evidence for resource-rational anchoring and adjustment. *Psychonomic Bulletin & Review*, 25, 775–784. doi:10.3758/s13423-017-1288-6
6. Shenhav, A., Musslick, S., **Lieder, F.**, Kool, W., Griffiths, T. L., Cohen, J. D., & Botvinick, M. M. (2017). Toward a rational and mechanistic account of mental effort. *Annual Review of Neuroscience*, 40, 99–124. doi:10.1146/annurev-neuro-072116-031526
5. **Lieder, F.**, & Griffiths, T. L. (2017). Strategy selection as rational metareasoning. *Psychological Review*, 124, 762–794. doi:10.1037/rev0000075
4. Griffiths, T. L., **Lieder, F.**, & Goodman, N. D. (2015). Rational use of cognitive resources: Levels of analysis between the computational and the algorithmic. *Topics in Cognitive Science*, 7, 217–229. doi:10.1111/tops.12142
3. **Lieder, F.**, Stephan, K. E., Daunizeau, J., Garrido, M. I., Friston, K. J. (2013). A neurocomputational model of the mismatch negativity. *PLoS Computational Biology*, 9, e1003288. doi:10.1371/journal.pcbi.1003288
2. **Lieder, F.**, Daunizeau, J., Garrido, M. I., Friston, K. J., & Stephan, K. E. (2013). Modeling trial-by-trial changes in mismatch negativity amplitudes. *PLoS Computational Biology*, 9, e1002911. doi:10.1371/journal.pcbi.1002911

- Petersen, L.-E., & **Lieder, F.** (2006). The effectiveness of written and graphic health warnings on cigarette packs: An examination of the revised model of protection motivation. *Social Psychology*, 37(4), 245-258. doi:10.1024/0044-3514.37.4.245

### Books

- Lieder, F.**, Callaway, F., & Griffiths, T. L. (in preparation). The Rational Use of Cognitive Resources. Under contract with Princeton University Press.

