SUE M. LIM

sueminnlim.com   limsue@msu.edu   @sueminnlim

552 Communication Arts & Sciences, 404 Wilson Road East Lansing MI, 48823

EDUCATION

PhD, Communication – Michigan State University (MSU)   (expected) 2025

> Dissertation: Human-embodied AI agent interaction in VR*: Effects of AI health coach's nonverbal *rapport-building behavior* on psychological and behavioral outcomes.
>
> Preliminary Project*: Artificial social influence* via human-embodied AI agent interaction in immersive *VR:* Effects of *similarity-matching* during health conversations.
>
> Committee: Ralf Schmälzle (Advisor), Gary Bente, Monique Turner, Wei Peng

MA, Communication – University of Wisconsin-Milwaukee (UWM)   2021

> Committee: Mike Allen (Advisor), Xiaoxia Cao, Erin Ruppel

BS, Economics (Marketing) – The Wharton School of the University of Pennsylvania   2015

PROFESSIONAL HISTORY

NSF VR Public Speaking Study (RA), Ralf Schmälzle – MSU (East Lansing, MI)   2024-

> Implemented experiments involving neurophysiological measurements and motion capture
>
> Trained RAs on data collection and cleaning; Recruited and scheduled participants

Center for Statistical Training & Consulting (RA) – MSU (East Lansing, MI)   2022-2023

> Secured two externally funded projects ($7303.70 total)
>
> Advised 18 graduate students on dissertations and other degree requirements
>
> Conducted statistical analysis for 9 journal/conference submissions & 1 book chapter

Department of Communication (TA) – Michigan State University (East Lansing, MI)   2021-2023

> Instructor on record (2 courses); Recitation Instructor (3 courses)

Department of Communication (TA) – UWM (Milwaukee, WI)   2019-2021

> Instructor on record for Business & Professional Communication

NAXION, Marketing Research Firm (Philadelphia, PA)   2015-2019

> Led a team of 5 for a multinational member satisfaction study for a $32B finance company
>
> Developed advertising & branding strategies for a $84B multinational pharmaceutical firm

PUBLICATIONS

Journal Articles & Preprints

14. **Lim, S.,** Schmälzle, R., & Bente, G. (in press). Artificial social influence: Rapport-building, LLM-based embodied conversational agents for health coaching. *Proceedings of CONNECT Workshop*

at the 24th ACM International conference on Intelligent virtual agents (IVA) 2024. CEUR Workshop Proceedings.

13. Peng, W., Lee, H., & **Lim, S.** (2024). Leverage chatbots to combat health misinformation for older adults: A participatory design approach. *JMIR Formative Research*. https://doi.org/10.2196/60712

12. Jeon, M., **Lim, S.,** Lapinski, M. K., Bente, G., Spates, S., & Schmälzle, R. (2024). Attention and retention effects of culturally targeted billboard messages: An eye-tracking study in a realistic virtual reality environment. *bioRxiv*

11. **Lim, S.**, Cho, H. J., Jeon, M., Cui, X., & Schmälzle, R. (2024). Using VR and eye-tracking to study attention to and retention of AI-generated ads in outdoor advertising environments. *bioRxiv*. https://doi.org/10.1101/2024.08.15.607684 [link] *Second/third authors contributed equally.

10. **Lim, S.**, Schmälzle, R., & Bente, G. (2024). Artificial social influence via human-embodied AI agent interaction in immersive virtual reality (VR): Effects of similarity-matching during health conversations. *arXiv*. https://doi.org/10.48550/arXiv.2406.05486 [link]

9. Cho, H. J., **Lim, S.,** Turner, M., Bente, G., & Schmälzle, R. (2024). Eyes on VR: Unpacking the Causal Chain Between Exposure, Reception, and Retention for Emotional Billboard Messages. *bioRxiv*. https://doi.org/10.1101/2024.07.19.604208 [link]

