

# Mike W.-L. Cheung

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## EXECUTIVE SUMMARY

I am a full professor at the Department of Psychology, the National University of Singapore. My research area is quantitative methods, including structural equation modeling, meta-analysis, and multilevel modeling. My primary research topic is the integration of meta-analysis and structural equation modeling. I have published over 80 articles in international journals and one book titled *Meta-Analysis: A Structural Equation Modeling Approach*. According to Google Scholar, my H-index and the total citations of my work are 47 and 9,663, respectively. I am an Associate Editor of *Research Synthesis Methods* and *Neuropsychology Review* and in the editorial boards of *Psychological Bulletin*, *Journal of Management*, *Health Psychology Review*, and *Methods in Psychology*. See <https://mikewlcheung.github.io> for my profile.

## CONTACT INFORMATION

Academic title	Full Professor
Affiliation	Department of Psychology, National University of Singapore (NUS), Singapore
Homepage	<a href="https://mikewlcheung.github.io">https://mikewlcheung.github.io</a>
Websites	Academia, Faculty Opinions, GitHub, Google Scholar, Linkedin, Loop, NCBI, OpenMx, ORCID, OSF, PsyArXiv, ResearchGate, Scopus, Stack Exchange, Twitter, Web of Science, and Zotero

## ACADEMIC POSITIONS

Jul 2020 - present	<b>Full Professor</b> (with tenure), Department of Psychology, NUS
Jan 2010 - Jun 20	<b>Associate Professor</b> (with tenure), Department of Psychology, NUS
Jul 2006 - Dec 09	<b>Assistant Professor</b> (tenure track), Department of Psychology, NUS
Mar 2003 - Jul 06	<b>Research Assistant Professor</b> , Department of Psychology, The University of Hong Kong (HKU)
Aug 2002 - Mar 03	<b>Postdoctoral Fellow</b> , Department of Psychology, HKU

## AFFILIATIONS

Aug 2021 - present	<b>Professor</b> (courtesy appointment), Department of Management & Organisation, NUS
Jan 2020 - present	<b>Steering Committee Member</b> , Centre for Family and Population Research (CFPR), NUS
Apr 2018 - present	<b>Affiliate</b> , The Institute for Application of Learning Science and Educational Technology (ALSET), NUS
Feb 2017 - present	<b>Affiliate</b> , The Institute of Data Science (IDS), NUS
Nov 2016 - present	<b>Research Associate</b> , Centre for Family and Population Research (CFPR), NUS
Oct 2015 - Sep 18	<b>Associate Professor</b> (courtesy appointment), Department of Management & Organisation, NUS

## EDUCATION

- 1999 - 2002 **Ph.D. in Psychology**, The Chinese University of Hong Kong (CUHK) (major in quantitative psychology and minor in industrial and organizational psychology)
- 1997 - 1999 **M.Phil. in Psychology**, CUHK (major in quantitative psychology)
- 1993 - 1997 **Bachelor of Social Sciences**, CUHK (major in psychology and minor in physics)

## FELLOWSHIPS AND AWARDS

- 2015 Humanities and Social Sciences (HSS) Faculty Research Fellowship, NUS
- 2012 Award for Excellent Researcher, Faculty of Arts and Social Sciences, NUS
- 2008 Nominated for the Young Scientists Program by the 29th International Congress of Psychology, Berlin, Germany

## PREPRINTS

- [3] Bierwaczzonek, K., **Cheung, M. W.**, & Kunst, J. R. (2022, October 20). Revisiting the integration hypothesis again: High heterogeneity complicates the interpretation of cross-sectional evidence. <https://psyarxiv.com/32npb>.
- [2] Jak, S., & **Cheung, M. W.** (2022, March 16). Can findings from meta-analytic structural equation modeling in management and organizational psychology be trusted? <https://psyarxiv.com/b3qvn>.
- [1] **Cheung, M. W.** (2021, May 26). Structural equation modeling (SEM)-based meta-analysis. <https://psyarxiv.com/93nfr>.

## BOOK

- [1] **Cheung, M. W.-L.** (2015). *Meta-Analysis: A Structural Equation Modeling Approach*. Chichester, West Sussex: John Wiley & Sons.

## EDITORIALS IN REFEREED JOURNALS

- [3] **Cheung, M. W.-L.**, & Jak, S. (2018). Challenges of analyses and applications of Big Data in Psychology. *Zeitschrift für Psychologie*, 226 (4), 209-211. doi:10.1027/2151-2604/a000348
- [2] Kwok, O.-M., **Cheung, M. W.-L.**, Jak, S., Ryu, E., & Wu, J.-Y. (2018). Editorial: Recent advancements in structural equation modeling (SEM): From both methodological and application perspectives. *Frontiers in Psychology*, 9 (1936). doi:10.3389/fpsyg.2018.01936
- [1] **Cheung, M. W.-L.**, & Hafdahl, A. R. (2016). Special issue on meta-analytic structural equation modeling: Introduction from the Guest Editors. *Research Synthesis Methods*, 7 (2), 112-120. doi:10.1002/jrsm.1212

## ARTICLES IN REFEREED JOURNALS

- [86] Campos, D., **Cheung, M. W.-L.**, & Scherer, R. (accepted for publication). A primer on synthesizing individual participant data obtained from complex sampling surveys: A two-stage IPD meta-analysis approach. *Psychological Methods*.
- [85] Gu, F., Yung, Y.-F., **Cheung, M. W.-L.**, Joo, B.-K., & Nimon, K. (2022). Statistical inference in redundancy analysis: A direct covariance structure modeling approach. *Multivariate Behavioral Research*. doi:10.1080/00273171.2022.2141675

- [84] In'nami, Y., **Cheung, M. W.-L.**, Koizumi, R., & Wallace, M. P. (2022). Examining second language listening and metacognitive awareness: A meta-analytic structural equation modeling approach. *Language Learning*. doi:/10.1111/lang.12548
- [83] Ho, N. F., Lin, A. Y., Tng, J. X. J., Hui Chew, Q. H., **Cheung, M. W.-L.**, Javitt, D. C., & Sim, K. (2022). Abnormalities in visual cognition and associated impaired interactions between visual and attentional networks in schizophrenia and brief psychotic disorder, 327, 111545. *Psychiatry Research: Neuroimaging*. doi:/10.1016/j.pscychresns.2022.111545
- [82] Quek, Y.-E., Fung, Y. L., **Cheung, M. W.-L.**, Vogrin, S. J., Collins, S. J., & Bowden, S. C. (2022). Agreement between automated and manual MRI Volumetry in Alzheimer's disease: A systematic review and meta-analysis. *Magnetic Resonance Imaging*, 56(2), 490-507. doi:/10.1002/jmri.28037
- [81] Halliday, A., Duncan, A., **Cheung, M.**, Boston, R.C., Apiwattanakul, M., Camacho, X., Bowden, S., & D'Souza, W. (2022). Second-line immunotherapy and functional outcomes in autoimmune encephalitis: A systematic review and individual patient data meta-analysis. *Epilepsia*, 63(9), 2214-2224. doi:/10.1111/epi.17327
- [80] Lim, A. J.-M. & **Cheung, M. W.-L.** (2022). Evaluating FIML and multiple imputation in joint ordinal-continuous measurements models with missing data. *Behavior Research Methods*, 54, 1063-1077. doi:/10.3758/s13428-021-01582-w
- [79] Epskamp, S., Isvoranu, A., & **Cheung, M. W.-L.** (2022). Meta-analytic Gaussian network aggregation. *Psychometrika*, 87(1), 12-46. doi:/10.1007/s11336-021-09764-3
- [78] Valentine, J. C., **Cheung, M. W.-L.**, Smith, E. J., Alexander, O., Hatton, J. M., Hong, R. Y., Huckaby, L. T., Patton, S. C., Pössel, P., & Seely, H. D. (2022). A primer on meta-analytic structural equation modeling: The case of depression. *Prevention Science*, 23, 346-365. doi:/10.1007/s11121-021-01298-5
- [77] Hagger, H. S., **Cheung, M. W.-L.**, Ajzen, I., & Hamilton, K. (2022). Perceived behavioral control moderating effects in the Theory of Planned Behavior: A meta-analysis, *Health Psychology*, 41 (2), 155-157. doi:/10.1037/hea0001153
- [76] **Cheung, M. W.-L.** (2022). Synthesizing indirect effects in mediation models with meta-analytic methods. *Alcohol and Alcoholism*, 57 (1), 5-15. doi:/10.1093/alcac/agab044
- [75] Chong, A., Tolomeo, S., Xiong, Y., Angeles, D., **Cheung, M.**, Becker, B., Lai, P. S., Lei, Z., Malavasi, F., Tang, Q., Chew, S. H., & Ebstein, R. P. (2021). Blending oxytocin and dopamine with everyday creativity. *Scientific Reports*, 11 (1), 16185. doi:/10.1038/s41598-021-95724-x
- [74] Ugarte-Gil, M. F., Mak, A., Leong, J. ..., **Cheung, M.**, Farewell, V., & Alarcon, G. S. (2021). Impact of glucocorticoids on the incidence of lupus-related major organ damage: A systematic literature review and meta-regression analysis of longitudinal observational studies. *Lupus Science & Medicine*, 8 (1), e000590. doi:/10.1136/lupus-2021-000590
- [73] Isvoranu, A., Epskamp, S., & **Cheung, M. W.-L.** (2021). Network models of post-traumatic stress disorder: A meta-analysis. *Journal of Abnormal Psychology*, 130 (8), 841-861. doi:/10.1037/abn0000704
- [72] Schutte, N. S., Keng, S. L., & **Cheung, M. W.-L.** (2021). Emotional intelligence mediates the connection between mindfulness and gratitude: A meta-analytic structural equation modelling study. *Mindfulness*, 12 (11), 2613-2623. doi:/10.1007/s12671-021-01725-2

