Curriculum Vitae

Michael J. Brusco

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GENERAL INFORMATION

University Address:	Department of Business Analytics, Information Systems, & Supply Chain College of Business Florida State University 821 Academic Way Tallahassee, Florida 32306-1110
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Professional Preparation

1990 Ph.D. in Business Administration, Florida State University, Tallahassee, FL. Major: Information and Management Sciences, Name of minor: Statistics. Dissertation supervisor: Michael J. Showalter.

Michael J. Brusco. (1990). An Evaluation of Nurse Staffing Policy Options in a Constrained Labor Environment. Unpublished doctoral dissertation, Florida State University, Tallahassee, Florida.

1986 Master's of Business Administration (MBA), Florida State University, Tallahassee, Florida. Major: Business.

1985 Bachelor's of Business Administration (BBA), Florida Atlantic University, Boca Raton, FL. Major: Marketing.

1982 Associate in Arts (AA), Broward Community College, Davie, FL.

Professional Experience

2004-Present Synovus Professor of Business Administration, College of Business, Florida State University, Tallahassee, FL.

2016-Present Professor of Business Administration – Department of Business Analytics, Information Systems, & Supply Chain, College of Business, Florida State University, Tallahassee, FL. Responsible for teaching graduate and undergraduate courses in business analytics, operations management, and operations research.

2003-2016 Professor of Business Administration – Department of Marketing, College of Business, Florida State University, Tallahassee, FL. Responsible for teaching

graduate and undergraduate courses in operations management, marketing research and operations research.

2001-2003 Associate Professor of Business Administration – Department of Marketing, College of Business, Florida State University, Tallahassee, FL. Responsible for teaching graduate and undergraduate courses in operations management, marketing research and operations research.

1998-2001 Associate Professor of Business Administration – Department of Information and Management Sciences, College of Business, Florida State University, Tallahassee, FL. Responsible for teaching graduate and undergraduate courses in operations management and operations research.

1995-1998 Assistant Professor of Business Administration – Department of Information and Management Sciences, College of Business, Florida State University. Responsible for teaching graduate and undergraduate courses in operations management and operations research.

1991-1995 Assistant Professor of Management – Department of Management, College of Commerce, DePaul University, Chicago, IL. Responsible for teaching graduate and undergraduate courses in operations management.

1990-1991 Assistant Professor of Management – Department of Management, College of Business, Ithaca College, Ithaca, NY. Responsible for teaching graduate and undergraduate courses in operations management.

1986-1990 Doctoral Student – Department of Information and Management Sciences, College of Business, Florida State University, Tallahassee, FL. Responsible for teaching graduate and undergraduate courses in operations management and computer programming.

1980-1985 Sears Roebuck & Company, Stock Clerk – Catalog Department, Hollywood, FL. Responsible for moving incoming catalog merchandise from the loading dock to the catalog staging area, and returned catalog merchandise from the staging area back to the loading dock. Basically, moving heavy stuff from point A to point B.

1979-1980 Winn Dixie – Stock Clerk (Various Aisles), Hollywood, FL. Responsible for stocking shelves at all hours of the day and night.

1975-1978 Hollywood Sun Tattler – Newspaper Delivery Technician, Hollywood, FL. Responsible for picking up newspapers (with my mom), folding the papers, putting them in plastic wrappers, packing them in my bicycle basket, riding around the neighborhood and throwing the papers into people's yards. Also, on weekends, going house-to-house and collecting payment.

Honors, Awards, and Prizes

Recipient, Best Reviewer Award (*Psychometrika*), Psychometric Society (2017)

Voted "Technical Professor of the Year", MBA Association, Florida State University (Spring 2001).

Voted "Outstanding MBA Teacher", MBA Association, Florida State University (Spring 2000).

Voted "Teacher of the Year", MIS Association, Florida State University (Spring 1998).

Recipient, Best Application Paper Award of the 1996 Decision Sciences Institute National Meeting in Orlando, Florida (November, 1996).

Recipient, Best Theoretical/Empirical Research Paper Award of the 1995 Decision Sciences National Meeting in Boston, Massachusetts (November, 1995).

