#### **Curriculum Vitae**

### **Personal information**

Surname: Pan

First names: Zhihu

### **Degrees**

### **Master of Education** 1.9.2022 – 1.6.2025

- . Psychology, Sichuan Normal University (SCNU), China
- Dissertation title: "The impact of background colour on the recognition and memory of emotional face" (supervisor: Dr. Chaoxiong Ye). This study investigated the influence of background color on emotional face recognition and memory by examining reaction times and accuracy rates across varying color contexts. Results indicated that background color significantly facilitated the recognition of emotional faces congruent with the color's associated emotion. This effect was also observed in visual immediate memory tasks. However, the facilitative effect of background color diminished as memory retention intervals increased, suggesting a time-dependent modulation. Furthermore, cultural familiarity is proposed as a potential moderator of the relationship between color and emotional face processing. These findings contribute to a more comprehensive understanding of the mechanisms by which color influences emotional face recognition and memory and offer a valuable framework for future cross-cultural investigations of emotion.
- . GPA: 3.8/4

## **Bachelor of Science** 1.9.2018 – 28.6.2022

. Applied Psychology, Southwest Medical University (SWMU), China

### Language skills

Native language: Mandarin Chinese

Other language: English – Fluent (IELTS: 6.5/9)

### Research experience

### Research Assistant of Ye's Lab, SCNU (1.7.2023 – present)

Managed laboratory-related matters.

Assisted in drafting project proposals.

Focus on visual working memory and its interaction with attention or emotion.

Act as main member of two projects (details shown in following parts).

Assist in an ERP study on memorability. Responsible for program coding in E-prime, data collection (60+), EEG data analysis via Matlab, visualization via OriginLab.

Assist in a behavioral study on retro-cue and facial memorability. Responsible for program coding in E-prime, data collection (90+), analysis via SPSS and JASP, visualization.

Have extensive experience in manuscript writing and revising according to reviewers' suggestion. Finish two manuscripts (two published).

# **Main Member of Delayed Distractor Effect Project**, SCNU (PI: Dr. Chaoxiong Ye, 22.11.2023 – 9.9.2024)

- . Manipulate the appearance phase of distractors (encoding vs. delayed vs. both) to elucidate the mechanisms of distraction resistance in the context of complex real-world stimuli. Results indicate that the VWM performance was significantly impaired by delay-stage distractors, but remained unaffected during the encoding stage. This dissociated VWM distraction effect results from the absence of processing distractors during the encoding stage, rather than the appearance of distractors during the delay or their abrupt emergence.
- . Responsible for validation., review and editing.

# **Main Member of Retro-cue Benefit Project**, SCNU (PI: Dr. Chaoxiong Ye, 23.6.2023 –12.3.2024)

- . Based on a comprehensive review of prior relevant studies, four potential influencing factors—external interference, internal interference, interference temporal dynamics, and cue type—are identified to account for the divergent findings observed in previous research. Furthermore, a cognitive model is proposed to elucidate the mechanisms by which interference affects the retrieval process of trace-back cues.
- . Complete a review article in *Journal of Sichuan Normal University (Natural Science)* as the first author.

### Research output

- 1. **Pan, Z.**, <u>Liu R.</u>, Guo, L., Ye, C. (2024) The Effect of Interference on Retro-cue Benefit in Visual Working Memory. *Journal of Sichuan Normal University* (*Natural Science*), 47(02):179-187. https://doi.org/10.3969/j.issn.1001-8395.2024.02.004 (in Chinese with English abstract)
- 2. Ye, C., Xu, Q., **Pan, Z.**, Nie, Q.-Y., & Liu, Q. (2024). The differential impact of face distractors on visual working memory across encoding and delay stages. Attention, Perception, & Psychophysics, 86(6), 2029 2041.

## Research supervision and leadership experience

Development in School-Aged Children Project in SCNU (7.2023 –8.2024): assumed responsibility for the efficient and effective operation of the fMRI scanning component of this large-scale longitudinal study. Duties included managing participant recruitment strategies, overseeing experimental preparation and protocol adherence, ensuring the integrity of data acquisition procedures, and implementing rigorous quality control measures. Acquired high-quality FMRI data from 182 school-aged children and trained a new MRI scanner operator to independently conduct scanning sessions.

### **Teaching merits**

- Present lectures on visual working memory experimental studies and cognitive models in seminars of Ye's Lab (in Chinese, 9.2022 present).
- Present lectures on visual attention and working memory. Organize discussions in Prof. Hong-jin Sun's online Attention Bias Summer Camp (in English, 5.2023 6.2023).
- . Provided psychological counseling and administered assessments to adult and child patients. Assisted in a mental health outpatient clinic and participated in repetitive

transcranial magnetic stimulation (rTMS) therapy. (in Chinese, Intern, Department of Psychosomatic Medicine, 11.2021 – 6.2022).

### **Awards and honours**

- . Third-class Academic Scholarship (for 20% graduate students), funded by Sichuan Education Department, CNY 6,000 (~€760), 2022.
- . First-class Academic Scholarship (for 8% graduate students), funded by Sichuan Education Department, CNY 10,000 (~€1,279), 2024.

### Other key academic merits

Attention Bias Summer Camp, online (5.2023 – 6.2023)

- . Assisted Prof. Hong-jin Sun (Associate Professor, Department of Psychology, Neuroscience & Behaviour, McMaster University) for this summer camp.
- Presented one lectures on attention and its interaction with visual working memory, and organize the symposium among attendees, including undergraduate students in McMaster University and graduate students in several universities in China.

# The neural mechanism of visual working memory processing different familiarity and memory stimuli, (2.2024 - 7.2024)

- . Maintained close communication with Prof. Weizhen Xie (Associate Professor, Department of Psychology, University of California), participating in multiple online meetings to clarify project objectives and data acquisition requirements.
- . As the lead researcher responsible for fMRI data acquisition, independently completed preparatory work, including parameter configuration, subject recruitment, ensuring data quality and delivering high-quality data on schedule(75 participants), laying a solid foundation for subsequent project analysis.

### Other skills

- . E-prime: Coding three behavioral experiments with change detection tasks.
- . SPSS & JASP: Conducting ANOVA, classical or Bayesian *t*-test, correlation, and Logistic regression analysis.
- . Matlab: Using eeglab to analyze EEG data.
- Office: Proficient in Microsoft Office Suite (Word, Excel, PowerPoint), skilled in processing complex data and creating high-quality reports