

# ZHENG (JOYCE) WANG

The Ohio State University  
3145 Derby Hall, 154 N. Oval Mall  
Columbus, OH 43210

Web: TheDOCC.com  
Email: zhengjoycewang@gmail.com  
Email: wang.1243@osu.edu

## Academic Appointments

2017-present Professor  
2013-2017 Associate Professor  
2007-2013 Assistant Professor

Faculty, School of Communication, OSU  
Director, Communication and Psychophysiology Lab (CAPLab)  
Affiliated faculty, Center for Cognitive and Brain Sciences  
Affiliated faculty, Decision Science Collaborative  
Faculty-in-Residence & Leadership team, Translational Data Analytics (cross all colleges and departments of OSU)

## Education

Ph.D. Communications & Cognitive Science, double-major (2007)  
Indiana University, Bloomington, IN, USA  
B. A. Journalism & Mass Communications (2001), *summa cum laude*  
China Youth University for Political Sciences, Beijing, China

## Research Expertise

- Motivation, emotion, and cognition in message processing and media choice behavior; message design and evaluation.
- Reciprocal dynamics of choice behavior and information processing; mHealth (mobile health) applications.
- Psychophysiological and dynamic computational modeling methods.
- Quantum probabilistic and dynamic models of cognition and decision; contextualized communication, decision and choices.

Currently, I'm especially interested in pursuing some new ideas and approaches from cognitive science to the study of communications.

- One new direction is the use of real time data (e.g., psychophysiological measures, real life experience sampling) in conjunction with formal dynamic models to study how people process, select, and are affected by information. This has led to the development of new dynamic models of information processing and choice behaviors. My current focus is the **dynamic reciprocal effects** between media use/choices and their impacts on emotion and cognition over time. I have employed the approach to study media entertainment, ads and health campaign messages, program context effects, news selection, media multitasking, media and diet, etc. They help design more effective messages and media. Also, they help better understand the long-term dynamic reciprocal influences between media use, communications, cognitive functions and neuro-substrates, and personal traits from a dynamic, developmental perspective.
- Another new direction is to study contextual influences on cognition, decision, and communication, by **building new probabilistic and dynamic systems** based upon quantum rather than traditional classical probability theory. Quantum probability theory turns out to be highly suitable for explaining puzzles associated with the highly contextual nature of cognition. I have applied the quantum models to study paradoxical findings that have resisted classical explanations, including categorization-decision interference effects, sequential effects of measurements (e.g., order effects of attitude judgments and decisions, arguments, jury decisions), and episodic memory overdistribution effects. Check out our special issue on *The Potential of Quantum Probability for Modeling Cognitive Processes (Topics in Cognitive Science, 2013)* and related commentaries (2014).

## Recent Research Experience

- 09/07- Full, Associate, & Assistant Professor (2007-present), OSU  
Founded and direct the Communication and Psychophysiology research lab, continuously supported by grants from School of Communication, National Science Foundation, and the U.S. Air Force Office of Scientific Research, PI
- 06/06-05/07 Manager, Institute for Communication Research (ICR), IU  
Founded in 1974, ICR is a multiple-disciplinary research institute for communication studies.

## Recent Teaching Experience

- Full, Associate & Assistant Professor, School of Communication, the OSU (2007-present):  
Advanced Statistics for Communication (graduate), Cognition & Communication (graduate)  
Communication Industry Research Methods (graduate and undergraduate)  
Communication Research Methods (undergraduate), Mass Communication and Society (undergraduate)  
Strategic Media Planning (undergraduate)
- Associate Instructor, Dept. of Telecommunications, IU (2001-2007):  
Electronic Media Advertising (undergraduate), Cable & Broadcast Advertising (undergraduate)  
Living in the Information Age (undergraduate), Programming Strategies (undergraduate)

## Selected Academia Professional Service and Leadership

### **International Professional Organizations**

- Chair, International Communication Association (ICA), Information Systems  
2015-2017(vice chair elected), 2017-2019 (chair)  
2017-2019 (ICA Board of Directors)

### **The university, OSU:**

- Translational Data Analytics (TDA) Faculty Advisory Board, 2015-2016; Leadership team, 2017-present  
Cognitive and Brain Sciences Graduate Interdisciplinary Specialization, Graduate Studies Committee, 2015-present  
Behavioral and Social Sciences Institutional Review Board, 2012-2017

### **The School of Communication:**

- Chair, Promotion & Tenure Committee, 2017-present  
Executive Committee, 2017-present  
Director Search Committee, 2013-2014, 2017  
Faculty Search Committee, 2008-2009 (5 positions); 2013-2014 (2 positions); 2015-2016 (2 positions)  
Research Committee, 2013-2014  
Promotion & Tenure Reading Committee, 2013-present  
Graduate Studies Committee, 2010-2013, 2015-present

### **Student life enrichment:**

- Host, supporting recruitment & training activities of OSU, research lab, 2007-present  
Graduate Faculty Representative, OSU, 2008-present  
Judge, Denman Undergraduate Research Forum, OSU, 2012-present  
Faculty and speaker, Humanities and Cognitive Sciences High School Summer Institute (annually), 2014-present  
Faculty and speaker, Mentoring Young Women in Data Science (annually), 2018-

## Academic Honors

- The Best Research  
American Society of Trial Consultants, 2017

Denis McQuail Award (2016) and ASCoR Honorary Fellow (2017-2018).  
Amsterdam School of Communication Research. Selected by an international award committee. Awarded for the best article advancing communication theory published in a peer-reviewed journal or a university press published book in the previous two years. ("Multi-dimensions of media multitasking and adaptive media selection." *Human Communication Research*, 2015)

Top Paper Award  
International Communication Association, Information Systems, 2016

Mattox Award for research productivity and impact (\$10,000), SoC, OSU, 2015

ScienceDirect Top 25 hottest article in *Journal of Mathematical Psychology*  
(Continuously ranked every quarter, 2006-2016)

Most Cited Article in the Past Five Years (2009-2014)  
*Journal of Mathematical Psychology*

Most Cited Article in the Past Five Years (2006-2011)  
*Journal of Mathematical Psychology*

Top Faculty Paper Award  
International Communication Association, Communication and Technology, 2013

Top Paper Award  
National Communication Association, Human Communication and Technology, 2012

Top Paper Award  
International Communication Association, Information Systems, 2008

Outstanding Dissertation Award (Bi-annual)  
Cognitive Science, IU, 2008

Top Research Paper Competition Winner  
ICR and Dept. of Telecommunications, IU, 2005, 2006

The Summer Research Fellowship  
Cognitive Science Program, IU, 2004

Outstanding University Graduate of the Year  
Beijing, China, 2001

The Highest Fellowship  
China Youth University for Political Sciences, Beijing, China, 1998-2001

### External Research Grants

**PI**, National Science Foundation (NSF)  
Methodology, Measurement, & Statistics; and Perception, Action, & Cognition  
"Construct a General Hilbert Space Multi-dimensional Model" (SES-1560501)  
\$236,592 to Wang and \$500,000 in total across research sites, 2016-2019

**PI** (the OSU subaward), U.S. Air Force Office of Scientific Research (AFOSR)  
"Applications of Quantum Probability Theory to Strategic Decision Making" (FA9550-15-1-0343)  
\$181,972 to Wang and \$592,302 in total across research sites, 2015-2019

**PI** (the OSU subaward), National Science Foundation (NSF)  
Electrical, Communications, and Cyber Systems; Integrative Strategies for Understanding Neural and Cognitive Systems  
"Fully-Passive and Wireless Multi-Channel Neural Recording for Chronic In-Vivo Studies in Animals"  
\$128,108 to Wang and \$569,087 in total, 2017-2019

William K. and Katherine W. Estes Fund in Advanced Training in Mathematical and Computational Modeling for Psychological Science, The Psychonomic Society, \$7,500, 2017

For organizing a one-day workshop, "Computational Tools for Developing and Testing Models of Quantum Cognition"