8. **Lim, S.,** & Schmälzle, R. (2024). The effect of source disclosure on evaluation of AI-generated messages. *Computers in Human Behavior: Artificial Human*, *2*(1), 100058. https://doi.org/10.1016/j.chbah.2024.100058 [link]

7. Peng, W., Meng, J., **Lim, S.,** & Liu, H. (2024). Online health [mis] information processing and evaluation among older adults: Comparing "Misinformation Detectives" and "Misinformation Victims". https://dx.doi.org/10.2139/ssrn.4725205 [link]

6. Schmälzle, R., Wu, J., **Lim, S.**, & Bente, G. (2024). The eyes have it: Inter-subject correlations of pupillary responses for audience response measurement in VR. *bioRxiv.* https://doi.org/10.1101/2024.01.22.576685 [link]

5. Schmälzle, R., **Lim, S.**, Wu, J., Bezbaruah, S., & Hussain, S. A. (2024). Two of a kind: Adolescent twins' brains align more closely during a social movie. *Journal of Media Psychology*. https://doi.org/10.1027/1864-1105/a000422 [link]

4. **Lim, S.,** & Schmälzle, R. (2024). Exploring the mechanisms of AI message generation: A chatbot development activity for students. *Communication Teacher*, *38*(1), 21-27. https://doi.org/10.1080/17404622.2023.2269258 [link]

3. Schmälzle, R., **Lim, S.**, Cho, H. J., Wu, J., & Bente, G. (2023). Examining the exposure-reception-retention link in realistic communication environments via VR and eye-tracking: The VR

billboard paradigm. *PLOS One*, *18*(11), e0291924.
https://doi.org/10.1371/journal.pone.0291924 [link]

2. **Lim, S.,** & Schmälzle, R. (2023). Artificial intelligence for health message generation: An empirical study using a large language model (LLM) and prompt engineering. *Frontiers in Communication*, *8*, 1129082. https:/doi.org/10.3389/fcomm.2023.1129082 [link]

1. Wei, P., **Lim, S.**, & Meng, J. (2023). Persuasive strategies in online health misinformation: A systematic review. *Information, Communication, and Society*, 1-18. https://doi.org/10.1080/1369118X.2022.2085615 [link]

Manuscripts Under Review / In Preparation

16. Schmälzle, R., Wu, J., **Lim, S**., & Bente, G. (revise and resubmit, Journal of Media Psychology). *Title masked for review.*

15. Schmälzle, R., **Lim, S.,** Jahn, N., Wilcox, S., & Ye, Q. (revise and resubmit, Asian Communication Research). *Title masked for review.*

14. Peng, W., Meng, J., **Lim, S.,** & Liu, H. (revise and resubmit, Telematics & Informatics). *Title masked for review.*

13. Smith, M., Myers, C. L., Chong, M., Clark, M. D., **Lim, S.,** Rollins, D. D., Fields, V. T., Rodrigues, L., Njonge, W., & Martin, O. (revise and resubmit, Political Communication*). Title masked for review.*

12. **Lim, S.,** Schmälzle, R., & Bente, G. (under review, Computers in Human Behavior: Artificial Humans). *Title masked for review.*

11. **Lim, S.**, Cho, H. J., Jeon, M., Cui, X., & Schmälzle, R. (under review, Journal of Advertising). *Title masked for review.*

10. **Lim, S.**, Lim, S. S. Y., Park, S., & Lee, H. (under review, CSCW conference). *Title masked for review.*

9. Cho, H. J., **Lim, S.,** Turner, M., Bente, G., & Schmälzle, R. (under review, Human Behavior & Emerging Technologies). *Title masked for review.*

8. Jeon, M., **Lim, S.,** Lapinski, M. K., Bente, G., Spates, S., & Schmälzle, R. (under review, Communication Monographs). *Title masked for review.*

7. **Lim, S.,** Yang, Q., Meng, J., & Rains, S. (under review, Behaviour & Information Technology). *Title masked for review.* *First two authors share 1st-authorship

6. Hussain, A., Schmälzle, R., **Lim, S.,** & Bouali, N. (under review, Communication Research Reports). *Title masked for review*.

