John C. Flournoy, PhD

Research Scientist, Stats Maven

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Education

Ph.D., Psychology, University of Oregon

Dissertation: Adolescent Social Motives: Measurement and Implications

2018

M.S., Psychology, University of Oregon

2014

B.A., Cognitive Science, University of California, Berkeley

2005

Work Experience

Principal Research Scientist, Developer Success Lab, Pluralsight

2024-present

- Lead scientist on analysis of yearly ticket data from over 11k developers
- Drove organizational insights across multiple research projects
- Spearheaded community engagement overlay journal at dsl.pubpub.org

Research Associate, Harvard University, Cambridge, MA

2018-2024

- · Lead analyst on intensive longitudinal fMRI neuroimaging study of mechanisms linking stress to psychopathology in adolescents
- Lead author of report on fMRI measurement reliability
- · Supported co-authors on intensive longitudinal digital phenotyping analysis of stress, sleep, digital communication, and physical activity
- · Lead analyst of task-based fMRI for multi-site adolescent cognitive control study (NIMH Uoi-MH109589, \$17.1M)
- Developed digital phenotyping data processing for NIMH R37-MH119194 (\$9M)
- Provided methodology and scientific computing support across two lab groups
- note: post-doctoral scholar from 2018-2020

Graduate Research Fellow, University of Oregon, Eugene, OR

2012-2018

- Developed hierarchical Bayesian model of reinforcement learning for adolescent social motives
- Collected data from 300+ participants, including foster-care-involved adolescents
- Dissertation: Adolescent Social Motives: Measurement and Implications
- · Developed expertise in longitudinal personality, fMRI, and cognitive task data using multilevel and structural equation modeling
- Validated new self-report and task measures, and evaluated validity and reliability of existing measures

Research Coordinator, Stanford University, Stanford, CA

2009-2012

- · Coordinated Simons Foundation-funded study on sleep problems in autism using ambulatory polysomnography
- Site coordinator for clinical trial testing a novel PET marker for β -amyloid in dementia patients