**PI** (the OSU subaward), U.S. Air Force Office of Scientific Research (AFOSR)

"Applications of Quantum Probability Theory to Dynamic Decision Making" (FA9550-12-1-0397)

\$161,157 to Wang and \$607,712 in total across research sites, 2012-2015

**PI**, National Science Foundation (NSF)

Methodology, Measurement, & Statistics; and Decision, Risk & Management Sciences

"Quantum Decision Theory" (SES 1153846)

\$40,622 to Wang and \$50,000 in total across research sites, 2012-2014

**PI**, National Science Foundation (NSF)

Methodology, Measurement, & Statistics; and Decision, Risk & Management Sciences

"Quantum Information Processing" (SES 0818277)

\$238,434 to Wang and \$450,000 in total across research sites, 2009-2012

### **Internal Research Grants (Selected)**

Advisor, Decision Sciences Collaborative Grant (\$3000) (Graduate student: Lorraine Borghetti)

OSU, 2016

Advisor, The OSU Research Scholar Award (\$1000)

Advisor, Arts & Sciences Undergraduate Research Scholarship (\$1500) (undergraduate student: Yilu Sun)

OSU, 2015

PI, the Director's Award for successful external grants

\$160,020, School of Communication, OSU, 2013-2014

Advisor, The Mayers Summer Research Scholarships in the Natural & Mathematical Sciences (\$3500)

Advisor, OSU Summer Research Fellowship (\$3500) (undergraduate student: Zhengjie Li), OSU, 2013

Advisor, Pelotonia Fellowship for Cancer Research (undergraduate student: Linghan Wang)

\$12,000, OSU, 2010-2011

Advisor, Undergraduate Research Office Summer Research Fellowship (undergraduate student: Xuyan Zhao)

\$3,500, OSU, 2011

PI, Miller Research Award

\$6,330, School of Communication, OSU, 2008-2009

The Dissertation Research Fellowship

\$4,800, Cognitive Science, IU, 2007

Research Assistant Grant Competition Winner

\$500, ICR, IU, 2005

Conference Travel Grant

\$500, ICR, IU, 2003, 2004, 2005, 2006, 2007

The Summer Research Fellowship

\$2,800, Cognitive Science, IU, 2004

The President's Summer Research Initiative Grant

\$3,000, IU, 2002

## **Editorial & Review Service**

### **Action Editor**

*Topics in Cognitive Science, special issue: The Potential of Quantum Probability for Modeling Cognitive Processes (2013)*  
*Commentaries on the special issue (2014)*

### **Consulting Editor/Editorial Board**

*Communication Methods and Measures*  
*Communication Monographs (Special issue on the psychophysiological approach, 2014)*  
*Communication Research*  
*Decision*  
*Frontiers in Cognitive Science*  
*Journal of Experimental Psychology: General*  
*Journal of Information Society*  
*Media Psychology*  
*Perspectives on Psychological Science*

### **Grant proposal reviewer:**

Canada Foundation for Innovation, Canada  
Netherlands Organization for Scientific Research (NWO), Netherlands  
Research Foundation–Flanders (FWO), Belgium  
The Royal Society, UK  
U.S. National Science Foundation (NSF), Decision, Risk & Management Science; Methodology, Measurement, & Statistics

### **Ad-hoc Journal reviewer:**

<i>Cognitive Science</i>	<i>Journal of Computer-Mediated Communication</i>
<i>Communication Methods &amp; Measures</i>	<i>Journal of Health Communication</i>
<i>Communication Monographs</i>	<i>Journal of Mathematical Psychology</i>
<i>Computers in Human Behavior</i>	<i>Journal of Media Psychology</i>
<i>Communication Research</i>	<i>Media Psychology</i>
<i>Entertainment Computing</i>	<i>Mathematical Social Sciences</i>
<i>Frontiers in Cognitive Science</i>	<i>Mind and Matter</i>
<i>Frontiers in Psychology</i>	<i>New Media &amp; Society</i>
<i>Health Communication</i>	<i>Political Behavior</i>
<i>Human Communication Research</i>	<i>Psychonomic Bulletin &amp; Review</i>
<i>Human-Computer Interaction</i>	<i>Psychology Assessment</i>
<i>International Journal of Listening</i>	<i>Psychological Review</i>
<i>Internet Research</i>	<i>Sociological Forum</i>
<i>Journal of Advertising</i>	<i>Topics in Cognitive Science</i>
<i>Journal of Communication</i>	

### **Conference Planner & Committee**

*Annual Conference planner, International Communication Association (2015-2017)*  
*Program Committee, International Conference on Quantum Interaction (2014)*

### **Conference reviewer:**

*Cognitive Science Society, International Communication Association, National Communication Association, Society for Consumer Psychology, Quantum Interaction*

## **Affiliations**

International Communication Association

National Communication Association  
The Association for Education in Journalism and Mass Communication  
Chinese Communication Association  
Cognitive Science Society  
Society for Mind-Matter Research  
The Society for Mathematical Psychology  
The Society for Psychophysiological Research

## Media Coverage

My research has received national and international media coverage, including the *NSF Highlights* and its affiliated *Science360*, *Economists*, *Forbes*, *The Atlantic*, *The Independent (UK)*, *Scientific American*, *Inside Science*, *ABC news*, *USA Today*, *WebMD*, *Prevention*, *Glamour*, *Chicago Daily Herald*, *Columbus Dispatch*, *Psychology Today*, *Insurance Journal*, *IEEE Spectrum*, and news websites such as *Huffington Post*, *The Verge*, *Yahoo News*, *phys.org*, and *United Press International (UPI)*.

## Academic Publications (Books, Journal Articles, Chapters, Proceedings, etc.)

### Books

- Wang, Z.**, & Busemeyer, J. R. (forthcoming). *Cognitive choice modeling*. Cambridge, MA: MIT Press.
- Busemeyer, J. R., **Wang, Z.**, Townsend, J. T., & Eidels, A. (2015). *Oxford Handbook of Computational and Mathematical Psychology*. New York, NY: Oxford University Press.

### Journal Articles (Peer-Reviewed)

(<sup>a</sup> undergraduate or graduate student; impact factor = five years impact factor)

- J40. Busemeyer, J. R., & **Wang, Z.** (in press). Hilbert space multi-dimensional modeling. *Psychological Review*.  
[Impact Factor: 9.51]
- J39. Busemeyer, J. R., & **Wang, Z.** (in press). Data fusion using Hilbert space multi-dimensional models. *Theoretical Computer Science*.  
Online first: <https://www.sciencedirect.com/science/article/pii/S0304397517308915>  
[Impact Factor: 0.82]
- J38. Busemeyer, J. R., & **Wang, Z.** (2017). Is there a problem with quantum models of psychological measurements? *PLoS ONE*, *12*, e0187733. <https://doi.org/10.1371/journal.pone.0187733>  
*\*Authors contributed to the article equally.*  
[Impact Factor: 3.39]
- J37. Banjo, O., **Wang, Z.**, Appiah, O., <sup>a</sup> Brown, C., <sup>a</sup> Walther-Martin, W., <sup>a</sup> Tchernev, J., <sup>a</sup> Hedstrom, A., & <sup>a</sup> Irwin, M. (2017). Experiencing racial humor with out-groups: A psychophysiological examination of co-viewing effects. *Media Psychology*, *20*, 607-631.  
[Impact Factor: 2.15]
- J36. <sup>a</sup> Anderegg, C., <sup>a</sup> Alade, S., Ewoldsen, D., & **Wang, Z.** (2017). Comprehension models of audiovisual discourse processing. *Human Communication Research*, *43*, 344-362. doi:10.1111/hcre.12107  
[Impact Factor: 3.71]
- J35. **Wang, Z.**, & Busemeyer, J. R. (2016). Interference effects of categorization on decision making. *Cognition*, *150*, 133-149. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0010027716300191>

doi: 10.1016/j.cognition.2016.01.019

[Impact factor: 4.31]