5. **Lim, S.**, Schmälzle, R., & Bente, G. (in preparation). *Title masked.*

4. **Lim, S.**, Schmälzle, R., & Bente, G. (in preparation). *Title masked.*

3. **Lim, S.**, Lim, S. S. Y., Park, S., & Lee, H. (in preparation). *Title masked.*

2. **Lim, S.**, Lim, S. S. Y., Park, S., & Lee, H. (in preparation). *Title masked.*

1. Smith, M., **Lim, S.,** et al. (in preparation*). Title masked.*

Book Chapters
1. Jones, C.M. & **Lim, S.** (2020). Technology in the workplace. In E. Mueller and M. Allen (Eds.), *Business and Professional Communication* (pp. 293-306). New York: McGraw Hill Education.

GRANTS & FUNDING

National Science Foundation (NSF), Co-Writer, $801,061.56 (Pending) 2024
Text-To-Nonverbal conversational agents (TTN-ECAs): Redefining college mentoring with embodied virtual coaches *[Proposal #2445561]*

Microsoft, Accelerate Foundation Models Research Grant, Co-Writer, $20,000 (Not funded) 2023
Artificial intelligence for artificial social influence in virtual reality: Harnessing LLMs for avatar-human dialogue interactions in immersive virtual environments

Charles J. Strosacker Graduate Research Grant, PI, $4,000 (Awarded) 2022
Designing technology-based mental well-being support tools for a Korean American young adult community in Michigan

National Institute of Health (NIH) R21 Resubmission, Co-Writer, $414,668.51 (Not funded) 2023
A VR platform to study health-related food choices at the Point-of-Sale

Funded Project, Center for Statistical Training & Consulting, $6,338.40 (Awarded) 2023
Auditory-visual speech perception in the first and second language: Using eye tracking to investigate effects of task difficulty *[CSTAT Bid # C23-1186/B1061]*

Funded Project, Center for Statistical Training & Consulting, $965.39 (Awarded) 2022
Does paid family leave protect children from maltreatment *[CSTAT Bid # C23.051.1/B1047]*

FELLOWSHIPS, AWARDS, & PROFESSIONAL DEVELOPMENT

Google PhD Fellowship Nominee, Nominated by MSU Graduate School 2024

Dissertation Completion Fellowship, MSU Graduate School, $5,000 2024

Graduate Office Fellowship Travel Award, MSU CAS Dean's Office, $4,824 2023-2024

MIND Summer School for Computational Neuroscience, Hanover, NH Summer 2023
Dartmouth College, Department of Psychological and Brain Sciences

Conference Travel Award, MSU Council of Graduate Students, $300 2023

Cloud Computing Fellowship, MSU Institute for Cyber-Enabled Research, $200   2022-2023

Hideya Kumata Memorial Doctoral Recruitment Fellowship, MSU, $3,733   2021

John Paul Jones Research Scholarship, UWM, $1,000   2020

Chancellor's Fellowship Award, UWM, $1,000   2019

CONFERENCE PRESENTATIONS [* denotes presenter]

Top Paper/Poster Awards

2. *****Lim, S.**, Cho, H., Jeon, M., & Schmälzle, R. (April, 2024). *Leveraging virtual reality (VR) with eye-tracking and generative Artificial Intelligence (AI) for message effects research.* Kentucky Conference on Health Communication, Lexington, KY. [Top Poster, Honorable Mention].

