

Publications

1. Lee, S.Y. & **Poon, W.Y.** (1985). Further developments on constrained estimation in analysis of covariance structures. *The Statistician*, 34, 305-316.
2. Lee, S.Y. & **Poon, W.Y.** (1986). Maximum likelihood estimation of polyserial correlations. *Psychometrika*, 51, 113-121.
3. Lee, S.Y. & **Poon, W.Y.** (1987). Two-step estimation of multivariate polychoric correlation. *Communications in Statistics: Theory and Methods*, 16, 307-320.
4. **Poon, W.Y.** & Lee, S.Y. (1987). Maximum likelihood estimation of multivariate polyserial and polychoric correlation coefficients. *Psychometrika*, 52, 409-430.
5. Lee, S.Y. & **Poon, W.Y.** (1987). Maximum likelihood estimation of multiple correlations and canonical correlations with categorical data. *Applied Psychological Measurement*, 11, 317-323.
6. Lee, S.Y. & **Poon, W.Y.** (1987). Generalized least squares and maximum likelihood estimations of multivariate polychoric correlations. *Acta Mathematicae Applicatae Sinica*, 3, 351-357.
7. Lee, S.Y. & **Poon, W.Y.** (1988). Estimation of correlations in a multidimensional contingency table by GLS and partition GLS approaches. *Computational Statistics Quarterly*, 4, 59-70.
8. Bentler, P.M., **Poon, W.Y.** & Lee, S.Y. (1988). Generalized multimode latent variable models: Implementation by standard programs. *Computational Statistics and Data Analysis*, 6, 107-118.
9. Lee, S.Y. & **Poon, W.Y.** (1989). A general model for analysis of categorical data in several groups. *Computational Statistics Quarterly*, 5, 11-25.
10. Lee, S.Y., **Poon, W.Y.** & Bentler, P.M. (1989). Simultaneous analysis of multivariate polytomous variates in several groups. *Psychometrika*, 54, 63-73.
11. Lee, S.Y., **Poon, W.Y.** & Bentler, P.M. (1990). Full maximum likelihood analysis of structural equation models with polytomous variables. *Statistics and Probability Letters*, 9, 91-97.
12. Lee, S.Y., **Poon, W.Y.** & Bentler, P.M. (1990). A three-stage estimation procedure for structural equation models with polytomous variables. *Psychometrika*, 55, 45-51.
13. **Poon, W.Y.**, Lee, S.Y., Afif, A.A. & Bentler, P.M. (1990). Analysis of multivariate polytomous variates in several groups via the partition maximum likelihood approach. *Computational Statistics and Data Analysis*, 10, 17-27.
14. Lee, M.L., **Poon, W.Y.** & Kingdon, H.S. (1990). A two-phase linear regression model for biologic half-life data. *The Journal of Laboratory and Clinical Medicine*, 115, 745-748.
15. **Poon, W.Y.**, Lee, S.Y. & Bentler, P.M. (1990). Pseudo maximum likelihood estimation of multivariate polychoric and polyserial correlations. *Computational Statistics Quarterly*, 1, 41-53.
16. Fu, F.H. & **Poon, W.Y.** (1990). A comparison of the development of sport culture in the People's Republic of China and Hong Kong (A preliminary report). *Journal of International Council for Health Physical Education and Recreation*, Fall, 9-16.
17. Lee, S.Y., **Poon, W.Y.** & Bentler, P.M. (1992). Structural equation models with continuous and polytomous variables. *Psychometrika*, 57, 89-105.

