杨航

在读博士研究生（2022年10月毕业），荷兰格罗宁根大学（2021年世界大学学术排名全球64，心理学学科排名全球41），计算认知神经科学方向

邮箱: hankyoung1324@hotmail.com

研究领域与方向

抑郁症等脑疾病的认知与神经基础

走神与"粘性"思维的认知模型

脑电单试次分析与机器学习

视觉文字加工与阅读障碍

教育背景

- 10/2018 - 10/2022，博士阶段
  荷兰格罗宁根大学，伯努利数学、计算机科学和人工智能研究所 计算认知神经科学方向
- 09/2015 - 06/2018，硕士阶段
  杭州师范大学，心理科学研究院 临床认知神经科学
- 09/2009 - 06/2013，本科阶段
  中国矿业大学（北京），力学与建筑工程学院 土木工程

博士期间在研项目

1, 运用SSVEP追踪走神与"粘性"思维

(Tracking mind-wandering and "sticky" thinking with the Steady State Visual Evoked Potential (SSVEP))

2, "粘性"思维引发焦虑与抑郁状态下的决策障碍研究

("Sticky" thinking causes impaired decision making in the state of worry and depression)

3, "粘性"思维在抑郁症病人决策障碍中的作用

(The role of "sticky" thinking on decision making impairment among Major Depressive Disorder (MDD) patients)

4, 运用冥想和积极幻想对抑郁症的干预研究

(Intervention of Major Depressive Disorder (MDD) with mindfulness and positive fantasizing)

5, 正字法与语义信息在字典判断的证据累积过程中的作用

(The roles of orthographic and semantic information in the neural correlates of evidence accumulation for lexical decision-making)

6, 静息状态脑电连接预测走神倾向/抑郁状况

(The altered resting state connectivity in pre-clinical depression)

学术成果

已发表文章

Yang, H., Zhao, J., Gaspar, C. M., Chen, W., Tan, Y., & Weng, X. (2017). Selectivity of for words in the right hemisphere: Evidence from analysis. *Psychophysiology*, 54(8), 1128–1137.

Zhao J, **Yang H**, Weng X and Wang Z (2018) Emergent Attentional Bias Toward Visual Word Forms in the Environment: Evidence From Eye Movements. *Front. Psychol.* 9:1378.

Xue, H., Wang, Z., Tan, Y., **Yang, H.**, Fu, W., Xue, L., & Zhao, J. (2020). Resting-state EEG reveals global network deficiency in dyslexic children. Neuropsychologia, 138, 107343.

Huang, Z., Yang, S., Xue, L., **Yang, H.**, Lv, Y., & Zhao, J. (2021). Level of Orthographic Knowledge Helps to Reveal Automatic Predictions in Visual Word Processing. Frontiers in Neuroscience, 15.

已投稿文章

Yang, H., Paller K., van Vugt, M. (2022) The Steady State Visual Evoked Potential (SSVEP) tracks "sticky" thinking, but not more general mind-wandering. *Frontiers in Human Neuroscience*.

在准备文章

1，**Yang, H.**, Jing Zhao, van Vugt, M. (2022) Separating the roles of orthographic and semantic information in the neural correlates of evidence accumulation for lexical decision-making.

2，**Yang, H.**,van Vugt, M. Sticky form of spontaneous thought affect the evidence accumulation in pre-clinical depression.

3，**Yang, H.**,Besten, M, van Tol, M.J.,van Vugt, M. The role of sticky thinking on decision making impairment among Major Depression Disorder (MDD) patients.

4，**Yang, H.**,Besten, M, van Tol, M.J., van Vugt, M. Differential mechanism of mindfulness and positive fantasizing on the intervention of Major Depression Disorder (MDD).

5, Kaushik,P., **Yang, H.**, van Vugt, M., Roy, P. Classification of worries and depression among health participants with EEG.