- [71] Dharan, A. L., Bowden, S. C., Lai, A., Peterson, A.D.H., **Cheung, M. W.-L.**, Woldman, W., & D'Souza, W. J. (2021). Resting-state functional connectivity in the idiopathic generalized epilepsies: A systematic review and meta-analysis of EEG and MEG studies. *Epilepsy & Behavior*, *124*, 108336. doi:/10.1016/j.yebeh.2021.108336
- [70] Jak, S., Li, H., Kolbe, L., & **Cheung, M. W.-L.** (2021). Meta-analytic structural equation modeling made easy: A tutorial and web application for one-stage MASEM. *Research Synthesis Methods*, *12* (5), 590-606. doi:/10.1002/jrsm.1498
- [69] Vijayakumar, R., & **Cheung, M. W.-L.** (2021). Assessing replicability of machine learning results: An introduction to methods on predictive accuracy in social sciences. *Social Science Computer Review*, *39* (5), 768-801. doi:/10.1177/0894439319888445
- [68] Sun, H., Yussof, N. T. B., Habib Mohamed, M. B. B., Rahim, A. B., Bull, R., **Cheung, M. W.-L.**, & Cheong, S. A. (2021). Bilingual language experience and children's social-emotional and behavioral skills: a cross-sectional study of Singapore preschoolers. *International Journal of Bilingual Education and Bilingualism*, *24* (3), 324-339. doi:/10.1080/13670050.2018.1461802
- [67] Zhang, Y., Liu, G., Zhang, L., Xu, S., & **Cheung, M.W.-L.** (2021). Psychological ownership: A meta-analysis and comparison of multiple forms of attachment in the workplace. *Journal of Management*, *47* (3), 745-770. doi:/10.1177/0149206320917195
- [66] Yeung, W.-J. J., Chen, X., Ding, X. P., & **Cheung, M.W.-L.** (2020). Achievement test for Chinese preschool children: Validity and social correlates. *Chinese Journal of Sociology*, *6* (4), 497-520. doi:/10.1177/2057150X20950507
- [65] Chua, M.H.Y., Ng, I.A.T., **Cheung, M. W.-L.**, & Mak, A. (2020). Association between cigarette smoking and systemic lupus erythematosus - An updated multivariate Bayesian meta-analysis. *The Journal of Rheumatology*, *47* (10), 1514-1521. doi:/10.3899/jrheum.190733
- [64] Jak, S., & **Cheung, M. W.-L.** (2020). Meta-analytic structural equation modeling with moderating effects on SEM parameters. *Psychological Methods*, *25* (4), 430-455. doi:/10.1037/met0000245
- [63] **Cheung, M. W.-L.** (2019) A guide to conducting a meta-analysis with non-independent effect sizes. *Neuropsychology Review*, *29* (4), 387-396. doi:/10.1007/s11065-019-09415-6
- [62] Gu, F., Yung, Y.-F., & **Cheung, M. W.-L.** (2019). Four covariance structure models for canonical correlation analysis: A COSAN modeling approach. *Multivariate Behavioral Research*, *54* (2), 192-223. doi:/10.1080/00273171.2018.1512847
- [61] **Cheung, M. W.-L.** (2019). Some reflections on combining meta-analysis and structural equation modeling. *Research Synthesis Methods*, *10* (1), 15-22. doi:/10.1002/jrsm.1321
- [60] Zhang, Y., Zhang, L., Liu, G., Duan, J., Xu, S., & **Cheung, M. W.-L.** (2019). How does ethical leadership impact employee organizational citizenship behavior? *Zeitschrift für Psychologie*, *227* (1), 18-30. doi:/10.1027/2151-2604/a000353
- [59] Vijayakumar, R., & **Cheung, M. W.-L.** (2018). Replicability of machine learning models in the social sciences: a case study in variable selection. *Zeitschrift für Psychologie*, *226* (4), 259-273. doi:/10.1027/2151-2604/a000344
- [58] **Cheung, M. W.-L.** (2018). Computing multivariate effect sizes and their sampling covariance matrices with structural equation modeling: Theory, examples, and computer simulations. *Frontiers in Psychology*, *9* (1387). doi:10.3389/fpsyg.2018.01387

- [57] Jak, S., & **Cheung, M. W.-L.** (2018). Testing moderator hypotheses in meta-analytic structural equation modeling using subgroup analysis. *Behavior Research Methods*, 50 (4), 1359-1373. doi/10.3758/s13428-018-1046-3
- [56] Cheng, C., **Cheung, M. W.-L.**, & Wang, H. (2018). Multinational Comparison of Internet Gaming Disorder and Psychosocial Problems versus Well-being: Meta-Analysis of 20 Countries. *Computers in Human Behavior*, 88, 153-167. doi: 10.1016/j.chb.2018.06.033
- [55] Cheung, F., Lun, V.M.C., & **Cheung, M. W.-L.** (2018). Emotional labor and occupational well-being: Latent profile transition analysis approach. *Frontiers in Psychology*, 9 (1084). doi: 10.3389/fpsyg.2018.01084
- [54] Jak, S., & **Cheung, M. W.-L.** (2018). Accounting for missing correlation coefficients in fixed-effects meta-analytic structural equation modeling. *Multivariate Behavioral Research*, 53 (1), 1-14. doi:/10.1080/00273171.2017.1375886
- [53] **Cheung, M. W.-L.**, & Hong, R.-Y. (2017). Applications of meta-analytic structural equation modeling in health psychology: Examples, issues, and recommendations. *Health Psychology Review*, 11 (3), 265-279. doi:10.1080/17437199.2017.1343678
- [52] Sigerson, L., Li, A. Y.-L. **Cheung, M. W.-L.**, & Cheng, C. (2017). Examining common information technology addictions and their relationships with non-technology-related addictions. *Computers in Human Behavior*, 75, 520-526. doi:10.1016/j.chb.2017.05.041
- [51] Sigerson, L., Li, A. Y.-L. **Cheung, M. W.-L.**, Luk, J. W., & Cheng, C. (2017). Psychometric properties of the Chinese Internet Gaming Disorder Scale Addictive Behaviors. *Addictive Behaviors*, 74, 20-26. doi:10.1016/j.addbeh.2017.05.031
- [50] Runge, M., **Cheung, M. W.-L.**, & D'Angiulli, A. (2017). Meta-analytic comparison of trial- versus questionnaire-based vividness reportability across behavioral, cognitive and neural measurements of imagery. *Neuroscience of Consciousness*, 3 (1), 1-13. doi:10.1093/nc/nix006
- [49] Hong, R.Y., Riskind, J.H., **Cheung, M. W.-L.**, Calvete, E., González-Díez, Z., Atalay, A.A., Curzik, D., Jokic-Begic, N., del Palacio-Gonzalez, A., Mihić, L., Samac, N., Sica, C., Sugiura, Y., Khatri, S., & Kleiman, E.M. (2017). The Looming Maladaptive Style Questionnaire: Measurement invariance and relations to anxiety and depression across 10 countries. *Journal of Anxiety Disorders*, 49, 1-11. doi:10.1016/j.janxdis.2017.03.004
- [48] Ho, N. F., Holt, D., **Cheung, M.**, Iglesias, J. E., Goh, A., Wang, M. Lim, J., De Souza, J., Poh, J., See, Y. M., Adcock, A., Wood, S., Chee, M., Lee, J. & Zhou, J. (2017). Progressive decline in hippocampal CA1 volume in individuals at ultra-high-risk for psychosis who do not remit: Findings from the Longitudinal Youth at Risk Study. *Neuropsychopharmacology*, 42 (6), 1361-1370. doi:10.1038/npp.2017.5
- [47] Tang, R., & **Cheung, M. W.-L.** (2016). Testing IB theories with meta-analytic structural equation modeling: The TSSEM approach and the univariate-r approach. *Review of International Business and Strategy*, 26 (4), 472-492. doi:10.1108/RIBS-04-2016-0022
- [46] Cheng, C., **Cheung, M. W.-L.**, & Lo, B. C. Y. (2016). Relationship of health locus of control with specific health behaviours and global health appraisal: A meta-analysis and effects of moderators. *Health Psychology Review*, 10 (4), 460-477. doi:10.1080/17437199.2016.1219672
- [45] **Cheung, M. W.-L.**, & Vijayakumar, R. (2016). A guide to conducting a meta-analysis. *Neuropsychology Review*, 26 (2), 121-128. doi:10.1007/s11065-016-9319-z

