Ryan Patrick Bowles

February 2023

Areas of Expertise

My research focuses on the development and validation of assessments using contemporary methods in measurement and longitudinal analysis. I have expertise in measurement methods such as Rasch measurement, item response theory, and structural equation modeling with categorical outcomes, and in longitudinal analyses including linear and nonlinear latent growth curve modeling and growth mixture modeling. My applied focus is in early childhood language and literacy development for children with and without disabilities.

Personal Information

Work:

Department of Human Development and Family Studies Michigan State University 2E Human Ecology Building East Lansing, MI 48824 517-432-2264 (office) 517-432-2953 (fax) 734-308-6696 (cell) bowlesr@msu.edu

Citizenship: U.S.

Formal Education

Ph.D., Quantitative Psychology, University of Virginia, 2006

Dissertation title: Item response models for intratask change to examine the impacts of proactive interference on the aging of working memory span

M.A., Quantitative Psychology, University of Virginia, 2003

Thesis title: An examination of item review on a CAT using the specific information item selection algorithm.

M.A., Economics, University of Chicago, 1999

B. S., Mathematical Economics, Wake Forest University, 1996

Professional Experience

Michigan State University

July 2014 - current

Associate Professor, Department of Human Development and Family Studies, College of Social Sciences

Michigan State University

August 2011 - June 2014

Assistant Professor, Department of Human Development and Family Studies, College of Social Sciences

Michigan State University

August 2006 - August 2011

Assistant Professor, Department of Psychology, College of Social Sciences

University of Virginia

January 2000 – August 2006

Graduate Research Assistant, Department of Psychology, Graduate College of Arts and Sciences

ACT, Inc.

Summer 2000

Summer Internship, Support, Technological Applications, and Research (STAR)

Department

Computer Adaptive Technologies, Inc.

January 1999 – June 1999

Program Associate for medical and information technology certification

Grants

Funded

- Co-Investigator (PI: C. Venker). How single-word and telegraphic simplification affects language processing and word learning in young children with Autism Spectrum Disorder. National Institutes of Health, June 2022 May 2027, \$3,746,084.
- Principal Investigator (Co-PIs: G. Bingham & H. K. Gerde). Development and validation of two complementary measures of early writing to assess teacher practice and child outcomes. Institute of Education Sciences, July 2021 June 2025, \$1,999,022.
- Co-Principal Investigator (PI: S. Douglas). Development and feasibility of an online training for paraeducators to improve communication supports for young children with complex communication needs. Institute of Education Sciences, July 2018 June 2023, \$1,498,336.
- Co-Principal Investigator (PI: S. Douglas). *Paraeducator training and supervision in Michigan: Current practice, policies, and future recommendations.* Michigan State University Internal Grant: Michigan Applied Public Policy Research Program, July 2016-August 2017, \$22,000.
- Psychometrician (PI: C. Hammer). *Development of the Bilingual Assessment of Phonological Sensitivity.* Institute of Education Sciences, July 2016 June 2020, \$1,600,000.
- Co-Principal Investigator (PI: L. E. Skibbe). *Development of the Inventory of Phonological Awareness with Alternative Responses (IPAAR)*. Institute of Education Sciences, July 2015 June 2021. \$1,599,734.

This grant was awarded additional funding, July 2021, \$62,000.

- Co-Principal Investigator (PI: M. McClelland). *Developing a measure of self-regulation for children at-risk for school difficulty.* Institute of Education Sciences, July 2015 June 2019. \$1,600,000.
- Co-Principal Investigator (PI: H. Gerde). Development of the Improving Writing Resources and Interactions in Teaching Environments through Professional Development (IWRITE-PD) for teachers of economically disadvantaged children. Institute of Education Sciences, July 2015 June 2019. \$1,499,994.
- Co-Principal Investigator (PI: Julie Libarkin). *Utilizing best practice to refine and validate concept inventories in bio- and geo- sciences*. National Science Foundation, August 2015 July 2017.
- Co-Principal Investigator (PI: J. Pentimonti). *Development and validation of the Systematic Assessment of Book Reading*. Institute of Education Sciences, July 2014 June 2018. \$1,600,000.
- Co-Principal Investigator (PI: A. Blow). *Risk, resiliency, and coping in National Guard families*. Department of the Army, USAMRAA, Sept. 2012 Sept. 2015, \$881,838.
- Principal Investigator (Co-PIs: L. M. Justice and L. E. Skibbe). *Development and validation of the Narrative Assessment Protocol (NAP)*. Institute of Education Sciences, July 2011 June 2016. \$1,800,843.
- Co-Principal Investigator (PI: M. McClelland). *Touch your toes! Developing a new measure of behavioral regulation*. Institute of Education Sciences, July 2010 June 2014, \$1,600,000.
- Principal Investigator (Co-PIs: L. E. Skibbe & G. Troia). *The Inventory of Phonological Awareness with Alternative Responses: A feasibility study.* Michigan State University Competitive Discretionary Funding Program, Feb. 2010 June 2011, \$25,294.
- Principal Investigator (Co-PIs: S. L. Wise & G. G. Kingsbury) *Position effects on the NCLEX*. National Council of State Boards of Nursing, Sept. 2006 Aug. 2007, \$31,782.

Not Funded (last three years)

- Co-Principal Investigator (PI: H. K. Gerde). *iWRITE+: Development of an adaptive PD for engaging a diverse group of educators to enhance teachers' writing practices and children's outcomes*. Institute of Education Sciences, \$2,000,000. Submitted August 2020. Not scored. Resubmitted August 2021.
- Co-Principal Investigator (PI: L. E. Skibbe). *Development and validation of the Access to Literacy Assessment System- Vocabulary.* Institute of Education Sciences, \$1,399,540. Submitted August 2018. Not scored. Resubmitted August 2019. Not scored. Resubmitted August 2021. \$1,999,325.
- Co-Principal Investigator and Faculty Sponsor (PI: S. Goodwin). *Linking test scores across measures to support decision making about examinee ability.* Institute of Education Sciences. \$224,922. Submitted July 2020. Not scored.

Sponsored Student Grants

- College of Social Science Early Start Program to Ellen Searle, Jul. 2019, \$2000.
- Provost Undergraduate Research Initiative to Cassidy Wesenburg. Michigan State University, Sep. 2015, \$2,000.
- Graduate assistant grant to Laura Froyen (cosponsored with Lori Skibbe). Literacy Achievement Research Center, Michigan State University, Aug. 2009 May 2010, \$11,970.22.
- Honors College Research Fund to Bridget Smeekens. Strategy production hypothesis versus inhibition deficit hypothesis: Exploring the mechanisms behind intratask change in working memory. Michigan State University Honors College, Nov. 2009, \$500.
- Provost Undergraduate Research Initiative to Kayla Musielak and Kelli Smith (cosponsored with Lori Skibbe). Michigan State University, Sep. 2009, \$2,000.
- Psi Chi Undergraduate Research Grant to Bridget Smeekens. Strategy production hypothesis versus inhibition deficit hypothesis: Exploring the mechanisms behind intratask change in working memory. Psi Chi, Apr. 2009, \$1,100.
- Dean's Assistantship to Bridget Smeekens. Strategy production hypothesis versus inhibition deficit hypothesis: Exploring the mechanisms behind intratask change in working memory. Michigan State University College of Social Science, Mar. 2009, \$3,400.