### PEER-REVIEWED CONFERENCE ARTICLES

- Singhi, N., Mohnert, F., Prystawski, B., & **Lieder, F.** (2023). Toward a normative theory of (self-)management by goal-setting. In M. Goldwater, F. K. Anggoro, B. K. Hayes, & D. C. Ong (Eds.), *Proceedings of the 45th Annual Conference of the Cognitive Science Society* (pp. 748-754). <https://escholarship.org/uc/item/5843d1jr>
- He, R., & **Lieder, F.** (2023). What are the mechanisms underlying metacognitive learning? In M. Goldwater, F. K. Anggoro, B. K. Hayes, & D. C. Ong (Eds.), *Proceedings of the 45th Annual Conference of the Cognitive Science Society* (pp. 3304-3311). <https://escholarship.org/uc/item/58m1x3h8>
- Srinivas, S., He, R., & **Lieder, F.** (2023). Learning planning strategies without feedback. In M. Goldwater, F. K. Anggoro, B. K. Hayes, & D. C. Ong (Eds.), *Proceedings of the 45th Annual Conference of the Cognitive Science Society* (pp. 3151-3157). <https://escholarship.org/uc/item/60x123xq>
- Lieder, F.**, Chen, P.-Z., Stojcheski, J., Consul, S., & Pammer-Schindler, V. (2022). A cautionary tale about AI-generated goal suggestions. *Mensch und Computer 2022 (MuC '22)*, September 4–7, 2022, Darmstadt, Germany. DOI:10.1145/3543758.3547539
- He, R., Jain, Y. R., & **Lieder, F.** (2021). Measuring and modelling how people learn how to plan and how people adapt their planning strategies to the structure of the environment. *International Conference on Cognitive Modeling*. <https://mathpsych.org/presentation/604#/document>
- Kemturi, A., Jain, Y. R., Mehta, A., Callaway, F., Consul, S., Stojcheski, J., & **Lieder, F.** (2020). Leveraging machine learning to automatically derive robust planning strategies from biased models of the environment. In S. Denison, M. Mack, Y. Zu, & B. C. Armstrong (Eds.), *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*. Cognitive Science Society. <https://cogsci.mindmodeling.org/2020/papers/0380/index.html>
- Jain, Y. R., Callaway, F., & **Lieder, F.** (2019). Measuring how people learn how to plan. In A. K. Goel, C. M. Seifert, & C. Freksa (Eds.) *Proceedings of the 41st Annual Meeting of the Cognitive Science Society* (pp. 1956-1962). Cognitive Science Society. <https://cogsci.mindmodeling.org/2019/papers/0344/index.html>
- Mohnert, F., Pachur, T., & **Lieder, F.** (2019). What's in the adaptive toolbox and how do people choose from it? Rational models of strategy selection in risky choice. In A. K. Goel, C. M. Seifert, & C. Freksa (Eds.) *Proceedings of the 41st Annual Meeting of the Cognitive Science Society* (pp. 2378-2384). Cognitive Science Society. <https://cogsci.mindmodeling.org/2019/papers/0412/index.html>
- Xu, L., Wirzberger, M. & **Lieder, F.** (2019). How should we incentivize learning? An optimal feedback mechanism for educational games and online courses. In A. K. Goel, C. M. Seifert, & C. Freksa (Eds.) *Proceedings of the 41st Annual Meeting of the Cognitive Science Society* (pp. 3136-3142). Cognitive Science Society. <https://cogsci.mindmodeling.org/2019/papers/0527/index.html>
- Pothos, E. M., Busemeyer, J. R., Pleskac, T. J., Yearsley, J. M., Tenenbaum, J. B., Goodman, N. D., Tessler, M. H., Griffiths, T. L., **Lieder, F.**, Hertwig, R., Pachur, T., Leuker, C., & Shiffrin, R. M. (2019). Extending rationality. In A. K. Goel, C. M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 39-40). Cognitive Science Society. <https://cogsci.mindmodeling.org/2019/papers/0020/index.html>
- Callaway, F.\*, Gul, S., Griffiths, T. L., Krueger, P. M., Griffiths, T. L., & **Lieder, F.\*** (2018). Learning to select computations. *Uncertainty in Artificial Intelligence: Proceedings of the Thirty-Fourth Conference*. doi:arXiv:1711.06892