- J34. <sup>a</sup> Xu, S., **Wang, Z.**, & David, P. (2016). Media multitasking and well-being of university students. *Computers in Human Behavior*, *55*, 242-250.  
[Impact Factor: 3.72]
- J33. **Wang, Z.**, & Busemeyer, J. R. (2015). Reintroducing the concept of complementarity into psychology. *Frontiers in Psychology*, *6*, Article 1822. <https://doi.org/10.3389/fpsyg.2015.01822>  
[Impact Factor: 2.89]
- J32. **Wang, Z.**, & Busemeyer, J. R. (2015). Comparing quantum versus Markov random walk models of judgments measured by rating scales. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, *374*, 20150098. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4685762/>  
[Impact Factor: 3.05]
- J31. Brainerd, C. J., **Wang, Z.**, Reyna, V. F., & <sup>a</sup> Nakamura, K. (2015). Episodic memory does not add up: Verbatim-gist superposition predicts violations of the additive law of probability. *Journal of Memory and Language*, *84*, 224-245.  
[Impact Factor: 4.36]
- J30. Bruza, P. D., **Wang, Z.**, & Busemeyer, J. R. (2015). Quantum cognition: A new theoretical approach to psychology. *Trends in Cognitive Sciences*, *19*(7), 383-393. doi:10.1016/j.tics.2015.05.001  
*\*Feature review. Authors contributed to the article equally.*  
[Impact Factor: 23.87]
- J29. Busemeyer, J. R., & **Wang, Z.** (2015). What is quantum cognition, and how is it applied to psychology? *Current Directions in Psychological Science*, *24*(3), 163-169. doi: 10.1177/0963721414568663  
[Impact Factor: 6.63]
- J28. Banjo, O., Appiah, O., **Wang, Z.**, <sup>a</sup> Brown, C., & <sup>a</sup> Walther, W. (2015). Co-viewing effects of ethnic-oriented programming: An examination of in-group bias and racial comedy exposure. *Journalism and Mass Communication Quarterly*, *92*(3), 662-680. doi: 10.1177/1077699015581804  
[Impact Factor: 1.63]
- J27. **Wang, Z.**, <sup>a</sup> Vang, M. H., <sup>a</sup> Lookadoo, K. L., <sup>a</sup> Tchernev, J., & <sup>a</sup> Cooper, C. (2015). Engaging high-sensation seekers: The dynamic interplay of sensation seeking, message visual-auditory complexity and arousing content. *Journal of Communication*, *65*, 101-124. doi:10.1111/jcom.12136  
[Impact Factor: 4.41]
- J26. Busemeyer, J. R., **Wang, Z.**, Pothos, E. M. & Trueblood, J. S. (2015). The conjunction fallacy, confirmation, and quantum theory: Comment on Tentori, Crupi & Russo (2013). *Journal of Experimental Psychology: General*, *144*, 236-243. doi:<http://dx.doi.org/10.1037/xge0000035>  
[Impact Factor: 5.11]
- J25. **Wang, Z.**, <sup>a</sup> Irwin, M., <sup>a</sup> Cooper, C., & <sup>a</sup> Srivastava, J. (2015). Multi-dimensions of media multitasking and adaptive media selection. *Human Communication Research*, *41*, 102-127. doi:10.1111/hcre.12042  
[Impact Factor: 3.71]
- J24. Busemeyer, J. R., **Wang, Z.**, & Shiffrin, R. (2015). Bayesian comparison of a quantum versus a traditional model of human decision making. *Decision*, *2*, 1-12.

- J23. **Wang, Z.**, <sup>a</sup> Solloway, T., Shiffrin, R. M., & Busemeyer, J. (2014). Context effects produced by question orders reveal quantum nature of human judgments. *Proceedings of the National Academy of Sciences*, *111*(26), 9431-9436. doi: 10.1073/pnas.1407756111  
<http://www.pnas.org/content/111/26/9431.short>  
 [Impact Factor: 10.29]
- J22. **Wang, Z.** (2014). Bridging media processing and selective exposure: A dynamic motivational model of media choices and choice response time. *Communication Research*, *41*(8), 1064-1087. doi: 10.1177/0093650214534963  
 [Impact Factor: 3.47]
- J21. Busemeyer, J. R., **Wang, Z.**, Khrennikov, A., & Basieva, I. (2014). Applying quantum principles to psychology. *Physica Scripta*, *T163*, 014007.  
 [Impact Factor: 1.09]
- J20. Busemeyer, J. R., & **Wang, Z.** (2014). Quantum cognition: Key issues and discussion. *Topics in Cognitive Science*, *6*, 1-4.  
 [Impact Factor: 2.85]
- J19. **Wang, Z.**, <sup>a</sup> Morey, A. C., & <sup>a</sup> Srivastava, J. (2014). Motivated selective attention during political ad processing: The dynamic interplay between emotional ad content and candidate evaluation. *Communication Research*, *41*, 119-156. doi: 10.1177/0093650212441793  
 [Impact Factor: 3.47]
- J18. **Wang, Z.**, Busemeyer, J. R., Atmanspacher, H., & Pothos, E. M. (2013). The potential of using quantum theory to build models of cognition. *Topics in Cognitive Science*, *5*, 672-688. doi: 10.1111/tops.12043  
 [Impact Factor: 2.85]
- J17. **Wang, Z.**, & Busemeyer, J. R. (2013). A quantum question order model supported by empirical tests of an a priori and precise prediction. *Topics in Cognitive Science*, *5*, 689-710. doi: 10.1111/tops.12040  
 [Impact Factor: 2.85]
- J16. Brainerd, C., **Wang, Z.**, & Reyna, V. (2013). Superposition of episodic memories: Overdistribution and quantum models. *Topics in Cognitive Science*, *5*, 773-799. doi: 10.1111/tops.12039  
 [Impact Factor: 2.85]
- J15. Lang, A., Sanders-Jackson, A., **Wang, Z.**, & Rebenking, B. (2013). Motivated message processing: How motivational activation influences resource allocation, encoding, and storage of TV messages. *Motivation and Emotion*, *37*, 508-517. doi: 10.1007/s11031-012-9329-y  
 [Impact Factor: 2.36]
- J14. **Wang, Z.**, <sup>a</sup> Solloway, T., <sup>a</sup> Tchernev, J., & <sup>a</sup> Barker, B. (2012). Dynamic motivational processing of anti-marijuana messages: Coactivation begets attention. *Human Communication Research*, *38*, 485-509.  
 [Impact Factor: 3.71]
- J13. **Wang, Z.**, <sup>a</sup> Tchernev, J., & <sup>a</sup> Solloway, T. (2012). A dynamic longitudinal examination of social media use, needs, and gratifications among college students. *Computers in Human Behavior*, *28*, 1829-1839. doi: 10.1016/j.chb.2012.05.001  
 [Impact Factor: 3.72]