Recipient, Outstanding Research Award, Department of Management, DePaul University (1994)

Recipient, Outstanding Research Award, Department of Management, DePaul University (1992)

Past Memberships in Professional Organizations

Academy of Management, American Marketing Association, Classification Society of North America, Decision Sciences Institute, Institute of Industrial Engineers, Institute for Operations Research and the Management Sciences, Psychometric Society.

TEACHING

Courses Taught

MAR	4613	Marketing Research (UG, Florida State University)
COC	3211	TruBasic, Lotus, and D-base programming (UG, Florida State University)
QMB	4700	Operations Research for Managerial Decisions (UG, Florida State University)
MAN	3010	Operations Management (UG, Florida State University)
MAN	3504	Service Operations Management (UG, Florida State University)
MAN	4521	Logistics Management (UG, Florida State University)
MAN	5501	Service Operations Management (graduate, Florida State University)
MAR	5625	Marketing Research and Analytics (graduate, Florida State University)
QMB	5616	Probabilistic Methods for Business Analytics (graduate, Florida State University)
QMB	5755	Deterministic Methods for Business Analytics (graduate, Florida State University)
MAR	6636	Quantitative Methods in Marketing I (graduate, Florida State University)
MGT	301	Managerial Concepts and Practices II (UG, DePaul University)
MGT	345	Service Sector Management (UG, DePaul University)
MGT	346	Advanced Topics in Service Operations (UG, DePaul University)
MGT	501	Operations Strategy (graduate, DePaul University)
MGT	502	Operations Management (graduate, DePaul University)
MGT	510	Statistical Quality Control (graduate, DePaul University)
MGT	545	Service Operations Management (graduate, DePaul University)
MGT	798	Seminar in Service Operations (graduate, DePaul University)
84-310		Quantitative Methods for Business (UG, Ithaca College)

86-340 Operations Management (UG, Ithaca College)

New Course Development

MAR 5625 Marketing Analytics & Research (Summer 2010). I developed this course for the new Master's Degree in Marketing program. The course was taught for the first time in the summer of 2011.

Chair of Doctoral Dissertation Supervisory Committees

Susan Brudvig, Graduate. (2007). *From coarse to fine and weak to strong: The impact of scale granularity and rating strength on the ability of K-means to recover true cluster structure.*

Co-Chair of Doctoral Dissertation Supervisory Committees

Renu Singh, Graduate. (2006). *An empirical investigation into the effects of shopping motivation on store environment-value relationship.*

Member of Doctoral Dissertation Supervisory Committees

James Gaboardi, Geography. Graduated. (2019)
Sid Anderson, Graduated. (2016)
Bill Montford. Graduated. (2016).
Cinthia Satornino, Graduated. (2014).
Real Carbonneau, University of Montreal, Mathematics, Graduated. (2012).
Doug Johansen, Graduated. (2011).
Edward Ramirez, Graduated. (2010).
Daniel Aloise, University of Montreal, Mathematics, Graduated. (2009).
Gavin Fox, Graduated. (2009)
Hans-Friedrich Köhn, University of Illinois, Psychology, Graduated. (2007).
Jason Stoner, Graduated. (2007).
Clay Voorhees, Graduated. (2006).
Kishore Gopalakrishnan, Graduated. (2005).
Tom DeWitt, Graduated. (2004).

Chair of Bachelor's Thesis Supervisory Committees
Steven Vandercook, Bachelor's student. Graduated. (2011).

Member of Bachelor's Thesis Supervisory Committees
Meylin Perla, Bachelor's student. Graduated. (2016).

RESEARCH

Overview

Over the past 30 years, my research has focused on the development of exact and approximate algorithms for a variety of combinatorial optimization problems. Specific methodologies of interest include branch-and-bound, dynamic programming, integer linear programming, genetic algorithms, simulated annealing, variable neighborhood search, and tabu search. Application areas include classification and clustering, linear ordering, variable selection in multivariate statistics, multidimensional scaling, rater agreement, manufacturing cell formation, market segmentation, blockmodeling of social networks, bin-packing, set-covering, facility location, facility layout, and workforce staffing, scheduling, and allocation. I have published a lot of papers on these topics, most (if not all) of which are mediocre at best. Still, I find doing research fun, and it's probably better than anything else I'd be likely to be doing. My publications have appeared in journals of several different fields, including:

Psychology journals: *British Journal of Mathematical and Statistical Psychology*, *Psychometrika*, *Psychological Methods*, *Journal of Mathematical Psychology*, *Journal of Abnormal Psychology*, *Multivariate Behavioral Research*, *Behavior Research Methods*, and *Perception & Psychophysics*,

Sociology / social network journals: *Social Networks*, *Sociological Methods & Research*, *Journal of Mathematical Sociology*, *Journal of Social Structure*, and *Network Science*.