Professional Publications and Presentations

- **Peer-reviewed Publications** (+ denotes graduate or undergraduate student at time of writing)
- 72. +Sun, T., **Bowles,** R. P., & Douglas, S. N. (in press). Chinese-English speaking family perspectives of augmentative and alternative communication use with their children. *Journal of Communication Disorders*.
- 71. +Sun, T., **Bowles,** R. P., Douglas, S. N., & Plavnick, J. B. (in press). Response time of young children with Complex Communication Needs following a communication opportunity. *Exceptional Children*.
- 70. Farero, A., Sullivan, C. M., Lopez-Zeron, G., **Bowles,** R. P., Sprecher, M., Chiaramonte, D., & Engleton, J. (in press). Development and validation of the housing instability scale. *Journal of Social Distress and Homelessness*.
- 69. Farero, A., Blow, A., **Bowles**, R. P., (Gorman) Ufer, L., Kees, M. & Guty, D. (in press). What predicts personal growth following a deployment? An examination of National Guard soldiers through the lens of posttraumatic growth. *Military Psychology*.
- 68. Ahmed, S. F., Montroy, J. J., Skibbe, L. E., **Bowles,** R. P., & Morrison, F. J. (2023). The timing of executive function development is associated with growth in math achievement from preschool through second grade. *Learning and Instruction*, *83*, 101713.
- 67. Bingham, G. E., Gerde, H. K., Pikus, A. E., Rohloff, R., Quinn, M. F., **Bowles**, R. P., & Zhang, X. Y. (2022). Examining teachers' early writing knowledge and practices. *Reading and Writing*, *35*, 2201-2227.
- 66. Cabell, S. Q., Gerde, H. K., Hwang, H., **Bowles**, R. P., Skibbe, L. E., Piasta, S. B., & Justice, L. M. (2022). Rate of growth of preschool-age children's language and decoding skills

- predicts beginning writing achievement. *Early Education and Development, 33*(7), 1198-1221..
- 65. Douglas, S. N., **Bowles,** R. P., & Kammes, R. (2022, Spring/Summer). Paraeducators: An important member of the educational team for students with disabilities. *Journal of the American Academy of Special Education Professionals*.
- 64. +Sun, T., **Bowles**, R. P., Douglas, S., & Gerde, H. K. (2022). Supporting AAC use for preschoolers with complex communication needs. *Young Exceptional Children*, 25(2), 101-112.
- 63. McClelland, M. M., Gonzales, C. R., Cameron, C. E., Geldhof, G. J., **Bowles**, R. P., Nancarrow, A. F., Merculief, A., & Tracy, A. (2021). The Head-Toes-Knees-Shoulders Revised (HTKS-R): Links to academic outcomes and measures of EF in young children. *Frontiers in Psychology: Developmental Psychology, 12*.
- 62. +Chandler, M. C., Gerde, H. K., **Bowles**, R. P., +McRoy, K. Z., Pontifex, M. B., & Bingham, G. E. (2021). Self-regulation moderates the relationship between fine motor skills and writing in early childhood. *Early Childhood Research Quarterly*, *57*, 239-250. doi: 10.1016/j.ecresq.2021.06.010
- 61. Khan, K., Logan, J., Justice, L. M., Bowles, R. P., & Piasta, S. B. (2021). The contribution of vocabulary, grammar, and phonological awareness to narrative precocity in young children. *Journal of Speech, Language, and Hearing Research*, 64, 3489-3503.
- 60. Clark, D. A., Nuttall, A. K., **Bowles**, R. P (2021). Study length, change process separability, parameter estimation, and model evaluation in hybrid autoregressive-latent growth structural equation models for longitudinal data. *International Journal of Behavioral Development*, 45, 440-452
- 59. Gonzalez, C. R., **Bowles**, R. P., Geldhof, G. J., Cameron, C., Tracy, A., & McClelland, M. M. (2021). The Head-Toes-Knees-Shoulders Revised (HTKS-R): Development and psychometric properties of a revision to reduce floor effects. *Early Childhood Research Quarterly*, *56*, 320-332.
- 58. Pentimonti, J., **Bowles,** R. P., Zucker, T., Tambyraja, S., & Justice, L. M. (2021). Development and validation of the Systematic Assessment of Book Reading (SABR-2.2). *Early Childhood Research Quarterly, 55,* 201-213.
- 57. Skibbe, L. E., **Bowles**, R. P., Goodwin, S., Troia, G. A., & Konishi, H. (2020). The Access to Literacy Assessment System for Phonological Awareness (PA): An adaptive measure of PA appropriate for children with speech and/or language impairment. *Language, Speech, and Hearing Services in Schools, 51*, 1124-1138.
- 56. +Whitehead, M. R., Parra-Cardona, J. R., Wampler, R., **Bowles**, R. P., Klein, S. (2020). Longitudinal changes among Latino/a immigrant parental acculturation and extra-familial immigration-related stress. *Hispanic Journal of Behavioral Sciences*, 42, 18-40.
- 55. **Bowles**, R. P., Justice, L. M., Khan, K. S., Piasta, S. B., Skibbe, L. E., & +Foster, T. D. (2020). Development of the Narrative Assessment Protocol-2 (NAP-2): A tool for examining young children's narrative skill. *Language, Speech, and Hearing Services in*

- Schools, 52, 390-404.
- 54. +Wang, W., Vallotton, C. D., & **Bowles**, R. P. (2020). Ethnic variances in socializing young children's mastery motivation among White, African American, and Hispanic low-income families. *Early Childhood Research Quarterly*, *51*, 329-337.
- 53. Nuttall, A. K., +Froyen, L. C., Skibbe, L. E., & **Bowles**, R. P. (2019). Maternal and paternal depressive symptoms, home learning environment, and children's early literacy. *Child Psychiatry and Human Development*, 50, 681-691.
- 52. +Farero, A., Blow, A., **Bowles**, R. P., Gorman, L., Kees, M., & Guty, D. (2019). The relationship between parent-soldier communication and post-deployment soldier mental health. *Military Behavioral Health*, *7*, 336-344.
- 51. Deshmukh, R. S., Zucker, T. A., Tambyraja, S. T., Pentimonti, J. M., **Bowles**, R. P., & Justice, L. M., (2019). Teachers' use of questions during shared book reading: Relations to child responses. *Early Childhood Research Quarterly*, 49, 59-68.
- 50. +Farero, A., **Bowles**, R., Blow, A., Ufer, L., Kees, M., & Guty, D. (2019). Rasch analysis of the Revised Dyadic Adjustment Scale (RDAS) with military couples. *Contemporary Family Therapy*, 40, 1-10. DOI: 10.1007/s10591-018-09486-2.
- 49. Skibbe, L. E., Montroy, J. J., **Bowles,** R. P., & Morrison, F. J. (2019). Self-regulation and the development of literacy and language achievement from preschool through second grade. *Early Childhood Research Quarterly*, *46*, 240-251.
- 48. Libarkin, J. C., Gold, A. U., Harris, S. E., McNeal, K. S., & **Bowles**, R. P. (2018). A new, valid measure of climate change understanding: Associations with risk perception. *Climatic Change*, *150*, 403-416.
- 47. +Clark, D. A., & **Bowles**, R. P. (2018). Model fit and Item Factor Analysis: Overfactoring, underfactoring, and a program to guide interpretation. *Multivariate Behavioral Research*, 54, 544-558.
- 46. Piasta, S. B., Farley, K. S., Phillips, B. M., Anthony, J. L., & **Bowles**, R. P. (2018). Assessment of young children's letter-sound knowledge: Initial validity evidence for letter sound short forms. *Assessment for Effective Intervention*, 43, 249-255.
- 45. Piasta, S. B., Groom, L. J., Khan, K. S., Skibbe, L. E., & **Bowles,** R. P. (2018). Young children's narrative skill: Concurrent and predictive associations with emergent literacy and early reading. *Reading and Writing, 31,* 1479-1498.
- 44. +Clark, D. A., Nuttall, A. K., & **Bowles**, R. P. (2018). Misspecification in latent change score models: Consequences for parameter estimation, model evaluation, and predicting change. *Multivariate Behavioral Research*, *53*, 172-189.
- 43. Konishi, H., +Froyen, L., Skibbe, L. E., & **Bowles**, R. P. (2018). Family context and children's early literacy skills: The role of marriage quality and emotional expressiveness of mothers and fathers. *Early Childhood Research Quarterly*, *42*, 183-192.
- 42. Blow, A. J., **Bowles, R. P.**, +Farero, A., Subramaniam, S., Lappan, S., Nichols, E., Gorman, L., Kees, M., & Guty, D. (2017). Couples coping through deployment: Findings from a sample of National Guard families. *Journal of Clinical Psychology*, 73, 1753-1767.