18. **Poon, W.Y.** & Lee, S.Y. (1992). Maximum likelihood and generalized least squares analyses of two-level structural equation models. *Statistics and Probability Letters*, *14*, 25-30.
19. **Poon, W.Y.** & Lee, S.Y. (1992). Statistical analysis of continuous and polytomous variables in several populations. *British Journal of Mathematical and Statistical Psychology*, *45*, 139-149.
20. Lee, S.Y. & **Poon, W.Y.** (1992). Two-level analysis of covariance structures for unbalanced designs with small level-one samples. *British Journal of Mathematical and Statistical Psychology*, *45*, 109-123.
21. **Poon, W.Y.**, Lee, S.Y., Bentler, P.M. & Afifif, A.A. (1993). Covariance structural analysis with polytomous variables in several populations. *Acta Mathematicae Applicatae Sinica*, *9*, 63-70.
22. Yau, Linda H.Y., Lee, S.Y. & **Poon, W.Y.** (1993). Covariance structure analysis with three-level data. *Computational Statistics and Data Analysis*, *15*, 159-178.
23. Lee, S.Y. & **Poon, W.Y.** (1993). Structural equation models with hierarchical data. In K. Haagen, D.J. Bartholomew & M. Deistler (Eds) *Statistical Modelling and Latent Variables*, 203-227. North-Holland: Elsevier Science Publishers.
24. **Poon, W.Y.**, Lee, S.Y. & Bentler, P.M. (1993). Maximum likelihood estimation in a model with interval data. *Journal of Applied Statistics*, *20*, 219-227.
25. **Poon, W.Y.** & Leung, Y.P. (1993). Analysis of structural equation models with interval and polytomous data. *Statistics and Probability Letters*, *17*, 127-137.
26. **Poon, W.Y.** & Lee, S.Y. (1994). A distribution free approach for analysis of two-level structural equation model. *Computational Statistics and Data Analysis*, *17*, 265-275.
27. Lee, S.Y., **Poon, W.Y.**, & Bentler, P.M. (1994). Covariance and correlation structure analyses with continuous and polytomous variables. *Multivariate Analysis and Its Applications, IMS Lecture Notes-Monograph Series*, *24*, 347-358.
28. Lee, S.Y. & **Poon, W.Y.** (1995). Estimation of factor scores in a two-level confirmatory factor analysis model. *Computational Statistics and Data Analysis*, *20*, 275-284.
29. Lee, S.Y., **Poon, W.Y.** & Bentler, P.M. (1995). A two-stage estimation of structural equation models with continuous and polytomous variables. *British Journal of Mathematical and Statistical Psychology*, *48*, 339-358.
30. **Poon, W.Y.** & Hung, H.Y. (1996). Analysis of square tables with ordered categories. *Computational Statistics and Data Analysis*, *22*, 303-322.
31. **Poon, W.Y.**, Lee, S.Y. & Tang, M.L. (1997). Analysis of structural equation models with censored data. *British Journal of Mathematical and Statistical Psychology*, *50*, 227-241.
32. **Poon, W.Y.**, Tang, M.L. & Lee, S.Y. (1997). Analysis of covariance structures with truncated variables. *Behaviormetrika*, *24*, 39-50.
33. Lee, S.Y. & **Poon, W.Y.** (1998). Analysis of two-level structural equation models via EM type algorithms. *Statistica Sinica*, *8*, 749-766.
34. **Poon, W.Y.** & Poon, Y.S. (1999). Conformal normal curvature and assessment of local influence. *Journal of Royal Statistical Society, B*, *61*, 51-61.
35. **Poon, W.Y.** & Lee, C.M. (1999). Sources of heterogeneity in distributions with ordered categorical variables. *Journal of Applied Statistics*, *26*, 383-392.