- [44] **Cheung, M. W.-L.**, & Cheung, S. F. (2016). Random-effects models for meta-analytic structural equation modeling: Review, issues, and illustrations. *Research Synthesis Methods*, 7 (2), 140-155. doi:10.1002/jrsm.1166
- [43] **Cheung, M. W.-L.**, & Jak, S. (2016). Analyzing big data in psychology: A split/analyze/meta-analyze approach. *Frontiers in Psychology*, 7 (738). doi:10.3389/fpsyg.2016.00738
- [42] Cheng, C., **Cheung, M. W.-L.**, Montasem, A., & 44 members of the International Network of Well-Being Studies. (2016). Explaining differences in subjective well-being across 33 nations using multilevel models: Universal personality, cultural relativity, and national income. *Journal of Personality*, 84 (1), 46-58. doi:10.1111/jopy.12136
- [41] Hong, R. Y., & **Cheung, M. W.-L.** (2015). The structure of cognitive vulnerabilities to depression and anxiety: Evidence for a common core etiologic process based on a meta-analytic review. *Clinical Psychological Science*, 3 (6), 892-912. doi:10.1177/2167702614553789
- [40] **Cheung, M. W.-L.** (2015). metaSEM: An R Package for Meta-Analysis using Structural Equation Modeling. *Frontiers in Psychology*, 5 (1521). doi:10.3389/fpsyg.2014.01521
- [39] **Cheung, M. W.-L.** (2014). Modeling dependent effect sizes with three-level meta-analyses: A structural equation modeling approach. *Psychological Methods*, 19 (2), 211-229. doi:10.1037/a0032968
- [38] **Cheung, M. W.-L.** (2014). Fixed- and random-effects meta-analytic structural equation modeling: Examples and analyses in R. *Behavior Research Methods*, 46 (1), 29-40. doi:10.3758/s13428-013-0361-y
- [37] **Cheung, M. W.-L.** (2013). Multivariate meta-analysis as structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, 20 (3), 429-454. doi:10.1080/10705511.2013.797827
- [36] **Cheung, M. W.-L.** (2013). Implementing restricted maximum likelihood estimation in structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, 20 (1), 157-167. doi:10.1080/10705511.2013.742404
- [35] Mak, A., **Cheung, M. W.-L.**, Chiew, H. J., Liu, Y., & Ho, R. C. M. (2012). Global trend of survival and damage of systemic lupus erythematosus: Meta-analysis and meta-regression of observational studies between the 1950s to 2000s. *Seminars in Arthritis and Rheumatism*, 41 (6), 830-839. doi:10.1016/j.semarthrit.2011.11.002
- [34] **Cheung, M. W.-L.**, Ho, R. C. M., Lim, Y., & Mak, A. (2012). Conducting a meta-analysis: Basics and good practices. *International Journal of Rheumatic Diseases*, 15 (2), 129-135. doi: 10.1111/j.1756-185X.2012.01712.x
- [33] Ho, R. C. M., **Cheung, M. W.-L.**, Fu, E., Win, H. H., Zaw, M. H., Ng, A., & Mak, A. (2011). Is high homocysteine level a risk factor for cognitive decline in elderly? A systematic review, meta-analysis, and meta-regression. *American Journal of Geriatric Psychiatry*, 19 (7), 607-617. doi: 10.1097/JGP.0b013e3181f17eeb
- [32] Cheng, C., Jose, P. E., Sheldon, K. M., Singelis, T. M., **Cheung, M. W.-L.**, Tiliouine, H., Alao, A. A., Chio, J. H. M., Lui, J. Y. M., Chun, W. Y., de Zavala, A. G., Hakuzimana, A., Hertel, J., Liu, J.-T. Onyewadume, M., & Sims, C. (2011). Sociocultural differences in self-construal and subjective well-being: A test of four cultural models. *Journal of Cross-Cultural Psychology*, 42 (5), 832-855. doi: 10.1177/0022022110381117

- [31] Zhang, M. W. B., Ho, R. C. M., **Cheung, M. W.-L.**, Fu, E., & Mak, A. (2011). Prevalence of depressive symptoms in patients with chronic obstructive pulmonary disease: a systematic review, meta-analysis and meta-regression. *General Hospital Psychiatry*, 33 (3), 217-223. doi:10.1016/j.genhosppsych.2011.03.009
- [30] Viechtbauer, W., & **Cheung, M. W.-L.** (2010). Outlier and influence diagnostics for meta-analysis. *Research Synthesis Methods*, 1 (2), 112-125. doi: 10.1002/jrsm.11
- [29] Ho, R. C. M., Ong, H. S., Kudva, K. G., **Cheung, M. W.-L.**, & Mak, A. (2010). How to critically appraise and apply meta-analyses in clinical practice. *International Journal of Rheumatic Diseases*, 13 (4), 294-299. doi: 10.1111/j.1756-185X.2010.01560.x
- [28] **Cheung, M. W.-L.** (2010). Fixed-effects meta-analyses as multiple-group structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, 17 (3), 481-509. doi: 10.1080/10705511.2010.489367
- [27] Mak, A., **Cheung, M. W.-L.**, Fu, E. H. Y., & Ho, R. C. M. (2010). Meta-analysis in medicine: An introduction. *International Journal of Rheumatic Diseases*, 13 (2), 101-104. doi: 10.1111/j.1756-185X.2010.01471.x
- [26] Mak, A., **Cheung, M. W.-L.**, Cheak, A. A. C., & Ho, R. C. M. (2010). Combination of heparin and aspirin is superior to aspirin alone in enhancing live births in patients with recurrent pregnancy loss and positive antiphospholipid antibodies: A meta-analysis of randomized controlled trials and meta-regression. *Rheumatology*, 49 (2), 281-288. doi: 10.1093/rheumatology/kep373
- [25] Mak, A., **Cheung, M. W.-L.**, Ho, R. C. M., Cheak, A. A. C., & Lau, C. S. (2009). Bisphosphonates and atrial fibrillation: Bayesian meta-analyses of randomized controlled trials and observational studies. *BMC Musculoskeletal Disorders*, 10 (113). doi: 10.1186/1471-2474-10-113
- [24] **Cheung, M. W.-L.** (2009). Comparison of methods for constructing confidence intervals of standardized indirect effects. *Behavior Research Methods*, 41 (2), 425-438. doi: 10.3758/BRM.41.2.425
- [23] **Cheung, M. W.-L.** (2009). Constructing approximate confidence intervals for parameters with structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, 16 (2), 267-294. doi: 10.1080/10705510902751291
- [22] **Cheung, M. W.-L.**, & Chan, W. (2009). A two-stage approach to synthesizing covariance matrices in meta-analytic structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 16 (1), 28-53. doi: 10.1080/10705510802561295
- [21] **Cheung, M. W.-L.** (2008). A model for integrating fixed-, random-, and mixed-effects meta-analyses into structural equation modeling. *Psychological Methods*, 13 (3), 182-202. doi: 10.1037/a0013163
- [20] Au, T. K. F., Chan, C. K. K., Chan, T. K., **Cheung, M. W.-L.**, Ho, J. Y. S., & Ip, G. W. M. (2008). Folkbiology meets microbiology: A study of conceptual and behavioral change. *Cognitive Psychology*, 57 (1), 1-19. doi: 10.1016/j.cogpsych.2008.03.002
- [19] **Cheung, M. W.-L.**, Wong, P. W. C., Liu, K. Y., Yip, P. S. F., Fan, S. Y. S., & Lam, T. H. (2008). A study of sexual satisfaction and frequency of sex among Hong Kong Chinese couples. *Journal of Sex Research*, 45 (2), 129-139. doi: 10.1080/00224490801987416 (Portion of the paper was reprinted as **Cheung, M. W.-L.**, Yip, P. S. F., Fan, S. Y. S., & Lam, T. H. (2012). Marital satisfaction among Hong Kong couples. *Hong Kong Medical Journal*, 18 (Supplement 6), S25-26.)