- J12. **Wang, Z.**, & Tchernev, J. (2012). The “myth” of media multitasking: Reciprocal dynamics of media multitasking, personal needs, and gratifications. *Journal of Communication*, *62*, 493-513. doi:10.1111/j.1460-2466.2012.01641.x [Impact Factor: 4.41]
- J11. **Wang, Z.**, David, P., Srivastava, J., Powers, S. R., D’Ángelo, J., Brady, C., & Moreland, J. (2012). Behavioral performance and visual attention in communication multitasking: A comparison between instant messaging and online voice chat. *Computers in Human Behavior*, *28*, 968-975. doi: 10.1016/j.chb.2011.12.018 [Impact Factor: 3.72]
- J10. **Wang, Z.**, & Lang, A. (2012). Reconceptualizing excitation transfer as motivational activation changes and a test of the television program context effects. *Media Psychology*, *15*, 68-92. doi: 10.1080/15213269.2011.649604 [Impact Factor: 2.15]
- J9. **Wang, Z.**, Lang, A., & Busemeyer, J. R. (2011). Motivational processing and choice behavior during television viewing: An integrative dynamic approach. *Journal of Communication*, *61*, 71-93. doi: 10.1111/j.1460-2466.2010.01527.x [Impact Factor: 4.41]
- J8. **Wang, Z.**, & Gantz, W. (2010). Health content in local television news: A current appraisal. *Health Communication*, *25*, 230–237. doi: 10.1080/10410231003698903 [Impact Factor: 1.93]
- J7. Busemeyer, J., **Wang, Z.**, & Lampert-Mogiliansky, A. L. (2009). Empirical comparison of Markov and quantum models of decision making. *Journal of Mathematical Psychology*, *53*, 423-433. doi: 10.1016/j.jmp.2009.03.002 **[Most Cited Article in the Past Five Years, JMP]** [Impact Factor: 2.61]
- J6. Gantz, W., & **Wang, Z.** (2009). Coverage of cancer in local television news. *Journal of Cancer Education*, *24*, 65-72. doi:10.1080/08858190802664727 [Impact Factor: 1.28]
- J5. **Wang, Z.**, & Gantz, W. (2007). Health content in local television news. *Health Communication*, *21*, 213-221. doi: 10.1080/10410230701307527 [Impact Factor: 1.93]
- J4. Lang, A., Park, B. H., Sanders, A., Wilson, B., & **Wang, Z.** (2007). Cognition and emotion in TV message processing: How valence, arousing content, structural complexity, and information density affect the availability of cognitive resources. *Media Psychology*, *10*, 317-338. doi: 10.1080/15213260701532880 [Impact Factor: 2.15]
- J3. Busemeyer, J. R., **Wang, Z.**, & Townsend, J. T. (2006). Quantum dynamics of human decision-making. *Journal of Mathematical Psychology*, *50*, 220-241. doi: 10.1016/j.jmp.2006.01.003 **[Most Cited Article in the Past Five Years, JMP]** [Impact Factor: 2.61]

- J2. Gantz, W., **Wang, Z.**, Paul, B., & Potter, R.F. (2006). Sports versus all comers: Comparing TV sports fans with fans of other programming genres. *Journal of Broadcasting & Electronic Media*, 50, 95-118. doi: 10.1207/s15506878jobem5001\_6 [Impact Factor: 1.71]
- J1. Lang, A., Shin, M., Bradley, S.D., **Wang, Z.**, Lee, S., & Potter, D. (2005). Wait! Don't turn that dial! More excitement to come! The effects of story length and production pacing in local television news on channel changing behavior and information processing in a free choice environment. *Journal of Broadcasting & Electronic Media*, 49, 3-22. doi: 10.1207/s15506878jobem4901\_2 [Impact Factor: 1.71]

### Book Chapters (Invited)

(<sup>a</sup> undergraduate or graduate student)

- C13. <sup>a</sup> Xu, S., & **Wang, Z.** (2017). Multitasking: Does it actually exist? P. Vorderer, D. Hefner, L. Reinecke, C. Klimmt (Eds.), *Permanently online, permanently connected: Living and Communicating in a POPC World* (pp. 72-82). New York: Routledge.
- C12. <sup>a</sup> Irwin, M., & Wang, Z. (2017). Dynamic systems modeling. International encyclopedia of communication research methods. In J. Matthes, R. Potter, & C. Davis (Eds.), *International Encyclopedia of Communication Research Methods*, San Francisco, CA: Wiley. <http://onlinelibrary.wiley.com/doi/10.1002/9781118901731.iecrm0074/full>
- C11. <sup>a</sup> Xu, S., & Wang, Z. (2017). Multitasking. In P. Rossler (Ed.), *The international encyclopedia of media effects*. San Francisco, CA: Wiley.
- C10. **Wang, Z.**, & Busemeyer, J. R. (2016). Order effects in sequential judgments and decisions. In H. Atmanspacher & S. Maasen (Eds.), *Reproducibility: Principles, practices, and problems* (pp.391-406). San Francisco, CA: Wiley.
- C9. <sup>a</sup> Irwin, M., & **Wang, Z.** (2015). Media multitasking. In R. Scott & S. Kosslyn (Eds.), *Emerging trends in the social and behavioral sciences*. San Francisco, CA: Wiley.
- C8. Busemeyer, J. R., **Wang, Z.**, Pothos, E. (2015). Quantum models of cognition and decision. In J. R. Busemeyer, Z. Wang, J. T. Townsend, & A. Eidels (Eds.), *Oxford handbook of computational and mathematical psychology* (pp.369-389). NY: Oxford University Press.
- C7. Busemeyer, J. R., **Wang, Z.**, Eidels, A., & Townsend, J. T. (2015). Review of basic mathematical concepts used in mathematical psychology. In J. R. Busemeyer, Z. Wang, J. T. Townsend, & A. Eidels (Eds.), *Oxford handbook of computational and mathematical psychology* (pp.1-10). NY: Oxford University Press.
- C6. **Wang, Z.**, & Gantz, W. (2014). Media content: Televised News. In T. L., Thompson (Ed.), *Encyclopedia of health communication*. Thousand Oaks, CA : SAGE.
- C5. **Wang, Z.**, & Gantz, W. (2014). Media content: Newspaper. In T. L., Thompson (Ed.), *Encyclopedia of health communication*. Thousand Oaks, CA : SAGE.
- C4. **Wang, Z.** (2013). Excitation transfer theory. In M. S. Eastin (Ed.), *Encyclopedia of media violence*. Thousand Oaks, CA : SAGE.
- C3. Busemeyer, J. R., **Wang, Z.** (2010). Quantum probability applied to social and behavioral sciences. In C. Rangacharyulu & E. Haven (Eds.), *Proceedings of the first Interdisciplinary CHESS Interactions Conference* (pp. 115-126). Singapore: World Scientific.

- C2. Bucy, E., Gantz, W., & **Wang, Z.** (2007). News and new technology: Contending with the 24-hour news cycle. In C. A. Lin & D. Atkin (Eds.), *Communication technology and social change* (pp.143-163). Mahwah, NJ: Erlbaum.
- C1. Gantz, W., **Wang, Z.**, & Bradley, S.D. (2006). Televised NFL games, the family, and domestic violence. In A. A. Raney & J. Bryant (Eds.), *Handbook of sports and media* (pp.365-381). Mahwah, NJ: Erlbaum.

### Book Translation (Invited)

- Zhan, J., **Wang, Z.**, & Wang, T. (2005). *A Free and Responsible Press* (Translated from English to Chinese). Beijing, China: Renmin University Press.

### Conference Proceedings (Peer-Reviewed, Full-Text)

- P5. **Wang, Z.**, Solloway, T., & Busemeyer, J. (2013). New empirical tests of a quantum model for question order effects. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 1575-1580). Austin TX: Cognitive Science Society.
- P4. Busemeyer, J. R., **Wang, Z.**, & Trueblood, J. (2012). Hierarchical Bayesian estimation of quantum decision model parameters. In J. R. Busemeyer, F. Dubois, A. Lambert-Mogiliansky, & M. Melucci (Eds.), *Quantum interaction. Lecture Notes in Computer Science, Vol. 7620* (pp. 80-89). Springer.
- P3. Busemeyer, J. R., & **Wang, Z.** (2007). Quantum information processing explanation for interactions between inferences and decisions. In P. D. Bruza, W. Lawless, K. van Rijsbergen, & D. A. Sofge (Eds.), *Quantum interaction, AAAI Spring Symposium, Technical Report, SS-07-08* (pp. 91-97). Menlo Park, CA: AAAI Press.
- P2. **Wang, Z.**, Busemeyer, J.R., & Lang, A. (2006). Grazing or staying tuned: A dynamic stochastic model of channel changing behavior. In R. Sun & N. Miyake (Eds.), *The 28th Annual Conference of the Cognitive Science Society & the 5th International Conference of the Cognitive Science* (pp.870-875). Mahwah, NJ: Erlbaum.
- P1. Busemeyer, J.R., Matthew, M.R., & **Wang, Z.** (2006). A quantum information processing explanation of disjunction effects. In R. Sun & N. Miyake (Eds.), *The 28th Annual Conference of the Cognitive Science Society & the 5th International Conference of the Cognitive Science* (pp.131-135). Mahwah, NJ: Erlbaum.

