QINGQING YANG

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EDUCATION

New York University (NYU) 09/2021-05/2023

- Degree: Master of Arts in General Psychology | Cumulative GPA: 3.97/4.0

Zhejiang University (ZJU) 09/2017-06/2021

- Degree: Bachelor's Degree in Natural Sciences
- Major: Psychology | Rank: 4/75 | Overall GPA: 3.92/4.0 (88.85/100)

Academic Awards: Zhejiang Province Government Scholarship (2/75, 01/2020) etc.

RESEARCH EXPERIENCE

Modeling Working Memory Limit and Parietal Cortex Involvement 09/2021 till date

Advisor: Dr. Clay Curtis, NYU

- Design and perform memory guide saccade working memory task
- Computational modeling of working memory precision, capacity with Mixture, Variable Precison, Slots models.
- Explore the relationship with visual field structure and WM capacity with TMS, by ROIs drawn by population receptive field mapping of fMRI data

Hartley Lab, NYU | Master Research Assistant 09/2022-08/2023

Work with Dr. Catherine Hartley, directly with Dr. Noam Goldway

- Adapt online JavaScript Decision making Experiment;
- Computational modeling decision making in Reinforcement learning and neural connectivity with Python and R;
- fMRI data collecting and processing.

Attention, Working Memory, and Perception Lab, ZJU | Research Assistant 05/2019-06/2021

Work directly with Dr. Hui Chen, Ping Zhu, Dr. Yingtao Fu

- Organize the behavioral and EEG data collecting, preliminary analyzing
- Investigate how attention influence working memory and memory guide attention.

Active Inhibition of Attended Information and its Neurocognitive Mechanism 04/2020-06/2021

Advisor: Dr. Hui Chen | Leader of 3-person Team | ZJU Undergraduate Research Program (Rate: Excellent)

- Designed behaviroal experiments to test the active inhibition of attended but useless information for future tasks (Key feature), compared to task-irrelevant information, with MATLAB PsychtoolBox, filtered collected data with Python, and performed ANOVA with SPSS
- Conducted study on the neurocognitive mechanism (ERP) of active inhibition of attended Key feature, compared the N2pc and Pd conponents during the visual search where the distractor is key feature or irrelevant feature, discovered a difference at left occipito-temporal lobe between the ERPs during 700-1000ms after the onset of irrelevant information and key feature.

Active Inhibition Mechanism of Attended Information Based on Dual-Task Paradigms 05/2019-09/2020

Advisor: Dr. Hui Chen | Leader of 3-person Team | ZJU Student Research Training Program (Rate: Excellent)

- Designed 6 experiments to test the active inhibition of key feature using MATLAB Stream Toolkit by Brad Wyble Lab, collected data from about 20 subjects for each experiment and filtered data with Python
- Selected color and shape as key features severally, employed attentional capture and dual-task paradigm to explore whether the key feature was stored in working memory, and the intrinsic mechanism of attribute amnesia
- Adjusted time interval between dual-task to study the active inhibition mechanism of attended information, verified the validity of the time window as an experimental operation by repeated measures ANOVA in SPSS

Working Memory Guided Attention Competes with Exogenous but Not Endogenous Attention. 01/2021-05/2021

Advisor: Dr. Hui Chen | Undergraduate Thesis | Published

- Designed 2 experiments to test whether attentional guidance of working memory content and attentional guidance of endogenous cue or exogenous cue interplay with each other
- Collected data from 20 participants for each experiment, and conducted analysis in SPSS to find that attentional guidance of working memory might share the same attentional guidance mechanism with exogenous attentional guidance, and be differ from endogenous attentional guidance

Trust Design in Digital Financial Product 06/2020-10/2020

Leader of 5-person Team | Project in the Co-ed Course offered by Zhejiang University, Alibaba Design and China Academy of Art (Rate: Excellent)

- Designed trust impact questionnaires for different groups of potential users, conducted EFA to find out the main factors that affect the trust in Alibaba insurance products using SPSS
- Established user portraits and proposed improvement plans for smart evaluation and search function based on the demands of different users and sketched out the design model
- Designed a usability test, analyzed test videos to find the underlying cause of incorrect manipulation in new version design, performed paired-samples T-test with SPSS to verify that the new design effectively enhanced users' trust

Construction of Dormitory Harmony Scale for College Students in Chinese Culture 10/2019-12/2019

Leader of 8-person Team

- Developed the 50 items preliminary questionnaires based on previous research and semi-structured interviews, and collected 133 valid data for preliminary questionnaires
- Carried out exploratory factor analysis (EFA) based on preliminary questionnaires to narrow down the item number to 31 for the formal questionnaires, and collected 197 valid data from formal questionnaires
- Divided the 330 data into two groups for EFA and confirmatory factor analysis respectively to determine a higher-order model with 3 factors on the first-order best represented Chinese university dormitory harmony, and further verified the excellent internal reliability and good validity of the scale through data analysis
- Conducted hierarchical linear regression in SPSS to find that the free choice of dormitory's prediction effect on dormitory harmony was mediated by the grade, and the low-level dormitory harmony lead to depression by the mediation effect of negative emotions and interpersonal disturbance

TEACHING EXPERIENCE

Course Assistant in Advanced Psychological Statistics (Undergrad crouse) 01/2022-05/2022

- Attend lectures, proctor exams, grade assignments and hold office hours.
- lead 2 recitations per week and teach R code for statistical analysis R scripts github

PUBLICATION & COMFERENCE

Zhu, P., ***Yang, Q***., Chen, L., Guan, C., Zhou, J., Shen, M., & Chen, H. (2023). Working-Memory-Guided Attention Competes with Exogenous Attention but Not with Endogenous Attention. *Behavioral Sciences*, *13*(5), 426. https://doi.org/10.3390/bs13050426

PROFESSIONAL SKILLS

- Self-incentive, detail-oriented, comprehensive thinking and team spirit.
- Excel in Microsoft office, such as Excel, Word, PPT etc.
- Experimental Programming in MATLAB, Python, and JavaScript.
- Data analysis in R, MATLAB, Python, SPSS, G*Power, AMOS. Data management in SQL.
- Eye-tracking data acquisition and analysis with EyeLink and Matlab iEye package.
- TMS data acquisition and analysis with Magstim Rapid, Mag Venture, and Brainsight Software.
- EEG data acquisition and analysis in BioSemi ActiveTwo System, and Brain Vision Analyzer.
- fMRI data acquisition and analysis in bash files, mrTools, and HPC.
- Physiological data acquisition and analysis in RM6240 Multi-channel Physiology Signal Collection and Processing System