- 41. +Tigchelaar, M., **Bowles**, R. P., Winke, P., & Gass, S. (2017). Assessing the validity of ACTFL can-do statements for spoken proficiency: A Rasch analysis. *Foreign Language Annals*, *50*, 584-600.
- 40. Tortorelli, L., **Bowles,** R. P., & Skibbe. L. E. (2017). Easy as AcHGzrjq: The Quick Letter Name Knowledge Assessment (Q-LNK). *The Reading Teacher*, 71, 145-156.
- 39. Khan, K., Gugiu, M., Justice, L. M., **Bowles,** R. P., Skibbe, L. E., & Piasta, S. (2016). Age-related progressions in story structure in young children's narratives. *Journal of Speech, Language, and Hearing Research, 59,* 1395-1408.
- 38. +Montroy, J. J., **Bowles**, R. P., Skibbe, L. R., McClelland, M. M., & Morrison, F. J. (2016). The development of self-regulation across early childhood. *Developmental Psychology*, *52*, 1744-1762.
- 37. +Foster, T. D., +Froyen, L. C., Skibbe, L. E., **Bowles,** R. P., & +Decker, K. B. (2016). Fathers' and mothers' home learning environments and children's early academic outcomes. *Reading and Writing*, *29*, 1845-1863.
- 36. +Montroy, J. J., **Bowles**, R. P., & Skibbe, L. E. (2016). The effect of peers' self-regulation on preschooler's self-regulation and literacy growth. *Journal of Applied Developmental Psychology*, 46, 73-83.
- 35. Piasta, S. B., Phillips, B. M., Williams, J. M., **Bowles**, R. P., & Anthony, J. L. (2016). Measuring young children's alphabet knowledge: Development and validation of brief letter-sound knowledge assessments using Item Response Theory. *Elementary School Journal*, *116*, 523-548.
- 34. +Hubbard, N. A., Hutchison, J. L., Turner, M., +Montroy, J. J., **Bowles**, R. P., Rypma, B. (2016). Depressive thoughts limit working memory capacity in dysphoria. *Cognition and Emotion*, 30, 193-209. doi: 10.1080/02699931.2014.991694
- 33. +Elafros, M. A., **Bowles,** R. P., Atadzhanov, M., Mbewe, E., Haworth, A., Chomba, E., & Birbeck, G. L. (2015). Reexamining epilepsy-associated stigma: Validation of the Stigma Scale of Epilepsy in Zambia. *Quality of Life Research*, *24*, 1483-1489.
- 32. Guo, Y., Piasta, S. B., & **Bowles**, R. P. (2015). Exploring preschool children's science content knowledge. *Early Education and Development*, *26*, 125-146. doi:10.1080/10409289.2015.968240
- 31. McClelland, M. M., Cameron, C. E., Duncan, R., **Bowles,** R. P., Acock, A. C., Miao, A., & Pratt, M. E. (2014). Predictors of early growth in academic achievement: The Head-Toes-Knees-Shoulders task. *Frontiers in Psychology, 5:599*. doi: 10.3389/fpsyg.2014.00599. Reprinted in Y. Moriguchi, P. D. Zelazo, & N. Chevalier (Eds.), *Development of executive function during childhood*. Retrieved from https://www.frontiersin.org/books/b/834.
- 30. +Montroy, J. J., **Bowles**, R. P., Skibbe, L. E., & +Foster, T. D. (2014). Social skills and problem behaviors as mediators of the relationship between behavioral self-regulation and academic achievement. *Early Childhood Research Quarterly*, *29*, 298-309. doi: 10.1016/j.ecresq.2014.03.002

- 29. **Bowles**, R. P., Pentimonti, J. M., Gerde, H. K., & +Montroy, J. J. (2014). Item response analysis of uppercase and lowercase letter name knowledge. *Journal of Psychoeducational Assessment*, 32, 146-156.
- 28. +Corker, K. S., Donnellan, M. B., & **Bowles**, R. P. (2013). The development of achievement goals throughout college: Modeling stability and change. *Personality and Social Psychology Bulletin*, *39*, 1404-1417.
- 27. Bindman, S. W., Hindman, A. H., **Bowles**, R. P., & Morrison, F. J. (2013). The contributions of parental management language to self-regulation in preschool children. *Early Childhood Research Quarterly*, 28, 529-539.
- 26. +Froyen, L. C., Skibbe, L. E., **Bowles**, R. P., Blow, A. J., & Gerde H. K. (2013). Marital satisfaction, family emotional expressiveness, home learning environments and children's academic outcomes. *Journal of Marriage and Family*, 75, 42-55.
- 25. Gerde, H. K., Skibbe, L. E., **Bowles**, R. P., & +Martoccio, T. L. (2012). Relative importance of child and home predictors of children's emergent writing. *Child Development Research*, 2012. doi: 10.1155/2012/748532.
- 24. Estabrook, R., Grimm, K. J., & **Bowles**, R. P. (2012). A Monte Carlo simulation study assessment of the reliability of within-person variability. *Psychology and Aging*, *27*, 560-576.
- 23. Skibbe, L. E., Grimm, K. J., **Bowles**, R. P., & Morrison, F. J. (2012). Literacy growth in the academic year versus summer from Preschool through Second Grade: Differential effects of schooling across four skills. *Scientific Studies of Reading*, *16*, 141-165.
- 22. **Bowles**, R. P., Skibbe, L. E., & Justice, L. M. (2011). Analysis of letter name knowledge using Rasch measurement. *Journal of Applied Measurement*, *12*, 387-399.
- 21. Hogan, T.P., **Bowles**, R., Catts, H.W., & Storkel, H.L. (2011). Lexical influences on phoneme awareness. *Journal of Communication Disorders*, 44, 49-58.
- 20. Skibbe, L. E., Justice, L. M., & **Bowles**, R. P. (2011). Implementation processes associated with a home-based phonological awareness intervention program for children with specific language impairment. *International Journal of Speech Language Pathology, 13*, 110-124.
- 19. Pence Turnbull, K. L., **Bowles**, R. P., Skibbe, L. E., Justice, L. M., & Wiggins, A. K. (2010). Theoretical explanations for preschoolers' lowercase alphabet knowledge. *Journal of Speech, Language, and Hearing Research*, *53*, 1757-1768.
- 18. Justice, L. M., **Bowles**, R. P., Pence Turnbull, K. L., & Gosse, C. S. (2010). A scalable tool for assessing the spoken narratives of preschool children: The NAP (Narrative Assessment Protocol). *Early Childhood Research Quarterly*, *25*, 218-234.
- 17. McArdle, J. J., Grimm, K. J., Hamagami, F., **Bowles**, R. P., & Meredith, W. (2009). Modeling life-span growth curves of cognition using longitudinal data with multiple samples and changing scales of measurement. *Psychological Methods*, *14*, 126-149.
- 16. Justice, L.M., Bowles, R. P., Pence Turnbull, K. L., & Skibbe, L. E. (2009). School readiness