Statistics journals: *Technometrics*, *Computational Statistics & Data Analysis*, *Statistical Analysis and Data Mining*, *Communications in Statistics – Simulation and Computation*, *Communications in Statistics – Theory and Methods,* and *Journal of Classification.*

Industrial engineering journals: *IIE Transactions*, *Computers & Industrial Engineering,* and *European Journal of Industrial Engineering*.

Operations management/supply chain/information systems journals: *Management Science*, *Decision Sciences*, *Journal of Operations Management*, *Journal of Supply Chain Management*, *Decision Support Systems*, *Expert Systems with Applications*, *International Journal of Operations & Production Management*, and *Omega*.

Operations research journals: *Operations Research*, *Naval Research Logistics*, *European Journal of Operational Research*, *Annals of Operations Research*, *Journal of the Operational Research Society* and *Computers & Operations Research*.

Marketing journals: *Journal of Marketing*, *Journal of Marketing Research*, *Marketing Science*, *Journal of Marketing Analytics*, *European Journal of Marketing*, *Journal of Business Research*, *Review of Marketing Science,* and *International Journal of Advertising*.

General science journals: *Science*.

Refereed Journal Articles

1. Andrews, R. L., Brusco, M. J., & Currim, I. S. (2010). Amalgamation of partitions from multiple segmentation bases: A comparison of model-based and non-model based procedures. *European Journal of Operational Research, 201* (2), 608-618.
2. Andrews, R. L., Brusco, M. J., Currim, I. S., & Davis, B. (2010). An empirical comparison of methods for clustering problems: Are there benefits from having a statistical model? *Review of Marketing Science, 8* (1), article 3, pages 1-32. Retrieved from http://www.bepress.com/romsjournal/vol8/iss1/art3/ .
3. Bechtold, S. E., & Brusco, M. J. (1994). A microcomputer-based heuristic for tour scheduling of a mixed workforce. *Computers and Operations Research*, *21* (9), 1001-1009.
4. Bechtold, S. E., & Brusco, M. J. (1994). Working set generation methods for labor tour scheduling. *European Journal of Operational Research, 74* (3), 540-551.
5. Bechtold, S. E., & Brusco, M. J. (1995). Microcomputer-based working set generation methods for personnel scheduling. *International Journal of Operations and Production Management*, *15* (10), 63-74.
6. Bechtold, S. E., Brusco, M. J., & Showalter, M. J. (1991). A comparative evaluation of labor tour scheduling methods. *Decision Sciences*, *22* (4), 683-699.
7. Brady, M. K., Voorhees, C. M., & Brusco, M. J. (2012). Service sweethearting: Its antecedents and customer consequences. *Journal of Marketing*, *76* (2), 81-98.
8. Brudvig, S., Brusco, M. J., & Cradit, J. D. (2019). Joint selection of variables and clusters: Recovering the underlying structure of marketing data. *Journal of Marketing Analytics, 7* (1), 1-12.
9. Brusco, M. J. (1998). Solving personnel tour scheduling problems using the dual all-integer cutting plane. *IIE Transactions*, *30* (9), 835-844.
10. Brusco, M. J. (1999). Morph-based local-search methods for large-scale combinatorial data analysis. *Journal of Classification*, *16* (2), 163-180.
11. Brusco, M. J. (2001). A simulated annealing heuristic for unidimensional and multidimensional (city-block) scaling of symmetric proximity matrices. *Journal of Classification*, *18* (1), 3-33.
12. Brusco, M. J. (2001). Seriation of asymmetric matrices using integer linear programming. *British Journal of Mathematical and Statistical Psychology*, *54* (2), 367-375.
13. Brusco, M. J. (2002). A branch-and-bound method for fitting anti-Robinson structures to symmetric dissimilarity matrices. *Psychometrika*, *67* (3), 459-471.
14. Brusco, M. J. (2002). Identifying a reordering of the rows and columns of multiple proximity matrices using multiobjective programming. *Journal of Mathematical Psychology*, *46* (6), 731-745.
15. Brusco, M. J. (2002). Integer programming methods for seriation and unidimensional scaling of proximity matrices: A review and some extensions. *Journal of Classification*, *19* (1), 45-67.

