# JACOB T. FISHER

Ph.D. Candidate, Department of Communication, The University of California, Santa Barbara Media Neuroscience Lab • NSF IGERT for Network Science and Big Data jacobtfisher@ucsb.edu • 794 Cypress Walk Apt H., Goleta CA 93117

#### **EDUCATION**

### Ph.D. • Communication (Expected June 2020)

2016 - Present

The University of California, Santa Barbara

Emphasis: Cognitive and Brain Sciences

Emphasis: Quanititative Methods in Social Sciences

Advisor: René Weber, Committee Members: Scott Grafton, Scott Reid

#### Master of Arts • Media and Communication

2014 - 2016

Texas Tech University • Lubbock, TX

Thesis Title: Examining Cognitive Load and Recall for Educational

Multimedia Messages in ADHD and Non-ADHD Populations

Advisor: Justin Keene, Committee Members: Paul Bolls, Glenn Cummins

#### Bachelor of Arts • Honors Arts & Letters

2009 - 2013

Texas Tech University • Lubbock, TX

Minor: Communication

#### REFEREED PUBLICATIONS

**Fisher, J.T.,** Hopp, F.R., Weber, R. (2019). Modality-specific effects of perceptual load in multimedia processing. *Journal of Media & Communication*. Published online ahead of print.

Hopp. F.R., Schaffer, J., Fisher, J.T., Cornell, D., & Weber, R. (2019). iCoRe: The GDELT interface for the advancement of communication research. *Computational Communication Research*. Published online ahead of print.

Weber, R., Behr, K.M., **Fisher**, **J.T.**, Lonergan, C., & Quebral, C. (in press). Video game violence & interactivity: effect or equivalence? *Journal of Communication*.

**Fisher, J.T.**, Keene, J.R., Huskey, R., & Weber, R. (2018). The limited capacity model of motivated mediated message processing: taking stock of the past. *Annals of the International Communication Association*. 42(4), 270-290.

**Fisher, J.T.**, Huskey, R., Keene, J.R., & Weber, R. (2018). The limited capacity model of motivated mediated message processing: looking to the future. *Annals of the International Communication Association*. 42(4), 291-315. **Distinguished Article Award, NCA Social Cognition Division**.

Weber, R., Fisher, J.T., Hopp, F.R., & Lonergan, C. (2018). Taking messages into the magnet: method-theory synergy in communication neuroscience. *Communication Monographs*. 85(1). 81-102.

#### MANUSCRIPTS UNDER REVIEW

Hopp, F.R., **Fisher**, **J.T.**, & Weber, R. (conditional acceptance) Integrating news framing, dynamic-transactional paradigms, and computational modeling: An examination of the dynamic relationship between

news frames and real-world events. Journal of Communication.

**Fisher, J.T.**, Hopp, F.R., Weber, R. (under review). Network neuroscience: a practical introduction for communication researchers. *Communication Methods & Measures*.

**Fisher, J.T.**, Hopp, F.R., & Weber, R. (under review). Of primary importance? Motivation and cognitive effort drive resource allocation across multiple concurrent naturalistic tasks. *Communication Research*.

**Fisher, J.T.**, Keene, J.R. (under review). ADHD individuals exhibit breadth-biased cognitive control in e-learning environments. *Learning, Media, & Technology*.

Hopp, F.R., **Fisher**, **J.T.**, Cornell, D., Huskey, R., & Weber, R. (under review). The extended moral foundations dictionary (eMFD): Development and applications of a crowd-sourced approach to extracting moral intuitions from text at scale. *Behavior Research Methods*.

Dienlin, T., Johannes, N., Bowman, N.D., Masur, P.K., Engesser, S., Kümpel, A.S., Lukito, J., Bier, L.M., Zhang, R., Johnson, B.K., Huskey, R., Fisher, J.T. ... De Vreese, C. (under review). An agenda for open science in communication. *Journal of Communication*.

#### MANUSCRIPTS IN PREPARATION

Hopp, F.R.\*, **Fisher, J.T.**\*, & Weber (in prep). Computational modeling of complex communication systems. *Initial manuscript draft completed. Editing and revising for submission.*Expected submission winter 2020

**Fisher, J.T.,** Hopp, F.R., Lonergan, C., & Weber (in prep). Perceptual load improves naturalistic task performance in ADHD.