- among children with varying histories of language difficulties. *Developmental Psychology*, 45, 460-476.
- 15. Pence, K. L., Anthony, A. B., Justice, L. M., & **Bowles**, R. P. (2009). Preschoolers' exposure to language stimulation in classrooms serving at-risk children: The contribution of group size and activity context. *Early Education and Development*, 20, 53-79.
- 14. **Bowles**, R. P., & Salthouse, T. A. (2008). Vocabulary test format and differential relations to age. *Psychology and Aging*, *23*, 366-376.
- 13. Massey, S., Pence, K. L., Justice, L. M., & **Bowles**, R. P. (2008). Educators' use of cognitive challenging questions in economically disadvantaged preschool classroom contexts. *Early Education and Development*, *19*, 340-360.
- Skibbe, L. E., Grimm, K. J., Stanton-Chapman, T., Justice, L. M., Pence, K. L., & Bowles, R. P. (2008). Reading trajectories of children with language difficulties from preschool through grade five. *Language, Speech, and Hearing Services in Schools*, 39, 475-486.
- 11. Sutfin, E. L., Fulcher, M., **Bowles**, R. P., & Patterson, C. J. (2008). How lesbian and heterosexual parents convey attitudes about gender to their children: The role of gendered environments. *Sex Roles*, *58*, 501-513.
- 10. **Bowles**, R. P., & Ram, N. (2006). Using Rasch measurement to investigate volleyball skills and inform coaching. *Journal of Applied Measurement*, 7, 39-54.
- 9. Justice, L. M., **Bowles**, R. P., Kaderavek, J. N., Ukrainetz, T. A., Eisenberg, S. L., & Gillam, R. B. (2006). The Index of Narrative Micro-Structure (INMIS): A clinical tool for analyzing school-aged children's narrative performance. *American Journal of Speech-Language Pathology*, *15*, 177-189.
- 8. Justice, L. M., **Bowles**, R. P., & Skibbe, L. E. (2006). Measuring preschool attainment of print-concept knowledge: A study of typical and at-risk 3- to 5-year-old children using item response theory. *Language, Speech and Hearing Services in Schools*, *37*, 224-235.
- 7. Justice, L. M., Pence, K. L., **Bowles**, R. P., & Wiggins, A. (2006). An investigation of four hypotheses concerning the order by which children learn the letters of the alphabet. *Early Childhood Research Quarterly*, 21, 374-389.
- 6. Kline, T. L., Schmidt, K. M., & **Bowles**, R. P. (2006). Using LinLog and FACETS to model item components in the LLTM. *Journal of Applied Measurement*, *7*, 74-91.
- 5. **Bowles**, R. P., Grimm, K. J., & McArdle, J. J. (2005). A structural factor analysis of vocabulary knowledge and relations to age. *Journal of Gerontology: Psychological Sciences*, 60, P234-P241.
- 4. Justice, L. M., Kaderavek, J., **Bowles**, R. P., & Grimm, K. J. (2005). Language impairment, parent-child shared reading, and phonological awareness: A feasibility study. *Topics in Early Childhood Special Education*, *25*, 143-156.
- 3. Ram, N., Chow, S.-M., **Bowles**, R. P., Wang, L., Grimm, K. J., Fujita, F., & Nesselroade, J. R. (2005). Examining interindividual differences in cyclicity of pleasant and unpleasant affect using spectral analysis and item response modeling. *Psychometrika*, 70, 773-790.

- 2. **Bowles**, R. P. (2004). The effect of dropping low scores on ability estimates. *Journal of Applied Measurement*, *5*, 178-188.
- 1. **Bowles**, R. P., & Salthouse, T. A. (2003). Assessing the age-related effects of proactive interference on working memory using the Rasch model. *Psychology and Aging*, 18, 608-615.

Book Chapters

- 4. **Bowles,** R. P. (2018). The role of interval measurement in developmental studies (Ch. 12). In Ferrer, E., & Boker, S.M. (Eds.), *Longitudinal multivariate psychology*. New York: Taylor & Francis.
- 3. **Bowles,** R. P., Schmidt, K. M., Kline, T. L., & Grimm, K. J. (2017). Ben Wright, Rasch measurement, and cognitive psychology. In M. Wilson & W. P. Fisher Jr. (Eds.), *Psychological and social measurement: The career and contributions of Benjamin D. Wright*. New York, NY: Springer.
- 2. **Bowles**, R. P., & +Montroy, J. J. (2013). Latent growth curve modeling using structural equation modeling. In Y. Petscher, C. Schatschneider, & D. L. Compton (Eds.), *Applied quantitative analysis in the social and education sciences*. New York, NY: Routledge.
- 1. **Bowles**, R. P. (2010). Measuring intraindividual variability with intratask change item response models. In S. M. Chow, E. Ferrer, & F. Hsieh (Eds.), *Statistical methods for modeling human dynamics: An interdisciplinary dialogue*. Mahwah, NJ: Erlbaum. [peer-reviewed]

Comments, Reviews, Reports, and Non-Peer Reviewed Publications

- 11. Chandler, M. C., McRoy, K. Z., Goodwin, S., **Bowles**, R. P., Bingham, G. E., Gerde, H. K., & Pontifex, M. B. (2020). Preschoolers' self-regulation, fine motor skills, and performance on a standardized literacy assessment. *Medicine & Science in Sports & Exercise*, *52*(7S), 617.
- 10. Douglas, S. N. & **Bowles**, R. (2017). *Paraeducator training, supervision, and evaluation in Michigan*. Applied Public Policy Research Final Grant Report. East Lansing, MI: Author.
- 9. Liu, Y., Skibbe, L. E., & **Bowles,** R P. (2017). An experimental study of the narrative ability of 3-5-year-old Chinese children. *Chinese Journal of Special Education*, 209(11), 92-96.
- 8. Montroy, J. J., & **Bowles**, R. P. (2016). Why kids who have trouble behaving in pre-school fall behind. *The Conversation*. Retrieved from https://theconversation.com/why-kids-who-have-trouble-behaving-in-preschool-fall-behind-69327
- 7. **Bowles,** R. P. (2016). Review of *Test equating, linking, and scoring. Structural Equation Modeling, 1,* 155-156.
- 6. **Bowles,** R. P. (2014). Review of Advances in longitudinal methods in the social and behavioral sciences. Structural Equation Modeling, 21, 651-652.
- 5. **Bowles**, R. P., Wise, S. L., & Kingsbury, G. G. (2008). *Position effects on the NCLEX*. National Council of State Board of Nursing research report.

- 4. Schmidt, K. M., **Bowles**, R. P., Kline, T. L., & Deboeck, P. (2002). *Psychometric scaling progress report: The Rainbow Project data- revised*. College Board technical report.
- 3. **Bowles**, R. P. (2000). Modeling person response styles. *Rasch Measurement Transactions*, *14*, 739.
- 2. **Bowles**, R. P. (1999). Measuring mountains. *Journal of Popular Measurement*, 2, 19-21.
- 1. **Bowles**, R. P. (1999). Combining and dropping subtest measures. *Rasch Measurement Transactions*, *13*, 686.

Invited Presentations

- 7. Bowles, R. P. (2019, May). *The ATLAS project and thoughts on the bifactor model*. Invited presentation at Rightpath Research and Innovation Center, University of South Florida, Tampa, FL.
- 6. Bowles, R. P. (2019, February). *What makes measurement meaningful?* Invited presentation at the Department of Psychology, Florida State University, Tallahassee, FL.
- 5. Zucker, T. A., Pentimonti, J., Tambyraja, S., Bowles, R. (2018, June). *Understanding and using the Systematic Assessment of Book Reading*. Invited Presentation at the Florida Center for Reading Research, Florida State University, Tallahassee, FL.
- 4. Bowles, R. P. (2016, October). *Jack McArdle: Influences on the measurement of development*. Invited presentation at Advances in Longitudinal Models for Multivariate Psychology, Richmond, VA.
- 3. Skibbe, L., Bowles, R., Justice, L., & Piasta, S. (2015, February). *Using the Narrative Assessment Protocol-2 to document children's language development.* Invited presentation at the Illinois Speech and Hearing Association, Chicago, IL.
- 2. Bowles, R. P. (2013, December). *Item-specific retest and the assessment of change*. Paper presented at Dependent data in social sciences research: Forms, issues, and methods of analysis, Erlangen, Germany.
- 1. Bowles, R. P. (2011, May). *Explanations for preschoolers' Letter Name Knowledge*. Paper presented at the Annual Meeting of the Midwestern Psychological Association, Chicago, IL.

