

# WINNIE WING-YEE TSE

## EDUCATION

- |                      |  |   |
|----------------------|--|---|
| 2019<br> <br>Current | <ul style="list-style-type: none"><li>● <b>Ph.D. in Quantitative Psychology</b><br/>University of Southern California (USC)<ul style="list-style-type: none"><li>• Advisor: Hok Chio (Mark) Lai</li></ul></li></ul>                                    |  Los Angeles, CA |
| 2015<br> <br>2018    | <ul style="list-style-type: none"><li>● <b>B.A. in Psychology</b><br/>University of British Columbia (UBC)<ul style="list-style-type: none"><li>• Advisor: Victoria Savalei</li><li>• Graduate Student Advisor: Cathy Xijuan Zhang</li></ul></li></ul> |  Vancouver, BC   |



## AWARDS & FELLOWSHIPS

- |                   |   |   |
|-------------------|---|---|
| 2021<br> <br>2022 | <ul style="list-style-type: none"><li>● <b>Spencer Foundation</b><br/>University of Southern California (USC)<ul style="list-style-type: none"><li>• Role: Graduate Research Assistant</li><li>• Funded: USD \$49,796</li></ul></li></ul>   |  Los Angeles, CA |
| 2018              | <ul style="list-style-type: none"><li>● <b>Natural Sciences and Engineering Research Council of Canada (NSERC)</b><br/>University of British Columbia<ul style="list-style-type: none"><li>• Summer Undergraduate Student Research Awards (USRA)</li><li>• Funded: CAD \$12,900</li></ul></li></ul> |  Vancouver, BC |

## CURRENT RESEARCH PROJECTS

- **Hybrid Classical-Bayesian Approach for Sample Size Planning in Multilevel Randomized Trials**  
Developing an approach that incorporates the uncertainty around design parameters when determining multilevel sample sizes
- **Measurement Invariance with Ordered-Categorical Variables**  
Examining situations when strict factorial invariance is necessary for mean comparisons

## PUBLICATIONS

- |      |   |
|------|---|
| 2020 | <ul style="list-style-type: none"><li>● <b>Adjusting for partial invariance in latent parameter estimation: Comparing forward specification search and approximate invariance methods</b><br/>Behavior Research Methods<ul style="list-style-type: none"><li>• Authors: Lai, M. H. C., Liu, Y., &amp; <b>Tse, WW-Y.</b></li><li>• Manuscript accepted for publication (2020 February 5)</li></ul></li></ul> |
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## CONTACT INFO

✉ [wingyeet@usc.edu](mailto:wingyeet@usc.edu)

⌚ [winniewytse](https://www.wingyeet.com)

(OSF: [winniewytse](https://osf.io/winniewytse/))

## COMPUTER SKILLS

Statistics: R, SPSS, Stata, SAS

SEM: R (`lavaan`), Mplus

Multilevel: R (`lme4`, `brms`), Mplus

Document preparation:  
LaTeX, RMarkdown, MS Powerpoint, Excel, Word

Frontend: HTML, CSS

*This CV is made using [pagedown](#)*

*and last modified on 2021-03-02.*

- 2019
- **Improved properties of the Big Five Inventory and the Rosenberg Self-Esteem Scale in the Expanded format relative to the Likert Format**  
Frontiers in Psychology
    - Authors: Zhang, X., **Tse, WW-Y.**, & Savalei, V.
    - 10:1286, 11 pages
    - <https://doi.org/10.3389/fpsyg.2019.01286>

## 💻 CONFERENCE PRESENTATIONS

- 2020, July 14-17
- **Measurement Invariance for Ordered Categorical Variables: The Necessity of Strict Invariance for Valid Group Comparisons**  
Annual Meeting of the Psychometric Society (IMPS) [Poster Session]
    - Presentors: **Tse, WW-Y.** & Lai, M. H. C.
    - [Schedule](#)
- 2020, June 25-26
- **Measurement Invariance for Ordered Categorical Variables: The Necessity of Strict Invariance for Valid Group Comparisons**  
A Meeting of Methodologies (AMOM) [Conference Session]
    - Presentors: **Tse, WW-Y.** & Lai, M. H. C.
    - [Powerpoint slides](#)
- 2020, June 2-3
- **Path to valid means comparisons: The necessity of strict measurement invariance for ordered categorical variables**  
Modern Modeling Methods Conference (MMM) [Poster Session]
    - Presentors: **Tse, WW-Y.** & Lai, M. H. C.
    - Conference canceled due to Covid-19
- 2017, April 1-2
- **Examining the Order Effects in Psychological Scales in the Expanded Format**  
Psychology Undergraduate Research Conference, UBC
    - Presentors: **Tse, WW-Y.**, Zhang, X., & Savalei, V.

## 💻 RESEARCH EXPERIENCE

- 2020 | Current
- **Graduate Research Assistant**  
MMM Lab
    - Principal Investigator: Hok Chio (Mark) Lai
    - Project on the Alignment Methods Adjusting for Measurement Noninvariance
    - Project on Integrative Data Analysis
- 2016 | 2019
- **Undergraduate Research Assistant**  
SEM Lab
    - Principal Investigator: Victoria Savalei
    - Project on Order Effects in the Expanded Format Scales (Cathy Zhang)
    - Project on Bayes Factor under Different Priors (Bill Chen)

- 2017 | 2019
- **Undergraduate Research Assistant**  
Social Accuracy Lab
    - Principal Investigator: Jeremy Biesanz
    - Project on the Effects of Researchers' Degrees of Freedom on Effect Sizes
- 2017 | 2019
- **Undergraduate Research Assistant**  
Department of Social Work
    - Principal Investigator: Miu Chung Yan
    - Project on Immigration, Integration, and Social Transformation in the Pacific Rim
- 2016 | 2017
- **Undergraduate Research Assistant**  
Cultural and Self Lab
    - Principal Investigator: Steve Heine
    - Projects on Meaning Maintenance (Rachele Benjamin)
    - Project on Social Inequality (Anita Schmalor)

## TEACHING EXPERIENCE

- 2019
- **Statistics (PSYC 274)**  
 USC

## STATISTICAL TRAINING

- 2020
- **Applied Machine Learning (PSYC 625)**  
 USC
    - Instructor: Morteza Dehghani
- 2020
- **Multilevel Modeling**  
 USC
    - Instructor: Hok Chio (Mark) Lai
- 2020
- **Classic and Modern Statistical Methods II (PSYC 502)**  
 USC
    - Instructor: Rand Wilcox
- 2020
- **Research Design**  
 USC
    - Instructor: Christopher Beam
- 2019
- **Bayesian Data Analysis (PSYC 621)**  
 USC
    - Instructor: Hok Chio (Mark) Lai
- 2019
- **Classic and Modern Statistical Methods I (PSYC 501L)**  
 USC
    - Instructor: Rand Wilcox
- 2018
- **Applied Multiple Regression (PSYC 546E)**  
 UBC
    - Instructor: Jeremy Biesanz

2017

- **Exploratory Data Analysis (STAT 545A)**

- Instructor: Vincenzo Coia



## PROFESSIONAL SERVICES

- **Ad Hoc Journal Reviewer**

- Asian American Journal of Psychology
- Alcohol and Alcoholism