16. Brusco, M. J. (2003). An enhanced branch-and-bound algorithm for a partitioning problem. *British Journal of Mathematical and Statistical Psychology*, *56* (1), 83-92.
17. Brusco, M. J. (2004). On the concordance among empirical confusion matrices for visual and tactual letter recognition. *Perception & Psychophysics*, *66* (3), 392-397.
18. Brusco, M. J. (2004). Clustering binary data in the presence of masking variables. *Psychological Methods*, *9* (4), 510-523.
19. Brusco, M. J. (2004). Optimal solution methods for the minimum-backtracking row layout problem. *IIE Transactions*, *36* (1), 181-189.
20. Brusco, M. J. (2006). A repetitive branch-and-bound algorithm for minimum within-cluster sums of squares partitioning. *Psychometrika*, *71* (2), 347-363.
21. Brusco, M. J. (2006). On the performance of simulated annealing for large-scale L_2 unidimensional scaling. *Journal of Classification*, *23* (2), 255-269.
22. Brusco, M. J. (2007). Measuring human performance on clustering problems: Some potential objective criteria and experimental research opportunities. *Journal of Problem Solving*, *1* (2), 33-51. Retrieved from http://docs.lib.purdue.edu/jps/vol1/iss2/5/ .
23. Brusco, M. J. (2008). Scheduling advertising slots for television. *Journal of the Operational Research Society*, *59* (10), 1373-1382.
24. Brusco, M. J. (2008). An exact algorithm for a workforce allocation problem with application to an analysis of cross-training policies. *IIE Transactions*, *40* (5), 495-508.
25. Brusco, M. J. (2011). An exact algorithm for a core/periphery bipartitioning problem. *Social Networks*, *33* (1), 12-19.
26. Brusco, M. J. (2011). Analysis of two-mode network matrices using nonnegative matrix factorization. *Social Networks*, *33* (3), 201-210.
27. Brusco, M. J. (2014). A comparison of simulated annealing algorithms for variable selection in principal component analysis and discriminant analysis. *Computational Statistics and Data Analysis*, *77* (1), 38-53.
28. Brusco, M. J. (2015). An iterated local search heuristic for cell formation. *Computers & Industrial Engineering*, *90* (December), 242-254.
29. Brusco, M. J. (2015). An exact algorithm for maximizing grouping efficacy in part-machine clustering. *IIE Transactions*, *47* (6), 653-671.
30. Brusco, M. J. (2015). A bicriterion algorithm for allocating a cross-trained workforce based on operational and human-resource objectives. *European Journal of Operational Research*, *247* (1), 46-59.
31. Brusco, M. J. (2017). Partitioning methods for pruning the Pareto set with application to multiobjective allocation of a cross-trained workforce. *Computers & Industrial Engineering*, *111*, 29-38.
32. Brusco, M. (2018). Demonstrating the mechanics of principal component analysis via spreadsheets. *Spreadsheets in Education*, *11* (1), Retrieved from: https://sie.scholasticahq.com/article/6895-demonstrating-the-mechanics-of-principal-component-analysis-via-spreadsheets

33. Brusco, M. (2019). An Excel spreadsheet and VBA macro for model selection and predictor importance using all-possible-subsets regression. *Spreadsheets in Education, 12* (1), Retrieved from: https://sie.scholasticahq.com/article/8064-an-excel-spreadsheet-and-vba-macro-for-model-selection-and-predictor-importance-using-all-possible-subsets-regression

34. Brusco, M. J., & Cradit, J. D. (2001). A variable selection heuristic for *K*-means clustering. *Psychometrika, 66* (2), 249-270.

35. Brusco, M. J., & Cradit, J. D. (2004). Graph coloring, minimum-diameter partitioning, and the analysis of confusion matrices. *Journal of Mathematical Psychology, 48* (5), 301-309.

36. Brusco, M. J., & Cradit, J. D. (2005). ConPar: A method for identifying groups of concordant subject proximity matrices for subsequent multidimensional scaling analyses. *Journal of Mathematical Psychology, 49* (2), 142-154.