36. **Poon, W.Y.** (1999). Bayesian analysis of square ordinal-ordinal tables. *British Journal of Mathematical and Statistical Psychology*, 52, 111-124.
37. **Poon, W.Y.**, Wang, S.J. & Lee, S.Y. (1999). Influence analysis of structural equation models with polytomous variables. *Psychometrika*, 64, 461-473.
38. **Poon, W.Y.** & Lee, S.Y. (1999). Two practical issues in using LISCOMP for analysing continuous and ordered categorical variables. *British Journal of Mathematical and Statistical Psychology*, 52, 195-211.
39. **Poon, W.Y.**, Lew, S.F. & Poon, Y.S. (2000). A local influence approach to identifying multiple multivariate outliers. *British Journal of Mathematical and Statistical Psychology*, 53, 255-273.
40. **Poon, W.Y.** & Poon, Y.S. (2001). Conditional local influence in case-weights linear regression. *British Journal of Mathematical and Statistical Psychology*, 54, 177-191.
41. **Poon, W.Y.** & Tang, M.L. (2001). Influence measure in maximum likelihood estimate for models of lifetime data. *Journal of Applied Statistics*, 28, 737-742.
42. **Poon, W.Y.** & Poon, Y.S. (2002). Influential observations in the estimation of mean vector and covariance matrix. *British Journal of Mathematical and Statistical Psychology*, 55, 177-192.
43. **Poon, W.Y.**, Leung, K. & Lee, S.Y. (2002). The Comparison of single item constructs by relative mean and relative variance. *Organizational Research Methods*, 5, 275-298.
44. **Poon, W.Y.** & Ng, S.C. (2002). Identification of influential cells in the analysis of ordinal square tables. *British Journal of Mathematical and Statistical Psychology*, 55, 231-246.
45. **Poon, W.Y.** & Poon, Y.S. (2002). Total behavior of likelihood displacement. *Statistica Sinica*, 12, 599-607.
46. **Poon, W.Y.** & Chan, W. (2002). Influence analysis of ranking data. *Psychometrika*, 67, 421-436.
47. **Poon, W.Y.** & Tang, F.C. (2002). Multisample analysis of multivariate ordinal categorical variables. *Multivariate Behavioral Research*, 37, 479-500.
48. **Poon, W.Y.**, Tang, M.L. & Wang, S.J. (2003). Influence measures in contingency tables with application in sampling zeros. *Sociological Methods and Research*, 31, 439-452.
49. Lee, S.Y., Song, X.Y. & **Poon, W.Y.** (2004). Comparison of approaches in estimating interaction and quadratic effects of latent variables. *Multivariate Behavioral Research*, 39(1), 37-67.
50. **Poon, W.Y.** & Wong, Y.K. (2004). A forward search procedure for identifying influential observations in the estimation of a covariance matrix. *Structural Equation Modeling: A Multidisciplinary Journal*, 11(3), 357-374.
51. **Poon, W.Y.** (2004). Identifying influential observations in discriminant analysis. *Statistical Methods in Medical Research: An International Review Journal*, 13(4), 291-308.
52. **Poon, W.Y.** (2004). A latent normal distribution model for analysing ordinal responses with applications in meta-analysis. *Statistics in Medicine*, 23(14), 2155-2172.
53. **Poon, W.Y.** (2006). Identifying influential observations in logistic discriminant analysis. *Statistics and Probability Letters*, 76, 1348-1355.