1. Schmälzle, R., *****Lim, S.**, Wu, J., & Bezbaruah, S. (November, 2023). *Two of a kind: Adolescent twins' brains align more closely during a social movie.* [Paper presentation]. National Communication Association, National Harbor, MD. [Top Paper Award, Social Cognition Division]

Presentations

29. *****Lim, S.,** Schmälzle, R., & Bente, G. (2024, November). *Artificial Intelligence (AI) meets virtual reality (VR): Persuasive impact of gender-matching in a health-related conversation with an embodied GPT-agent.* [Paper presentation]. National Communication Association, New Orleans, LA.

28. Hussain, A., Schmälzle, R., **Lim, S.,** & Bouali, N. (2024, November). *AI at the wheel: A comparative study of AI- vs. human-authored road safety messages in the UAE.* [Paper presentation]. National Communication Association, New Orleans, LA.

27. Smith, M., **Lim, S**., Chong, M., Lella, O. S. K. M., & Mbonu, A. (2024, October). *Tracing the Spread of CRT Disinformation within Partisan Ecosystems*. [Poster presentation]. Meeting of the Association for Information Science and Technology (ASIS&T), Calgary, Canada.

26. *****Lim, S.,** Schmälzle, R., & Bente, G. (2024, May). *Artificial social influence via a VR-Embodied Conversational Agent: Effects of similarity-matching in human-AI communication.* [Poster presentation]. Communication Science Futures Conference, East Lansing, MI.

25. *****Lim, S.,** & Schmälzle, R. (2024, June). *Computational analysis of dyadic facial expressions in face-to-face conversations*. [Paper presentation]. International Communication Association, Gold Coast, Australia.

24. Jeon, M., **Lim, S.,** Lapinski, M. K., Bente, G., & Schmaelzle, R. (2024, June). *Effects of cultural tailoring on visual attention: A virtual reality (VR) eye-tracking study using a billboard paradigm*. [Paper presentation]. International Communication Association, Gold Coast, Australia.

23. Cho, H. J., **Lim. S.,** Turner, M. M., Bente, G., & Schmälzle, R. (2024, June). *Emotion on display: Using the VR billboard paradigm to examine the link between exposure, reception, and retention for emotional billboard messages*. [Paper presentation]. International Communication Association, Gold Coast, Australia.

22. Schmälzle, R., Wu, J., & **Lim, S**., & Bente, G. (2024, June). *The eyes have it: Introducing the pupillary audience response measurement approach (PARMA).* [Paper presentation]. International Communication Association, Gold Coast, Australia.

21. ***Lim, S.,** & Schmälzle, R. (2023, November). *The effect of source disclosure on the perception of vaping prevention messages*. [Paper presentation]. National Communication Association, National Harbor, MD.

20. Schmälzle, R., ***Lim, S.,** Cho, H. J., Wu, J., & Bente, G. (2023, November). *The VR billboard paradigm: Using VR and eye-tracking to examine the exposure-reception-retention link in realistic communication environments.* [Paper presentation]. National Communication Association, National Harbor, MD.

19. Smith, M. A., Rollins, D., Rodrigues, L., Fields, V., **Lim, S.,** Myers, C.L., Chong, M., & Njonge, W. (2023, August). *"Racist equity and unjust policies:" Examining anti-Black disinformation in partisan news about critical race theory.* [Paper presentation]. Association for Education in Journalism and Mass Communication (AEJMC) Annual Meeting, Washington, DC.

18. Skelly, C., Waite, K., Hitzler, P., Guthrie, T., Shelle, G., & **Lim, S**. (2023, June). *Low and mid-level equine assisted services improved mood and state anxiety levels in university students*. [Paper presentation]. Equine Science Symposium, Grapevine, TX.

17. Waite, K., Skelly, C., Hitzler, P., Guthrie, T., Heyboer, G., & **Lim, S**. (2023, June). *Low and Mid-Level Equine Assisted Services Improved Mood and State Anxiety Levels in Healthcare Workers*. [Paper presentation]. Equine Science Symposium, Grapevine, TX.

16. ***Lim, S.** (2023, May). *Leveraging GPT and other Large Language Models (LLM) for Communication Research*. [Breakout session presentation]. Hackathon Pre-Conference, International Communication Association, Toronto, Canada.