11. Callaway, F.\*, **Lieder, F.\***, Das, P., Gul, S., Krueger, P. M., & Griffiths, T. L. (2018). A resource-rational analysis of human planning. In C. Kalish, M. Rau, J. Zhu, & T. T. Rogers (Eds.), *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (pp. 178-183). Cognitive Science Society. <https://cogsci.mindmodeling.org/2018/papers/0054/index.html>
10. Krueger, P. M.\*, **Lieder, F.\***, & Griffiths, T. L. (2017). Enhancing metacognitive reinforcement learning using reward structures and feedback. In G. Gunzelmann, A. Howes, T. Tenbring, & E. Davelaar (Eds.), *Proceedings of the 39th Annual Conference of the Cognitive Science Society* (pp. 2469-2474). Cognitive Science Society. <https://cogsci.mindmodeling.org/2017/papers/0469/index.html>
9. **Lieder, F.\***, Krueger, P. M.\*,& Griffiths, T. L. (2017). An automatic method for discovering rational heuristics for risky choice. In G. Gunzelmann, A. Howes, T. Tenbring, & E. Davelaar (Eds.), *Proceedings of the 39th Annual Conference of the Cognitive Science Society* (pp. 742-747). Cognitive Science Society. <https://cogsci.mindmodeling.org/2017/papers/0149/index.html>
8. Bourgin, D. D.\*, **Lieder, F.\***, Reichman, D.\* , Talmon, N.\* , & Griffiths, T. L. (2017). The structure of goal systems predicts human performance. In G. Gunzelmann, A. Howes, T. Tenbring, & E. Davelaar (Eds.), *Proceedings of the 39th Annual Conference of the Cognitive Science Society* (pp. 1660-1665). Cognitive Science Society. <https://cogsci.mindmodeling.org/2017/papers/0324/index.html>
7. **Lieder, F.**, & Griffiths, T. L. (2016). Helping people make better decisions using optimal gamification. In Papafragou, A., Grodner, D., Mirman, D., & Trueswell, J. C. (Eds.), *Proceedings of the 38th Annual Meeting of the Cognitive Science Society* (pp. 2075-2080). Cognitive Science Society. <https://cogsci.mindmodeling.org/2016/papers/0361/index.html>
6. **Lieder, F.**, & Griffiths, T. L. (2015). When to use which heuristic: A rational solution to the strategy selection problem. In D. C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, T. Matlock, C. D. Jennings, & P. P. Maglio (Eds.), *Proceedings of the 37th Annual Conference of the Cognitive Science Society* (pp. 1362-1367). Cognitive Science Society. <https://cogsci.mindmodeling.org/2015/papers/0239/>
5. **Lieder, F.\***, Sim, Z.\* , Hu, J. C., Griffiths, T. L., & Xu, F. (2015). Children and adults differ in their strategies for social learning. In D. C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, T. Matlock, C. D. Jennings, & P. P. Maglio (Eds.), *Proceedings of the 37th Annual Conference of the Cognitive Science Society* (pp. 1368-1373). Cognitive Science Society. <https://cogsci.mindmodeling.org/2015/papers/0240/>
4. **Lieder, F.**, Plunkett, D., Hamrick, J. B., Russell, S. J, Hay, N. J., & Griffiths, T. L. (2014). Algorithm selection by rational metareasoning as a model of human strategy selection. *Advances in Neural Information Processing Systems 27*, 2870–2878. <https://dl.acm.org/doi/abs/10.5555/2969033.2969147>
3. **Lieder, F.**, Hsu, M., & Griffiths, T. L. (2014). The high availability of extreme events serves resource-rational decision-making. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.), *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. 2567-2572). Cognitive Science Society. <https://escholarship.org/uc/item/5433c2jb>
2. **Lieder, F.**, Goodman, N.D., & Huys, Q.J.M. (2013). Learned helplessness and generalization. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.) *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 900-905). Cognitive Science Society. <https://escholarship.org/uc/item/31362551>
1. **Lieder, F.**, Griffiths, T.L., & Goodman, N.D. (2012). Burn-in, bias, and the rationality of anchoring. *Advances in Neural Information Processing Systems 25*, 2690-2798. [Paper]

#### PEER-REVIEWED WORKSHOP PAPERS

8. Maier, M., Cheung, V., & **Lieder, F.** (2023, December). A reinforcement-learning meta-control architecture based on the dual-process theory of moral decision-making. NeurIPS Workshop AI meets Moral Philosophy and Moral Psychology: An Interdisciplinary Dialogue about Computational Ethics. [Paper]

7. Consul, S., Stojcheski, J., & **Lieder, F.** (2022, September). Leveraging AI for effective to-do list gamification. *5<sup>th</sup> international workshop Gam-R – Gamification Reloaded*. DOI: [10.18420/muc2022-mci-ws08-241](https://doi.org/10.18420/muc2022-mci-ws08-241)
6. Becker, F., & **Lieder, F.** (2021, December). Promoting metacognitive learning through systematic reflection. *NeurIPS Workshop on Metacognition in the Age of AI*. [Paper]
5. He, R., Jain, Y. R., & **Lieder, F.** (2021, December). Have I done enough planning or should I plan more? *NeurIPS Workshop on Metacognition in the Age of AI*. [Paper]
4. Kemtur, A., Jain, J. R., Mehta, A., Callaway, F., Stojcheski, J., Consul, S., & **Lieder, F.** (2020, December). Improving Human Decision-Making using Metalevel-RL and Bayesian Inference. *NeurIPS Workshop on Challenges of Real-World RL*. Paper
3. **Lieder, F.\***, Callaway, F.\*., Gul, S.\*., Krueger, P., & Griffiths, T. L. (2017). Learning to select computations. *NIPS Workshop on Cognitively Informed Artificial Intelligence*. [Paper]
2. **Lieder, F.**, Goel, S., Kwan, R., & Griffiths, T. L. (2015). Optimism can be boundedly rational. *NIPS 2015 Workshop on Bounded Optimality and Rational Metareasoning*.
1. **Lieder, F.**, Goodman, N.D., & Griffiths, T. L. (2013). Reverse-engineering resource-efficient algorithms. *Resource-Efficient Machine Learning Workshop at NIPS 2013*. [Paper]