- [18] Lau, P. W. C., **Cheung, M. W.-L.**, & Ransdell, L. B. (2008). A structural equation model of the relationship between body perception and self-esteem: Global physical self-concept as the mediator. *Psychology of Sport and Exercise*, 9 (4), 493-509. doi: 10.1016/j.psychsport.2007.07.005
- [17] **Cheung, M. W.-L.** (2007). Comparison of methods of handling missing time-invariant covariants in latent growth models under the assumption of missing completely at random. *Organizational Research Methods*, 10 (4), 609-634. doi: 10.1177/1094428106295499
- [16] Lau, P. W. C., **Cheung, M. W.-L.**, & Ransdell, L. (2007). Sport identity and sport participation: A cultural comparison between collective and individualistic societies *International Journal of Sport and Exercise Psychology*, 5 (1), 66-81. doi: 10.1080/1612197X.2008.9671813
- [15] **Cheung, M. W.-L.** (2007). Comparison of approaches to constructing confidence intervals for mediating effects using structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, 14 (2), 227-246. doi: 10.1080/10705510709336745
- [14] Wu, K. K., & **Cheung, M. W.-L.** (2006). Posttraumatic stress after motor vehicle accident: A six-month follow-up study utilizing latent growth modeling. *Journal of Traumatic Stress*, 19 (6), 923-936. doi: 10.1002/jts.20178
- [13] Lau, P. W. C., Fox, K. R., & **Cheung, M. W.-L.** (2006). An analysis of sport identity as a predictor of children's participation in sport. *Pediatric Exercise Science*, 18 (4), 415-425. doi: 10.1123/pes.18.4.415
- [12] **Cheung, M. W.-L.**, Leung, K., & Au, K. (2006). Evaluating multilevel models in cross-cultural research: An illustration with social axioms. *Journal of Cross-Cultural Psychology*, 37 (5), 522-541. doi: 10.1177/0022022106290476
- [11] **Cheung, M. W.-L.** (2006) Recovering preipsative information from additive ipsatized data: A factor score approach. *Educational and Psychological Measurement*, 66 (4), 565-588. doi: 10.1177/0013164405282486
- [10] Cheng, C., & **Cheung, M. W.-L.** (2005). Cognitive processes underlying coping flexibility: Differentiation and integration. *Journal of Personality*, 73 (4), 859-886. doi: 10.1111/j.1467-6494.2005.00331.x
- [9] Cheng, C., & **Cheung, M. W.-L.** (2005). Psychological responses to outbreak of severe acute respiratory syndrome: A prospective, multiple-time-point study. *Journal of Personality*, 73 (1), 261-285. doi: 10.1111/j.1467-6494.2004.00310.x
- [8] **Cheung, M. W.-L.**, & Chan, W. (2005). Classifying correlation matrices into relatively homogeneous subgroups: A cluster analytic approach. *Educational and Psychological Measurement*, 65 (6), 954-979. doi: 10.1177/0013164404273946
- [7] **Cheung, M. W.-L.**, & Chan, W. (2005). Meta-analytic structural equation modeling: A two-stage approach. *Psychological Methods*, 10 (1), 40-64. doi: 10.1037/1082-989X.10.1.40
- [6] **Cheung, M. W.-L.**, & Au, K. (2005). Applications of multilevel structural equation modeling to cross-cultural research. *Structural Equation Modeling: A Multidisciplinary Journal*, 12 (4), 598-619. doi: 10.1207/s15328007sem1204\_5
- [5] Lau, P. W. C., Fox, K. R., & **Cheung, M. W.-L.** (2004). Psychosocial and socio-environmental correlates of sport identity and sport participation in secondary school-age children. *European Journal of Sport Science*, 4 (3), 1-21. doi: 10.1080/17461390400074301



- [4] Au, K., & **Cheung, M. W.-L.** (2004). Intra-cultural variation and job autonomy in 42 countries. *Organization Studies*, 25 (8), 1339-1362. doi: 10.1177/0170840604046345
- [3] **Cheung, M. W.-L.**, & Chan, W. (2004). Testing dependent correlation coefficients via structural equation modeling. *Organizational Research Methods*, 7 (2), 206-223. doi: 10.1177/1094428104264024
- [2] **Cheung, M. W.-L.** (2004). A direct estimation method on analyzing ipsative data with Chan and Bentler's (1993) method. *Structural Equation Modeling: A Multidisciplinary Journal*, 11 (2), 217-243. doi: 10.1207/s15328007sem1102\_5
- [1] **Cheung, M. W.-L.**, & Chan, W. (2002). Reducing uniform response bias with ipsative measurement in multiple group confirmatory factor analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, 9 (1), 55-77. doi: 10.1207/S15328007SEM0901\_4

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## COMMENTARIES

- [2] Jak, S., & **Cheung, M. W.-L.** (2020). A commentary on Lv and Maeda (2019). *Structural Equation Modeling: A Multidisciplinary Journal*, 27 (3), 438-441. doi:10.1080/10705511.2019.1688155
- [1] **Cheung, M. W.-L.** (2018). Issues in solving the problem of effect size heterogeneity in meta-analytic structural equation modeling: A commentary and simulation study on Yu, Downes, Carter, and O'Boyle (2016). *Journal of Applied Psychology*, 103 (7), 787-803. doi:10.1037/apl0000284

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## INVITED BOOK REVIEW

- [1] **Cheung, M. W.-L.** (2013). Applied meta-analysis for social science research by Noel A. Card. *Structural Equation Modeling: A Multidisciplinary Journal*, 20 (4), 704-707. doi: 10.1080/10705511.2013.824795

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## ARTICLES IN EDITED BOOKS, ENCYCLOPEDIA, AND PROCEEDINGS

- [9] **Cheung, M. W.-L.** (2023). Structural equation modeling (SEM)-based meta-analysis. In R. H. Hoyle (Ed.), *Handbook of Structural Equation Modeling* (2nd ed.). New York: Guilford Press.
- [8] **Cheung, M. W.-L.** (2021). Meta-analytic structural equation modeling. In *Oxford Research Encyclopedia of Business and Management*. Oxford University Press. doi: 10.1093/acrefore/9780190224851.013.225
- [7] Becker, B. J., Aloe, A. M., & **Cheung, M. W.-L.** (2020). Meta-analysis of correlation matrices and structural equation models. In C. H. Schmid, T. Stijnen, & I. R. White (Eds.), *Handbook of Meta-Analysis* (pp. 347-369). CRC Press. doi: 10.1201/9781315119403
- [6] **Cheung, M. W.-L.** (2017). Meta-analysis: Fixed-effects analysis. In M. Allen (Ed.), *The SAGE Encyclopedia of Communication Research Methods* (pp. 989-993). Thousand Oaks: Sage. doi: 10.4135/9781483381411.n343
- [5] Ho, S. M. Y., & **Cheung, M. W.-L.** (2007). Using the combined etic-emic approach to develop a measurement of interpersonal subjective well-being in Chinese populations. In A. D. Ong & M. van Dulmen (Eds.), *Oxford handbook of methods in positive psychology* (pp. 139-152). N.Y.: Oxford University Press.

- [4] **Cheung, M. W.-L.**, & Yip, P. S. F. (2005). Theta reliability. In K. Kempf-Leonard (Ed.), *Encyclopedia of social measurement*: Vol. 3 (pp.791-796). Oxford: Elsevier Academic Press. doi: 10.1016/B0-12-369398-5/00396-0
- [3] **Cheung, M. W.-L.** (2005). Testing research hypotheses with structural equation models: An illustration with PROC CALIS. *Proceedings of the SAS academic user group conference 2005* (pp. 30-36), Hong Kong.
- [2] Lau, P. W. C., **Cheung, M. W.-L.**, & Ransdell, L. (2004). Measurement properties of subscales of the Physical Self-Descriptive Questionnaire in Chinese children. In M. K. Chin, L. D. Hensley, P. Cote & S. H. Chen (Eds.), *Global perspectives in the integration of physical activity, sports, dance and exercise science in physical education: From theory to practice* (pp. 439-446). Hong Kong: The Hong Kong Institute of Education.
- [1] Au, K., & **Cheung, M. W.-L.** (2002). Consequences of intra-cultural variation: An exploratory study of job autonomy in 42 countries. In P. Boski, F. J. R. van de Vijver, & A. M. Chodyncka (Eds.), *New directions in cross-cultural psychology* (pp. 261-278). Warsaw, Poland: Polish Psychological Association.

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## CONFERENCE PRESENTATIONS

- [58] Campos, G. D., **Cheung, M. W.-L.** & Scherer, R. (Jul, 2022). *Synthesizing research on complex sampling surveys: Two-stage meta-analysis with individual participant data*. Paper presented at the IMPS 2022 International Meeting of the Psychometric Society, Bologna, Italy.
- [57] Desveaud, K. & **Cheung, M. W.-L.** (Aug, 2021). *Conducting relevant generalizations of past results in Marketing research: Introduction to the one-stage meta-analytic structural equation modeling*. Paper presented at the 2021 American Marketing Association (AMA) Summer Academic Conference (Virtual Conference).
- [56] **Cheung, M. W.-L.** (Jun, 2021). *Integrating meta-analysis within the structural equation modeling framework*. **Invited talk** presented at the 2021 Annual Meeting of the International Society for Data Science and Analytics (ISDSA) (Virtual Conference).
- [55] Campos, G. D., Scherer, R., & **Cheung, M. W.-L.** (May, 2021). *Meta-analyzing international large-scale assessment data: An application of the Split, Analyze, and Meta-analyze (SAM) approach*. Paper presented at the Research Synthesis & Big Data Conference (Virtual Conference).
- [54] **Cheung, M. W.-L.** (Jul, 2019). *Handling missing covariates in mixed-effects meta-analysis with Full-Information Maximum Likelihood*. Paper presented at the 14th Annual Meeting of the Society for Research Synthesis Methodology, Chicago, USA.
- [53] **Cheung, M. W.-L.** (Dec, 2018). *A general meta-analytic model for independent and dependent effect sizes*. Paper presented at the ACPRI Social Science Methodology Conference 2018, Sydney, Australia.
- [52] Chua, M. H. Y., Ng, I. A. T., **Cheung, M. W.-L.** & Mak, A. (Oct, 2018). *Association between cigarette smoking and systemic lupus erythematosus - a Bayesian multivariate meta-analysis of case-control and cohort studies*. Paper presented at the 2018 ACR/ARHP Annual Meeting, Chicago, USA.
- [51] Jak, S., & **Cheung, M. W.-L.** (Jul, 2018). *Meta-analytic structural equation modeling with moderator variables*. Paper presented at the 13th Annual Meeting of the Society for Research Synthesis Methodology, Bristol, UK.