### Journal or Conference Proceedings Abstracts (Peer-Reviewed)

- A18. Trueblood, J. T., Yearsley, J., Kvam, P., **Wang, Z.**, & Busemeyer, J. R. (2016). Full day tutorial on quantum models of cognition and decision. In Papafragou, A., Grodner, D., Trueswell, J., & Mirman, D. (Eds.), *Proceedings of the 38th Annual Meeting of the Cognitive Science Society* (pp. 1-2). Austin, TX: Cognitive Science Society.
- A17. Trueblood, J. T., Yearsley, J., **Wang, Z.**, & Busemeyer, J. R. (2015). Full day tutorial on quantum models of cognition and decision. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceedings of the 37th Annual Meeting of the Cognitive Science Society* (pp.17-18). Austin, TX: Cognitive Science Society.
- A16. **Wang, Z.**, Busemeyer, J. R., & Trueblood, J. T. (2014). Full day tutorial on quantum models of cognition and decision. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.), *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. 62-63). Austin, TX: Cognitive Science Society.

- A15. Pothos, E. M., **Wang, Z.**, & Busemeyer, J. R. (2013). Half day tutorial on using quantum probability theory to model cognition. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp.45-46). Austin TX: Cognitive Science Society.
- A14. **Wang, Z.**, Solloway, T., Tchernev, J., & Barker, B. (2011). Dynamic motivational processing of anti-drug messages: Mixed feelings and attention. *Psychophysiology*, 48.
- A13. Pothos, E. M., Busemeyer, J. R., Shiffrin, R. M., Trueblood, J. S., **Wang, Z.**, Blutner, R. K., & Atmanspacher, H. (2011). The potential of quantum probability for modeling cognitive processes. In L. Carlson, C. Hoelscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp.1336-1337). Austin, TX: Cognitive Science Society. (a symposium)
- A12. **Wang, Z.**, Morey, A. C., & Srivastava, J. (2010). Processing political ads: Dynamic interactions between emotional appeals and political attitude. *Psychophysiology*, 47, S34.
- A11. Busemeyer, J. R. & **Wang, Z.** (2010). Interactions between categorization and decision making. *Abstracts of the Psychonomic Society 51st Annual Meeting* (Vol. 15), p.23.
- A10. **Wang, Z.**, & Busemeyer, J.R.(2007). Motivation, emotion, and attention: A dynamic approach. *Abstracts of the Psychonomic Society 48th Annual Meeting* (Vol. 12), p.11.
- A9. Busemeyer, J.R., **Wang, Z.** & Matthew, M.R. (2007). A quantum information processing explanation of disjunction effects. *Abstracts of the Psychonomic Society 48th Annual Meeting* (Vol. 12), p.2.
- A8. Gantz, W., & **Wang, Z.** (2006). Cancer information in local television news: From an information seeking perspective. *Frontiers in Cancer Prevention Research* conference proceedings.
- A7. **Wang, Z.**, & Lang, A. (2006). Ad placement matters: A psychophysiological examination of program context effects on advertising processing. *Psychophysiology*, 43, S104.
- A6. Potter, R.F., **Wang, Z.**, Angelini, J.R., Sanders-Jackson, A., Kurita, S., Koruth, J., & Lang, A. (2006). The effect of structural complexity and information density on cognitive effort and arousal during audio message processing. *Psychophysiology*, 43, S79.
- A5. Lang, A., Sparks, J., Bradley, S.D., Lee, S.K., & **Wang, Z.** (2004). Processing arousing information: Psychophysiological predictors of motivated attention. *Psychophysiology*, 41, S61.
- A4. Bradley, S.D., Shin, M., **Wang, Z.**, Lee, S.J., & Lang, A. (2003). Processing the nightly news: How shot and story length affect effort, arousal, and encoding. *Psychophysiology*, 40, S27.
- A3. Shin, M., Bradley, S.D., Lee, S.J., **Wang, Z.**, & Lang, A. (2003). Why people change: Does physiology predict channel changing behavior? *Psychophysiology*, 40, S78.
- A2. Fox, J.R., Chung, Y., Lee, S.W., Schwartz, N., Haverhals, L., **Wang, Z.**, Lang, A., & Potter, D. (2003). Effects of graphics on processing television news. *Psychophysiology*, 40, S41.
- A1. Fox, J.R., Lang, A., Chung, Y., Lee, S.W., Schwartz, N., Haverhals, L., **Wang, Z.**, Bradley, S. D., & Potter, D.(2002). Effects of text and animated graphics in television news stories on viewer attention, arousal, and memory. *Psychophysiology*, 39, S36.

### Technical Reports, Academic Tutorials, and Workshops

(Peer-reviewed and competitive, unless noted otherwise)

- T12. Busemeyer, J. R., Plesckac, T., Pothos E., Trueblood, J. T., & **Wang, Z.** (2017). Computational tools for developing and testing models of quantum cognition. A full-day workshop, University of Warwick, UK.

2017 William K. and Katherine W. Estes Fund Advanced Training in Mathematical and Computational Modeling of Psychological Science.

- T11. Trueblood, J. T., Yearsley, J., Kvam, P., **Wang, Z.**, & Busemeyer, J. R. (2016). Quantum models of cognition and decision. A full-day tutorial at The 38th Annual Conference of the Cognitive Science Society, August, Philadelphia, PA.
- T10. Trueblood, J. T., Yearsley, J., **Wang, Z.**, & Busemeyer, J. R. (2015). Quantum models of cognition and decision. A full-day tutorial at The 37th Annual Conference of the Cognitive Science Society, July, Pasadena, CA.
- T9. **Wang, Z.**, Busemeyer, J. R., & Trueblood, J. (2014). Using quantum probability theory to model cognition. A full-day tutorial at The 36th Annual Conference of the Cognitive Science Society, July, Quebec City, Canada.
- T8. Busemeyer, J. R., & **Wang, Z.** (2014). Contextualized probability theories. Invited symposium at the Society for Mathematical Psychology annual meeting, July 2014, Quebec City, Canada.
- T7. Pothos, E. M., **Wang, Z.**, & Busemeyer, J. R. (2013). Using quantum probability theory to model cognition. A half-day tutorial at The 35th Annual Conference of the Cognitive Science Society, July, Berlin, Germany.
- T6. Busemeyer, J.R., & **Wang, Z.** (July 21, 2012). *To build human cognitive models using quantum probability and dynamics*. A half-day workshop at the 45th Annual Meeting of the Society for Mathematical Psychology, July, Columbus, OH
- T5. Lang, A., **Wang, Z.**, Kurita, S., Bradley, S. D., & Rubenking, B. (2009). *Motivational Activation Measurement (MAM): Technical manual and normative ratings (Version 2)*. Technical Report, Institute for Communication Research, Indiana University, Bloomington.
- T4. Busemeyer, J.R., & **Wang, Z.** (July 29, 2009). *Quantum information processing theory*. A full day tutorial at The 31th Annual Conference of the Cognitive Science Society, July, Amsterdam, The Netherlands.
- T3. Busemeyer, J.R., & **Wang, Z.** (July 23, 2008). *Quantum information processing theory*. A full day tutorial at The 30th Annual Conference of the Cognitive Science Society, July, Washington, D. C.
- T2. Busemeyer, J.R., & **Wang, Z.** (August 1, 2007). *Quantum information processing theory*. A full day tutorial at The 29th Annual Conference of the Cognitive Science Society, August, Nashville, TN.
- T1. Lang, A., **Wang, Z.**, & Bradley, S.D. (2004). *Motivational Activation Measurement (MAM): Technical manual and normative ratings*. Technical Report, Institute for Communication Research, Indiana University, Bloomington.