15. ***Lim, S.** (2023, May). *Media Consumption and Mental Health from Adolescence to Mid-Adulthood: A Latent Growth Modeling Approach to Examining the Dynamics among Daily Activities and Health Over Time.* [Paper presentation]. International Communication Association, Toronto, Canada.

14. ***Lim, S.,** & Schmälzle, R. (2023, May). *Leveraging Prompt-Engineering to Generate Health Awareness Messages - A Role for Artificial Neural Networks in Communication Science.* [Paper presentation]. International Communication Association, Toronto, Canada.

13. Peng, W., Meng, J., *Lim, S., & Liu, H. (2023, May). *Health [mis]information processing among older adults: An in-depth interview study comparing "misinformation detectives" and "misinformation victims".* [Paper presentation]. International Communication Association, Toronto, Canada.

12. Meng, J., Qin, J., Zhang, Y., Bredland, A., Lim, S., Hu, J., & Rains, S. (2023, May). *The Effects of the source of support and message contingency on self-disclosure unfolding over conversational stages.* [Paper presentation]. International Communication Association, Toronto, Canada.

11. *Lim, S., & Schmälzle, R. (2023, April). *Leveraging prompt-engineering to generate vaping prevention messages: A role for Artificial Intelligence in health communication.* [Poster presentation]. DC Health Communication, Herndon, VA.

10. Wu, J., Schmälzle, R., Lim, S., & Bente, G. (2023, April). *From viewable impressions to neural impressions: Combining EEG and VR to develop measurement standards for responses to media.* [Poster presentation]. Meeting at the Social Affective Neuroscience Society Conference, Santa Barbara, CA.

9. Garcia, A. J., Cazares-Navarro, E., Lim, S., & Blalock, E. (2023, April). *Development and evaluation of a case-based medical curriculum for first- and second-year medical students.* [Poster presentation]. National Hispanic Medical Association, Washington DC.

8. Cazares-Navarro, E., Garcia, A. J., Lim, S., & Blalock, E. (2023, April). *Evaluation of a case-based medical Spanish curriculum for first- and second- year medical students.* [Poster presentation]. National Hispanic Medical Association, Washington DC.

7. Garcia, A. J., Cazares-Navarro, E., Lim, S., & Blalock, E. (2023, March). *Evaluation of a case-based medical Spanish curriculum for first- and second- year medical students.* [Poster presentation]. Latino Medical Student Associated Student Advocacy, Leadership, Unity, and Diversity Summit Research Symposium, Washington DC.

6. Yang, Q., *Lim, S., Meng, J., & Rains, S. A. (2022, November). *The Role of communication in health-focused conversational AI: A review of systematic reviews.* [Paper presentation]. National Communication Association, New Orleans, LA.

5. Garcia, A. J., Cazares-Navarro, E., Lim, S., & Blalock, E. (2022, October). *Evaluation of a case-based medical Spanish curriculum for first- and second- year medical students.* [Paper presentation]. Latino Health Symposium, Medical Organization for Latino Advancement, Chicago, IL.

4. Wei, P., *Lim, S., Meng, J. (2022). *Persuasive strategies in online health misinformation: A systematic review.* [Paper presentation]. International Communication Association, Paris, France.

3. Schmälzle, R., Wilcox, S., Jahn, N., **Lim, S.**, Ye, Q. (2022, May). *Common story-induced brain responses across languages: How 'Le Petit Prince' connects the brains of French, Chinese, and English listeners*. [Paper presentation]. International Communication Association, Paris, France.

2. ***Lim, S.** (2021). *Adoption of a therapy chatbot app: An exploratory study applying uses and gratification and efficacy frameworks.* [Paper presentation]. National Communication Association, Seattle, WA.

1. ***Lim, S.** & Cao, X. (2020). *Media effects on obesity related health behavior: Application of cultivation theory*. [Poster presentation]. D.C. Health Communication, Virtual.