- [50] **Cheung, M. W.-L.** (Jun, 2018). *Modelling non-independent effect sizes in meta-analysis*. Paper presented at the International Symposium on Education and Social Sciences, Okinawa, Japan.
- [49] **Cheung, M. W.-L.** (Jun, 2018). *Bridging meta-analysis and standard statistical methods*. **Invited keynote address** presented at the Research Synthesis 2018 organized by the Leibniz Institute for Psychology Information (ZPID), Trier, Germany.
- [48] **Cheung, M. W.-L.** (Jun, 2018). *Testing model-driven hypotheses with Big Data*. **Invited keynote address** presented at the Big Data in Psychology 2018 organized by the Leibniz Institute for Psychology Information (ZPID), Trier, Germany.
- [47] **Cheung, M. W.-L.** (Nov, 2017). *Evidence-based education with meta-analysis*. Poster presented at the WERA Focal Meeting & HKERA International Conference 2017, Hong Kong SAR, China.
- [46] **Cheung, M. W.-L.**, & Jak, S. (Jul, 2017). *A simulation study on meta-analytic structural equation modeling under random-effects model*. Paper presented at the 12th Annual Meeting of the Society for Research Synthesis Methodology, Montreal, Canada.
- [45] Jak, S. & **Cheung, M. W.-L.** (Jul, 2017). *Accounting for missing correlation coefficients in fixed-effects meta-analytic structural equation modeling*. Paper presented at the 12th Annual Meeting of the Society for Research Synthesis Methodology, Montreal, Canada.
- [44] **Cheung, M. W.-L.** (Mar, 2017). *Synthesizing research findings in psychology with meta-analysis*. **Invited keynote address** at the 6th Annual International Conference on Cognitive and Behavioral Psychology, Singapore.
- [43] **Cheung, M. W.-L.**, & Jak, S. (Dec, 2016). *Analysis of big data in social, educational and behavioral sciences*. Poster presented at the 4th Asia-Pacific Conference on Business & Social Sciences, Hong Kong SAR, China.
- [42] **Cheung, M. W.-L.** (Jul, 2016). *Integrating meta-analysis within structural equation modeling: Theories and applications*. **Invited talk** presented at the International Meeting of Psychometric Society 2016, Asheville, NC, USA.
- [41] **Cheung, M. W.-L.** (Jun, 2016). *Meta-analysis: A structural equation modeling approach*. Paper presented at the 4th Institute of Mathematical Statistics Asia Pacific Rim Meeting, Hong Kong SAR, China.
- [40] Sigerson, L., Li, A. Y.-L., **Cheung, M. W.-L.**, & Cheng, C. (May, 2016). *Information technology addiction: A general problem or a spectrum of problems?* Poster presented at the Association for Psychological Science 28st Annual Convention, Chicago, IL, USA.
- [39] Li, A. Y.-L., Sigerson, L., Cheng, C., & **Cheung, M. W.-L.** (May, 2016). *Information technology addiction as an addiction on its own or manifestation of emotional problems: A confirmatory factor analytic approach*. Poster presented at the Association for Psychological Science 28st Annual Convention, Chicago, IL, USA.
- [38] Tang, R., & **Cheung, M. W.-L.** (Aug, 2015). *Testing theoretical models with the two-stage meta-analytic structural equation modeling*. Paper presented at the Academy of Management Annual Meeting, Vancouver, Canada.
- [37] **Cheung, M. W.-L.**, & Jak, S. (Jul, 2015). *A guide to analyzing big data in Psychology: A meta-analytic approach*. Paper presented at the 10th Annual Meeting of the Society for Research Synthesis Methodology, Nashville, TN, USA.

- [36] Hong, R. Y., & **Cheung, M. W.-L.** (Mar, 2015). *A common core vulnerability factor to depression and anxiety: Evidence from a meta-analytic review*. Poster presented at the International Convention of Psychological Science 2015, Amsterdam, the Netherlands.
- [35] **Cheung, M. W.-L.** (May, 2014). *Conducting analyses on matrices of meta-analytic correlations*. **Invited panel discussion** at the 29th Annual Society for Industrial and Organizational Psychology Conference, Honolulu, Hawaii.
- [34] Jak, S., **Cheung, M. W.-L.**, & Oort, F. (Mar 2014). *Modelling heterogeneity in meta-analytic SEM*. Paper presented at the Meeting of the Working Group Structural Equation Modeling, Goethe University, Frankfurt, Germany.
- [33] **Cheung, M. W.-L.** (Jun, 2013). *Modeling dependent effect sizes with three-level meta-analysis: A structural equation modeling approach*. Paper presented at the 8th Annual Meeting of the Society for Research Synthesis Methodology, Providence, Rhode Island.
- [32] **Cheung, M. W.-L.** (Jul, 2011). *metaSEM: An R package to conducting meta-analysis using structural equation modeling*. Paper presented at the 17th International Meeting of the Psychometric Society, Hong Kong SAR, China.
- [31] Mak, A., **Cheung, M. W.-L.**, & Ho, R. C. (May, 2011). *Global trend of survival and damage of systemic lupus erythematosus: A meta-analysis and meta-regression of observational studies from 1950 to 2010*. Paper presented at the Annual European Congress of Rheumatology EULAR 2011, London, United Kingdom.
- [30] **Cheung, M. W.-L.** (Jul, 2010). *Computing common effect sizes and their asymptotic sampling variances for meta-analysis in structural equation models*. Poster presented at the 27th International Congress of Applied Psychology, Melbourne, Australia.
- [29] Cheung, S. F., & **Cheung, M. W.-L.** (Jul, 2010). *Random effects models for meta-analytic structural equation modeling*. Paper presented at the 7th Conference of the International Test Commission, Hong Kong SAR, China.
- [28] **Cheung, M. W.-L.** (May, 2009). *Modeling multivariate effect sizes with structural equation models*. Paper presented at the Association for Psychological Science 21st Annual Convention, San Francisco, CA, USA.
- [27] **Cheung, M. W.-L.** (Jul, 2008). *A model for integrating fixed-, random-, and mixed-effects meta-analyses into structural equation modeling*. Paper presented at the 29th International Congress of Psychology, Berlin, Germany.
- [26] Lau, P. W. C., **Cheung M. W.-L.**, Randsell, L., Wong, P. & Luk, T. C. (Nov, 2007). *Chinese children's pedometer-determined physical activity patterns during the segmented school day*. Poster presented at the New Horizons in Nutrition & Public Health, 10 Anniversary Symposium of Centre for Nutritional Studies, School of Public Health, The Chinese University of Hong Kong, Hong Kong SAR, China.
- [25] **Cheung, M. W.-L.**, Yip, P. S. F., Fan, S. Y. S., & Lam, T. H. (Sep, 2007). *A study of sexual satisfaction and frequency of sex among Hong Kong Chinese couples*. Poster presented at the Health Research Symposium 2007, Hong Kong SAR, China.
- [24] **Cheung, M. W.-L.** (Jul, 2007). *Is meta-analysis a structural equation model? The case of fixed effects models*. Paper presented at the 15th International Meeting of the Psychometric Society, Tokyo, Japan.
- [23] Lau, P. W. C., & **Cheung, M. W.-L.** (Feb, 2007). *Intervention study for Chinese overweight children- Effects on exercise behavior and physical self satisfaction*. Paper presented at the 4th Asia-Oceania Conference on Obesity, Seoul, Korea.

- [22] **Cheung, M. W.-L.** (Dec, 2006). *Analyzing mediating effects in social sciences*. Paper presented at the ACSPRI Social Science Methodology Conference 2006, Sydney, Australia.
- [21] Lau, P. W. C., & **Cheung, M. W.-L.** (Oct, 2006). *The influence of body ratings to peer relationships and physical self-concept in Chinese primary children*. Paper presented at the 5th SCSEPF Annual Conference, the Society of Chinese Scholars on Exercise Physiology and Fitness, Tianjin, China.
- [20] Lau, P. W. C., Fox, K. R., & **Cheung, M. W.-L.** (Jul, 2006). *A longitudinal study of sport identity as a mediator of children's participation in sport*. Paper presented at the 11th Annual Congress of European College of Sport Science, Lausanne, Switzerland.
- [19] **Cheung, M. W.-L.**, & Wong, K. C. (Jun, 2006). *Effects of the round-off errors reported in primary studies on the results of a meta-analysis*. Paper presented at the 2006 Research Methods Division in Asia, Academy of Management Regional Conference, Hong Kong SAR, China.
- [18] Lau, P. W. C., **Cheung, M. W.-L.**, & Ransdell, L. (Dec, 2005). *Sport identity and sport participation: A cultural comparison between collective and individualistic societies*. Paper presented at the 4th Society of Chinese Scholars on Exercise Physiology and Fitness Annual Conference, Taiwan.
- [17] **Cheung, M. W.-L.** (Jul, 2005). *A general approach to constructing confidence intervals for many multivariate techniques: A structural equation modeling approach*. Paper presented at the 14th International Meeting of the Psychometric Society, Tilburg, the Netherlands.
- [16] Wong, K. C., & **Cheung, M. W.-L.** (Jun, 2005). *Effects of the number of decimal places reported in primary studies on met-analysis: A Monte Carlo simulation study*. Poster presented at the Annual Conference of the Hong Kong Psychological Society, Hong Kong SAR, China.
- [15] **Cheung, M. W.-L.**, & Au, K. (Jun, 2005). *Analyzing nested data with hierarchical linear models: An illustration with trust across 42 countries*. Paper presented at the Annual Conference of the Hong Kong Psychological Society, Hong Kong SAR, China.
- [14] Wu, K. K., **Cheung, M. W.-L.**, Chan, K. S., & Fung, Y. W. (May, 2005). *Posttraumatic stress after road traffic accident: A six-month follow-up study*. Poster presented at the Hospital Authority Convention 2005, Hong Kong SAR, China.
- [13] **Cheung, M. W.-L.** (May, 2005). *Testing research hypotheses with structural equation models: An illustration with PROC CALIS*. Paper presented at the SAS Academic User Group Conference, Hong Kong SAR, China.
- [12] Au, T. K. F., Ip, G. W. M., Ho, J. Y. S., Lam, C. Y. Y., Chan, S. M. K., & **Cheung, M. W.-L.** (Apr, 2005). *What causes colds/flu? A study of Chinese children and older adults' folk beliefs*. Poster presented at the 2005 Society for Research in Child Development Biennial Meeting, Atlanta, Georgia, U.S.A.
- [11] Lau, P. W. C., & **Cheung, M. W.-L.** (Oct, 2004). *The effects of resistance training on obese adolescents' physical activity level and physical self-perception*. Poster presented at the 3rd Society of Chinese Scholars on Exercise Physiology and Fitness Annual Conference, Sozhow, China.
- [10] Lau, P. W. C., **Cheung, M. W.-L.**, & Ransdell, L. (Jul, 2004). *Measurement properties of subscales of the Physical Self-Descriptive Questionnaire in Chinese children*. Paper presented at the 2nd International Conference for Physical Educators, Hong Kong SAR, China.

