Triman Kaur Portfolio | chadhagungun@gmail.com | LinkedIn | (+91)- 7303606106 | Delhi, India

PERSONAL PROFILE

Three years of teaching, leading, guiding, and designing experiences and events, both large and small scale, for low-SES, first-generation learners in Patiala and Delhi. Experienced in both qualitative and quantitative data collection, currently building experimental research skills (PsychoPy, OpenSesame). Specialising in working with children in low-SES contexts, both neurodivergent and neurotypical. My broader research question: how can culturally relevant, play-based learning strengthen executive functioning and school readiness in low-SES elementary children, using active, joyful learning to mitigate the effects of poverty and close the knowledge gap with their privileged peers?

EDUCATION

Thapar Institute of Engineering and Technology, Patiala, Punjab, India
Bachelor of Science in Cognitive Science (Honors), Minor in Psychology | 2023 – 2027 | CGPA: 8.10/10
Presentation Convent Senior Secondary School, Delhi, India
All India Senior School Certificate Examination (CBSE), Medical Sciences| 2010 – 2023 |Percentage: 77.20/100

RESEARCH INTERESTS

Executive function as a predictor of school readiness in low-SES elementary children | Culturally relevant, play-based pedagogy as a cognitive intervention in early childhood | Active, joyful learning as a mechanism to mitigate the effects of poverty | Closing the school-readiness and achievement gap between low-SES and privileged peers

RELEVANT COURSEWORK

Lifespan Development | Foundation in Cognitive Science | Learning and Memory | Biological Basis of Behaviour | Research Methods | Experimental Methods | Introduction to Statistics | Social Imagination and Cultural Life | Introduction to Programming and Algorithms | Programming Fundamentals: Data Visualization and Analysis

RESEARCH EXPERIENCES

Undergraduate Research Fellow: Testing the Mental Timeline Hypothesis in Adults
Thapar Institute of Engineering and Technology| Advisor: Dr. Anuj Shukla | Jan 2026 – Present

- Designed, programmed, and analysed a 30-participant temporal bisection independent study in OpenSesame, managing the full project lifecycle from initial ideation to final presentation.
- Presented the foundational theoretical paradigm at an international student research conference (TICSR-2026), with a primary-authored manuscript currently in preparation.

Independent Lab Participant (Online)
Child's Play, Learning and Development Lab | University of Delaware | PI: Dr. Roberta Golinkoff | Sept 2025 – Present

- Independently secured this position through direct cold outreach to the PI with no institutional referral.
- Participated in weekly lab meetings across three semesters, actively analysing contemporary research on play-based learning, language acquisition and joint attention.
- Submitted substantive discussion questions that the PI consistently every week.

Longitudinal Developmental Case Study | Lifespan Development (SP2405)
Thapar Institute of Engineering and Technology | Advisor: Dr. Kriti Vyas | Jan – May 2026

- Authored a 50-page longitudinal case study of a Grade 5 first-generation learner, drawing on three years of direct classroom observation across physical, cognitive, language, social, and moral developmental domains.
- Analysed the participant's developmental trajectory through Piaget, Erikson, and Kohlberg frameworks, integrating naturalistic observation with theoretical interpretation.
- Awarded 9/10 for sustained observational depth and theoretical integration.

Experimental Psychology Project: Effect of Binaural Beats on Attention & Accuracy
Thapar Institute of Engineering and Technology, Patiala | Advisor: Dr. Richa Nigam | Aug–Dec 2024

- Led a 5-member team to design and execute a behavioral study (N=15), testing the effect of binaural beat exposure on Stroop task accuracy across high and low anxiety groups.
- Delivered stimulus presentation via PsychoPy and analyzed the resulting data, finding consistent post-exposure improvements in participant accuracy.

