

Shruti Jindal

Independent Researcher

Brain Dynamics, Connectivity and Cognition Lab
Indian Institute of Technology Jodhpur, Rajasthan, IN

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in : [LinkedIn](#)

🌐 : [Personal Portfolio](#)

Objective

I am interested in understanding principles within cognitive psychology that enhance learning and memory performance, fostering critical thinking, curiosity, and core competence in educational contexts. Additionally, I am keen on investigating memory retrieval dynamics, particularly how diverse cues influence retrieval speed and efficiency, and delving into the underlying neural mechanisms.

Research Experience

Indian Institute of Technology Jodhpur

Nov 2023 - Till date

Position: Independent Researcher, School of Data Science and Artificial Intelligence

Role: Collaborating with [Dr. Dipanjan Roy](#) in the design and implementation of behavioral paradigms for studying multi-sensory speech processing. This involves EEG signal recording and brain stimulation using transcranial alternating current stimulation. Responsibilities also include source EEG modelling, experiment design, data analysis, and contributing to the writing of research articles.

Tools Used: Python, MATLAB, EEG Equipment

Outcome: Currently engaged in the initial stages of the project, with a focus on establishing foundational methodologies and experimental protocols.

Skills

University of Sydney

Mar 2022 - Till date

Position: Independent Researcher, School of Public Health

Role: Working with [Dr. Sabrina Pit](#) and [Dr. Hamiduzzaman](#) on exploring the challenges and implications of people living with dementia and employment. My comprehensive involvement spanned from literature search to manuscript preparation, strictly adhering to PRISMA guidelines.

Tools Used: QDA Miner, Quillbot, Scholar AI, txyz.ai, Mendeley

Outcome: The project is currently under peer review and aims to fill a critical gap in the literature.

- **Experimental Design and Software (H):** Implemented tailored designs using PsychoPy and Psytoolkit
- **Coding (B):** R, SQL, Python, HTML, CSS, JavaScript, LaTeX
- **Data Analysis (E):** MS Excel, SPSS, QDA Miner, NVivo
- **Other Skills (E):** Data Analysis (ChatGPT 4.0)

Tata Institute of Fundamental Research May 2021 - Jul 2023

Position: Research Associate, Learning Sciences Research Group

Role: Worked with [Dr. Mukesh Makwana](#), Brown University to investigate the role of attention in reading Academic language using the Navon task by constructing a system [simulation](#) using Psytoolkit to test an analytical framework.

Tools Used: CSS, Javascript, HTML, Psytoolkit, PsychoPy

Outcome: The research was presented at the CogSci 2023 conference in Sydney and has been published in the proceedings, contributing to the academic discourse on language and scientific thinking. [Published Paper](#)

*Note (Level of Proficiency):

*B- Basic

*H- High

*E- Expert

University of California Los Angeles

Mar 2018 - Till date

Position: Independent Researcher, Bjork Learning and Forgetting Lab

Role: Worked with [Professor Robert Bjork](#) in all phases of the research process, from conceptualizing the experimental design and conducting literature reviews to data collection, analysis, and manuscript preparation. The study focused on testing a retrieval-based method for effective learning.

Tools Used: Microsoft Excel, Microsoft Clipchamp, SPSS

Outcome: The project is currently under peer review and aims to fill a critical gap in the literature.

Position: Research Assistant, IIIT Delhi, Department of Computer Science Engineering

Role: Worked under guidance of [Dr. Vaibhav Tripathi](#), IIIT Delhi (now at Harvard University), and Divya Kanchibhotla, Executive Director, SSIAR, on a project examining the effect of the Art of Living Intuition Program on children's cognition and intuition. Conducted the pilot of paper-based tasks and captured the results.