- [9] **Cheung, M. W.-L.**, Leung, K., & Au, K. (Jul, 2004). *A multilevel structural equation model on the Social Axioms*. Paper presented at the 2004 Academy of International Business Annual Conference, Stockholm, Sweden.
- [8] Ho, J. Y. S., Au, T. K. F., Ip, G. W. M., Chan, S. M. K., Lam, C. Y. Y., & **Cheung, M. W.-L.** (Jun, 2004). *Children and older adults' folk beliefs about colds/flu*. Poster presented at the Annual Conference of the Hong Kong Psychological Society, Hong Kong SAR, China.
- [7] **Cheung, M. W.-L.** (Jun, 2004). *Testing dependent and independent correlational hypotheses via structural equation modeling*. Paper presented at the Annual Conference of the Hong Kong Psychological Society, Hong Kong SAR, China.
- [6] **Cheung, M. W.-L.** (Jul, 2003). *Recovering preipsative latent factor scores from ipsative measures: A simulation study*. Paper presented at the 13th International Meeting of the Psychometric Society, Sardinia, Italy.
- [5] **Cheung, M. W.-L.**, & Chan, W. (Jul, 2002). *Meta-analysis of correlation matrices for structural equation models: A multi-sample structural equation modeling approach*. Paper presented at the 25th International Congress of Applied Psychology, Singapore.
- [4] Au, K., & **Cheung, M. W.-L.** (Jul, 2002). *Hierarchical linear modeling on affective orientation and Pro-social behaviors: A secondary analysis on 42 societies of the World Values Survey*. Paper presented at the 25th International Congress of Applied Psychology, Singapore.
- [3] **Cheung, M. W.-L.**, & Chan, W. (Jun, 2001). *Psychometric properties of graphic scales: Some applications on Internet research measurement*. Poster presented at the Annual Conference of the Hong Kong Psychological Society, Hong Kong SAR, China.
- [2] **Cheung, M. W.-L.**, & Chan, W. (Jul, 2000). *Reducing uniform response bias with ipsative measurement in the content of confirmatory factor analysis*. Paper presented at the International Association for Cross-Cultural Psychology XVth Congress, Pultusk, Poland.
- [1] Au, K., & **Cheung, M. W.-L.** (Jul, 2000). *Determinants and consequences of intra-cultural variation- A 42 country study on job control and job satisfaction*. Paper presented at the International Association for Cross-Cultural Psychology XVth Congress, Pultusk, Poland.

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## COMPUTER PROGRAMS

- [5] **Cheung, M. W.-L.**, Gu, F., & Yung, Y.-F. (2022). mulSEM: Some Multivariate Analyses using Structural Equation Modeling. R package version 0.2 Retrieved from <https://github.com/mikewlcheung/mulsem>
- [4] **Cheung, M. W.-L.** (2022). symSEM: Symbolic Computation for Structural Equation Models. R package version 0.1.1 Retrieved from <https://github.com/mikewlcheung/symsem>
- [3] **Cheung, M. W.-L.** (2021). metaSEM: Meta-analysis using Structural Equation Modeling. R package version 1.2.5.1 Retrieved from <http://cran.r-project.org/package=metaSEM>
- [2] **Cheung, M. W.-L.** (2009). TSSEM: A LISREL syntax generator for two-stage structural equation modeling (Version 1.11) [Computer software]. Retrieved from <http://courses.nus.edu.sg/course/psycwlm/internet/tssem.zip>.



- [1] **Cheung, M. W.-L.** (2003). MetaAnalysisCorr: An SAS/IML program to synthesize correlation matrices with Hunter and Schmidt, Hedges and Olkin, and Generalized Least Squares approaches. *Applied Psychological Measurement*, 27, 234-235. doi: 10.1177/0146621603027003004

## FUNDED RESEARCH PROJECTS

- 2022 - 2024 Advancing meta-analysis: Correcting unreliability and testing interaction effect (Role: Sole investigator). Funded by the Academic Research Fund Tier 1, Ministry of Education, Singapore. SGD 27,646.94 (convert to USD)
- 2021 - 2023 Quality of life without gaming: A randomized controlled trial comparing the efficacy of two dyadic programs for gaming disorder prevention (Role: Co-investigator) (Principal investigator: Prof. Cecilia Cheng). Funded by the RGC General Research Fund, Hong Kong. HKD 866,100 (convert to USD)
- 2019 - 2020 Mass-interpersonal communication and opinion climate perception on individual risk perception and evaluation on social media (Role: Collaborator) (Principal investigator: Dr. Elmie Nekmat). Funded by the IPUR Research Grant, Singapore. SGD 24,000 (convert to USD)
- 2017 - 2020 Advances in Five-Factor Model of personality with meta-analysis (Role: Sole investigator). Funded by the Academic Research Fund Tier 1, Ministry of Education, Singapore. SGD 20,877 (convert to USD)
- 2017 - 2019 Analysis of Big Data with multivariate statistics in social and behavioral sciences (Role: Principal investigator). Funded by the Humanities and Social Sciences (HSS) Seed Fund, National University of Singapore, Singapore. SGD 20,000 (convert to USD)
- 2017 - 2019 Animated electronic storybook and children's mother tongue development: Tracing the process and the outcome with eyetracking (Role: Collaborator) (Principal investigator: Dr. He Sun). Funded by the Office of Education Research, National Institute of Education, Singapore. SGD 99,668 (convert to USD)
- 2015 - 2016 Blended learning initiative (Role: Sole investigator). Funded by the Provost Office, National University of Singapore, Singapore. SGD 10,000 (convert to USD)
- 2014 - 2017 New approaches to random-effects meta-analytic structural equation modeling (Role: Sole investigator). Funded by the Academic Research Fund Tier 1, Ministry of Education, Singapore. SGD 30,420 (convert to USD)
- 2013 - 2015 FASS book grant scheme (Role: Sole investigator). Funded by the Faculty of Arts and Social Sciences, NUS, Singapore. SGD 5,214.80 (convert to USD)
- 2013 - 2015 Toward a cultural approach to the study of perceived control and psychological adjustment (Role: Co-investigator) (Principal investigator: Prof. Cecilia Cheng). Funded by the RGC General Research Fund, Hong Kong. HKD 577,512 (convert to USD)
- 2012 - 2014 Early genetic, environmental and behavioural predictors of autistic traits in pre-school children (Role: Co-investigator) (Principal investigator: Dr. Iliana Magiati). Funded by the Academic Research Fund Tier 1, Ministry of Education, Singapore. SGD 59,640 (convert to USD)
- 2012 - 2013 Award for excellent researcher. Awarded by the Faculty of Arts & Social Sciences, NUS. SGD 5,000 (in USD)
- 2010 - 2014 Methodological advances in testing mediating and indirect effects (Role: Sole investigator). Funded by the Academic Research Fund Tier 1, Ministry of Education, Singapore. SGD 32,000 (convert to USD)

