

Aiyana Koka Willard, Ph.D.

Curriculum Vitae

Centre for Culture and Evolution
Brunel University London
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Current Position

Lecturer in Psychology
Brunel University London
Department of Life Sciences

June 2018 - Present

Other Affiliations

Research Affiliate
University of Oxford
Institute for Cognitive and Evolutionary Anthropology

June 2018 - Present

Previous Positions

Postdoctoral Researcher
University of Oxford
School of Anthropology and Museum Ethnography

June 2017 – June 2018

Postdoctoral Researcher
University of Texas at Austin
Cognition, Culture, and Development Laboratory

Sept. 2015 – June 2017

Sessional Lecturer
University of British Columbia
Department of Psychology

Jan. 2015 – May 2015

Education

- Ph.D., Psychology 2015
Minor in Quantitative Methods (Statistics)
Thesis: *The Basis of Belief: the cognitive and cultural foundations of supernatural belief*
Advisors: Prof. Ara Norenzayan and Prof. Joseph Henrich
University of British Columbia
- M.A., Psychology 2011
Thesis: *Memory and Belief in Religious Content*
Advisors: Prof. Ara Norenzayan and Prof. Joseph Henrich
University of British Columbia
- B.A., Psychology, 1st Class 2008
University of British Columbia

Research Funding

- Psychology of Religion Early-Career Seed Grant Arizona State University Foundation & John Templeton Foundation \$22,675 (total awarded)—2017
 - \$11,425 *Magic, Religion, and Trust Across Cultures* (co-PI, collaborating with Dimitris Xygalatas (PI) and Kirsten Lesage)
 - \$11,250 *It's only weird if it doesn't work: The role of intentions and emotions in magical thinking* (co-PI, collaborator with Kathleen Corriveau (PI), Kurt Gray, and Cindel White)
- Cultural Evolution of Religion Research Consortium *Evolution of Religion and Morality Project* \$10,000 CAN—2013

Awards

- Daniel M. Wegner Theoretical Innovation Prize, *Society for Personality and Social Psychology* 2017
- Early Career Showcase Award, *Cultural Evolution Society* 2017
- CERC Fellowship: \$20,000 2013-2015
- SSRCH Graduate Fellowship: \$40,000 2013-2015
- CERC Fellowship: \$11,000 2012-2013
- Four Year Fellowship: \$64,000 (\$32,000 accepted) 2011-2015
- Graduate Tuition Waiver 2011-2015
- Faculty of Arts Graduate Award; \$16,000 2010-2011
- Joseph-Armand Bombardier Scholarship: \$17,500 2009-2010
- Graduate Entrance Scholarship UBC: \$5,000 2009-2010
- Trek Excellence Scholarship UBC: \$1,500 2007-2008