Data collected and analyzed. In final stages of manuscript writeup before submission. Expected submission fall 2019

**Fisher, J.T.**, Chen, Y.C., & Weber, R. (in prep). Understanding the structure of media multitasking and attention problems.

Data collected and preprocessed. Analysis ongoing.

Expected submission winter/spring 2020

**Fisher, J.T.**, Hopp, F.R., & Weber, R. (in prep). Developing best practices for the implicit measurement of moral foundation salience.

Pilot data collected (n = 78) and full data collection underway (n = 250).

Expected submission fall 2019.

**Fisher**, **J.T.**, Hopp, F.R., Lonergan, C. & Weber (in prep). Brain network topology and dynamics in ADHD individuals during video game play.

Data collected and preprocessed. Analysis slated for late fall 2019.

Expected submission winter 2020.

#### **BOOK CHAPTERS & ENCYCLOPEDIA ENTRIES**

**Fisher, J.T.**, Lonergan, C., Hopp, F.R., & Weber (in press). Media entertainment, flow experiences, and the synchronization of audiences. In Vorderer, P, & Klimmt, C., (Eds.) *Oxford Handbook of Entertainment Theory*.

Oxford, UK: Oxford University Press.

**Fisher, J.T.**, & Weber, R. (in press). Innovative health interventions at the intersection of neuroimaging and multimedia design. In Kim, J. & Song, H. (Eds.) *New Technology for Health-Related Cognitive and Behavioral Change.* San Diego, CA: Elsevier.

**Fisher, J.T.**, Huskey, R., Keene, J.R., & Weber (in press). The life of a model: Commentary on "How the LC4MP became the DHCCST". In Weber, R., & Floyd, K., (Eds.) *Handbook of Communication Science and Biology*. New York, NY: Routledge.

**Fisher, J.T.,** & Keene, J.R. (in press). Attention, working memory, and media multitasking. In Weber, R., & Floyd, K., (Eds.) *Handbook of Communication Science and Biology*. New York, NY: Routledge.

Weber, R., & **Fisher**, **J.T.** (in press). Advancing the synchronization theory of flow experiences. In Weber, R., & Floyd, K., (Eds.) *Handbook of Communication Science and Biology*. New York, NY: Routledge.

**Fisher, J.T.**, & Weber, R. (in press). Limited capacity model of motivated mediated message processing (LC4MP). In Van Den Bulck, J., (Ed.) *International Encyclopedia of Media Psychology*. Hoboken, NJ: Wiley Blackwell.

Weber, R., & **Fisher**, **J.T.** (in press). Flow. In Van Den Bulck, J., (Ed.) *International Encyclopedia of Media Psychology*. Hoboken, NJ: Wiley Blackwell.

#### AWARDS AND HONORS

Top 5 Paper Award National Communication Association Social Cognition Division	2019
James J. Bradac Award for Excellence in Research University of California, Santa Barbara	2019
<b>Kavli Institute for Cognitive Neuroscience Fellowship</b> University of California, Santa Barbara	2019
<b>Top Reviewer</b> International Communication Association Communication Science & Biology Interest Group	2019
Top 5 Paper Award International Communication Association Computational Methods Division	2019
Distinguished Article Award  National Communication Association  Social Cognition Division	2018
Top 5 Paper Award National Communication Association	2018