### Conference Presentations (Peer-Reviewed)

- Busemeyer, J. R., & **Wang, Z.** (2017). Hilbert space multi-dimensional modeling. Paper presented at the Society for Mathematical Psychology annual meeting, July 2017, Warwick, England.
- Wang, Z.**, Borghetti, L., & Hu, X.D. (2017). Influence of symptom specificity and order on online medical diagnoses. Paper presented to the International Communication Association, May 2017, San Diego, CA.
- Polavin, N., & **Wang, Z.** (2017). How atypical communication influences jury verdicts. Paper presented to the International Communication Association, May 2017, San Diego, CA.

- Davidson, E., **Wang, Z.**, Wang, T., Tchernev, J., & Collier, J. (2017). Dynamic measures of narrative transportation experience. Paper presented to the International Communication Association, May 2017, San Diego, CA.
- Borghetti, L., **Wang, Z.**, & deBuys B. (2017). What's the benefit? The influence of argument strength and order presentation on judgments about public land use. Paper presented to the International Communication Association, May 2017, San Diego, CA.
- Borghetti, L., & **Wang, Z.** (2017). Categorization and decision-making in humans teaming with machines. Paper presented to the International Communication Association, May 2017, San Diego, CA.
- Borghetti, L., **Wang, Z.**, & Davidson, E. (2017). Neural sensitivity to explicit versus implicit categorization. Paper presented to the International Communication Association, May 2017, San Diego, CA.
- Polavin, N., & **Wang, Z.** (2016). The influence of the unpacking effect on non-economic damages awards. Paper presented to the National Communication Association, November 2016, Philadelphia, PA.
- Irwin, M., & **Wang, Z.** (2016). Dynamic modeling in communication research. Paper presented to the International Communication Association, June 2016, Fukuoka, Japan.  
**(Top Faculty Paper Award)**
- Collier, J., Tchernev, J., **Wang, Z.**, & Tyrawski, J. (2016). Toward a dynamic model of empathy, narrative transportation, and autobiographical memory. Paper presented to the International Communication Association, June 2016, Fukuoka, Japan.
- Lloyd, J., Crano, W. D., **Wang, Z.**, Schmaelzle, R., Evans, W., & Alvaro, E. (2016). Transdisciplinary research to inform the next generation of drug use prevention messages. A roundtable presented to the Society for Prevention Research annual meeting, June, 2016, San Francisco, CA.
- Hedstrom, A., **Wang, Z.**, & Irwin, M. (2015). Emotional eating and social support. Paper presented to the National Communication Association, November 2015, Las Vegas.
- Irwin, M., **Wang, Z.**, & Hedstrom, A. (2015). The dynamics of media multitasking and food consumption: An experience sampling study. Paper presented to the National Communication Association, November 2015, Las Vegas.
- Cooper, C., **Wang, Z.**, Solloway, T., Hedstrom, A., & Irwin, M. (2015). Explore the effects of communication on decision making. Paper presented to the National Communication Association, November 2015, Las Vegas.
- Busemeyer, J. R., & **Wang, Z.** (2015). Multi-dimensional Hilbert space modeling of tables extracted from big data. Paper presented at the Society for Mathematical Psychology annual meeting, July 2015, Newport Beach, California.
- Wang, Z.**, Woods, K. W., Xu, S., & Cooper, C. (2015). Does media multitasking make food taste bland? Paper presented to the International Communication Association, May 2015, Puerto Rico.
- Irwin, M., **Wang, Z.**, & Hedstrom, A. (2015). Mismatched gratifications of media multitasking and its impacts on food intake: A dynamic experience sampling study. Paper presented to the International Communication Association, May 2015, Puerto Rico.
- Cooper, C., & **Wang, Z.** (2015). Formally modeling attention allocation in a dynamic media environment. Paper presented to the International Communication Association, May 2015, Puerto Rico.
- Xu, S., **Wang, Z.**, David, P., & Xie, T. (2015). Media multitasking and wellbeing of college students. Paper

- presented to the International Communication Association, May 2015, Puerto Rico.
- Tyrawski, J. A., & **Wang, Z.** (2015). The framing effects of user-generated comments on online news stories. Paper presented to the International Communication Association, May 2015, Puerto Rico.
- Banjo, O., **Wang, Z.**, Appiah, O., Walther, W., & Brown, C. (2015). Wait, can I laugh at this? Group viewing and racial humor message. Paper presented to the International Communication Association, May 2015, Puerto Rico.
- Wang, Z.** (2014). What is complementarity and compatibility in quantum cognition? Paper presented to Society for Mathematical Psychology annual meeting, July 2014, Quebec City, Canada.
- Wang, Z.**, Solloway, T., & Cooper, C. (2014). Communication can reduce stereotyping behavioral decision. Paper presented to the International Communication Association, May 2014, Seattle, WA.
- Wang, Z.**, Li, Z.J., Hedstrom, A., & Irwin, M. (2014). Social media, social support, and solitude among college students. Paper presented to the International Communication Association, May 2014, Seattle, WA.
- Anderegg, C., Alade, S., Ewoldsen, D., & **Wang, Z.** (2014). Comprehension models of audiovisual discourse processing. Paper presented to the International Communication Association, May 2014, Seattle, WA.
- Busemeyer, J., **Wang, Z.**, Pleskac, T., Kvam, P. (2013). Markov versus quantum random walk models of decision making. Paper presented at the Society for Mathematical Psychology annual meeting, August 2013, Potsdam, Germany.
- Wang, Z.**, Irwin, M., Cooper, C., & Srivastava, J. (2013). Multi-dimensions of media multitasking. Paper presented to the International Communication Association, June 2013, London, UK.  
**(Top One Faculty Paper Award)**
- Wang, Z.**, & Solloway, T. (2013). An *a priori* and parameter-free quantum model for cognitive measurement order effects. Paper presented at the Midwestern Cognitive Science Conference, May 2013, Columbus, OH.
- Wang, Z.**, Tchernev, J., & Solloway, T. (2012). A dynamic longitudinal examination of social media use, needs, and gratifications among college students. Paper presented to the National Communication Association annual meeting, November 2012, Orlando, FL.  
**(Top Paper Award)**
- Wang, Z.**, & Busemeyer, J. R. (2012). Entangling beliefs and actions during interpersonal interactions. Paper presented at the Society for Mathematical Psychology annual meeting, July 2012, Columbus, OH.
- Busemeyer, J. R., **Wang, Z.**, & Shiffrin, R. (2012). Bayesian model comparison of quantum versus traditional models of decision making for explaining violations of the dynamic consistency principle. Paper presented at the Foundations and Applications of Utility, Risk and Decision Theory (FUR) XV international conference, June 2012, Atlanta, GA.
- Wang, Z.**, Vang, M. H., Lookadoo, K. L., & Cooper, C. (2012). Enticing high sensation seekers: The dynamic interplay of sensation seeking, information complexity and arousing content. Paper presented to the International Communication Association, May 2012, Phoenix, AZ.
- Wang, Z.**, Tyrawski, J. A., Schumaker, E.M., Cooper, C., Zhao, X., & Bishop, L. (2012). Supporting the cigarette graphic warning policy on the web: An examination of health-political attitude interaction. Paper presented to the International Communication Association, May 2012, Phoenix, AZ.
- Solloway, T., Tyrawski, J.A., & **Wang, Z.** (2012). The worth of pictures in print ads. Paper presented to the International Communication Association, May 2012, Phoenix, AZ.