Outcome: The paper was published, and the pilot results led to the execution of the main study. [Link to the paper.](#)

Publication and Presentation

Publication

- **Jindal, S.**, & Hamiduzzaman, M. (in press). Last hired, first fired: Stereotype-based challenges faced by elderly workforce under young managers during COVID-19. *Frontiers in Sociology*.
- Salve, J., Khosla, K., **Jindal, S.**, Chandroth, A., Makwana, M., & Chandrasekharan, S. (2023). [Attention in the mind's eye](#): using the Navon attention task to track the way the grammatical structure of text passages modulate mental simulation of perspective. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 45.
- Hamiduzzaman, M., & **Jindal, S.** (under review). Barriers to and facilitators of virtual care use for older adults with preventable chronic conditions and their family carers: Review of recent evidence.
- **Jindal, S.**, & Bjork, R. A. (under review). Enhancing Memory Encoding for Improved Retrieval: Investigating the Effects of Series and Simultaneous Presentations on Recall Performance.
- **Jindal, S.**, Pit, S., & Hamiduzzaman, M. (under review). Exploring the Challenges and Implications of People living with Dementia and employment: A Scoping Review.

Editorial Contributions

[Mind & Music: Demystifying Thumri Maestros](#)

MLBD Publications

Professionally contributed to book development through transcription of interviews, qualitative thematic analysis, content organization, extensive literature review, and comprehensive editing, including proofreading, copy-editing, and enhancing manuscript clarity.

Poster Presentation

Salve, J., Khosla, K., **Jindal, S.**, Chandroth, A., Makwana, M., & Chandrasekharan, S. (2023). Attention in the mind's eye: using the Navon attention task to track the way the grammatical structure of text passages modulate the mental simulation of perspective. CogSci 2023, Sydney, AU.

Media Coverage

- [Mummy, My Phone is Not a Cause of My Anxiety](#). Rising Kashmir. Oct 8, 2022
- [Eliminating Ageism-Based Mental Health Concerns Among Older Workers in an Organizational Setting](#). Rising Kashmir. Oct 15, 2022

Education

- **Jamia Millia Islamia University (JMI), New Delhi, India**
 - **M.A. in Applied Psychology** 2020 – 2022
 - * Major: Organizational Behavior
 - * Cumulative GPA: **8.96/10**
 - * Achievements: Top 1% among cohort of 50 students in the Organizational Specialization
- **Jamia Millia Islamia University, New Delhi, India**
 - **B.A.(Honors) in Psychology** 2016 – 2019
 - * Cumulative GPA: **8.75/10**
 - * Achievements:
 - Twice awarded (Merit and Central) scholarship by JMI (Class Rank 2)
 - Top 3% of my cohort consisting of around 50 students

Other Certifications

- Qualified GATE (Graduate Aptitude Test in Engineering) exam in Psychology. 2023
- Advanced Diploma in German Language (A2 Level) 2016
- Advanced Diploma in Early Childhood Care and Education 2014

Relevant Courses Taken

Highly Relevant: Cognitive Psychology, Research Methods, Experimental Psychology, Advanced Statistics, Psychometric, Physiological Psychology.

Moderately Relevant: Developmental Psychology, Social Psychology, Guidance & Counseling, Rehabilitation Psychology, Peace Psychology, Psychopathology.

Less Relevant: Data Mining & Analytics, Machine Learning, Deep Learning, Engineering Mathematics, Organizational Behavior.

Accomplishments

Competitive Exams and Entrances

- Among the 517,000 candidates who appeared for GATE (Graduate Aptitude Test in Engineering), I was in the top 18 percent who qualified, securing All India Rank 444 in Psychology. 2023
- All India Rank 3 in the entrance exam for the admission in M. Sc. Psychology at University of Allahabad, one of India's best universities in Cognitive and Behavioral Sciences. 2020
- All India Rank 27 in the entrance exam for the admission in M.A. Applied Psychology at Jamia Millia Islamia University, ranked 3rd among all universities in the country in rankings released by the NIRF, Ministry of Education of India 2023. 2020

International Forums like MUN

- Selected as a Good Health & Well-Being and Quality Education Delegate at the 22nd Session of The Youth Assembly Conference, New York City. July 2018
- Selected as a Health and Social Policy Delegate at The Harvard Project for Asian and International Relations 2018 Conference at Harvard University, USA. Feb 2018