# Mass Communication Division

Top 5 Paper Award International Communication Association Communication Science and Biology Interest Group			
Top 5 Paper Award International Communication Association Communication Science and Biology Interest Group			
National Science Foundation IGERT Fellowship The University of California, Santa Barbara			
Regent's Fellowship The University of California, Santa Barbara  Hutcheson Graduate Research Endowment Texas Tech University College of Media and Communication		2016	
		2014	
GR	ANT ACTIVITY		
(1)	Cottage Health Research Initiative • \$50,000  Understanding How Technology Habits Influence Developmental  Mechanisms of Attention in Children  Co-I., wrote grant proposal with, P.I. René Weber  Currently under review	2019	
$\forall$	Gerber Foundation • \$247,375  Investigating the Relationship Between Multimedia Use and Development of ADHD Symptoms in Children Co-I., wrote grant proposal with, P.I. René Weber Not selected for funding	2019	
<b>∀</b>	Theodore Fett Brain Imaging Center Research Grant • \$25,000 Characterizing Cognitive Control and Reward Networks in ADHD During A Naturalistic Task Co-I., wrote grant proposal with, P.I. René Weber, Involved in study design, data collection, data analysis, and reporting.	2018	
<b>∀</b>	National Science Foundation IGERT Innovation Grant • \$12,000  Developing an Interactive, Naturalistic Stimulus for the Study of Network  Dynamics of Cognitive Control  Co-I., co-wrote grant proposal with P.I., René Weber.  Involved in study design, data collection, data analysis, and reporting.	2018	
<b>V</b>	John Templeton Foundation • \$234,800  Moral Foundations of Movies: Examining the Virtuous Content and Financial Performance of Popular Films  Collaborator, co-wrote wrote proposal with PI, René Weber,	2018	

involved in study design, data collection, data analysis, and reporting

# ✓ Academic Senate Council on Research and Instructional Resources Faculty Research Grant • \$13,800

2017

College Students, Media, and the Increasing Prevalence of Attention Disorders: Examining the Role of Motivation and Perceptual Load on Cognitive Control and Learning in ADHD and High Media Multitasking Populations.

Co-I., co-wrote grant proposal with P.I., René Weber.

Involved in study design, data collection, data analysis, and reporting.

# ☑ UCSB Department of Communication Graduate Student Research Grant • \$500

2017

Examining the Role of Motivation and Cognitive/Perceptual Load on Attentional Control and Performance in Interactive Digital Environments Co-I., co-wrote grant proposal with P.I., René Weber. Involved in study design, data collection, data analysis, and reporting.

#### CONFERENCE PRESENTATIONS

**Fisher, J.T.**, Chen, Y., Hopp, F.R., & Weber, R. (2020). Uncovering the structure of media multitasking and attention problems using network analytic techniques. Paper submitted to the annual meeting of the International Communication Association (ICA). Gold Coast, Australia.

**Fisher, J.T.**, Hopp, F.R., & Weber, R. (2020). Of primary importance? Motivation drives resource allocation across concurrent tasks during multimedia processing. Paper submitted to the annual meeting of the International Communication Association (ICA). Gold Coast, Australia.

**Fisher, J.T.**, Hopp, F.R., & Weber, R. (2020). Cognitive load and perceptual load during video game play correspond to differing brain network topologies. Paper submitted to the annual meeting of the International Communication Association (ICA). Gold Coast, Australia.

Dienlin, T., Johannes, N., Bowman, N., Masur, P. K., Engesser, S., ... Fisher, J.T., ... Weber, R., ... DeVreese, C. (2020, May). An agenda for open science in communication. Paper submitted to the annual meeting of the International Communication Association (ICA), Gold Coast, Australia.

**Fisher, J.T.**, Hopp, F.R., & Weber, R. (2019). Modality-specific effects of perceptual load in multimedia processing. Paper accepted at the 105th annual meeting of the National Communication Association (NCA), Baltimore, MD. **Top 5 Paper.** 

**Fisher, J.T.**, Hopp, F.R., Prabhu, S., Tamborini, R., & Weber, R. (2019). Developing best practices for the implicit measurement of moral foundation salience. Paper accepted at the 105th annual meeting of the National Communication Association (NCA), Baltimore, MD.

**Fisher, J.T.** & Weber, R. Understanding and treating ADHD using naturalistic network neuroscience. Paper presented at the annual meeting of the Cottage Health Research Institute (CHRI), Santa Barbara, CA.

Hopp, F. R., Fisher, J. T., & Weber, R. (2019). The Moral Narrative Analyzer (MoNA): An integrated, spatio-temporal platform for monitoring, predicting, and countering global sociopolitical instability. Paper presented at the Workshop on Naval Applications of Machine Learning (NAML), San Diego, CA.