### Book Chapters and Encyclopedia Entries

1. **Lieder, F.**, & Prentice, M. (2024). Life Improvement Science. In F. Maggino (Ed.), *Encyclopedia of Quality of Life and Well-Being Research*, 2nd Edition, Springer. doi:[10.13140/RG.2.2.10679.44960](https://doi.org/10.13140/RG.2.2.10679.44960)
2. **Lieder, F.**, Callaway, F., & Griffiths, T. L. (in press). Resource-Rational Analysis. In T. L. Griffiths, N. Chater, & J. Tenenbaum (Eds.), *Bayesian Models of Cognition: Reverse Engineering the Mind*. MIT Press.

### DISSERTATION

**Lieder, F.** (2018). Beyond bounded rationality: Reverse-engineering and enhancing human intelligence (Ph.D. thesis). University of California, Berkeley. doi:[10.13140/RG.2.2.16888.55041](https://doi.org/10.13140/RG.2.2.16888.55041)

### FORTHCOMING (SUBMITTED, UNDER REVIEW, OR IN REVISION)

9. Measuring the Decision Process in (Moral) Dilemmas: Self-Report Measures of Reliance on Rules, Cost-Benefit Reasoning, Intuition, & Deliberation. PsyArXiv Preprint. <https://doi.org/10.31234/osf.io/zfmp9>
8. Maier, M., Cheung, V., & **Lieder, F.** (submitted). Metacognitive Learning from Consequences of Past Choices Shapes Moral Decision-Making. <https://osf.io/preprints/psyarxiv/gjf3h>
7. Cheung, V., Maier, M., & **Lieder, F.** (under review). Large Language Models Amplify Human Biases in Moral Decision-Making.
6. Heindrich, L. & **Lieder, F.** (in revision). Leveraging automatic strategy discovery to teach people how to select better projects.
5. Amo, V., & **Lieder, F.** (in revision). Evaluating the Effectiveness of the InsightApp: A Longitudinal Randomized Controlled Trial on Anxiety, Valued Action, and Psychological Resilience
4. He, R., & **Lieder, F.** (in revision). Learning-induced changes in people's planning strategies DOI: [10.13140/RG.2.2.28966.60487](https://doi.org/10.13140/RG.2.2.28966.60487)
3. Heindrich, L., Consul, C. & **Lieder, F.** (in revision). An Intelligent Tutor for Planning in Large, Partially Observable Environments.
2. Felso, V., & **Lieder, F.** (in revision). Measuring individual differences in the depth of planning. DOI: [10.31234/osf.io/xmf3y](https://doi.org/10.31234/osf.io/xmf3y)
1. Iwama, G., Weber, F., Wirzberger, M., Prentice, M., & **Lieder, F.** (*under review*). Development and Validation of a Goal Characteristics Questionnaire. doi:[10.31219/osf.io/dzhwv](https://doi.org/10.31219/osf.io/dzhwv)