Publications

- Willard, A. K., Cingl, L., & Norenzayan, A. (in press). Cognitive Biases and Religious Belief: A path model replication in the Czech Republic and Slovakia with a focus on anthropomorphism. *Social Psychological and Personality Science*.
- Lang, M., Purzycki, B. G., Apicella, C., Atkinson, Q., Bolyanatz, A., Cohen, E., Kundtová Klocová, E., Handley, C., Lesorogol, C., Mathew, S., McNamara, R. A., Moya C., Placek, C., Soler, M., Vardy, T., Weigel, J., Willard, A. K., Xygalatas, D., Norenzayan, A., & Henrich, J. (in press). Powerful Gods and Large-Scale Cooperation: A Study of Impersonal Prosociality across 15 Societies. *Proceedings of the Royal Society B*.
- Willard, A. K., Busch, J. T. A., Cullum, K. A., Letourneau, S. M., Sobel, D. M., Callanan, M., & Legare, C. H. (in press). Explain this, explore that: A study of parent-child interaction in a children's museum. *Child Development*.
- Willard, A. K. & McNamara, R. A. (in press). The Minds of God(s) and Humans: Differences in Mind Perception in Fiji and North America. *Cognitive Science*.
- McNamara, R. A., Willard, A. K., Norenzayan, A. & Henrich J. (2019). Weighing outcome vs. intent across societies: How cultural models of mind shape moral reasoning. *Cognition*. 182, 95-108. DOI: 10.1016/j.cognition.2018.09.008
- Purzycki, B. G., Pisor, A. C., Apicella, C., Atkinson, Q., Cohen, E., Henrich, J., McElreath, R., McNamara, R. A., Norenzayan, A., Willard, A. K., and Xygalatas, D (2018). The Cognitive and Cultural Foundations of Moral Behavior. *Evolution and Human Behavior*.
- Purzycki, B. G., Ross, C. T., Apicella, C., Atkinson, Q. D., Cohen, E., McNamara, R. A., Willard, A. K., Xygalatas, D., Norenzayan, A. & Henrich, J. (2018). Material security, life history, and moralistic religions: A cross-cultural examination. *PLoS one*, 13(3), e0193856.
- Willard, A. K. (2018). Religion and Prosocial Behaviour among the Indo-Fijians. *Religion Brain and Behavior*, 8:2, 227-242, DOI: 10.1080/2153599X.2016.1267032
- Purzycki, B. G., Norenzayan, A., Apicella, C., Atkinson, Q., Cohen, E., McNamara, R. A., Willard, A. K., and Henrich, J. (2018). The Evolution of Religion and Morality: A Synthesis of Ethnographic and Experimental Evidence from Eight Societies. *Religion Brain and Behavior*, 8:2, 101-132, DOI: 10.1080/2153599X.2016.1267027
- Willard, A. K. & Norenzayan, A. (2017). "Spiritual But Not Religious": cognition, schizotypy, and conversion in understanding alternative beliefs. *Cognition*, 165, 137-146.

- Willard, A. K. & Cingl, L. (2017). Testing Theories of Religion and Secularization in the Czech Republic and Slovakia. *Evolution and Human Behavior*, 38(5), 604-615.
- Shariff, A. F., Willard, A. K., Muthukrishna, M., Kramer, S., & Henrich, J. (2016). What is the Association Between Religious Affiliation and Children's Altruism? *Current Biology*, 26, R699-R700.
- Willard, A. K., Shariff, A. F. & Norenzayan, A. (2016). Religious Priming as a research tool for studying religion: Evidentiary Value, Current Issues, and Future Directions. *Current Opinions in Psychology*, 12, 71-75.
- Willard, A. K., Henrich, J. & Norenzayan, A. (2016). Memory and Belief in the Transmission of Counterintuitive Content. *Human Nature*, 27, 221-243.
- Norenzayan, A., Shariff, A. F., Gervais, W., Willard, A. K., McNamara, R., Slingerland, E. & Henrich, J. (2016). The Cultural Evolution of Prosocial Religions. *Behavior and Brain Sciences*, 39.
- Norenzayan, A., Shariff, A. F., Gervais, W., Willard, A. K., McNamara, R., Slingerland, E. & Henrich, J. (2016). Parochial prosocial religions: Historical and contemporary evidence for a cultural evolutionary process. [Reply to Commentaries]. *Behavior and Brain Sciences*, 39, e29.
- Purzycki, B. G., Apicella, C., Atkinson, Q., Cohen, E., McNamara, R. A., Willard, A. K., Xygalatas, D. Norenzayan, A., Henrich, J. (2016). Moralizing Gods, Supernatural Punishment, and the Expansion of Human Sociality. *Nature*, 530, 327-330.
- Shariff, A. F., Willard, A. K., Andersen, T. & Norenzayan, A. (2016). Religious Priming: A meta-analysis with a focus on religious prosociality. *Personality and Social Psychology Review*, 20, 27-48.
- Purzycki, B. G. & Willard, A. K. (2016). MCI Theory: A Critical Discussion. *Religion Brain and Behavior*, 6, 207-248.
- Purzycki, B. G., and Willard, A. K. (2016). Accounting for Variation and Stability in Religious Cognition [Reply to Commentaries]. *Religion, Brain and Behavior*, 6, 266-274.
- Willard, A. K. & Norenzayan A. (2013). Cognitive Biases Explain Religious Belief, Paranormal Belief, and Belief in Life's Purpose. *Cognition*, 129, 379-391.
- Gervais, W., Willard, A. K., Norenzayan, A. & Henrich, J. (2011). The Cultural Transmission of Faith: Why natural intuitions and memory biases are necessary, but insufficient, to explain religious belief. *Religion*, 41, 389-410.

