### Shan Gao

College of Safety Science and Engineering Civil Aviation University of China

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Human Factors

#### Research interest

Human Factors; Human-Computer Interaction; Safety Engineering; Trust in Autonomy; Ergonomics; Human-Centered Design; Ageing; Flight Training; Accident Analysis; Psychophysiology; Aviation Psychology; Individual Differences; Decision-making; Risk-Taking Behavior

Education			
2022.4 - 2026.6	College of Safety Science and Engineering	Civil Aviation University of China	Ph.D. student
2018.9 - 2021.6	College of Safety Science and Engineering	Civil Aviation University of China	Master student
2014.9 – 2018.6	College of Safety Science and Engineering	Taiyuan University of Technology	Undergraduate
Project			
2023-2024	Tianjin Graduate Research and Innovation Project	2022BKY150	Principal
2021-2024	National Natural Science Foundation of China	32071063	Participant
2019-2020	Tianjin Graduate Research and Innovation Project	2019YJSS068	Principal
Publication			

#### **Publication**

- [1]. Wang, L., Gao, S., Hong, R. & Jiang Y. (2023). Effects of age and flight exposure on flight safety performance: Evidence from a large cross-sectional pilot sample. Safety Science, 165, 106199.
- [2]. Gao, S., & Wang, L. (2023). More experience might not bring more safety: Negative moderating effect of pilots' flight experience on their safety performance. International Journal of Industrial Ergonomics, 95, 103430.
- [3]. Wang, L., Gao, S., Tan, W., & Zhang, J. (2023). Pilots' mental workload variation when taking a risk in a flight scenario: a study based on flight simulator experiments. International Journal of Occupational Safety and Ergonomics, 29(1), 366-375.
- [4]. Zhai, S., Gao, S., Wang, L., & Liu, P. (2023). When both human and machine drivers make mistakes: Whom to blame? Transportation Research Part A: Policy and Practice, 170, 103637.
- [5]. Gao, S., Xian, Y. and Wang, L. (2023). An evaluation framework on pilot's competency-based flying style. In the 25th International Conference on Human-Computer Interaction, Copenhagen, Denmark. (accept)
- [6]. Gao, S., & Wang, L. (2020). Effects of mental workload and risk perception on pilots' safety performance in adverse weather contexts. In: International Conference on Human-Computer Interaction, Copenhagen, Denmark, pp. 278-291.
- [7]. Wang, L. & Gao, S. (2020). Study on eye movement and physiological characteristics of flying risk-taking behaviors. China Safety Science Journal, 30(09): 22-28.
- [8]. Wang, L. & Gao, S. (2021). Research on evaluation of exceedance behaviors of airline transport pilots based on QAR data. Journal of Safety and Environment, 30(09): 22-28.

#### Conference

- [1]. HCII 2020, the 22nd International Conference on Human-Computer Interaction, held virtually from 19-24 July 2020 [Presenter]
- [2]. The 4th COMAC International Technological Innovative Week, Shanghai, 2020.9.21-2020.9.25 [Poster]
- [3]. The 9th Annual Meeting of the Risk Analysis of China Disaster Defense Association, Tianjin, 2020.10.24-2020.10.25 [Presenter]

### Professional experience

## Research Assistant, Center of Psychological Sciences

2021-2022

PI: Prof. Peng Liu, Zhejiang University

Project 1: Responsibility Attribution in Human-Computer Interaction

Project 2: Trust in Automation

Project 3: Emerging Technology Acceptance

## Research Intern, Okair Airline - Civil Aviation University of China simulator center

2019

Project: Flight Operations and Experiment Design

# Professional service

Reviewer Safety Science 2021 - Present

Updated: 5/20/2023