- 2010 - 2013 Effects of early maternal employment on cognitive and behavioral development (Role: Co-investigator) (Principal investigator: Dr. Catherine Wing-chee So). Funded by the Academic Research Fund Tier 1, Ministry of Education, Singapore. SGD 40,000 (convert to USD)
- 2006 - 2010 Enriching the language environment of children learning a second language (Role: Co-investigator) (Principal investigator: Prof. Terry Kit-fong Au). Funded by the Competitive Earmarked Research Grant, Hong Kong. HKD 699,600 (convert to USD)
- 2006 - 2010 Methodological development in meta-analytic structural equation modeling (Role: Sole investigator). Funded by the Academic Research Fund Tier 1, Ministry of Education, Singapore. SGD 56,687 (convert to USD)
- 2006 - 2007 Violence among individuals with psychotic illnesses: Prevalence and correlates (Role: Co-investigator) (Principal investigator: Dr. Sandra Kit-man Tsang). Funded by the Seed Funding for Basic Research, HKU.
- 2005 - 2007 A multi-method approach to evaluate the effectiveness of the statistical methods on controlling response bias (Role: Sole investigator). Funded by the Seed Funding for Basic Research, HKU. HKD 40,000 (convert to USD)
- 2005 - 2006 A study of marital satisfaction among Hong Kong couples (Role: Principal investigator). Funded by the Health and Health Services Research Fund, Hong Kong SAR Government. HKD 193,968 (convert to USD)
- 2004 - 2006 A meta-analytic study on the higher-order factors of the Five-Factor Model (Role: Sole investigator). Funded by the Seed Funding for Basic Research, HKU. HKD 60,000 (convert to USD)
- 2003 - 2005 Factor structures of general beliefs across cultures: A multilevel approach (Role: Principal investigator). Funded by the Faculty Allocation of University Development Fund, HKU. HKD 100,000 (convert to USD)

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## FUNDED RESEARCH CONTRACTS

- 2003 - 2005 Development and validation of clinical risks and needs evaluation measures for offenders (Role: Co-investigator) (Principal investigator: Prof. Patrick W. L. Leung). Funded by Correctional Services Department, HKSAR Government.
- 2003 - 2005 Consultancy on the development of prevention and treatment programs for offenders with problems of psychotropic substance abuse (Role: Co-investigator) (Principal investigators: Prof. Tatia M. C. Lee and Dr. Karen Joe Laidler). Funded by Commissioner of Correctional Services, Correctional Services Department, HKSAR Government.

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## PROFESSIONAL MEMBERSHIPS

- Member Society for Research Synthesis Methodology (elected member: 2010-2021)
- Member Psychometric Society

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## EDITORIAL POSITIONS

- 2021 - present ***Faculty Opinions***: Co-head of the Quantitative Psychology Section
- 2019 - present ***Methods in Psychology***: Editorial board
- 2019 - present ***Zeitschrift für Psychologie***: Editorial board
- 2017 - present ***Health Psychology Review***: Research methods and data analysis editorial board
- 2017 - present ***Psychological Bulletin***: Consulting editor (editorial board)
- 2017 - present ***Journal of Management***: Editorial board and methods task force



- 2017 - present *Neuropsychology Review*: Associate editor
- 2017 - present *Research Synthesis Methods*: Associate editor
- 2011 - present *SpringerBriefs in Research Synthesis and Meta-Analysis* (published by Springer): Series editor (with Michael Bosnjak and Wolfgang Viechtbauer)
- 2014 - 2019 *Frontiers in Psychology* (Quantitative Psychology and Measurement section) and *Frontiers in Applied Mathematics and Statistics* (Quantitative Psychology and Measurement section): Associate editor
- 2011 - 2019 *Psychological Methods*: Consulting editor (editorial board)
- 2017 - 2018 *Zeitschrift für Psychologie*: Guest co-editor (with Suzanne Jak) for the special issue "Big Data in Psychology: Methods and Applications"
- 2016 - 2017 *Neuropsychology Review*: Editorial board
- 2013 - 2016 *Research Synthesis Methods*: Editorial board, ad-hoc action editor, and guest co-editor (with Adam R. Hafdahl) for the special issue "Meta-Analytic Structural Equation Modeling"
- 2010 - 2012 *Educational Researcher*: Editorial board
- 2007 - 2011 *Journal of Psychology in Chinese Societies*: Associate editor
- 2004 - 2008 *Journal of Psychology in Chinese Societies*: Managing editor

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## REVIEWERS FOR JOURNALS, PUBLISHERS, GRANTS, ORGANIZATION, CONFERENCES, DISSERTATIONS, AND TENURE AND PROMOTION

- Methodology and Statistics (23 journals) *Advances in Methods and Practices in Psychological Science, Applied Psychological Measurement, Behavior Research Methods, BMC Medical Research Methodology, British Journal of Mathematical and Statistical Psychology, Communications in Statistics - Theory and Methods, Educational and Psychological Measurement, Frontiers in Psychology* (Quantitative Psychology and Measurement), *International Journal of Biostatistics, International Journal of Testing, Journal of Educational and Behavioral Statistics, Journal of Modern Applied Statistical Methods, Methodology, Methods in Psychology, Multivariate Behavioral Research, Organizational Research Methods, Oxford Bulletin of Economics & Statistics, Psychological Methods, Research Methods in Applied Linguistics, Research Synthesis Methods, Sociological Methodology, Sociological Methods and Research, and Structural Equation Modeling: A Multidisciplinary Journal*

Psychology, Education, Social, Management, and Medical Sciences (65 journals)	<i>Alcohol and Alcoholism, American Journal of Community Psychology, Applied Psychology: An International Review, Asia Pacific Journal of Education, Asia Pacific Journal of Management, Asian Journal of Social Psychology, BMC Research Notes, BMJ Open, Child Development, Communication Research Reports, Comprehensive Psychiatry, Developmental Psychology, Ecology Letters, Educational Psychology, Educational Psychology Review, Educational Research Review, Educational Researcher, Epilepsia, European Journal of Cancer Care, European Sociological Review, Health and Quality of Life Outcomes, Health Psychology Review, Information &amp; Management, International Journal of Public Opinion Research, International Journal of Rheumatic Diseases, International Review of Sport and Exercise Psychology, JCPP Advances, Journal of Abnormal Psychology, Journal of Adolescence, Journal of Applied Psychology, Journal of Child and Family Studies, Journal of Counseling Psychology, Journal of Cross-Cultural Psychology, Journal of Environmental Psychology, Journal of Experimental Education, Journal of Management, Journal of Management Information Systems, Journal of Management Studies, Journal of Personality, Journal of Personality and Social Psychology, Journal of Personnel Psychology, Journal of Psychiatric Research, Journal of Psychology in Chinese Societies, Journal of Quantitative Criminology, Journal of Research in Personality, Journal of Sex Research, Journal of Social and Personal Relationships, Journal of Strategic Information Systems, Learning and Individual Differences, Management Science, Mindfulness, Neuropsychology Review, Personnel Review, Perspectives on Psychological Science, Prevention Science, Psychological Bulletin, Psychopathology Review, Psychotherapy and Psychosomatics, Quality of Life Research, Research on Aging, Review Journal of Autism and Developmental Disorders, Review of Educational Research, Scientific Reports, Social Science &amp; Medicine, Stress and Health, The Internet and Higher Education and Zeitschrift für Psychologie</i>
Reviewer for funding agents	National Science Foundation (The Methodology, Measurement, and Statistics Program) Competitive Earmarked Research Grant by Research Grants Council of Hong Kong Replication Studies 2016 research programme, The Netherlands Organisation for Scientific Research (NWO) The NWO Talent Programme 2020, The Netherlands Organisation for Scientific Research (NWO) The Campbell Collaboration
Panel member for funding agents	Education Research Funding Programme (ERFP) Expert Panel, National Institute of Education (NIE), Nanyang Technological University (NTU), Singapore (2019-2022) CityScan grant call evaluation panel, the Cities of Tomorrow R&D Programme (CoT) by the Ministry of National Development (MND), Singapore (2020) A*STAR Social Sciences Innovation Seed Fund, Singapore (2021-2023)
Conferences	American Educational Research Association, Reviewer for Division D in-progress research gala: 2009, 2010, 2011 Annual American Psychological Association Convention, Reviewer for Division 5: 2005 The Annual Conference of the International Test Commission, International advisory panel: 2010, 2015
Book publishers	Guilford Press, Routledge, Wiley
External academic advisor	Master of Arts Programme in Psychology, the Chinese University of Hong Kong, Hong Kong (2013-16)

Bachelor of Social Sciences (Hons) in Business Psychology programme, Lingnan University, Hong Kong (2020-2023)

BSocSc (Hons) in Psychology programme, The Education University of Hong Kong, Hong Kong (2020-present)

BSSc (Hons) in Counselling & Psychology and BSSc (Hons) in Psychology, Hong Kong Shue Yan University, Hong Kong (2021-2022)

External referee	Chair professor hires, Lingnan University, Hong Kong; the Hong Kong Polytechnic University
External expert	Professor hire, Chinese University of Hong Kong
External reviewer for tenure and promotion	Singapore Management University (mid-term review of assistant professor, promotion to associate professor, promotion to full professor)
	National Institute of Education (re-appointment of assistant professor), Singapore
	Hong Kong Polytechnic University (promotion to associate professor)
	University of Macau (promotion to associate professor)
PhD Dissertations	Hong Kong Institute of Education; University of Alberta; The University of Hong Kong

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## VISITING SCHOLARS

6 - 13 Jun 2018	The Leibniz Institute for Psychology Information (ZPID), Trier, Germany
4 - 5 Jun 2018	Research Institute of Child Development and Education, University of Amsterdam, the Netherlands
26 Feb - 2 Mar 2018	Department of Counselling and Psychology, Hong Kong Shue Yan University, Hong Kong
10 - 17 Sep 2017	School of Commerce, University of South Australia, Adelaide, Australia
19 - 30 Jun 2017	GESIS, Mannheim, Germany
5 - 8 Oct 2015	The Centre for Educational Measurement, University of Oslo, Norway
27 - 28 Aug 2015	Department of Social Work and Social Administration, HKU
21 May - 3 Jun 2014	Faculty of Education, HKU
17 - 18 Jul 2013	Department of Educational Psychology, Counselling and Learning Needs, The Hong Kong Institute of Education, Hong Kong
28 Feb - 1 Mar 2011	Department of Social Work and Social Administration, HKU
17 - 18 May 2010	Department of Psychology, HKU
22 - 23 Jan 2009	Department of Educational Psychology, Counselling and Learning Needs, The Hong Kong Institute of Education, Hong Kong
7 - 19 Jul 2008	Department of Methodology and Statistics, University of Maastricht, the Netherlands