- Wang, Z.,** Solloway, T., Tchernev, J., & Barker, B. (2011). Dynamic motivational processing of anti-drug messages: Mixed feelings and attention. Paper presented to Society for Psychophysiological Research annual conference, September 2011, Boston, MA.
- Busemeyer, J., Shiffrin, R., & **Wang, Z.** (2011). Model selection applied to quantum probability models. Paper presented at the Society for Mathematical Psychology annual meeting, July 2011, Boston, MA.
- Pothos, E., Busemeyer, J. R., Shiffrin, R. M., Trueblood, J., **Wang, Z.**, Blutner, R. K., & Atmanspacher, H. (2011). The potential of quantum probability for modeling cognitive processes. Paper presented at the 33<sup>rd</sup> Annual Conference of the Cognitive Science Society, July 2011, Boston, MA.
- Wang, Z.,** Collier, J. & Barker, B. (2011). Revisit the impact of question order on the third person effects. Paper presented to the International Communication Association, June 2011, Boston, MA.
- Wang, Z.,** & Tchernev, J. (2011). The myth of media multitasking: A dynamic panel analysis of media multitasking, personal needs, and gratifications. Paper presented to the International Communication Association, June 2011, Boston, MA.
- Wang, Z.,** & Morey, A. C. (2011). The decisive moments in emotional political ads processing: A multilevel analysis of the peak-and-end rule, political attitudes, and perceived persuasion. Paper presented to the International Communication Association, June 2011, Boston, MA.
- Wang, Z.** & Busemeyer, J. R. (2011). Explaining and predicting question order effects using a quantum probability model. Paper presented to the International Communication Association, June 2011, Boston, MA..
- Powers, S. R., **Wang, Z.,** Morey, A. C., Solloway, T., & Whitaker, J. (2011). Desensitization to violent images: Individual differences in habituation responses. Paper presented to the International Communication Association, June 2011, Boston, MA.
- Wang, Z.,** Morey, A. C., & Srivastava, J. (2010). Processing political ads: Dynamic interactions between emotional appeals and political attitude. Paper presented to Society for Psychophysiological Research annual conference, September-October 2010, Portland, OR.
- Wang, Z.,** Srivastava, J., David, P., D'Ángelo, J., Moreland, J., Brady, C., & Powers, S. R. (2010). Multitasking within same modality and between modalities: An examination of task performance and eye movement. Paper presented to the International Communication Association, June 2010, Singapore.
- Wang, Z.** (2009). Coactivation: An examination on subjective feelings, physiological responses, and adaptive functions. Paper presented to the International Communication Association, May 2009, Chicago, IL.
- Wang, Z.,** Morey, A. C., Srivastava, J., & Kruczkowski, A. (2009). Dynamics of processing emotional political ads. Paper presented to the International Communication Association, May 2009, Chicago, IL.
- Kurita, S., Lang, A., Potter, R., **Wang, Z.,** Weaver, A., Bae, S., Lee, S., & Koruth, J. (2009). Gender differences in motivational activation. Paper presented to the International Communication Association, May 2009, Chicago, IL.
- Wang, Z.,** Lang, A., & Busemeyer, J. R. (2008). Motivational processing and choice behavior during television viewing: An integrative dynamic approach. Paper presented to the International Communication Association, May 2008, Montreal, Quebec, Canada. **(Top Paper Award)**
- Kurita, S., Lee, S., **Wang, Z.,** & Lang, A. (2008). How much is too much? Media structure, content, cognitive load, and overload. Paper presented to the International Communication Association, May 2008, Montreal, Quebec, Canada.

- Yeghyan, N., Wilson, B., Gao, Y., Mayell, S., **Wang, Z.**, & Lang, A. (2008). Approach? Avoid? Or both? Processing coactive motivational media messages. Paper presented to the International Communication Association, May 2008, Montreal, Quebec, Canada.
- Wang, Z.** & Busemeyer, J.R.(2007). Motivation, emotion, and attention: A dynamic approach. Paper presented to the Psychonomic Society 48<sup>th</sup> Annual Meeting, November 2007, Long Beach, CA.
- Busemeyer, J.R., **Wang, Z.** & Matthew, M.R. (2007). A quantum information processing explanation of disjunction effects. Paper presented to the Psychonomic Society 48<sup>th</sup> Annual Meeting, November 2007, Long Beach, CA.
- Wang, Z.** (2007). Method is message: Dynamic signal detection theory and its application to media memory research. Paper presented to the International Communication Association, May 2007, San Francisco, CA.
- Gantz, W. & **Wang, Z.** (2007). Health content in local television news: A current appraisal. Paper presented to the International Communication Association, May 2007, San Francisco, CA.
- Busemeyer, J. R., & **Wang, Z.** (2007). Quantum information processing explanation for interactions between inferences and decisions. Paper presented to the Quantum Interaction Symposium of the American Association for Artificial Intelligence, March, Stanford University, 2007.
- Wang, Z.** (2006). The effects of emotional television programming on advertising processing. Paper presented to the International Communication Association, June 2006, Dresden, Germany.
- Wang, Z.** (2006).The effects of message arousal and valence on implicit and explicit memory. Paper presented to the International Communication Association, June 2006, Dresden, Germany.
- Wang, Z.**, Fox, J., & Bradley, S.D (2006). Emotional context and typicality in encoding and reality assessment of television scenarios. Paper presented to the International Communication Association, June 2006, Dresden, Germany.
- Wang, Z.**, Busemeyer, J.R., & Lang, A. (2006). A dynamic model of decision making and channel changing behavior during television viewing. Paper presented to the International Communication Association, June 2006, Dresden, Germany.
- Wang, Z.**, & Lang, A. (2006). Ad placement matters: A psychophysiological examination of program context effects on advertising processing. Paper presented to Society for Psychophysiological Research annual conference, October 2006, Vancouver, BC, Canada.
- Potter, R.F., **Wang, Z.**, Angelini, J.R., Sanders-Jackson, A., Kurita, S., Koruth, J., & Lang, A. (2006). The effect of structural complexity and information density on cognitive effort and arousal during audio message processing. Paper presented to Society for Psychophysiological Research annual conference, October 2006, Vancouver, BC, Canada.
- Potter, R., **Wang, Z.**, Lee, S.K., Koruth, K.J., Banerjee, M., & Kobach, M.(2006). Sounds like a winner: Examining structural features and basic content in five years of award-winning radio ads. Paper presented to the International Communication Association, June 2006, Dresden, Germany.
- Busemeyer, J. R., & **Wang, Z.** (2006). Application of quantum computing to psychology. Paper presented to the Society for Mathematical Psychology Annual Meeting, July 2006, Vancouver, BC, Canada.

- Wang, Z.**, Busemeyer, J.R., & Lang, A. (2006). Grazing or staying tuned: A dynamic stochastic model of channel changing behavior. Paper presented to Annual Conference of the Cognitive Science Society, Vancouver, BC, Canada.
- Busemeyer, J.R., Matthew, M.R., & **Wang, Z.** (2006). A quantum information processing explanation of disjunction effects. Paper presented to Annual Conference of the Cognitive Science Society, Vancouver, BC, Canada.
- Gantz, W., & **Wang, Z.** (2006). Local television news coverage of health. Paper presented to American Academy on Communication in Healthcare Research and Teaching Forum, October 2006, Atlanta, GA.
- Gantz, W., & **Wang, Z.** (2006). Cancer information in local television news: From an information seeking perspective. Paper presented to American Association for Cancer Research International Conference on Frontiers in Cancer Prevention Research, November 2006, Boston, MA.
- Wang, Z.** (2005). Ad placement matters: A psychophysiological re-examination of program context effects on ad processing. Paper presented to the International Communication Association, May 2005, New York City, NY.
- Bradley, S. D., & **Wang, Z.** (2005). Euclidean distance as a theory of perceived reality. Paper presented to the International Communication Association, May 2005, New York City, NY.
- Potter, R.F., **Wang, Z.**, Kurita, S., Sanders-Jackson, A., Koruth, J., Tao, C., & Lang, A. (2005). I<sup>2</sup> audio: Does examining information introduced by auditory structural features help clarify perplexing research findings? Paper presented to the International Communication Association, May 2005, New York City, NY.
- Gantz, W., **Wang, Z.**, Potter, R., & Paul, B. (2005). Sports vs. all comers: Comparing TV sport fans with fans of other programming genres. Paper presented to the International Communication Association, May 2005, New York City, NY.
- Wang, Z.**, Bradley, S.D., & Lang, A. (2004). Measuring individual variation and motivational activation: MAM, mini-MAM, YO-MAM. Paper presented to International Communication Association, May 2004, New Orleans, LA.
- Angelini, J.R., **Wang, Z.**, Bradley, S.D., & Lang, A. (2004). Measuring motivation activation in children: A look at sensation seeking, motivation, and substance use. Paper presented to the International Communication Association, May 2004, New Orleans, LA.
- Lang, A., Sparks, J., Bradley, S.D., Lee, S.K., & **Wang, Z.** (2004). Processing arousing information: Psychophysiological predictors of motivated attention. Paper presented to Society for Psychophysiological Research annual conference, October, 2004, Santa Fe, NM.
- Wang, Z.**, & Gantz, W. (2004). Health content in local television news. Paper presented to the Association for Education and Mass Communication annual conference, August 2004, Toronto, Canada.
- Bradley, S.D., Angelini, J.R., **Wang, Z.**, & Lang, A. (2003). Processing AIDS/HIV prevention messages: Arousing content, production pacing, and sexual experience. Paper presented to the Association for Education in Journalism and Mass Communication, July-August 2003, Kansas City, MO.
- Bradley, S.D., Shin, M., **Wang, Z.**, Lee, S.J., & Lang, A. (2003). Processing the nightly news: How shot and story length affect effort, arousal, and encoding. Paper presented to Society for Psychophysiological Research annual conference, October, 2003, Chicago, IL.

