

# NIH Biographical Sketch - Patrick E. McKnight

OMB No. 0925-0001 and 0925-0002 (Rev. 10/2021 Approved Through 01/31/2027)

## BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

**NAME:** McKnight, Patrick Everett

**eRA COMMONS USER NAME:** pmcknight

**POSITION TITLE:** Associate Professor of Psychology

**EDUCATION/TRAINING** (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.*)

INSTITUTION AND LOCATION	DEGREE	Completion Date MM/YYYY	FIELD OF STUDY
University of Notre Dame, Notre Dame, IN	B.S.	05/1988	Mechanical Engineering
University of Arizona, Tucson, AZ	M.S.	05/1992	Exercise & Sport Sciences
University of Arizona, Tucson, AZ	Ph.D.	08/1997	Clinical Psychology
University of Washington Medical School, Seattle, WA	Internship	06/1999	Clinical Psychology

### A. Personal Statement

My research expertise in measurement methodology, missing data analysis, and quantitative psychology is ideally suited for the proposed project. Over the past 27 years, I have developed methodological expertise that spans missing data analysis, measurement development, program evaluation, and applied statistical methods in health and psychology contexts.

My book, *Missing Data: A Gentle Introduction* (Guilford Press, 2007), with over 3,200 citations, remains a foundational text used in graduate programs worldwide. This work demonstrates my commitment to translating complex methodological concepts into accessible, practical guidance for applied researchers. Beyond methods, my content expertise includes purpose in life, curiosity, anxiety, depression, and health outcomes across diverse medical populations.

Of direct relevance to the current proposal, I have served as Co-Investigator on multiple NIH-funded grants examining psychological well-being and health outcomes. My collaboration with colleagues across institutions has resulted in over 130 peer-reviewed publications, with my work cited over

17,000 times. I am skilled in multilevel modeling, structural equation modeling, item response theory, and Bayesian methods—all essential for rigorous analysis of complex behavioral data.

My unique background combining engineering (B.S., Notre Dame), exercise science (M.S., Arizona), and clinical psychology (Ph.D., Arizona) provides an interdisciplinary perspective that strengthens research design and data interpretation. I am committed to rigorous methodology and transparent, reproducible science.

## **B. Positions, Scientific Appointments, and Honors**

### **Positions and Employment**

2008 – Present: Associate Professor, Department of Psychology, George Mason University, Fairfax, VA

2006 – 2008: Assistant Professor, Department of Psychology, George Mason University, Fairfax, VA

2002 – 2006: Research Assistant Professor, Department of Psychology, University of Arizona, Tucson, AZ

1999 – 2001: Health Sciences Specialist, VA Puget Sound Health Care System (CESATE), Seattle, WA

1998 – 1999: Psychology Intern, University of Washington Medical School, Seattle, WA

### **Other Experience and Professional Memberships**

2001 – 2005: Chair, Quantitative Methods Topical Interest Group, American Evaluation Association

1991 – Present: Member, American Evaluation Association

1992 – Present: Member, American Psychological Association

1992 – Present: Member, Association for Psychological Science

### **Honors and Recognition**

Founding Member, Measurement, Research methodology, Evaluation, and Statistics (MRES) group, GMU

Member, Evaluation Group for the Analysis of Data (EGAD), University of Arizona

## **C. Contributions to Science**

1. **Missing Data Methodology.** I have made foundational contributions to the understanding and handling of missing data in psychological and health research. My book provides researchers with practical tools for preventing and addressing missing data through study design rather than solely relying on statistical remediation.

a. McKnight, P.E., McKnight, K.M., Sidani, S., & Figueredo, A.J. (2007). *Missing Data: A Gentle Introduction*. Guilford Press. [3,200+ citations]

b. Figueredo, A.J., McKnight, P.E., McKnight, K.M., & Sidani, S. (2000). Multivariate modeling of missing data within and across assessment waves. *Addiction*, 95(Suppl 3), 361-380. [450+ citations]

2. **Measurement and Calibration.** My research on the calibration of psychological measures has influenced how researchers conceptualize the interpretability and meaningfulness of assessment scores. This work introduced calibration concepts to psychotherapy outcome research and

provided methods for linking psychological constructs to real-world referents.

- a. Sechrest, L., McKnight, P., & McKnight, K. (1996). Calibration of measures for psychotherapy outcome studies. *American Psychologist*, 51(10), 1065-1071. [890+ citations]
3. **Purpose in Life and Well-Being.** My collaborative research has advanced understanding of purpose in life as a protective factor against psychological distress. We demonstrated that commitment to meaningful goals serves as an antidote to suffering in social anxiety disorder and predicts positive outcomes independent of hedonic happiness.
  - a. McKnight, P.E., Kashdan, T.B., MacKay, A., Kelso, K., & Gross, M. (2025). Purpose and happiness: A comparison. *Journal of Positive Psychology*.
  - b. Kashdan, T.B., & McKnight, P.E. (2013). Commitment to a purpose in life: An antidote to the suffering by individuals with social anxiety disorder. *Emotion*, 13, 1150-1159. [380+ citations]
4. **Curiosity Measurement and Workplace Applications.** I contributed to the development and validation of multidimensional curiosity measures, including the Five-Dimensional Curiosity Scale. This work has been applied to understanding curiosity in workplace settings across multiple countries.
  - a. Kashdan, T.B., McKnight, P.E., et al. (2025). Enhancing curiosity with a wise intervention to improve political conversations. *Scientific Reports*.
  - b. Kashdan, T.B., Stikma, M.C., Disabato, D., McKnight, P.E., et al. (2018). The five-dimensional curiosity scale. *Journal of Research in Personality*, 73, 130-149. [520+ citations]
  - c. Kashdan, T.B., Goodman, F.R., Disabato, D.J., McKnight, P.E., et al. (2020). Curiosity has comprehensive benefits in the workplace. *Personality and Individual Differences*, 155, 109717. [195+ citations]

## D. Additional Information: Research Support

### Completed Research Support

**Koch Foundation** (PI: Kashdan) 2016-2021 “Distinguishing extraordinarily happy from psychologically flexible people: A multi-method study of optimal human functioning” Role: Co-Investigator Goals: Evaluated whether psychological flexibility offers incremental value in understanding optimal functioning using multi-method longitudinal approaches.

**NIH R01** (Multi-PI) 2016-2021 “Prospective determination of neurobehavioral risk for the development of emotion disorders” Role: Co-Investigator Goals: Explored neural substrates of neurotic-anxious disposition and relation to clinically significant anxiety and depression.

**NIAMS** 2003-2007 | Total: \$2,630,000 “Multidimensional Intervention in Osteoarthritis” Role: Co-Investigator (0.15 FTE) Goals: Tested long-term multidimensional intervention incorporating exercise and self-management in early knee osteoarthritis.

**Arthritis Foundation Clinical Science Grant** 2002-2006 | Total: \$313,500 “Positive Mental Health and Outcomes in Osteoarthritis” Role: Co-Investigator (0.08 FTE) Goals: Prospectively studied predictive role of personality and affect on pain, function, and quality of life in osteoarthritis.