54. Bai, Y., **Poon, W.Y.** & Cheung, G. W.H. (2006). Analysis of a two-level structural equation model with group-specific variables in LISREL. *Structural Equation Modeling: A Multidisciplinary Journal*, 13(4), 544-565.
55. Xu, L., Lee, S.Y., & **Poon, W.Y.** (2006). Deletion measures for generalized linear mixed effects models. *Computational Statistics and Data Analysis*, 51, 1131-1146.
56. **Poon, W.Y.** and Poon, Y.S. (2007). Local Conditional Influence. *Journal of Applied Statistics*, 34(8), 997-1009.
57. Lee, S.Y., **Poon, W.Y.** & Song, X.Y. (2007). Bayesian analysis of the factor model with finance applications. *Quantitative Finance*, 7, 343-356.
58. Tang, M.L. & **Poon, W.Y.** (2007). Statistical inference for equivalence trials with ordinal responses: A latent normal distribution approach. *Computational Statistics and Data Analysis*, 51, 5918-5926.
59. **Poon, W.Y.** (2007). The Analysis of Structural Equation Model with Ranking Data using Mx. *Latent Variable and Related Models*. S.Y. Lee (eds), 189-207, Elsevier.
60. Yiu C.F. & **Poon, W.Y.** (2008). Estimating the polychoric correlation from misclassified data. *British Journal of Mathematical and Statistical Psychology*, 61, 49-74.
61. Xu, L, **Poon, W.Y.** & Lee, S.Y. (2008). Influence analysis for the factor analysis model with ranking data. *British Journal of Mathematical and Statistical Psychology*, 61, 133-161.
62. Bai, Y. & **Poon, W.Y.** (2009). Using Mx to Analyze Cross-Level Effects in Two-Level Structural Equation Models, *Structural Equation Modeling: A Multidisciplinary Journal*, 16.1, 163-178.
63. **Poon, W.Y.**, McNaught, C, Lam, P. and Kwan, H.S. (2009). Improving assessment methods in university science education with negotiated self- and peer-assessment. *Journal of Assessment in Education: Principles, Policy and Practice*, 16.3, 331-346
64. **Poon, W.Y.** & Xu, L. (2009). On the modelling and estimation of attribute rankings with ties in the Thurstonian framework. *British Journal of Mathematical and Statistical Psychology*, 62, 507-527.
65. **Poon, W.Y.** & Wang, H.B. (2010). Analysis of ordinal categorical data with misclassification. *British Journal of Mathematical and Statistical Psychology*, 63, 17-42.
66. **Poon, W.Y.** & Wang, H.B. (2010). Analysis of a two-level structural equation model with missing data. *Sociological Methods and Research*, 39, 25-55.
67. **Poon, W.Y.** & Wang, H.B. (2010). Bayesian analysis of multivariate probit models with surrogate outcome data. *Psychometrika*, 75, 498-520.
68. Tang, M.L., **Poon, W.Y.**, Ling, L., Liao, Y. & Chui. H.W. (2011). Approximate unconditional test procedure for comparing two ordered multinomials. *Computational Statistics and Data Analysis*, 55.2 (February), 955-963.
69. Lu, T.Y., **Poon, W.Y.** & Tsang, Y.F. (2011). Latent growth curve modeling for longitudinal ordinal responses with applications. *Computational Statistics and Data Analysis*, 55.3, 1488-1497.
70. Li, H.Q, Tang, M.L. & **Poon, W.Y.** (2011). Confidence intervals for difference between two Poisson rates. *Communications in Statistics, Simulation and Computation*, 40.9 (October), 1478-1493.

71. Tang, M.L., Qiu, S.F., **Poon, W.Y.** & Tang, N.S. (2012). Test procedures for disease prevalence with partially validated data. *Journal of Biopharmaceutical Statistics*, 22, 368-386.
72. Tang, M.L., Qiu, S.F. & **Poon, W.Y.** (2012). Confidence interval construction for disease prevalence based on partial validation series, *Computational Statistics and Data Analysis*, 56, 1200-1220.
73. **Poon, W.Y.** & Wang, H.B. (2012). Latent variable models with ordinal categorical covariates. *Statistics and Computing*, 22.5, 1135-1154.
74. Tang, M.L., Qiu, S.F. & **Poon, W.Y.** (2012). Comparison of disease prevalence in two populations in presence of misclassification. *Biometrical Journal*, 54.6, 786-807.
75. Lin, Y, Cheung, S.H., **Poon, W.Y.**, & Lu, T.Y. (2013). Pairwise comparison with ordered categorical data. *Statistics in Medicine*, 32(18), 3192-3205.
76. **Poon, W.Y.** & Wang, H.B. (2013). Bayesian Analysis of Generalized Partially Linear Single-Index Models. *Computational Statistics and Data Analysis*, 68, 251-261.
77. Lu, T.Y., **Poon, W.Y.** & Cheung, S.H. (2014). A unified framework for the comparison of treatments with ordinal responses. *Psychometrika*, 79(4), 605-620.
78. Lin, YQ, Kwong, K.S., Cheung, S.H., and **Poon, W.Y.** (2014). Step-up testing procedure for multiple comparisons with a control for a latent variable models with ordered categorical responses. *Statistics in Medicine*, 33(21), 3629-3638.
79. **Poon, W.Y.**, and Wang, H.B. (2014). Multivariate partially linear single-index models: Bayesian analysis. *Journal of Nonparametric Statistics*, 26 (4), 755-768.
80. **Poon, W.Y.**, Qiu, S.F., and Tang, M.L. (2015). Confidence interval construction for the Youden index based on partially validated series. *Computational Statistics and Data Analysis*, 84, 116-134.
81. Lu, T.Y., **Poon, W.Y.** & Cheung, S.H. (2015). Multiple comparisons with a control for a latent variable model with ordered categorical responses. *Statistical Methods in Medical Research: An International Review Journal*. 24(6) 949-967.
82. Qiu, S.F., **Poon, W.Y.** & Tang, M.L. (2016). Sample size determination for disease prevalence studies with partially validated data. *Statistical Methods in Medical Research: An International Review Journal*, 25(1), 37-63.
83. Qiu, S.F., **Poon, W.Y.** and Tang, M.L (2016). Confidence intervals for proportion difference from two independent partially validated series. *Statistical Methods in Medical Research: An International Review Journal*. 25(5), 2250-2273.
84. Lu, T.Y., **Poon, W.Y.** & Cheung, S.H. (2016). Comparison of two treatments with skewed ordinal responses. *Statistics in Medicine*, 35, 189-201.
85. Qiu, S.F., **Poon, W.Y.** & Tang, M.L. (2016). Confidence intervals for an ordinal effect size measure based on partially validated series. *Computational Statistics and Data Analysis*, 103, 170-192.
86. Lu, T.Y., **Poon, W.Y.**, & Cheung, S.H. (2016). Multiple comparisons of treatments with skewed ordinal responses. *Computational Statistics and Data Analysis*, 104, 223-232.
87. Yang, P., Cheung, S.H., and **Poon, W.Y.** (2017). Multiple comparisons with two controls for ordered categorical responses. *Journal of Biopharmaceutical Statistics*, 27:1, 111-123, DOI:10.1080/10543406.2016.1148707.