Peer-Reviewed Conference Presentations

- 131. Bowles, R. P., Lorang, E., Venker, C. E., & Klotz, M. (2023, June). Assessment of children with autism using eye gaze and generalized additive logistic regression. In L. Branum-Martin (Chair), *Complex designs which stretch the boundaries of conventional IRT* [Symposium]. Modern Modeling Methods Conference, Storrs, CT.
- 130. Douglas. S. N., Bagawan, A., Bowles, R., Plavnick, J., Dunkel-Jackson, S., & Sun, T. (2023, July). *Development and testing of online training for educators to support young children who use AAC* [presentation]. International Society for Augmentative and Alternative Communication Conference, Cancun, Mexico.

- 129. Sun, T., Bowles, R., Douglas, S., Lu, Y., & Bagawan, A. (2023, April). A scoping review of measurements for evaluating language and communication skills of children with CCN [Poster presentation]. Annual Meeting of the American Educational Research Association, Chicago, IL.
- 128. Waters, N., Skibbe, L. E., & Bowles, R. P. (2023, March. Examining associations between caregivers' educational expectations, the home literacy and numeracy environments, and preschoolers' achievement. In A. Ellis (Chair), *The Home Learning Environment: Where are we now?* [Symposium]. Society for Research in Child Development, Salt Lake City, UT.
- 127. Gerde, H. K., Bingham, G. E., Bowles, R. P., Quinn, M. F., & Zhang, X. (2023, February). Teacher and child-level outcomes of the iWRITE professional development intervention to support preschoolers early writing and literacy skills [Presentation]. Writing Research Across Borders, Trondheim, Norway.
- 126. Gerde, H. K., Bingham, G. E., Pikus, A. E., Quinn, M. F., Rohloff, R. Bowles, R. P., & Zhang, X. Y. (2023, February). Associations between teachers' early writing knowledge and practices and children's early writing development. In D. McKowen (Chair), *Teacher knowledge and literacy outcomes* [Symposium]. Pacific Coast Research Conference, San Diego, CA.
- 125. Douglas, S., Bowles, R., Plavnick, J., Sun, T., Dunkel-Jackson, S. M., & Bagawan, A. (2023, January). Giving them the POWR to communicate: An online training program for paraeducators and teachers to support young children who use augmentative and alternative communication [Presentation]. International DADD Conference on Autism, Intellectual Disability, and Developmental Disability, Council for Exceptional Children, Clearwater, FL.
- 124. Gerde, H. K., Bingham, G. E., & Bowles, R. P. (2022, December). Teacher and child-level outcomes of the iWRITE professional development intervention. In G. Bingham (chair), *Supporting preschool teachers early writing: Instructional practices and professional learning* [Symposium]. Literacy Research Association, Phoenix, AZ.
- 123. Douglas, S. N., Dunkel-Jackson, S., Bagawan, A., Bowles, R., Plavnick, J., Sun, T. (2022, December). *An online training for educators to support young children with complex communication needs* [Presentation]. TASH Conference, Phoenix, AZ.
- 122. Hammer, C. S., Scarpino, S., Bowles, R., Keffala, B., & Goodwin, S. (2022, November). *The Bilingual Assessment of Phonological Sensitivity* [Presentation]. American Speech-Language-Hearing Association, New Orleans, LA.
- 121. Douglas, S., Bowles, R., Plavnick, J., Sun, T., Dunkel-Jackson, S. M., & Bagawan, A. (2022, October). *Giving children the POWR to communicate: Evaluation of the POWR Training System in schools* [Poster presentation]. Michigan Autism Conference, Kalamazoo, MI.
- 120. Skibbe, L., Waters, N., Bowles, R. P. & Searle, E. (2022, March). *The role of the home learning environment for children with speech and/or language impairment* [Presentation]. Badar-Kauffman, Kent, OH.

- 119. Sun, T., Bowles, R. P., Douglas, S. N., & Plavnick, J. (2022, February). *Response time of children with complex communication needs following a communication opportunity* [Poster presentation]. Biennial Conference on Research Innovations in Early Intervention. San Diego, CA.
- 118. Gerde, H. K., Strasser, K., Bingham, G. E., Bowles, R. P., & Goodrich, M. (2022, February). Early writing skills of monolingual Spanish-speaking and English-speaking children attending prekindergarten and kindergarten in Chile and the USA. In S. Linan-Thompson (Chair), *Understanding writing development in English, Spanish, and cross-linguistically* [Symposium]. Pacific Coast Research Conference, San Diego, CA.
- 117. Bowles, R. P., Gerde, H. K., & Bingham, G. E. (2022, January). Development and validation of two complementary measures of early writing to assess both teacher practice and child outcomes. In A. Truckenmiller (Chair), *Writing assessment: Shared challenges and opportunities* [Panel discussion]. Annual IES Principal Investigators Meeting, virtual.
- 116. Sun, T., Bowles, R. P., Douglas, S. N. & Bagawan, A. (2022, January). A systematic review of interventions supporting language and literacy development of young children with complex communication needs [Poster presentation]. International Conference on Autism, Intellectual Disability & Developmental Disabilities, Division on Autism & Developmental Disabilities (DADD), Council for Exceptional Children, Clearwater, FL.
- 115. Sun, T., Bowles, R. P., Douglas, S. N., & Goodwin, S. (2022, January). *The perspectives and experience of AAC communication in Chinese-English speaking families* [Poster presentation]. International Conference on Autism, Intellectual Disability & Developmental Disabilities, Division on Autism & Developmental Disabilities (DADD), Council for Exceptional Children, Clearwater, FL.
- 114. Bingham, G. E., Gerde, H. K., Barria, R., Zhang, X. Y., & Bowles, R. P. (2021, December). Are they in sync? Examining associations between teachers' early writing practices and children's early writing development. In G. Bingham (Chair), *How, what, and why?:*Examining early writing instructional and assessment practices [Symposium]. Annual Conference of the Literacy Research Association, Atlanta, GA.
- 113. Quinn, M., Bingham, G., & Bowles, R. P. (2021, April). Innovation in examining children's development of written composition across preschool. In H. K. Gerde (Chair), *Advances in writing development and assessment from preschool to elementary grades* [Symposium]. Biennial Meeting of the Society for Research in Child Development, online.
- 112. Zhang, X., Bingham, G., Bowles, R. P., & Gerde, H. K. (2021, April). Early writing development across preschool: Examining a two-factor model of transcription and composing. In H. K. Gerde (Chair), *Advances in writing development and assessment from preschool to elementary grades* [Symposium]. Biennial Meeting of the Society for Research in Child Development, online.
- 111. Chandler, M., McRoy, K., Gerde, H. K., Bowles, R. P., & Pontifex, M. (2021, April). Self-regulation moderates the relationship between fine motor skills and writing in early childhood. In H. K. Gerde (Chair), *Advances in writing development and assessment from*