Commentaries, Reviews, and Technical Reports

Willard, A. K., Nakawake, Y. & Jong, J. (in press). The Evolution of the Shaman's Cultural Toolkit. [Commentary]. *Behavior and Brain Sciences*.

Willard, A. K. & Baimel, A. (in press). The Evolution of Religion: An interdisciplinary approach. [Commentary]. *Journal for the Cognitive Science of Religion*.

Willard, A. K. (2018). Agency Detection is Unnecessary in the Explanation of Religious Belief. *Religion Brain and Behavior*.

Willard, A. K. (2018). The Evolution of Culture as a New Pattern for Comparative Religion. *Methods and Theory in the Study of Religion*.

Willard, A. K. (2017). Defining Religion. *Religion Brain and Behavior*.

Willard, A. K. & Legare, C. H. (2016) Ritual wellbeing: A simplified model. *Religion Brain and Behavior*, 39, e1.

Purzycki, B., C. Apicella, Q. Atkinson, E. Cohen, J. Henrich, R. McNamara, A. Norenzayan, A. Willard, & D. Xygalatas, (2016) CERC Dataset, *Harvard Dataverse*.

Purzycki, B.G., Apicella, C., Atkinson, Q., Cohen, E. , McNamara, R. A. , Willard, A. K. , Xygalatas, D., Norenzayan, A., & Henrich, J. (2016). Cross-cultural dataset for the Evolution of Religion and Morality Project. *Nature Scientific Data*.

Book Chapters

Busch J.T.A., Willard A.K., & Legare C.H. (2018) Explanation Scaffolds Causal Learning and Problem Solving in Childhood. In: Saylor M., Ganea P. (eds) *Active Learning from Infancy to Childhood*. Springer, Cham. https://doi.org/10.1007/978-3-319-77182-3_7

Invited Talks:

Willard A. K. (February 2019). The Basis of Belief: the cognitive and cultural foundations of supernatural belief. *Department of Religious Studies, University, Brno, CZ*.

Willard A. K. (February 2019). A brief introduction to meta-analysis. *HUME lab, Masaryk University, Brno, CZ*.

Willard A. K. (February 2019). The Basis of Belief: the cognitive and cultural foundations of supernatural belief. *Department of Social Sciences and Economics, Comenius University, Bratislava, SK*.

- Willard A.K (October 2018). Controlling the Dead with Magic: Witchcraft and distrust in Mauritius. *Zombie Apocalypse Medicine Meeting, Arizona State University, Tempe, AZ, USA.*
- Willard A.K. (May 2018). Do as I do, not as I say: content and context biases in the transmission of religious belief. *Future directions on the evolution of rituals, beliefs and religious minds, Erice, Sicily.*
- Willard, A.K. (February 2018). The Basis of Belief: the cognitive and cultural foundations of religious belief. *Department of Psychology, Coventry University, Coventry, UK*
- Willard, A. K. (October 2017). Supernatural Causal Reasoning in Witchcraft and Karma Beliefs. *Supernatural Attributions Meeting, Cleveland, OH, USA*
- Willard, A.K. (March 2017). The Basis of Belief: the cognitive and cultural foundations of religious belief. *Colloquium lecture series, Institute of Human Origins, Arizona State University, Tempe, AZ, USA.*
- Willard, A.K. (December 2016). The Basis of Belief: the cognitive and cultural foundations of supernatural belief. *Department of Psychology, Princeton University, Princeton, NJ, USA.*
- Willard, A. K. (May 2016). Anti-Science Attitudes, Religiosity, and Dualism Across Three Countries. *Public Perceptions of Science & Religion Meeting, San Diego, CA, USA.*
- Willard, A. K. (May 2015). Do as I do not as I say: lab and field evidence for Credibility Enhancing Displays. *Religion and Text on the Ground, CERC Plenary Conference, Montreal, QC, Canada.*
- Willard, A. K. (April 2014). Cheating Behaviour among the Indo-Fijians. *Paper presented at the Cultural Evolution of Religious Consortium Conference Ethnographic Research Group annual meeting, Vancouver, BC, Canada.*
- Willard, A. K. & McNamara, R. A. (December 2012). Measuring the Mind of God in Fiji. *Paper presented at the Cultural Evolution of Religious Consortium Conference Ethnographic Research Group annual meeting, Vancouver, BC, Canada.*