88. Qiu, S.F., Zeng, X.S., Tang, M.L., and **Poon, W.Y.** (2019). Test procedure and sample size determination for a proportion study using a double-sampling scheme with two fallible classifiers. *Statistical Methods in Medical Research: An International Review Journal*. 28(4), 1019-1043. DOI: 10.1177/0962280217744239.
89. Qiu, S.F., **Poon, W.Y.**, Tang, M.L., and Ji-Ran Tao (2019). Construction of confidence intervals for the risk differences in stratified design with correlated bilateral data. *Journal of Biopharmaceutical Statistics*. 29(3):446-467. DOI: 10.1080/10543406.2019.1579222.
90. Lu, T.Y., Chung, K.P., **Poon, W.Y.**, and Cheung S.H. (2019). Response-adaptive treatment allocation for clinical studies with ordinal responses. *Statistical Methods in Medical Research*. DOI: 10.1177/0962280219834061.
91. Han, Y., Lu, Z.H., and **Poon, W.Y.** (2019). Noninferiority Testing for Matched-Pair Ordinal Data with Misclassification. *Statistics in Medicine*, 38(28), 5332-5349. DOI: 10.1002/sim.8364
92. Qiu, S.F., He, J., Tao, J.R., Tang, M.L., and **Poon, W.Y.** (2020). Comparison of disease prevalence in two populations under double-sampling scheme with two fallible classifiers. *Journal of Applied Statistics*, 47(8), 1375-1401. DOI: 10.1080/02664763.2019.1679727.
93. Zhong, J.J., Wen, M.J., Cheung, S.H., and **Poon, W.Y.** (2022). Simultaneous tests of non inferiority and superiority in three-arm clinical studies with heterogeneous variance. *Communications in Statistics- Theory and Methods*, 51(1), 249–266. DOI: 10.1080/03610926.2020.1747082
94. Qiu, S.F., Wang, L.M., Tang, M.L., and **Poon, W.Y.** (2022). Confidence interval construction for proportion difference from partially validated series with two fallible classifiers. *Journal of Biopharmaceutical Statistics*, 10:1-26. DOI: 10.1080/10543406.2022.2058527.
95. Shi-Fang Qiu, Jie Lei, **Wai-Yin Poon**, Man-Lai Tang, Ricky S. Wong, Ji-Ran Tao (2024). Sample size determination for interval estimation of the prevalence of a sensitive attribute under non-randomized response models. *British Journal of Mathematical and Statistical Psychology*. Early View. DOI: 10.1111/bmsp.12338.