37. Brusco, M. J., & Cradit, J. D. (2005). Bicriterion methods for partitioning dissimilarity matrices. *British Journal of Mathematical and Statistical Psychology, 58* (2), 319-332.

38. Brusco, M. J., Cradit, J. D., & Brudvig, S. (2019). An integrated dominance analysis and dynamic programming approach for measuring predictor importance for customer satisfaction. *Communications in Statistics – Theory and Methods, 48* (21), 5290-5307.

39. Brusco, M. J., Cradit, J. D., & Stahl, S. (2002). A simulated annealing heuristic for a bicriterion partitioning problem in market segmentation. *Journal of Marketing Research, 39* (1), 99-109.

40. Brusco, M. J., Cradit, J. D., & Steinley, D. (in press). Combining diversity and dispersion criteria for anticlustering: a bicriterion approach. *British Journal of Mathematical and Statistical Psychology*.

41. Brusco, M. J., Cradit, J. D., Steinley, D., & Fox, G. L. (2008). Cautionary remarks on the use of clusterwise regression. *Multivariate Behavioral Research, 43* (1), 29-49.

42. Brusco, M. J., Cradit, J. D., & Tashchian, A. (2003). Multiobjective clusterwise regression for joint segmentation settings: An application to customer value. *Journal of Marketing Research, 40* (2), 225-234.

43. Brusco, M. J., & Doreian, P. (2015). An exact algorithm for two-mode *KL*-means partitioning. *Journal of Classification, 32* (October), 481-515.

44. Brusco, M., & Doreian, P. (2015). A real-coded genetic algorithm for two-mode *KL*-means partitioning with application to homogeneity blockmodeling. *Social Networks, 41*, 26-35.

45. Brusco, M. J., & Doreian, P. (2019). Partitioning signed networks using relocation heuristics, tabu search, and variable neighborhood search. *Social Networks, 56* (January), 70-80.

46. Brusco, M., Doreian, P., Lloyd, P., & Steinley, D. (2013). A variable neighborhood search method for a two-mode blockmodeling problem in social network analysis, *Network Science, 1* (2), 191-212.

47. Brusco, M., Doreian, P., Mrvar, A., & Steinley, D. (2011). Linking theory, models, and data to understand social network phenomena: Two algorithms for relaxed structural balance partitioning. *Sociological Methods and Research, 40* (1), 57-87.

48. Brusco, M., Doreian, P., Mrvar, A., & Steinley, D. (2013). An exact algorithm for blockmodeling of two-mode network data. *Journal of Mathematical Sociology, 37* (2), 61-84.

49. Brusco, M. J., Doreian, P., & Steinley, D. (2016). Biclustering methods for one-mode asymmetric matrices. *Behavior Research Methods, 48* (2), 487-502.

50. Brusco, M., Doreian, P., & Steinley, D. (in press). Deterministic blockmodeling of signed and two-mode networks: a tutorial with psychological examples. *British Journal of Mathematical and Statistical Psychology*.

51. Brusco, M., Doreian, P., Steinley, D., & Satornino, C. B. (2013). Multiobjective blockmodeling for social network analysis. *Psychometrika, 78* (3), 498-525.

52. Brusco, M. J., Futch, J., & Showalter, M. J. (1993). Nurse staff planning under conditions of a nursing shortage. *Journal of Nursing Administration, 23* (7/8), 58-64.

53. Brusco, M. J., & Jacobs, L. W. (1993). A simulated annealing approach to the cyclic staff scheduling problem. *Naval Research Logistics, 40* (1), 69-84.

54. Brusco, M. J., & Jacobs, L. W. (1993). A simulated annealing approach to the solution of flexible labor scheduling problems. *Journal of the Operational Research Society, 44* (12), 1191-1200.

55. Brusco, M. J., & Jacobs, L. W. (1993). Developing flexible personnel schedules using a microcomputer. *Work Study, 42* (5), 5-8.

56. Brusco, M. J., & Jacobs, L. W. (1995). Cost analysis of alternative formulations for personnel scheduling in continuous operating organizations. *European Journal of Operational Research, 86* (2), 249-261.