### PEER-REVIEWED CONFERENCE ABSTRACTS

51. Zhang, P., Lin, Y., **Lieder, F.**, & Ma, W. J. (2024). The Dynamic Nature of Procrastination. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 46(0). <https://escholarship.org/uc/item/4646625w>
50. Andrade, G., Wang, A., Groß, P., Burga, T., Pons, E., Lieder, E., Spiteri, G., Tahmasebi, Z., Cheung, V., Maier, M., & **Lieder, F.** (2024). Hypocrisy in Moral Decision-Making. *UCLA Psychology Undergraduate Research Conference (PURC)*. DOI: [10.13140/RG.2.2.18834.22729](https://doi.org/10.13140/RG.2.2.18834.22729)
49. Liu, H., Kim, S., Groß, P., Burga, T., Pons, E., Lieder, E., Spiteri, G., Tahmasebi, Z., Cheung, V., Maier, M., & **Lieder, F.** (2024). Why Aren't People More Prosocial? *UCLA Psychology Undergraduate Research Conference (PURC)*. DOI: [10.13140/RG.2.2.28900.55683](https://doi.org/10.13140/RG.2.2.28900.55683)
48. Kukamjad, T., Pauly, R., Heindrich, L., Amo, V., & **Lieder, F.** (2024). Evaluation of Brain Point Intervention in The Dawn of Civilization. *UCLA Psychology Undergraduate Research Conference (PURC)*. DOI: [10.13140/RG.2.2.11284.48008](https://doi.org/10.13140/RG.2.2.11284.48008)
47. Cheung, V., Maier, M., & **Lieder, F.** (2024). Metacognitive Learning Shapes Moral Decision-Making. *International Conference on Thinking*, <https://doi.org/10.13140/RG.2.2.15301.87524>
46. Groß, P., Burga, T., Pons, E., Spiteri, G., Maier, M., Cheung, V., Tahmasebi, Z., & **Lieder, F.** (2024). What (Doesn't) Limit People's Prosociality in Social Dilemma Situations? *11<sup>th</sup> European Conference on Positive Psychology*.
45. **Lieder, F.**, Maier, M., & Cheung, V. (2024). Malleable Morality: Investigating Moral Learning and Its Mechanisms. *SPSP Preconference on Moral Psychology*
44. Tahmasebi, Z., & **Lieder, F.** (2024). Perceived moral wrongness and blameworthiness of accidental harm caused by distracted driving. *SPSP Preconference on Moral Psychology*.
43. Burga, T., Groß, P., Pons, E., Maier, M., Cheung, V., & **Lieder, F.** (2023). Biases in responding to social dilemmas: Insights for policy development. *International Interdisciplinary Conference on Well-Being, Public Policies and Sustainable Human Development*.
42. Zhang, P., Lin, Y., **Lieder, F.**, & Ma, W. J. (2023). The Dynamic Nature of Procrastination. *Society for Neuroeconomics*.
41. Amo, V., & **Lieder, F.** (2023). The InsightApp: A Gamified Approach to Helping People Embrace Difficult Emotions in Stressful Situations. *Emotions 2023*.
40. Zhang, P., Lin, Y., **Lieder, F.**, & Ma, W. J. (2023). The Dynamic Nature of Procrastination. *Computational Cognitive Neuroscience (CCN) 2023*.
39. **Lieder, F.** (2022, November 29-30). Which research topics are most important for promoting flourishing? *Global Scientific Conference on Human Flourishing*. [Abstract] [Poster]
38. Prentice, M., Gonzalez Cruz, H., & **Lieder, F.** (2022, September 8-10). Evaluating Life Reflection Techniques to Help People Select Virtuous Life Goals. *Integrating Research on Character and Virtues: 10 Years of Impact*. Abstract
37. Jähnichen, S., Weber, F., Prentice, M., & **Lieder, F.** (2022, September 5-7). Does deliberate prospection help students set better goals? [Poster Presentation] *KogWis 2022 "Understanding Minds"*, Freiburg, Germany. Abstract
36. Pauly, R., Heindrich, L., Amo, V., & **Lieder, F.** (2022, June). What to learn next? Aligning gamification rewards to long-term goals using reinforcement learning. The 5<sup>th</sup> Multidisciplinary Conference on Reinforcement Learning and Decision Making (RLDM2022)
35. Amo, V., Prentice, M., & **Lieder, F.** (2022, February). Promoting value-congruent action by supporting effective metacognitive emotion-regulation strategies with a gamified app. *Society for Personality and Social Psychology (SPSP) Annual Convention 2022*. San Francisco, USA.
34. Becker, F., Skirzynski, J. M., van Opheusden, B., & **Lieder, F.** (2021, July). Encouraging far-sightedness with automatically generated descriptions of optimal planning strategies: Potentials and limitations. In T. Fitch, C. Lamm, H. Leder, & K. Teßmar-Raible (Eds.), *Proceedings of the 43rd Annual Meeting of the Cognitive Science Society*. [Abstract]
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