Conference Presentations

- Willard, A. K., Jong, J., & Whitehouse, H. (October 2018). Rewarding the Good and Punishing the Bad: the moral importance of karma and afterlife beliefs in Singaporean Chinese culture. *Cultural Evolutions Society Meeting, Tempe AZ, USA*
- Willard A.K. (July 2018). Do as I do, not as I say: content and context biases in the transmission of religious belief. *Human Behavior and Evolution Society Annual Meeting, Amsterdam, Netherlands.*

- Willard, A. K. (November 2017). Understanding God's Mind: Anthropomorphism as Motivated Belief. *Annual Meeting of the American Academy of Religion, Boston, MA, USA*
- Willard, A. K. (September 2017). Testing theories of religion and secularization in the Czech Republic and Slovakia. *Cultural Evolution Society Conference, Jena, Germany.*
- Willard, A. K. (August 2017). The Impact of Belief and Culture on Religious Priming and Prosocial Behaviour. *Annual Meeting of the International Association of Psychology of Religion, Hamar, Norway.*
- Willard, A. K., & Cingl, L. (November 2016). Secularization and the Spiritual Marketplace in the Czech Republic and Slovakia. *Annual Meeting of the American Academy of Religion, San Antonio, TX, USA.*
- Willard, A. K., & Norenzayan A. (January 2016). The Cognitive Foundations of Supernatural Belief. *Religion and Spirituality Pre-conference SPSP, San Diego, CA, USA*
- Willard, A. K., Shariff, A. F, Kramer, S. & Norenzayan A. (January 2016). Religious Priming: A Meta-Analysis. *Annual Meeting of the Society for Personality and Social Psychology, San Diego, CA, USA*
- Willard, A. K. (Aug 2015). Religion's effect on in-group and out-group preferences in Fiji. *International Association of Religious History World Congress, Nagoya, Japan.*
- Willard, A. K., & Cingl, L. (February 2015). Secularization and the Spiritual Marketplace in the Czech Republic and Slovakia. *Paper presented at Religion and Spirituality Pre-conference SPSP, Long Beach, CA, USA*
- Willard, A. K. & Gervais, W. (October, 2009). What's behind the HADD. *Paper presented at the Society for the Scientific Study of Religion 2009 Meeting, Denver, CO, USA.*

Conference Poster Presentations

- Willard, A. K., Busch, J. T. A., Sobel D. M., Callanan, M. A, & Legare, C. H. (June 2016). The Impact of Parent and Children's Explanation and Exploration on Children's Causal Learning. *The 42nd Annual Meeting of the Society for Research in Child Development, Austin TX, USA*
- Willard, A. K. & Cingl L. (July 2016). Secularization and the Spiritual Marketplace in the Czech Republic and Slovakia. *28th Annual Meeting of the Human Behaviour and Evolution Society, Vancouver, BC, Canada.*
- Willard, A. K., Busch, J. T. A., Sobel D. M., Callanan, M. A, & Legare, C. H. (June 2016). The Impact of Parent and Children's Explanation and Exploration on Children's Causal Learning. *The 42nd Annual Meeting of the Society for Philosophy and*

Psychology, Austin, TX, USA

- Willard, A. K., Norenzayan, A. & Henrich, J. (February 2014). Do as I Do, Not as I say: Credibility Enhancing Displays of Belief. *The 15th Annual Meeting of the Society for Personality and Social Psychology, Austin, TX, USA.*
- Willard, A. K. & Norenzayan, A. (May 2013). Spiritual but not religious. *Cultural Evolution of Religious Consortium Conference, Vancouver, BC, Canada.*
- Willard, A. K., Norenzayan, A. & Henrich, J. (January 2013). Signalling Belief: Credibility Enhancing Displays. *The 14th Annual Meeting of the Society for Personality and Social Psychology, New Orleans, LO, USA*
- Willard, A. K. & Norenzayan, A. (January 2012). The Cognitive Basis of Religiosity. *The 13th Annual Meeting of the Society for Personality and Social Psychology, San Diego, CA, USA*
- Willard, A. K., Norenzayan, A. & Henrich, J. (January 2011). Memory and Belief in Religious Concepts. *The 12th Annual Meeting of the Society for Personality and Social Psychology, San Antonio, TX, USA*
- Willard, A. K., Norenzayan, A. & Henrich, J. (June 2010). Does Memory Increase Belief? *The 22nd Annual Meeting of the Human Behaviour and Evolution Society, Eugene, OR, USA.*
- Willard, A. K., Norenzayan, A. & Gervais, W. (January 2010). Strangers in the Night: The Effects of Ambient Darkness on the Detection of Human Agency. *The 11th Annual Meeting of the Society for Personality and Social Psychology, Las Vegas, NV, USA*