- Hopp, F.R., Lonergan, C., Fisher, J.T., & Weber, R. (2019). The joy of mediated punishments: Moral transgression in auditory narratives elicit cortical synchronization in listeners. Poster presented at the 12th annual meeting of the Social and Affective Neuroscience Society (SANS), Miami, USA.
- Fisher, J.T., Hopp, F.R., Lonergan, C., & Weber, R. (2019). Brain network topology and dynamics in ADHD individuals during video game play. Poster presented at the 12th annual meeting of the Social and Affective Neuroscience Society (SANS), Miami, USA.
- **Fisher, J.T.**, Hopp, F.R., Lonergan, C., & Weber, R. (2019). The interacting roles of cognitive load, perceptual load, and reward in guiding attention during multimedia processing. Paper presented at the 69th annual meeting of the International Communication Association (ICA), Washington, DC.
- **Fisher, J.T.**, Hopp, F.R., Lonergan, C., & Weber, R. (2019). Brain network topology and dynamics in ADHD Individuals during video game play. Paper presented at the 69th annual meeting of the International Communication Association (ICA), Washington, DC.
- **Fisher, J.T.**, Lonergan, C., Hopp, F.R., Grall, C., Pandey, P., Scholz, C., Najera, C., & Wilcox, S. (2019). Best practices in training and mentoring research assistants and new graduate students. Panel presented at the 69th annual meeting of the International Communication Association (ICA), Washington, DC.
- Miao, X., Fisher, J.T., & Weber, R. (2019). Media multitasking in bilingual populations: A closer look at the effect of language switching. Paper presented at the 69th annual meeting of the International Communication Association (ICA), Washington, DC.
- Hopp, F.R., Barel, A., Fisher, J.T., Cornell, D., Lonergan, C., & Weber, R. (2019). "I believe that morality is gone": A large-scale inventory of moral foundations in lyrics of popular songs. Paper presented at the 69th annual meeting of the International Communication Association (ICA), Washington DC, USA.
- Hopp, F.R., **Fisher**, **J.T.**, Prabhu, S., Cornell, D., Tamborini, R., & Weber, R. (2019). Revisiting the moral foundations-affect misattribution procedure (MF-AMP): An extended, open-source tool for measuring the accessibility of moral intuitions. Paper presented at the 69th annual meeting of the International Communication Association (ICA), Washington DC, USA.
- Hopp, F.R., **Fisher**, **J.T.**, & Weber, R. (2019). The dynamic relationship between news frames and real-world events: A hidden markov model approach. Paper accepted to the 69th annual meeting of the International Communication Association (ICA), Washington DC, USA. **Top 5 Paper**.
- Fisher, J.T. & Keene, J.R. (2018) ADHD individuals and media multitaskers exhibit resource allocation differences when processing educational multimedia messages. Paper presented at the 104th Annual Meeting of the National Communication Association (NCA). Salt Lake City, UT.
- Hopp, F.R., Cornell, D., **Fisher, J. T.**, Huskey, R., & Weber, R. (2018). The moral foundations dictionary for news (MFD-N): A crowd-sourced moral foundations dictionary for the automated analysis of news corpora. Paper presented at the 104th Annual Meeting of the National Communication Association (NCA), Salt Lake City, UT. **Top 5 Paper.**
- **Fisher, J.T.**, Cornell, D., Hopp, F.R., Mangus, M., & Weber, R. (2018). "But how are they talked about?": A novel measure of entity framing in online news. Paper presented at the 68th annual conference of the International Communication Association (ICA), Prague, CZ.

**Fisher**, J.T. Hopp, F.R., & Weber, R. (2018). "Look harder!" ADHD, media multitasking, and the effects of cognitive and perceptual load on resource availability and processing performance. Paper presented at the 68th annual conference of the International Communication Association (ICA), Prague, CZ. **Top 5 Paper**.

Keene, J.R., Adams, R., Najera, C., **Fisher. J.T.**, Berke, C., & Bolls, P. (2018) Organized complexity in communication science: a systematic review and meta-analysis of psychophysiological methods in communication. Paper presented at the 68th annual conference of the International Communication Association (ICA), Prague, CZ.