CONFERENCE PRESENTATIONS & PUBLICATIONS

Kaur, T. (2026, April). *Hidden barriers to learning: Sensory filtering and temporal processing in socioeconomically disadvantaged children*. Thapar International Conference for Student Research (TICSR-2026), Patiala, India. [*View Presentation*] | [**Read Published Abstract (PID-293)**]

PROGRAM DESIGN AND FACILITATION

STEM Conclave 2026 | Lead Facilitator, Student Experience
Thapar Institute of Engineering and Technology | April 18, 2026

- Designed and directed an end-to-end STEM immersion for 100 first-generation girls from 25 government schools, leading 45+ cross-functional volunteers to deliver their first structured exposure to university-level engineering, coding, and entrepreneurship.
- Covered by the Indian express: article

Udaan 2026: Sapno Ka Carvaan | Main Production Lead
Pratigya Abhiyan, Patiala | January – May 2026

- Directed a 1-month flagship production for 150 children and a 45-person volunteer team, sustained across three consecutive editions (2024 , 2025 , 2026), before audiences of 500+.
- Secured two external sponsorships, fully provisioning 160 students with academic books, stationery, and meals for the rehearsal period.

Experiential Learning Program | Lead Organiser & Facilitator
Pratigya Abhiyan, Patiala | January – May 2026

- Directed 50+ volunteers to execute five experiential learning modules (including scaffolded sensory and motor activities) for 325+ children, driving an 80% increase in daily elementary attendance.
- Launched a rapid foundational literacy outreach for out-of-school migratory children, scaling daily participation from 3 to 10 students within 72 hours.
- Secured 2 independent academic sponsorships through direct faculty pitching, raising Rs. 8,000 approx. fully provisioning 60+ students with foundational literature supplies, stationery, and meals.

ADDITIONAL HONORS

- **BeVisioneers (Mercedes-Benz Fellowship):** €3,000 pilot grant, selected from 600+ global applicants, for sustainability education workshops reaching 80 children; represented grassroots pedagogy at a funded summit in Stuttgart, Germany.
- **5th UNCTAD Global Youth Forum:** Selected Youth Delegate, advising on international education and inclusive development policy.
- **Queen's Commonwealth Essay Competition:** Silver Award, 2022 and 2023.

VOLUNTEER & COMMUNITY EXPERIENCE

Academic Head
Pratigya Abhiyan |Patiala, On-Site |August 2023 – Present

- Committed 2000+ hours across 3 years of sustained instruction, 6 days per week, delivering longitudinal academic support to elementary children in a low-SES NGO setting.
- Designed adaptive, mixed-ability curricula based on real-time behavioral observations, delivering foundational literacy and numeracy interventions to 50+ children (Grades 1–7) annually.
- Delivered longitudinal academic outcomes across 3 years of sustained instruction: a student progressed from 82% to 89.8%, ranking 3rd in class; another's English proficiency moved from C to B across two consecutive years.

Occupational Therapy & Community Outreach Intern
Samadhan India |Delhi, On-site | June–July 2024 & June–July 2025

- Facilitated daily developmental interventions for 25+ neurodivergent children, independently designing and leading sensory integration modules (sand/water play) for autism and ADHD profiles.
- Mentored and onboarded 5 incoming interns into Samadhan's therapy protocols and documentation workflows.
- Advocated for low-SES neurodivergent care models at state-level policy workshops and Spain Embassy diplomatic events, pitching collaborative NGO strategies to external and international delegates.

CURRICULUM & TOOL DESIGN

Akhar Awaaz | Lead Developer

- Designed and piloted a low-cost, multi-sensory phonics application to reduce cognitive load for non-native learners in under-resourced classrooms, deployed to 50+ students.
- Increased on-task engagement from 10 to 35 minutes compared to traditional phonetic instruction.

Bolo (AAC Tool) | Lead Developer & Researcher

- Developed an icon-driven AAC digital prototype tailored for speech-delayed and neurodivergent children in low-resource Indian contexts.
- Synthesized two years of clinical observation to directly align the interface’s vocabulary architecture with the specific communicative intents of children with intellectual and developmental disabilities.

TECHNICAL SKILLS

Experimental Software: PsychoPy, OpenSesame
Programming & Data Science: Python (Pandas, NumPy, SciPy, Matplotlib, Seaborn), R, C/C++, MySQL
Quantitative Analysis: ANOVA, regression models, t-tests, correlation, descriptive statistics
Qualitative Methods: Longitudinal naturalistic observation, developmental case study writing, structured field documentation across three years of classroom fieldwork
Languages: English (Fluent), Hindi (Native), Punjabi (Native)