57. Brusco, M. J., & Jacobs, L. W. (1998). Eliminating redundant columns in continuous tour scheduling problems. *European Journal of Operational Research, 111* (3), 518-525.

58. Brusco, M. J., & Jacobs, L. W. (1998). Personnel tour scheduling when starting-time restrictions are present. *Management Science, 44* (4), 534-547.

59. Brusco, M. J., & Jacobs, L. W. (2000). Optimal models for meal-break and start-time flexibility in continuous tour scheduling. *Management Science, 46* (12), 1630-1641.

60. Brusco, M. J., & Jacobs, L. W (2001). Starting time decisions in labor tour scheduling: An experimental analysis and case study. *European Journal of Operational Research, 131* (3), 459-475.

61. Brusco, M. J., Jacobs, L. W., Bongiorno, R. J., Lyons, D., & Tang, B. (1995). Improving personnel scheduling at airline stations. *Operations Research, 43* (5), 741-751.

62. Brusco, M. J., Jacobs, L. W., & Thompson, G. M. (1999). A morphing procedure to supplement a simulated annealing heuristic for cost- and coverage-correlated set-covering problems. *Annals of Operations Research, 86*, 611-627.

63. Brusco, M. J., & Johns, T. R. (1995). Improving the dispersion of surplus labor in personnel scheduling solutions. *Computers and Industrial Engineering, 28* (4), 745-754.

64. Brusco, M. J., & Johns, T. R. (1995). The impact of demand smoothness and mean demand on tour scheduling heuristic performance. *International Journal of Operations and Production Management, 15* (1), 74-88.

65. Brusco, M. J., & Johns, T. R. (1996). A sequential integer programming-based heuristic for discontinuous tour scheduling. *European Journal of Operational Research, 95* (3), 537-548.

66. Brusco, M. J., & Johns, T. R. (1998). Staffing a multi-skilled workforce with varying levels of productivity: An analysis of cross-training policies. *Decision Sciences, 29* (2), 499-515.

67. Brusco, M. J., & Johns, T. R. (2011). An integrated approach to shift-starting time selection and tour schedule construction. *Journal of the Operational Research Society, 62* (7), 1357-1364.

68. Brusco, M. J., Johns, T. R., & Reed, J. (1998). Cross-utilization of a two-skilled workforce. *International Journal of Operations and Production Management, 18* (6), 555-564.

69. Brusco, M. J., Johns, T. R., & Venkataraman, R. (2018). LP-based working subsets for personnel scheduling: evaluation and augmentation. *European Journal of Industrial Engineering, 12* (2), 175-198.

70. Brusco, M. J., & Köhn, H.-F. (2008). Comment on 'Clustering by passing messages between data points'. *Science*, 319 (February 8), 726c. Retrieved from http://www.sciencemag.org/content/319/5864/726.3.full.pdf .

71. Brusco, M. J., & Köhn, H.-F. (2008). Optimal partitioning of a data set based on the *p*-median model. *Psychometrika, 73* (1), 89-105.

72. Brusco, M. J., & Köhn, H.-F. (2009). Exemplar-based clustering via simulated annealing. *Psychometrika, 74* (3), 457-475.

73. Brusco, M. J., & Köhn, H.-F. (2009). Clustering qualitative data based on binary equivalence relations: A neighborhood search heuristic for the clique partitioning problem. *Psychometrika, 74* (4), 685-703.

74. Brusco, M. J., Köhn, H.-F., & Stahl, S. (2008). Heuristic implementation of dynamic programming for matrix permutation problems in combinatorial data analysis. *Psychometrika, 73* (3), 503-522.

75. Brusco, M. J., Köhn, H.-F., & Steinley, D. (2013). Exact and approximate methods for a one-dimensional minimax bin-packing problem. *Annals of Operations Research, 206* (July), 611-626.

76. Brusco, M. J., Köhn, H.-F., & Steinley, D. (2015). An exact method for partitioning dichotomous items within the framework of the monotone homogeneity model. *Psychometrika, 80* (4), 949-967.

77. Brusco, M. J., Köhn, H.-F., & Steinley, D. (2016). An evaluation of exact methods for the multiple subsets maximum cardinality selection problem. *British Journal of Mathematical and Statistical Psychology, 69* (2), 194-213.