- preschool to elementary grades [Symposium]. Biennial Meeting of the Society for Research in Child Development, online.
- 110. Goodwin, S., Skibbe, L. E., Richardson, J., Bowles, R. P., & Troia, G. (2021, April). *Young children with speech-language disabilities and visual attention to oral language tasks* [Flash talk presentation]. Biennial Meeting of the Society for Research in Child Development, online.
- 109. Bowles, R. P., Goodwin, S., Keffala, B., Hammer, C. S., & Scarpino, S. (2021, April). *The Bilingual Assessment of Phonological Sensitivity (BAPS): Efficient assessment with branching subtests* [Flash talk presentation]. Biennial Meeting of the Society for Research in Child Development, online.
- 108. Sun, T., Bowles, R. P., & Douglas, S. (2021, April). *Chinese-English speaking family perspectives of AAC use with their children who have complex communication needs* [Flash talk presentation]. Biennial Meeting of the Society for Research in Child Development, online.
- 107. Sun, T., Bowles, R. P., Douglas, S., & Plavnick, J. (2021, April). *Response time of children with complex communication needs following a communication opportunity* [Flash talk presentation]. Biennial Meeting of the Society for Research in Child Development, online.
- 106. Skibbe, L. E., Bowles, R. P., Goodwin, S., & Troia, G. A. (2020, December). *ATLAS-PA: An adaptive measure of phonological awareness for children with speech and/or language impairment* [Poster presentation]. National Research Conference on Early Childhood, online.
- 105. Zhang, X., Bingham, G. E., Bowles, R. P., & Gerde, H. K. (2020, November). *Associations among parents' home literacy practices and children's writing development* [Poster presentation]. National Research Conference on Early Childhood, online.
- 104. Gerde, H. K., Bingham, G. E., Bowles, R. P., Meier, A., & Zhang, X. (2020, November). *Outcomes of online teacher professional development in early writing* [Poster presentation]. National Research Conference on Early Childhood, online.
- 103. Keffala, B., Scarpino, S., Hammer, C. S., Goodwin, S., Bowles, R., & Hokenson, J. (2020, November), *Spanish-English DLLs' vocabulary abilities and performance on the Bilingual Assessment of Phonological Sensitivity (BAPS)* [Poster presentation]. American Speech-Language-Hearing Association, San Diego, CA. Canceled due to COVID-19 pandemic.
- 102. Scarpino, S., Keffala, B., Hammer, C. S., Goodwin, S., Bowles, R., & Hokenson, J. (2020, November), *Influence of home literacy environment on DLL preschoolers' phonological awareness* [Poster presentation]. American Speech-Language-Hearing Association, San Diego, CA. Canceled due to COVID-19 pandemic.
- 101. Douglas, S. N., Bowles, R., Sun, T. (August, 2020). *Development of an online training program to support young children with complex communication needs* [Presentation].

- Biennial Conference of International Society for Augmentative and Alternative Communication, Cancun, Mexico. Canceled due to COVID-19 pandemic.
- 100. Sun, T., Bowles, R. P., Douglas, S. N., & Goodwin, S. (2020, August). *Family perspectives of the experience of bilingual children with complex communication needs who use AAC* [Poster presentation]. Biennial Conference of International Society for Augmentative and Alternative Communication, Cancun, Mexico. Canceled due to COVID-19 pandemic.
- 99. Sun, T., Bowles, R. P., Douglas, S. N. & Bagawan, A. (2020, August). Systematic review of interventions supporting language and literacy development of children with complex communication needs [Poster presentation]. Biennial Conference of International Society for Augmentative and Alternative Communication, Cancun, Mexico. Canceled due to COVID-19 pandemic.
- 98. Bowles, R. P., Skibbe, L. E., Goodwin, S., & Troia, G. (2020, July). Performance discrepancy in phonological awareness tasks. In L. Branum-Martin (Chair), *Using change scores to examine dynamics in reading research* [Symposium]. Annual Meeting of the Society for the Scientific Study of Reading, Newport Beach, CA. Canceled due to COVID-19 pandemic.
- 97. Zucker, T. A., Bowles, R. P., Pentimonti, J. P., Tambrayja, S. (2020, July). *Profiles of teacher and child talk during early childhood classroom shared book reading* [Presentation]. Annual Meeting of the Society for the Scientific Study of Reading, Newport Beach, CA. Canceled due to COVID-19 pandemic.
- 96. Skibbe, L. E., Bowles, R. P., Goodwin, S. & Troia, G., (June, 2020). *ATLAS-PA: An adaptive measure of phonological awareness for children with speech and/or language impairment* [Poster presentation]. National Research Conference on Early Childhood, Arlington, VA. Canceled due to COVID-19 pandemic.
- 95. Gerde, H. K., Bingham, G. E., Bowles, R. P., Meier, A., & Zhang, X. (2020, June). *Outcomes of online teacher professional development in early writing* [Poster presentation]. National Research Conference in Early Childhood, Arlington, VA. Canceled due to COVID-19 pandemic.
- 94. Zhang, X., Bingham, G. E., Bowles, R. P., & Gerde, H. K. (2020, June). *Contributions of home and school factors on children's early writing development* [Poster presentation]. National Research Conference in Early Childhood, Arlington, VA. Canceled due to COVID-19 pandemic.
- 93. Chandler, M. C., McRoy, K. Z., Goodwin, S., Bowles, R. P., Bingham, G. E., Gerde, H. K., & Pontifex, M. B. (2020, May). *Preschoolers' self-regulation, fine motor skills, and performance on a standardized literacy assessment* [Presentation]. Annual Meeting of the American College of Sports Medicine (ACSM), San Francisco, CA, USA. Canceled due to COVID-19 pandemic.
- 92. Gerde, H. K., Bingham, G. E., Bowles, R. P. (2020, April). Iterative design approaches and strong researcher-practitioner partnerships facilitate teacher engagement in the iWRITE professional development. In T. Zucker (Chair), *How implementation science and design thinking can be nurtured in research that addresses wicked problems* [Symposium].

- American Education Research Association, San Francisco, CA. Canceled due to COVID-19 pandemic.
- 91. Bowles, R. P., Goodwin, S., Skibbe, L. E., & Troia, G. A. (2020, February). *Comparability of interpretational cutoffs across assessments of phonological awareness* [Poster presentation]. Pacific Coast Research Conference, San Diego, CA.
- 90. Gerde, H. K., Bowles, R. P., & Bingham, G. E. (2020, February). Examination of an innovative composing task for young children: Validity and growth. In H. Gerde (Chair), *Innovations in writing assessments across features of writing, ages, and ability status* [Symposium]. Pacific Coast Research Conference, San Diego, CA.
- 89. Skibbe, L. E., Bowles, R. P., Goodwin, S., & Troia, G. A. (2020, January). *The Access to Literacy Assessment System for Phonological Awareness (PA): An adaptive measure of PA appropriate for children with speech and/or language impairment* [Poster presentation]. Institute of Education Sciences Principal Investigators Meeting, Washington DC.
- 88. Douglas, S. N., Bowles, R., & Plavnick, J. (January, 2020). *Development of online training materials for paraeducator/teacher teams to support the communication of young children who use AAC* [Poster presentation]. Institute for Education Sciences Principal Investigators Meeting, Washington, DC.
- 87. Gerde, H. K., Bowles, R. P., Bingham, G. E., & Quinn, M. F. (2019, December). Designing an assessment of young children's early composing. In G. E. Bingham (Chair), *Assessing children's early writing development: Attention to compositional processes, task performance, and teacher use* [Symposium]. Literacy Research Association, Tampa, FL.
- 86. Scarpino, S. E., Hammer, C. S., Keffala, B., Goodwin, S., & Bowles, R. P. (2019, November). *Supporting Spanish-English bilingual children's phonological awareness skills* [Presentation]. American Speech-Language-Hearing Association, Orlando, FL.
- 85. Meier, A., Gerde, H. K., Skibbe, L. E., & Bowles, R. P. (2019, November). *A longitudinal examination of language development by sex* [Poster presentation]. American Speech-Language-Hearing Association, Orlando, FL.
- 84. Truckenmiller, A., Bowles, R. P., & Quinn, M. F. (2019, July). Diagnostic profiles of written expression in middle grades. In H. Gerde (Chair), *Writing development: Predictors, profiles, and intervention* [Symposium]. Society for the Scientific Study of Reading, Toronto, ON.
- 83. Quinn, M. F., Bowles, R. P., Bingham, G. E., & Gerde, H. K. (2019, July). Profiles of preschool writers: Addressing emergent writing with attention to transcription, composing, and executive function. In H. Gerde (Chair), *Writing development: Predictors, profiles, and intervention* [Symposium]. Society for the Scientific Study of Reading, Toronto, ON.
- 82. Cabell, S. Q., Gerde, H. K., Hwang, H. J., Bowles, R. P., Skibbe, L. E., & Piasta, S. B. (2019, July). Level and growth of children's language and decoding skills predict later writing