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## TEACHING EXPERIENCE

NUS: 2006 - present	Introduction to Psychology (team teaching)
	Research and statistical methods I (undergraduate)
	Research and statistical methods II (undergraduate)
	Analysis of psychological data using general linear models (postgraduate)
	Multivariate statistics in psychology (postgraduate)

	Psychometrics and psychological testing (postgraduate)
	Structural equation modeling (postgraduate)
HKU: 2002-2006	Research methods and statistics I (postgraduate)
	Research methods and statistics II (postgraduate)
	Research methods of social research (postgraduate; team teaching)
	Research methods in psychology (undergraduate)
	Thesis in psychology (undergraduate; team teaching)
CUHK (tutorials):	Research methods I (postgraduate)
1997-2002	Research methods II (postgraduate)
	Psychological testing (undergraduate)

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## SUPERVISORY EXPERIENCE

Post-doc fellow	Dr. Adela Maria Epskamp (Jul-Dec 2022; funded to Dr. Epskamp by the James S. McDonnell Foundation)
Post-doc fellow	Dr. Suzanne Jak (2015; funded to Dr. Jak by the Rubicon grant)
PhD	Ranjith Vijayakumar (2015-2019), Gerard Yeo (2020-present, co-supervision), Nadyanna Binte Mohamed Majeed (2022-present), Park Hyungjun (2022-present)
Concurrent degree program (BSSc and M.Soc.Sci.)	Aaron Lim (2018-2019)
M.Soc.Sci.	Lim Yonghao (2010-2013), Melvin Sim (2019-2022)
Honor theses	16 students
HKU	1 Master of clinical psychology (co-supervision) and 25 honor theses

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## INVITED TALKS

Mar 2021	School of Humanities and Social Science, The Hong Kong University of Science and Technology (virtual meeting)
Oct 2017	School of Social Sciences, Singapore Management University
Sep 2017	Business School, University of Adelaide, Adelaide, Australia
Sep 2017	School of Commerce, University of South Australia, Adelaide, Australia
Mar 2017	Centre for Family and Population Research, FASS, NUS
May 2016	Saw Swee Hock School of Public Health, NUS
May 2016	Centre for Quantitative Medicine at the Duke-NUS Medical School, Singapore
Jun 2015	Department of Management & Organisation, NUS
May 2010	Department of Psychological Studies, The Hong Kong Institute of Education, Hong Kong
Mar 2008	School of Social Sciences, Singapore Management University
Feb 2006	Department of Psychology, CUHK
Jan 2006	Department of Psychology, HKU
Nov 2005	Department of Psychology, NUS
Dec 2003	Department of Psychology, HKU
Jun 2002	Department of Psychology, HKU

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## STATISTICAL CONSULTING EXPERIENCE

I occasionally provide statistical training and consultation to various companies and institutions.

## SPEAKER FOR WORKSHOPS ON STATISTICS TRAINING

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| Jun 2022              | A four half-day online workshop on <b>meta-analytic structural equation modeling with R</b> , Department of Social and Behavioural Sciences, City University of Hong Kong   |
| May 2021, 2022        | A four-day online workshop on <b>systematic review and meta-analysis with R</b> , Consortium for the Advancement of Research Methods and Analysis Research Methods Education for the Global Classroom (CARMA)               |
| 2016-2018, 2020, 2022 | A two- or three-day workshop on <b>structural equation modeling with R</b> , the Centre for Family and Population Research, NUS   |
| 2020, 2022            | A two-day workshop on <b>big data and machine learning in Social Sciences with R</b> , the Centre for Family and Population Research, NUS   |
| Sep 2019              | A three-day workshop on <b>multilevel modeling using R</b> , Office of Education Research, National Institute of Education (NIE), Nanyang Technological University (NTU), Singapore   |
| Dec 2018              | A half-day workshop on <b>meta-analytic structural equation modeling with R</b> at the ACSPRI Social Science Methodology Conference 2018, Sydney, Australia.  |
| Jun 2018              | A half-day post-conference workshop on <b>testing model-driven hypotheses with Big Data with R</b> at the Big Data in Psychology 2018 organized by the Leibniz Institute for Psychology Information (ZPID), Trier, Germany. |
| Jun 2018              | A half-day workshop on <b>meta-analytic structural equation modeling with R</b> at the Research Institute of Child Development and Education, University of Amsterdam, the Netherlands.                                     |
| May 2018              | A two-day workshop on <b>reliability and validity of measurement in scale development with R</b> , the Centre for Family and Population Research, NUS   |
| 2016, 17              | A three-day workshop on <b>multilevel modeling with R</b> , the Centre for Family and Population Research, NUS  |
| Jun 2017              | A two-day workshop on <b>meta-analysis using structural equation modeling</b> , GESIS, Mannheim, Germany  |
| Jun 2017              | A two-day workshop on <b>analysis of missing data with R</b> , the Centre for Family and Population Research, NUS   |
| May 2016              | A two-day workshop on <b>analysis of missing data</b> , the Lee Kuan Yew School of Public Policy, NUS   |
| Oct 2015              | A two-day workshop on <b>meta-analysis using structural equation modeling</b> , the Centre for Educational Measurement and the Department of Special Needs Education, University of Oslo, Norway                            |
| Aug 2015              | A two-day workshop on <b>multilevel modeling and structural equation modeling with R</b> , Department of Social Work & Social Administration, HKU   |
| Aug 2015              | A three-day workshop on <b>structural equation modeling with R</b> , the Lee Kuan Yew School of Public Policy, NUS  |
| Jul 2015              | A three-day workshop on <b>multilevel modeling with R</b> , the Centre for Family and Population Research, NUS  |
| Feb 2015              | A three-day workshop on <b>structural equation modeling with Mplus</b> , Ministry of Education, Singapore   |

- Sep 2014 A two-day workshop on **structural equation modeling and latent growth models with R**, the Centre of Regulatory Studies, University of Malaya, Malaysia
- Dec 2013 A one-day workshop on **structural equation modeling**, Singapore Examinations and Assessment Board
- Jul 2013 A two-day workshop on **structural equation modeling** and **meta-analysis**, Department of Special Education and Counselling, HKIEd
- Feb 2011 A two-day workshop on **structural equation modeling** and **latent growth models**, Department of Social Work and Social Administration, and Centre for Suicide Research and Prevention, HKU
- May 2010 A two-day workshop on **structural equation modeling**, **latent growth models** and **multilevel models**, Department of Psychology, HKU
- Aug 2009 A half-day workshop (via video conferencing) on **meta-analytic structural equation modeling** at the Summer School on Meta-analysis and Research Synthesis in Personality Psychology organized by the European Association of Personality Psychology and the International Society for the Study of Individual Differences, Castle Oppurg, Germany
- Jan 2009 A two-day workshop on **structural equation modeling** and **multilevel models**, Department of Educational Psychology, Counselling and Learning Needs, The Hong Kong Institute of Education (HKIEd), Hong Kong

## ADMINISTRATIVE EXPERIENCE AT THE FACULTY AND DEPARTMENTAL LEVELS

### Faculty of Arts and Social Sciences (FASS), NUS

- 2021 - present Faculty Promotion & Tenure Committee II
- 2020 - present Faculty Research Award Committee
- 2018 - present Faculty Research Committee
- 2019 - 2021 Faculty Promotion & Tenure Committee I
- 2017 - 2018 Faculty Assistant Professor Appointment Committee
- 2014 - 2017 Visiting Research Fellows Selection Committee

### Department of Psychology, FASS, NUS

- 2018 - present Deputy head

### Previous positions

- Director Undergraduate Programme; Research
- Chair Undergraduate Programme Committee; Research Committee; Department Ethics Review Committee; Search Committees (Teaching assistant hires, Junior hires, and Senior hires)
- Member Search Committees (Junior hires, Non-clinical hires, Teaching track hires, and Department Head hire); Research Graduate Programme Committee; Departmental Review Committee for annual appraisal; Department Evaluation Committee for tenure & promotion
- Departmental coordinator Student Exchange Program; Independent Study Modules; Non-graduating Applications; Level-2000 Modules; Level-4000 Modules

### Other departments, NUS

- Chair Department of Social Work: Search Committee (Full professor hires)

Member Department of Management and Organisation: Department Evaluation Committee for tenure & promotion

## COMPUTING EXPERIENCE

General statistical packages	R, SPSS, SAS, Stata, and Julia
Specialized statistical packages	EQS, LISREL, Mplus, OpenMx, lavaan, HLM, nlme/lme4, and BUGS/JAGS/Stan/Turing.jl
Operating Systems	Linux, Windows, and macOS
Others	Cygwin, Graphviz, Git, GNU Make, VNC, X2Go, Emacs, Vim, and $\text{\LaTeX}$