Non-refereed articles in proceedings volumes

96. Lee, S.Y. & **Poon, W.Y.** (1985). Maximum likelihood estimation of multivariate polyserial correlations. *ASA Proceedings of the Statistical Computing Section*, 342-346.
97. Lee, S.Y. & **Poon, W.Y.** (1987). Some algorithms in computing GLS estimates of multivariate polychoric correlations. *ASA Proceedings of the Statistical Computing Section*, 444-447.
98. **Poon, W.Y.**, Lee, S.Y. & Bentler, P.M. (1987). Simultaneous analysis of multivariate polytomous variates in several groups. *ASA Proceedings of the Social Statistics Section*, 564-569.
99. Lee, S.Y. & **Poon, W.Y.** (1990). Covariance structure analysis of correlated observations. *ASA Proceedings of the Social Statistics Section*, 336-341.

100. **Poon, W.Y.**, Lee, S.Y. & Bentler, P.M. (1990). Pseudo maximum likelihood estimation of multivariate polychoric and polyserial correlations. *ASA Proceedings of the Statistical Computing Section*, 291-296.
101. Lee, S.Y. & **Poon, W.Y.**, & Bentler, P.M. (1992). Some empirical investigations of LISCOMP. *ASA Proceedings of the Statistical Computing Section*, 183-188.
102. **Poon, W.Y.** & Leung, Y.P. (1992). Analysis of structural equation models with interval and polytomous data. *ASA Proceedings of the Statistical Computing Section*, 189-194.
103. **Poon, W.Y.**, Chan, W., Lee, S.Y. & Leung, K. (1993). Preliminary analysis of multiple group structural equation modeling via cluster analysis. *ASA Proceedings of the Social Statistics Section*, 368-373.
104. **Poon, W.Y.** & Hung, H.Y. (1994). Analysis of square tables with ordered categories. *ASA Proceedings of the Statistical Computing Section*, 292-298.
105. Lew, T.S.F. & **Poon, W.Y.** (1995). Comparison of measures of association for polytomous variables. *ASA Proceedings of the Statistical Computing Section*, 224-229.
106. **Poon, W.Y.** & Lee, C.M. (1996). Testing of homogeneity in distributions with ordered categorical variables. *ASA Proceedings of the Social Statistics Section*, 117-122.
107. **Poon, W.Y.** & Lew, T.S.F. (1997). Fuzzy decision tree analysis with applications. *ASA Proceedings of the Business and Economic Statistics Section*, 256-262.
108. **Poon, W.Y.** (2010). Articulating Programme Learning Outcomes: Synergies across the Faculty of Sciences at The Chinese University of Hong Kong. *Proceedings of AuQF2010 Quality in Uncertain Times*, 96-100.
109. Lu, Tongyu, **Poon, W.Y.** & Cheung, S.H. (2010). Multiple Testing of Several Treatments with a Control for Ordered Categorical Responses. *International Conference on Statistical Analysis of Complex Data*, 40.
110. Lin, Yueqiong, Cheung, S.H. & **Poon, W.Y.** (2012). Multiple Testing with Ordered Categorical Data. *Fifth International Conference on Statistics and Society at Renmin University*, 1.
111. Yang, P., **Poon, W.Y.** & Cheung, S.H. (2014). Multiple Comparisons of Disease Prevalence in the Presence of Misclassification. *2014 JSM Proceedings of the Section on Statistics in Epidemiology*.
112. Lee, Mei Wah, Cheung, S.H. & **Poon, W.Y.** (2014). Pairwise Comparisons for Multivariate Ordered Categorical Responses. *2014 JSM Proceedings of the Biometrics Section*.
113. Yang, P., Cheung, S.H. & **Poon, W.Y.** (2015). Multiple Comparisons with Two Controls for Ordered Categorical Responses. *2015 JSM Proceedings of the Biopharmaceutical Section*.

Books Authored

Poon, Y.S. & **Poon, W.Y.** (2012) Application of Elementary Differential Geometry to Influence Analysis. Higher Education Press, Beijing; International Press, Boston.