- achievement. In H. Gerde (Chair), Writing development: Predictors, profiles, and intervention [Symposium]. Society for the Scientific Study of Reading, Toronto, ON.
- 81. Gerde, H. K., Bingham, G. E., Bowles, R. P., Meier, A. & Zhang, X. (2019, July). Teacher and child-level outcomes of the iWRITE professional development intervention. In H. Gerde (Chair), *Writing development: Predictors, profiles, and intervention* [Symposium]. Society for the Scientific Study of Reading, Toronto, ON.
- 80. Bingham, G. E., Gerde, H. K., Puranik, C. & Bowles, R. P. (2019, March). Supporting children's writing development at home: Associations among low-income parents' home literacy practices and children's writing development. In S. Sonnenschein (Chair), Building on Family Strengths to Promote the Academic Development of Young Black and Latino Children [Symposium]. Society for Research in Child Development, Baltimore, MD.
- 79. Cameron, C., McClelland, M., Miao, A., Bowles, R. P., Ostrov, J., Geldhof, J., & Rates, C. (2019, March). Taking school readiness assessment from research to practice: Preliminary developmental norms for the HTKS. In C. Cameron & M. McClelland (Chairs), *Beyond the child: Measurement approaches to school readiness that are relevant for early childhood professionals* [Symposium]. Society for Research in Child Development, Baltimore, MD.
- 78. Goodwin, S., Skibbe, L. E., Troia, G., & Bowles, R. P. (2019, March). *An item level examination of monolingual and multilingual children's English phonological awareness* [Poster presentation]. Society for Research in Child Development, Baltimore, MD.
- 77. Konishi, H., Skibbe, L. E., & Bowles, R. P. (2019, March). *Preschoolers' self-regulatory behaviors during a language task mediate the relationship between self-regulation and language* [Poster presentation]. Society for Research in Child Development, Baltimore, MD.
- 76. McRoy, K., Gerde, H. K., & Bowles, R. P. (2019, March). *The relation between early writing and self-regulation in preschool* [Poster presentation]. Society for Research in Child Development, Baltimore, MD.
- 75. Gerde. H. K., Bingham, G. E., Bowles, R. P., Stadwick, R., Jenuwine, S., Zhang, X., & McRoy, K. Z. (2019, March). Measuring early composing through innovative story writing prompts. In H. Gerde (Chair), *Early writing assessment and intervention* [Symposium]. Society for Research in Child Development, Baltimore, MD.
- 74. Scarpino, S., Goodwin, S., Hammer, C., Keffala, B., Bowles, R. P., & Hokenson, J. (2019, March). *Relations between Spanish-English DLLs' performance on the Bilingual Assessment of Phonological Sensitivity (BAPS)* [Poster presentation]. Society for Research in Child Development, Baltimore, MD.
- 73. Wang, W., Vallotton, C., & Bowles, R. P. (2019, March). *Ethnic variations in the process of child mastery motivation socialization* [Poster presentation]. Society for Research in Child Development, Baltimore, MD.

- 72. Wexler, D., Fine, J., & Bowles, R. P. (2019, March). *Longitudinal reading achievement trends between children with reading disorder and children with low reading achievement* [Poster presentation]. Society for Research in Child Development, Baltimore, MD.
- 71. Skibbe, L. E., Bowles, R. P., Goodwin, S., Konishi, H., & Troia, G. A. (2019, February). Development of the Access to Literacy Assessment System for Phonological Awareness [Presentation]. Pacific Coast Research Conference, San Diego, CA.
- 70. Gerde, H. K., Bingham, G. E., Bowles, R. P., & Quinn, M. F. (2019, February). *Examination of an innovative composing task for young children: Validity and growth* [Presentation]. Pacific Coast Research Conference, San Diego, CA.
- 69. Gerde, H. K., Bingham, G. E., Bowles, R. P., Meier, A., & Zhang, X. (2019, January). *Outcomes of online teacher professional development in early writing* [Poster presentation]. Institution of Education Sciences Principal Investigators meeting, Washington, DC.
- 68. Gerde, H. K., Bingham, G. E., Bowles, R. P., Quinn, M. F., Zhang, X., & McRoy, K. Z. (2018, November). Impact of the iWRITE professional development on Head Start teacher practices. In C. E Whittingham (Chair), *Adult support of emergent writers* [Symposium]. Literacy Research Association, Indian Wells, CA.
- 67. Hammer, C. S., Scarpino, S., Keffala, B., Hokenson, J., Goodwin, S., Bowles, R. P. (2018, November). *Development of the Bilingual Assessment of Phonological Sensitivity: Test design and initial findings* [Poster presentation]. American Speech-Language-Hearing Association, Boston, MA.
- 66. Deshmukh, R., Tambyraja, S., Zucker, T., Pentimonti, J., Bowles, R. P., & Justice, L. M. (2018, November). *Teachers' use of questioning during shared read alouds: Relations to child responses* [Poster presentation]. American Speech-Language-Hearing Association, Boston, MA. *Meritorious Poster Submission award*.
- 65. Clark, D. A., Nuttall, A. K., & Bowles, R. P. (2018, September). Waves of change: How many waves of assessment are needed to effectively disaggregate autoregressive and growth curve processes, [Poster presentation]. Developmental Methods Conference, Whitefish, MT.
- 64. Bowles, R. P., Zucker, T., Pentimonti, J., Temyraja, S., & Justice, L. M. (2018, July). *Teachers' use of exratextual talk before, during, and after shared-reading sessions* [Poster presentation]. Society for the Scientific Study of Reading, Brighton, UK.
- 63. Pentimonti, J., Tambyraja, S., Zucker, T., Bowles, R. P., & Justice, L. M. (2018, July). *The impact of teachers' extratextual talk during shared reading on children's language/literacy skills* [Poster presentation]. Society for the Scientific Study of Reading, Brighton, UK.
- 62. Tuan, T., Zucker, T. A., Tompkins, V., Pentimonti, J. M., Bridges, M., Bowles, R. P., Tambyraja, S., & Justice, L. M. (2018, April). *The accuracy and complexity of children's responses to teacher questions* [Presentation]. American Educational Research Association, New York, NY.