Invited Workshops:

- Early Career Workshop in the Psychology of Religion (October 2016). Hosted by University of California-Irvine, San Diego, CA. Invited by Adam B. Cohen, Kevin Ladd, and Azim Shariff.
- Quantitative Methods Summer School (May 2016) Hosted by Max Planck Institute for the Science of Human History, Jena, Germany. Invited by Russell Gray and Fiona Jordan.

Departmental Talks:

- Willard A.K (October 2018). Controlling the Dead with Magic: Witchcraft and distrust in Mauritius. *Center for Culture and Evolution, Brunel University London.*

Willard, A. K., Shariff, A. F, Kramer, S. & Norenzayan A. (January 2016). Religious Priming: A Meta-Analysis. *Cognitive Science Area Meeting, Department of Psychology University of Texas at Austin.*

Willard, A. K. (November 2015). The Basis of Belief: the cognitive and cultural foundations of supernatural belief. *Social Area Meeting, Department of Psychology University of Texas at Austin.*

Willard, A. K. (October 2015). The Basis of Belief: the cognitive and cultural foundations of supernatural belief. *Cognitive Science Area Meeting, Department of Psychology University of Texas at Austin.*

Teaching Experience:

- Instructor: PSYC 307: Cultural Psychology, January 2015.
- Teaching Assistant: ISIC 302: Integrated Sciences Research Retreat Course (Prof: Michael Doebeli & Rik Blok, Summer 2014)
- Teaching Fellow: PSYC 217: Psychology Research Methods (Prof: Will Gervais, Winter 2011; Amori Mikami, Winter 2011)
- Teaching Assistant: PSYC 407: Culture and Cognition (Prof: Ara Norenzayan, Winter 2009; Joe Henrich Winter 2010)
- Teaching Assistant: ASTU 201: Canada, Japan and the Pacific: Cultural Studies (Prof: Darrin Lehman, Winter 2009-2011)

Postgraduate Students Supervised:

- Second Supervisor: Suzanne Hill, Brunel University London
Kathryn Ford, Brunel University London
- Research Development Advisor: Jo Holmberg-Hansson, Brunel University London

Undergraduate Students Supervised:

- 2016-17: Emily Cruz, Directed Research project
Shu Jie, Directed Research project
- 2015-16: Andrew Arriaga, Directed Research project
Shu Jie, Directed Research project
- 2014-15: Nancy Tania, Directed Research project
Jenny Zhao, Directed Research project
Samuel Kim, Cognitive Systems project
- 2013-14: Jason Chang, Directed Research project
Paul Grewl, Honours project
Melody Lam, Directed Research project

Samantha Greenwood, Directed Research project

- 2012-13: Gibak Lee, Honours project
- 2011-12: Sean Lee, Directed Research project
- 2010-11: Chadis Pharnichyakul, Directed Research project
- 2009-10: Gabriel Brooks, Directed Research project

Professional Activities:

Academic Societies:

European Human Behaviour and Evolution Association
Cultural Evolution Society
Human Behaviour and Evolution Society

Reviewer for:

British Journal of Social Psychology
Cognition
Cognitive Science
Current Anthropology
Evolution and Human Behaviour
Journal for the Cognitive Science of Religion
Journal of Experimental Psychology: General
Journal of Personality and Social Psychology
Journal of the Royal Anthropological Institute
Journal of the Scientific Study of Religion
Personality and Individual Differences
Proceedings of the National Academy of Science
Religion Brain and Behaviour
Social and Personality Psychology Science