TEACHING & INVITED LECTURES

Michigan State University

Methods of Communication Inquiry, Recitation Instructor, in person (58 students total)   Fall 2023

Introduction to Organizational Communication   Spring-Summer 2023
    Instructor of Record, online (30 students); Recitation Instructor, in-person (76 students)

Human Communication   Fall 2021-Summer 2022
    Instructor of Record, online (15 students); Recitation Instructor, in-person (62-71 students)

University of Wisconsin-Milwaukee

Business and Professional Communication   Fall 2019- Spring 2021
    Instructor of Record, online, hybrid, and in-person (~40 students)

Invited Lectures about Artificial Intelligence

ChatGPT potentials and limits, Wayne State University, Detroit, MI   October 2023

Introduction to AI and use cases for communication research, MSU, East Lansing, MI   September 2023

Leveraging AI for health promotion, The Ohio State University, Columbus, OH   March 2023

AI-message generation for health, MSU, East Lansing, MI   November 2022

ADDITIONAL RESEARCH EXPERIENCE

MAAA Equine Service Project, Department of Animal Services, MSU   2022-2023
    Collaborated on two conference submissions and presentations

SERVICE & MEMBERSHIPS

Ad Hoc Reviews

Association for Computing Machinery (ACM) SIGCHI Conference on CSCW   2024-
National Communication Association (NCA) & International Communication Association (ICA)   2021-

Conferences

Session Chair, Communication Science & Biology Interest Group, ICA, Gold Coast, Australia	2024
Co-organizer, Hackathon Pre-Conference, ICA, Gold Coast, Australia	2024
Student volunteer, Communication Science Futures Conference, East Lansing, MI	2024
Mentor-Mentee Committee, Health Communication Division, ICA, Toronto, Canada	2023
Volunteer (3 hours), National Communication Association, New Orleans, LA	2022
Session Chair, Health Communication, ICA, Paris, France	2022
Technology Squad Volunteer (17 hours), ICA, Paris, France	2022

Department

Colloquium Committee Lead, Association of Graduate Students in Communication, MSU	2023-2024
Colloquium Committee, Association of Graduate Students in Communication, MSU	2022-2023
Doctoral Affairs Committee, Association of Graduate Students in Communication, MSU	2021-2022
Mentor, Graduate Student Council, University of Wisconsin-Milwaukee	2020-2021

Professional Affiliations

Social & Affective Neuroscience Society (SANS)
Association for Computing Machinery (ACM)
International Communication Association (ICA)
National Communication Association (NCA)

SKILLS

Analysis – machine learning, text/image analysis via AI models, time series, multilevel modeling

Software – R, Python, Vizard (extended reality platform), Unity & Unreal (development programs)

Other – Building chatbots in Python, 3D animation

REFERENCES

Ralf Schmälzle (PhD, Psychology)
Associate Professor, CARISMA Lab co-director
Department of Communication
Michigan State University
404 Wilson Rd. East Lansing, MI 48824
schmaelz@msu.edu

Monique Turner (PhD, Communication)
Department Chair, Professor
Department of Communication
Michigan State University
404 Wilson Rd. East Lansing, MI 48824
mmturner@msu.edu

Gary Bente (PhD, Psychology), Professor
CARISMA Lab director
Department of Communication
Michigan State University
404 Wilson Rd. East Lansing, MI 48824
gabente@msu.edu

Steven Pierce, (PhD, Psychology)
Associate Director
Center for Statistical Training & Consulting
Michigan State University
293 Farm Lane, RM100 East Lansing, MI 48824
pierces1@msu.edu

Hee Rin Lee (PhD, Informatics & Computing)

Collaborator on Strosacker Grant Project,

Assistant Professor

Department of Media & Information

Michigan State university

404 Wilson Rd. East Lansing, MI 48824

heerin@msu.edu