78. Brusco, M. J., Shireman, E., & Steinley, D. (2017). A comparison of latent class, *K*-means, and *K*-median methods for clustering dichotomous data. *Psychological Methods*, *22* (3), 563-580.

79. Brusco, M. J., Shireman, E., Steinley, D., Brudvig, S., & Cradit, J. D. (2017). Gaussian model-based partitioning using iterated local search. *British Journal of Mathematical and Statistical Psychology*, *70* (1), 1-24.

80. Brusco, M. J., & Showalter, M. J. (1993). Constrained nurse staffing analysis. *Omega, 21* (2), 175-186.

81. Brusco, M. J., & Singh, R. (2010). Assigning commercial videotapes to time slots under alternative message spacing policies. *International Journal of Advertising*, *29* (3), 431-450.

82. Brusco, M. J., Singh, R., Cradit, J. D., & Steinley, D. (2017). Cluster analysis in OM research: Survey and recommendations. *International Journal of Operations & Production Management*, *37* (3), 300-320.

83. Brusco, M. J., Singh, R., & Steinley, D. (2009). Variable neighborhood search heuristics for selecting subsets of variables in principal component analysis. *Psychometrika*, *74* (4), 705-726.

84. Brusco, M. J., & Stahl, S. (2000). Using quadratic assignment methods to generate initial permutations for unidimensional scaling of symmetric proximity matrices. *Journal of Classification*, *17* (2), 197-223.

85. Brusco, M. J., & Stahl, S. (2001). An interactive approach to multiobjective combinatorial data analysis. *Psychometrika, 66* (1), 5-24.

86. Brusco, M. J., & Stahl, S. (2001). Compact integer programming models for extracting subsets of stimuli from confusion matrices. *Psychometrika, 66* (3), 405-420.

87. Brusco, M. J., & Stahl, S. (2005). Bicriterion seriation methods for skew-symmetric matrices. *British Journal of Mathematical and Statistical Psychology*, *58* (2), 333-343.

88. Brusco, M. J., & Stahl, S. (2005). Optimal least-squares unidimensional scaling: Improved branch-and-bound procedures and a comparison to dynamic programming. *Psychometrika, 70* (2), 253-270.

89. Brusco, M. J., & Stahl, S. (2007). An algorithm for extracting maximum cardinality subsets with perfect dominance or anti-Robinson structures. *British Journal of Mathematical and Statistical Psychology*, *60* (2), 333-351.

90. Brusco, M. J., Stahl, S., & Steinley, D. (2008). An implicit enumeration method for an exact test of weighted kappa. *British Journal of Mathematical and Statistical Psychology*, *61* (2), 439-452.

91. Brusco, M. J., & Steinley, D. (2006). Clustering, seriation, and subset extraction of confusion data. *Psychological Methods*, *11* (3), 271-286.

92. Brusco, M., & Steinley, D. (2006). Inducing a blockmodel structure for two-mode binary data using seriation procedures. *Journal of Mathematical Psychology*, *50* (5), 468-477.

93. Brusco, M. J., & Steinley, D. (2007). A comparison of heuristic procedures for minimum within-cluster sums of squares partitioning. *Psychometrika*. *72* (4), 583-600.

94. Brusco, M., & Steinley, D. (2007). A variable neighborhood search method for generalized blockmodeling of two-mode binary matrices. *Journal of Mathematical Psychology, 51* (5), 325-338.

95. Brusco, M. J., & Steinley, D. (2007). Exact and approximate algorithms for part-machine clustering based on a relationship between interval graphs and Robinson matrices. *IIE Transactions, 39* (10), 925-935.

96. Brusco, M. J., & Steinley, D. (2008). A binary integer program to maximize the agreement between partitions. *Journal of Classification*, *25* (2), 185-193.

97. Brusco, M. J., & Steinley, D. (2009). Cross-validation issues in multiobjective clustering. *British Journal of Mathematical and Statistical Psychology, 62* (2), 349-368.

98. Brusco, M. J., & Steinley, D. (2009). Integer programs for one- and two-mode blockmodeling based on prespecified image matrices for structural and regular equivalence. *Journal of Mathematical Psychology, 53* (6), 577-585.

99. Brusco, M. J., & Steinley, D. (2010). *K*-balance partitioning: An exact method with application to generalized structural balance and other psychological contexts. *Psychological Methods, 15* (2), 145-157.

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