Publications

- Flournoy, J. C., Lee, C. S., Wu, M., & Hicks, C. M. (2025, March 6). No Silver Bullets: Why Understanding Software Cycle Time is Messy, Not Magic. arXiv: 2503.05040 [CS]. https://doi.org/10.48550/arXiv.2503.05040
- Chen, Y. Y., Rosenbaum, G. M., Fan, H., Li, T., Flournoy, J., Mair, P., & Somerville, L. (2024). How beliefs around peers' risk preferences get incorporated into adolescents' decision making. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 46(0). Retrieved January 28, 2025, from https://escholarship.org/uc/item/6c42379z
- Curtis, M., Flournoy, J. C., Kandala, S., Sanders, A. F. P., Harms, M. P., Omary, A., Somerville, L. H., & Barch, D. M. (2024). Disentangling the unique contributions of age, pubertal stage, and pubertal hormones to brain structure in childhood and adolescence. *Developmental Cognitive Neuroscience*, 70, 101473. https://doi.org/10.1016/j.dcn.2024.101473
- Flournoy, J. C., Bryce, N. V., Dennison, M. J., Rodman, A. M., McNeilly, E. A., Lurie, L. A., Bitran, D., Reid-Russell, A., Vidal Bustamante, C. M., Madhyastha, T., & McLaughlin, K. A. (2024). A precision neuroscience approach to estimating reliability of neural responses during emotion processing: Implications for task-fMRI. NeuroImage, 285, 120503. https://doi.org/10.1016/j.neuroimage.2023.120503
- Heffer, T., Flournoy, J. C., Baum, G. L., & Somerville, L. H. (2024). Examining the Association between Punishment and Reward Sensitivity and Response Inhibition to Previously-Incentivized Cues across Development. *Journal of Youth and Adolescence*, 53(6), 1341–1354. https://doi.org/10.1007/s10964-024-01966-z
- Rith-Najarian, L. R., Gong-Guy, E., Flournoy, J. C., & Chavira, D. A. (2024). Randomized controlled trial of a web-based program for preventing anxiety and depression in university students. *Journal of Consulting and Clinical Psychology*, 92(1), 1–15. https://doi.org/10.1037/ecp0000843
- Xu, B., Dall'Aglio, L., Flournoy, J., Bortsova, G., Tervo-Clemmens, B., Collins, P., de Bruijne, M., Luciana, M., Marquand, A., Wang, H., Tiemeier, H., & Muetzel, R. L. (2024). Limited generalizability of multivariate brain-based dimensions of child psychiatric symptoms. *Communications Psychology*, 2(1), 1–14. https://doi.org/10.1038/s44271-024-00063-y
- Byrne, M. L., Vijayakumar, N., Chavez, S. J., Flournoy, J. C., Cheng, T. W., Mills, K. L., Barendse, M. E. A., Mobasser, A., Flannery, J. E., Nelson, B. W., Wang, W., Shirtcliff, E. A., Allen, N. B., & Pfeifer, J. H. (2023). Associations between multi-method latent factors of puberty and brain structure in adolescent girls. *Developmental Cognitive Neuroscience*, 60, 101228. https://doi.org/10.1016/j.dcn.2023.101228
- Grisanzio, K. A., Flournoy, J. C., Mair, P., & Somerville, L. H. (2023). Shifting qualities of negative affective experience through adolescence: Agerelated change and associations with functional outcomes. *Emotion*, 23(1), 278–288. https://doi.org/10.1037/em00001079
- McCormick, E. M., Byrne, M. L., Flournoy, J. C., Mills, K. L., & Pfeifer, J. H. (2023). The Hitchhiker's guide to longitudinal models: A primer on model selection for repeated-measures methods. *Developmental Cognitive Neuroscience*, 63, 101281. https://doi.org/10.1016/j.dcn.2023.101281
- McLaughlin, K. A., Weissman, D. G., & Flournoy, J. (2023). Challenges with Latent Variable Approaches to Operationalizing Dimensions of Childhood adversity a Commentary on Sisitsky et al. (2023). Research on Child and Adolescent Psychopathology, 51(12), 1809–1811. https://doi.org/10.1007/s10802-023-01114-4
- Xu, B., Dall'Aglio, L., Flournoy, J., Bortsova, G., Tervo-Clemmens, B., Collins, P., Bruijne, M. de, Luciana, M., Marquand, A., Wang, H., Tiemeier, H., & Muetzel, R. L. (2023, March 20). Multivariate brain-based dimensions of child psychiatric problems: Degrees of generalizability. https://doi.org/10.1101/2023.03.12.23287158
- Barendse, M. E. A., Byrne, M. L., Flournoy, J. C., McNeilly, E. A., Guazzelli Williamson, V., Barrett, A.-M. Y., Chavez, S. J., Shirtcliff, E. A., Allen, N. B., & Pfeifer, J. H. (2022). Multimethod assessment of pubertal timing and associations with internalizing psychopathology in early adolescent girls. *Journal of Psychopathology and Clinical Science*, 131(1), 14–25. https://doi.org/10.1037/abn0000721
- Baum, G. L., Flournoy, J. C., Glasser, M. F., Harms, M. P., Mair, P., Sanders, A. F. P., Barch, D. M., Buckner, R. L., Bookheimer, S., Dapretto, M., Smith, S., Thomas, K. M., Yacoub, E., Essen, D. C. V., & Somerville, L. H. (2022). Graded Variation in T1w/T2w Ratio during Adolescence: Measurement, Caveats, and Implications for Development of Cortical Myelin. *Journal of Neuroscience*, 42(29), 5681–5694. https://doi.org/10.1523/JNEUROSCI.2380-21.2022
- Byrne, M., Allen, N. B., Barendse, M. E. A., Barrett, A.-M., Chavez, S. J., Cheng, T., Flournoy, J. C., McNeilly, E. A., Shirtcliff, E. A., Vijayakumar, N., Williamson, V. G., & Pfeifer, J. (2022). Pubertal Hormones as a Measurement Method of Pubertal Stage and Timing Related to Internalizing Psychopathology in Adolescent Girls. *Biological Psychiatry*, 91(9), S64–S65. https://doi.org/10.1016/j.biopsych.2022.02.180
- Cosme, D., Flournoy, J. C., Livingston, J. L., Lieberman, M. D., Dapretto, M., & Pfeifer, J. H. (2022). Testing the adolescent social reorientation model during self and other evaluation using hierarchical growth curve modeling with parcellated fMRI data. *Developmental Cognitive Neuroscience*, 54, 101089. https://doi.org/10.1016/j.dcn.2022.101089
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- Romeo, R. R., Flournoy, J. C., McLaughlin, K. A., & Lengua, L. J. (2022). Language development as a mechanism linking socioeconomic status to executive functioning development in preschool. *Developmental Science*, 25(5), e13227. https://doi.org/10.1111/desc.13227
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 Differential neural sensitivity to social inclusion and exclusion in adolescents in foster care. NeuroImage: Clinical, 34, 102986. https://doi.org/10.1016/j.nicl.2022.102986
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- Hughes, B. T., Flournoy, J. C., & Srivastava, S. (2021). Is perceived similarity more than assumed similarity? An interpersonal path to seeing similarity between self and others. *Journal of Personality and Social Psychology*, 121(1), 184–200. https://doi.org/10.1037/pspp0000369
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- Nook, E. C., Flournoy, J. C., Rodman, A. M., Mair, P., & McLaughlin, K. A. (2021). High Emotion Differentiation Buffers Against Internalizing Symptoms Following Exposure to Stressful Life Events in Adolescence: An Intensive Longitudinal Study. *Clinical Psychological Science*, 2167702620979786. https://doi.org/10.1177/2167702620979786
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- Barendse, M. E. A., Cosme, D., Flournoy, J. C., Vijayakumar, N., Cheng, T. W., Allen, N. B., & Pfeifer, J. H. (2020). Neural correlates of self-evaluation in relation to age and pubertal development in early adolescent girls. *Developmental Cognitive Neuroscience*, 44, 100799. https://doi.org/10.1016/j.dcn.2020.100799
- Barendse, M. E. A., Vijayakumar, N., Byrne, M. L., Flannery, J. E., Cheng, T. W., Flournoy, J. C., Nelson, B. W., Cosme, D., Mobasser, A., Chavez, S. J., Hval, L., Brady, B., Nadel, H., Helzer, A., Shirtcliff, E. A., Allen, N. B., & Pfeifer, J. H. (2020). Study Protocol: Transitions in Adolescent Girls (TAG). Frontiers in Psychiatry, 10. https://doi.org/10.3389/fpsyt.2019.01018
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- Ludwig, R. M., Flournoy, J. C., & Berkman, E. T. (2019). Inequality in personality and temporal discounting across socioeconomic status? Assessing the evidence. *Journal of Research in Personality*, 81, 79–87. https://doi.org/10.1016/j.jrp.2019.05.003
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- Vijayakumar, N., Pfeifer, J. H., Flournoy, J. C., Hernandez, L. M., & Dapretto, M. (2019). Affective reactivity during adolescence: Associations with age, puberty and testosterone. *Cortex*, 117, 336–350. https://doi.org/10.1016/j.cortex.2019.04.024
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