Others

- Ranked 2nd in the German Language Learning Advanced Level course at Y.W.C.A. of Delhi. 2016
- Conferred with the Dean's Award for All-Around Excellence in Academics, Research, and Extracurricular Involvement by Trinity Institute of Professional Studies. 2014

Professional Experience

Remotasks, Soul AI, New Delhi

Oct 2023 - Present

Prompt Engineer

- Developing and refining prompts to enhance the performance and reliability of machine learning models, ensuring alignment with predefined academic and ethical standards to optimize Gen AI model outputs.

EduMentor Educational Pvt. Ltd., New Delhi

April 2023 - June 2023

Visiting Faculty, Psychology

- Prepared students for CUET (Central Universities Common Entrance Test) for undergraduate exams by creating study materials, delivering engaging lectures, providing doubt resolution, and offering exam strategies.

RUFA Educational Services, New Delhi

Jan 2023 - May 2023

Visiting Lecturer, Psychology

- Prepared students for CUET for Master's exams. Responsibilities include delivering lectures, conducting seminars, and assessing student progress.

Mount Abu Public School, New Delhi

Oct 2022 - March 2023

Post Graduate Teacher, Psychology

- Provided instruction and guidance to senior school students in various aspects of psychology, including theories, concepts, research methods, and practical applications for their senior secondary board exams.

Outreach Experience

Art of Living, International Association for Human Value, WHO, India

Jan 2017 - Jul 2017

Social Work and Community Development Intern

- Raised 20 Lakhs INR for Okhla Slum development.
- Conducted campaigns on skill training and social issues, benefiting 500 residents.
- Taught STEM and Arts to children aged 6-12 years in the slum.

Tihar Prisons, Mental Health Foundation India, India

Apr 2018 - Jul 2018

Medical Intern

- Developed a self-regulation module, improving mental health in 65% of inmates.
- Identified and reported 250 cases of mental health issues using WHO-approved procedures.

Leadership and Community Engagement

Key Member, Sponsorship Committee

Oct 2017

TEDxJMI 2017, Jamia Millia Islamia, New Delhi

- Spearheaded sponsorship drives as one of only six committee members, successfully securing 10 Lakh (INR) in funding to facilitate a landmark event.

Lead Campus Ambassador

2016 - 2017

Art of Living, South Campus (University of Delhi), Jawaharlal Nehru University, JMI, New Delhi

- Orchestrated career counseling initiatives across prestigious institutions, laying the foundation for enhanced career prospects for students.

Chief Event Manager

2014

EL-VEDA Annual Fest, Trinity Institute of Professional Studies, New Delhi, India

- Conceived and executed a diverse range of events, significantly enriching the educational and social experience for undergraduates in the Delhi NCR region.

Extra-Curricular Activities

Core Team Member, Psytalk.io

In Progress, Expected Launch: 2024

Role: Actively involved in the development of an innovative platform aimed at democratizing mental health care. Our tool, "RAB", is named in honor of Dr. Robert Allen Bjork, whose invaluable contributions have significantly shaped my research career. The platform aims to offer basic mental health diagnoses for as low as 10 cents and provide free support through artificial intelligence.

Co-Founder, 4 You.. Wedding and Gourmet Gift Store

Sept 2020 - Dec 2021

Role: Spearheaded the establishment and operation of an offline store specializing in weddings and gourmet gifts. Crafted compelling sales pitches and forged sustainable business relationships to solidify the brand's presence in an emerging market.

References

Professor Robert A. Bjork

Distinguished Research Professor,
University of California Los Angeles
Email: rabjork@psych.ucla.edu

Dr. Mukesh Makwana

Post Doctoral Fellow,
Brown University
Email: mukesh_makwana@brown.edu

Dr. Vaibhav Tripathi

Post Doctoral Fellow,
Harvard University
Email: vaibhavtripathi@fas.harvard.edu

Dr. Mohammad Hamiduzzaman

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University of Sydney
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