参加会议

Yang, H., Zhao J., van Vugt, M. Orthographic and semantic information in Chinese characters drives the evidence accumulation in the lexical decision task (LDT): A drift diffusion model (DDM) analysis. (April.28-30, 2022) 18th NVP Winter Conference on Brain and Cognition, Egmond aan Zee, the Netherlands

Yang, H., van Vugt, M; Grabowecky M., Paller K. Can the steady-state visual evoked potentials (SSVEP) predict mind wandering (March 13-16, 2021) Cognitive Neuroscience Society Annual Conference 2021, the United States (Virtual)

Yang, H., van Vugt, M; Taatgen N., Grabowecky M., Paller K. Keeping track of mind wandering with Steady-state visual evoked potentials (SSVEP) (Dec.19-21, 2019) 17th NVP Winter Conference on Brain and Cognition, Egmond aan Zee, the Netherlands

Yang, H., Zhao J., Tan Y., Gaspar, C., Weng X., (Dec.8-10, 2016). Selectivity of for words in the right hemisphere: Evidence from analysis. The 16th International Conference on the Processing of East Asian Languages (ICPEAL), Guangzhou, China.

Yang, H., Tan Y., Shi Y., Zhao J., Wang Z., Weng X. (Oct. 14- Oct. 15, 2016). Development of attentional bias towards forms in the environment, The 19th national conference on psychology, Xian, China.

Zhao J., Li S., **Yang H.**, Tan Y., Cheng Q., Weng X. (Dec.8-10, 2016). Fine neural tuning for print follows an inverted-U shape curve during reading development. The 16th International Conference on the Processing of East Asian Languages (ICPEAL), Guangzhou, China.

Shi Y., **Yang H.**, Ni L., He M., Zhang L. (Oct. 14- Oct. 15, 2016). The behavioral performance and electroencephalogram characteristics of self-control learning in inhibitory control, The 19th national conference on psychology, Xian, China

经历

审稿人 (2022.4)

- 《Reading and Writing》

助教 (2021.4-2021.6, 硕士课程，主讲人： Marieke van Vugt)

- Computational Cognitive Neuroscience

指导学生 (2019-2022)

- 人工智能专业硕士生1名，行为与认知神经科学硕士生1名, 人工智能专业本科生6名

评分卡分析师 (2018.5-2018.10, 捷信消费金融有限公司)

- 消费金融领域的预测建模

主讲人 (2018.6, 浙江师范大学)

- EEG & ERP训练营: EEG实验设计与数据分析 (学生10人, 18 小时)

主讲人 (2017.12, 华南师范大学)

- 脑电实验记录与事件相关电位的数据分析 (学生20人, 12 小时)

主讲人 (2017.9, 重庆思影科技有限公司)

- 脑电的概述和基于EEGLAB的预处理 (学员 50 人, 3 小时)
- MATLAB概览与运行脚本进行脑电分析 (学员 50 人, 3 小时)

研究助理 (2014.4 - 2015.9)

- 杭州师范大学，心理科学研究院

荣誉与奖励

- 2017 研究生国家奖学金 (2 万元)
- 2017 杭州师范大学研究生奖学金 (1.2 万元)
- 2016 杭州师范大学研究生奖学金 (0.8 万元)

- 2015 杭州师范大学研究生奖学金 (0.93 万元)

课程

课程

- 机器学习
- 计算认知神经科学
- 功能磁共振数据分析
- 数据科学专项课程(Johns Hopkins)
- R语言多元分析

推荐人

- **翁旭初 博士, 教授，博士生导师**

  华南师范大学脑科学与康复医学研究院

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  关系: 硕士阶段导师

- **赵静 博士, 副教授，硕士生导师**

  杭州师范大学经亨颐教育学院

  浙江省杭州市余杭塘路2318号

  zhaojing561@126.com

  关系: 硕士阶段导师

- **王治国 博士, 浙江大学"百人计划"研究员，博士生导师**

  浙江大学心理科学研究中心

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  关系: 合作者