- Fox, J.R., Chung, Y., Lee, S.W., Schwartz, N., Haverhals, L., **Wang, Z.**, Lang, A., & Potter, D. (2003). Effects of graphics on processing television news. Paper presented to Society for Psychophysiological Research annual conference, October, 2003, Chicago, IL.
- Shin, M., Bradley, S.D., Lee, S.J., **Wang, Z.**, & Lang, A. (2003). Why people change: Does physiology predict channel changing behavior? Paper presented to Society for Psychophysiological Research annual conference, October, 2003, Chicago, IL.
- Gantz, W., Bradley, S. D., & **Wang, Z.** (2003). Televised NFL games and domestic violence: A 12 city study. Paper presented to the International Communication Association, May 2003, San Diego, CA.
- Wang, Z.**, Yang, X.Y., & Liu, Y.Y. (2002). Print advertisement features, imagery, and memory. Presented to the Indiana University Research Conference, November 2002, Indianapolis, IN.
- Fox, J.R., Lang, A., Chung, Y., Lee, S.W., Schwartz, N., Haverhals, L., **Wang, Z.**, Bradley, S. D., & Potter, D.(2002). Effects of text and animated graphics in television news stories on viewer attention, arousal, and memory. Paper presented to Society for Psychophysiological Research annual conference, October, 2003, Chicago, IL.

### **Selected Invited Plenary/Colloquium Talks**

- Wang, Z.** (2016). Multidimensions of media multitasking. Amsterdam School of Communication Research, University of Amsterdam, Netherlands. (The annual McQuail Lecture by the McQuail Award winner)
- Wang, Z.** (2016). The dynamics of media processing and use: Personalized message design and delivery based on dynamic methods and models. Tobacco Centers of Regulatory Science, University of Pennsylvania, Philadelphia, PA.
- Wang, Z.** (2015). Personalized message design and delivery based on dynamic methods and models. NIDA workshop on neuro-imaging and media messages for adolescents, Rockville, MD.
- Wang, Z.** (2015). Quantum decision theory. The Program for Economic Research and the Center for Decision Science, Columbia University, NY.
- Wang, Z.** (2015). Multi-dimensional Hilbert space model of order effects in perspective changing. The Quantum Probability and the Mathematical Modeling of Decision Making conference, University of Toronto, Canada.
- Wang, Z.** (2014). Measurement order effects and compatibility in cognition. Purdue Winer Memorial lectures, Purdue University, Lafayette.
- Wang, Z.** (2014). Order effects in sequential judgments and decisions. Munich center for Technology in Society, Technology University Munich, Munich, Germany.
- Wang, Z.** (2014). Contextualized probability and measurement compatibility in cognition. Society for Mathematical Psychology annual meeting, Quebec City, Canada.
- Wang, Z.** (2013). Quantum Probabilistic and Dynamic Models of Cognition and Decision. Institute for Mathematical Behavioral Sciences, UC-Irvine, CA.
- Wang, Z.** (2013). Reciprocal Dynamics between Media Processing and Media Choices. Department of Communication, Michigan State University, East Lansing, MI.

- Wang, Z.** (2012). Toward a Theory of Complementarity in Psychology. Quantum Cognition roundtable, Institute for Frontier Areas of Psychology, Germany.
- Wang, Z.** (2012). Dynamic Media Use and Processing. Department of Telecommunications, Indiana University, Bloomington, IN.
- Wang, Z.** (2012). Quantum Dynamic Models of Cognition. Center for Cognition, Action & Perception, University of Cincinnati, OH.
- Wang, Z.** (2011). The Potential of Quantum Probability for Modeling Cognitive Processes. Center for Cognition, Action & Perception, University of Cincinnati, OH.
- Wang, Z.** (2011). Quantum Decision Theory. Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN.
- Wang, Z.** (2008). The Use of Psychophysiological Measure in Media Research. School of Digital Contents, Kyungsoong University, South Korea.
- Wang, Z.** (2008). The Use of Dynamic Cognitive Models in Media Research. School of Digital Contents, Kyungsoong University, South Korea.
- Wang, Z.** (2005). Quantitative Communication Research. China Youth University for Political Sciences, Beijing, China.

### **Graduate and Honors Undergraduate Students Advising**

#### **Post-Doctoral Fellow:**

Wan-Yun Yu (2017-2018)

#### **Ph.D. Advisor & Committee Chair:**

Tyler Solloway (2014)	Senior Marketing Scientist, Liberman Research Worldwide, Los Angeles, CA
John Tchernev (2015)	Tenure-track Assistant Professor, University of Miami, Oxford, OH
Bethany Barker (2017)	Senior Lecturer, The Ohio State University, Columbus, OH
Matthew Irwin (2017)	Consumer Research Scientist, Nationwide Insurance, Columbus, OH
Cody Cooper (exp. 2018)	Senior Marketing Scientist, Liberman Research Worldwide, Los Angeles, CA
Emily Davidson	In progress (exp.2018)
Alex Hedstrom	In progress (exp.2018)
Shan Xu	In progress
Kelsey Woods	In progress
Lorraine Borghetti	In progress
Nicholas Polavin	In progress
Brahm deBuys	In progress
Xiaodan Hu	In program

#### **Ph.D. Dissertation Committee Member:**

Kyle Messer  
 Rachel Ralston (2016)  
 Angela Palmer-Wackerly (2015)  
 Jennifer Tyrawski (2015)  
 Mao Vang-Corne (2015)

James Collier (2013)  
Alyssa Morey (2012)  
Jatin Srivastava (2010)  
Tingting Lu (2008)

**Ph.D. Candidacy Exam Committee Member:**

Rachel Ralston (2015)  
Angela Palmer-Wackerly (2014)  
Jennifer Tyrawski (2014)  
Mao Vang-Corne (2014)  
James Collier (2012)  
Alyssa Morey (2011)  
Jatin Srivastava (2009)

**M.A. Advisor & Committee Chair:**

Alex Hedstrom (2014)	Currently Ph.D. student
Linghan Wang (2014)	Senior Marketing Analyst for Nielsen
Cody Cooper (2013)	Senior Marketing Scientist for Liberman Research Worldwide, Los Angeles, CA
Bethany Barker (2012)	Lecturer, The Ohio State University, Columbus, OH
Caryn Ragin (2012)	Attorney

**M. A. Committee Member:**

Jonathan Anderson (2011)  
James Collier (2010)

**Undergraduate Honors Thesis Advisor:**

Yilu Sun (2016) Communication & Economics (double-major); graduate program, Cornell University  
Zhengjie Li (2014) Communication and Mathematics (double-major);  
Research Analyst for Kantar Retail, Shanghai, China