Hopp, F. R., Fisher, J.T., Mangus, J. M., Weber, R. (2018). Combining computational content analysis with self-report data to predict news article sharing. Paper presented at the 68th Annual Conference of the International Communication Association (ICA), Prague, CZ

Hopp, F. R., **Fisher**, **J.T.**, Mangus, J. M., Huskey, R., Swanson, R., Gordon, A., Khooshabeh, P., Weber, R. (2018). Mining the Global Database of Events, Language, and Tone: An introduction for communication researchers. Paper presented at the 68th Annual Conference of the International Communication Association (ICA), Prague, CZ.

Hopp, F.R., **Fisher**, **J.T.**, Mangus, M., Huskey, R., Swanson, R., Gordon, A., Khooshabeh, P., & Weber, R. (2017). Examining online news reporting using the Global Database of Events, Language, and Tone: Challenges, opportunities, and future directions. Paper presented at the 103rd annual meeting of the National Communication Association (NCA), Dallas, TX.

**Fisher, J.T.**, Huskey, R., Keene, J. & Weber, R. (2017). The offramp problem: Treating media psychology as an insular field inhibits theoretical and empirical progress. Paper presented at the 67th annual meeting of the International Communication Association (ICA), San Diego, CA. **Top 5 Paper.** 

**Fisher, J.T.**, & Keene, J. (2017). Examining cognitive load and recall for educational multimedia messages in ADHD and high media multitasking populations. Paper presented at the 67th annual meeting of the International Communication Association (ICA), San Diego, CA.

Huskey, R., Fisher, J.T., Craighead, B. (2016). A call to action: Using high-control, open-source, customizable, and naturalistic stimuli to overcome longstanding challenges in quantitative video game research. Paper Presented at the annual meeting of the 102nd National Communication Association (NCA), Philadelphia, PA.

Loof, T., Berke, C.K., Davidson, A., **Fisher, J.T.**, Keene, J. (2016). The dynamic interaction of emotional content and modality on coactivation in the motivational systems and psychophysiological responses. Paper presented at the 56th annual meeting of the Society of Psychophysiological Researchers, Minneapolis, MN.

#### **TEACHING**

# **Teaching Associate - Instructor of Record**

Summer 2018

PSY 111 • Behavioral Neuroscience The University of California, Santa Barbara

# Teaching Associate - Instructor of Record

Summer 2017

PSY 108 • Cognitive Psychology The University of California, Santa Barbara

# **Teaching Assistant**

MCOM 2320 • Writing for Media and Communication Texas Tech University

Fall 2015, Spring 2016

#### PROFESSIONAL AFFILIATIONS

#### **International Communication Association**

2015 – Present

Communication Science & Biology Interest Group Computational Methods Division, Information Systems Division Mass Communication Division, Game Studies Division

#### **National Communication Association**

2015 - Present

Mass Communication Division, Social Cognition Division

Social & Affective Neuroscience Society Organization for Human Brain Mapping 2016 – Present 2018-Present

**American Psychological Association** 

2016 – Present

#### PROFESSIONAL TRAINING

# Kavli Summer Institute in Cognitive Neuroscience

Summer 2019

2018-Present

The Kavli Summer Institute in Cognitive Neuroscience (SI), supported by NIMH, NIDA and the Kavli Foundation, advances the cognitive neurosciences by training the next generation of researchers in emerging information, methods and theoretical perspectives in mind-brain science, including how this knowledge is applied in translational research that addresses major mental health challenges.

NeuroHackAdemy Summer 2019

Neurohackademy is a two-week hands-on summer institute in neuroimaging and data science, held at the University of Washington eScience Institute. Researchers receive training in the latest technologies used to analyze human neuroscience data, as well as tools to make analysis and results shareable and reproducible.

#### **SERVICE**

Ad-Hoc Reviewing

Journal of Communication

Media Psychology

Communication Methods and Measures

Computational Communication Science

Journal of Media Psychology

Reviewer 2015 – Present

International Communication Association

Reviewer 2015 – Present

# National Communication Association

Mentor	2019 – Present
UCSB Graduate Mentorship Program	
Panelist Lambda Pi Eta Graduate School Panel The University of California, Santa Barbara	2018
Graduate Student Representative Faculty Search Committee, Digital Communication The University of California, Santa Barbara	2017