- 61. Konishi, H., Skibbe, L. E. & Bowles, R. P. (2018, April). *Preschoolers' self-regulatory behaviors during a language task mediate the relationship between self-regulation and language*. Paper presented at the American Education Research Association Meeting, New York, NY.
- 60. Pentimonti, J., Zucker, T., Bowles, R. P., Tambyraja, S., & Justice, L. (2018, April). *Teacher/Child question use during shared reading*. Poster presented at the Society for Research on Educational Effectiveness, Washington, DC.
- 59. +Meier, A. N., Gerde, H. K., Skibbe L. E., Bowles, R. P., Piasta, S., & Justice, L. M. (2018, March). *A longitudinal examination of language development by gender*. Poster presented at the Michigan Speech Language Hearing Association, Kalamazoo, MI.
- 58. Douglas, S. N., Bowles, R. P., & Kammes, R. (2018, February). A statewide survey of administrators, teachers, and paraeducators: Paraeducator supports for students with disabilities. Paper presented at the Pacific Coast Research Conference, San Diego, CA.
- 57. Libarkin, J. C., Gold, A. U., Harris, S. E., McNeal, K. S., & Bowles, R. P. (2017, October). *Relating understanding and risk perception with a validated measure of climate change conceptions.* Paper presented at the Geological Society of America, Seattle, WA.
- 56. Bowles, R. P., Pentimonti, J. M., Zucker, T. A., & Tambyraja, S., & Justice, L. M. (2017, July). *Children's engagement during book reading*. Poster presented at the Society for the Scientific Study of Reading, Halifax, Nova Scotia.
- 55. Pentimonti, J.M., Zucker, T.A., Bowles, R.P., Tambyraja, S., & Justice, L.M. (2017, July). *Teachers' use of literal and inferential extratextual talk during shared reading.* Poster presented at the Society for the Scientific Study of Reading, Halifax, Nova Scotia.
- 54. Konishi, H., Skibbe, L., McClelland, M., & Bowles, R. (2017, April). How kindergarten peer self-regulation relates to individual self-regulation and growth in academic outcomes. In H. Konishi (chair), Self-regulation in early childhood and relations to emergent academic skills. Symposium presented at the Society for Research in Child Development, Austin, TX.
- 53. Pentimonti, J. M., Zucker, T. A., Bowles, R. P., Tambyraja, S., & Justice, L. M. (2017, March). *Teachers' use of elicitation techniques during shared reading*. Poster presented at the Society for Research in Educational Effectiveness, Washington, DC.
- 52. Khan. K. S., Logan, J., Justice, L. M., Bowles, R. P., Skibbe, L. E., & Piasta, S. B. (2016, July). *The Connections between Early Literacy, Oral Language, and Precocious Narrative Abilities in Young Children*. Paper presented at the meeting of the Society for Scientific Studies of Reading, Porto, Portugal.
- 51. Gorman, L., Blow, A., Bowles, R., & +Farero, A. (2015, November). *Soldier and spouse mental well-being and family health.* Poster presented at the annual meeting of the National Council on Family Relations, Vancouver, BC, Canada.
- 50. +Farero, A., Blow, A., Kees, M., Gorman, L., Bowles, R. P., Marchiondo, C., & Guty, D. (2015, November). *Parent-service member communication and post-deployment*

- *outcomes*. Poster presented at the annual meeting of the National Council on Family Relations, Vancouver, BC, Canada.
- 49. Piasta, S. B., Skibbe, L. E., Bowles, R. P., & Justice, L. M. (2015, July). *An empirical investigation of young children's narrative skill as it relates to the theoretical construct of emergent literacy*. Poster presented at the annual meeting of the Society for the Scientific Study of Reading, Kona, HI.
- 48. +Samples-Steele, C. R., Skibbe, L. E., Bowles, R. P., & +Farkas, H. (2015, July). *Parents as teachers: Reading and teaching beliefs and practices at home predict children's language skill growth.* Paper presented at the annual meeting of the Society for the Scientific Study of Reading, Kona, HI.
- 47. +Froyen, L., Skibbe, L., & Bowles, R. (2015, April). Parent depressive symptoms and children's early literacy: The mediating role of the home learning environment in dyadic data. Poster presented at the Society for Research in Child Development, Philadelphia, PA.
- 46. Bowles, R. P., Justice, L. M., Skibbe, L. E., Piasta, S. B., +Foster, T., +Karsten, A., & Edwards, C. (2013, July). *Development of the Narrative Assessment Protocol*. In R. P. Bowles (Organizer), *Using narratives to understand language and literacy development*. Symposium presented at the Society for the Scientific Study of Reading, Hong Kong, China.
- 45. Bowles, R. P. (Organizer) (2013, July). *Using narratives to understand language and literacy development*. Symposium presented at the Society for the Scientific Study of Reading, Hong Kong, China.
- 44. Skibbe, L. E., Bowles, R. P., & Morrison, F. J. (2013, July). *Preschool behavioral self-regulation as a predictor of the level and growth of four early literacy skills*. Poster presented at the annual meeting of the Society for the Scientific Study of Reading, Hong Kong, China.
- 43. +Clare, D. D., Bowles, R. P., & Levine, T. R. (2013, June). *Applying IRT and Rasch measurement models to deception detection accuracy data*. Paper presented at the Annual Conference of the International Communication Association, London, UK.
- 42. + Montroy, J. J., Bowles, R. P., & Skibbe, L. E. (2013, April). The effect of classmates self-regulation on growth in individual self-regulation and literacy. In J. J. Montroy (chair), *Self-regulation and academic achievement within the classroom context*. Symposium conducted at the Society for Research in Child Development Biennial Conference, Seattle, WA.
- 41. +Corker, K. S., Donnellan, M. B., & Bowles, R. P. (2013, January). *The development of achievement goals throughout college*. Poster presented at the Annual Convention of the Society for Personality and Social Psychology, New Orleans, LA.

- 40. +Montroy, J. J., Skibbe, L. E., Bowles, R. P., & +Finger, T. D. (2012, July). *The role of problem behaviors and social skills in the relation between behavioral self-regulation and academic achievement in preschool.* Poster presented at the Society for the Scientific Study of Reading, Montreal, ON.
- 39. Bowles, R. P., Piasta, S., B., & +Musielak, K. (2012, July). *Developmental interrelations of uppercase and lowercase letter name knowledge*. Poster presented at the Society for the Scientific Study of Reading, Montreal, ON.
- 38. Hubbard, N. A. & Bowles, R. P. (2011, August). *The working memory endophenotype of depression*. Poster presented at 119th Annual Convention of the American Psychological Association. Poster Presentation. Washington, D.C.
- 37. Bowles, R. P., Skibbe, L. E., Troia, G., & +Froyen, L. (2011, June). *The Inventory of Phonological Awareness with Alternative Responses (IPAAR)*. In S. Piasta (Organizer), *New measures for investigating emergent literacy environments and skill development*. Symposium presented at the Society for the Scientific Study of Reading, St. Petersburg, FL.
- 36. +Froyen, L., Blow, A., Skibbe, L. E., Bowles, R. P., & Gerde, H. K. (2011, April). *The influence of marital satisfaction, emotional expressivity and the home learning environment on children's academic outcomes.* Poster presented at the Society for Research in Child Development, Montreal, Canada.
- 35. Worzalla, S. L., Hindman, A. H., Bowles, R. P., & Morrison, F. J. (2011, April). *The contributions of parental management language to self-regulation in preschool children.* In S. L Worzalla (Organizer), *Exploring home and school variables that shape self-regulation development in early childhood.* Symposium presented at the Society for Research in Child Development, Montreal, Canada.
- 34. +Froyen, L., Blow, A., Skibbe, L. E., Bowles, R. P., & Gerde, H. K. (2010, November). *The role of marital satisfaction and family emotional expressiveness on the home learning environment and children's academic outcomes*. Poster presented at the National Council on Family Relations, Minneapolis, MN.
- 33. Gerde, H. K., +Martoccio, T., Smith, K., Skibbe, L. E., & Bowles, R. P. (2010, July). *The longitudinal relations between children's letter knowledge, name writing, and self-regulation*. Poster presented at the Society for the Scientific Study of Reading, Berlin, Germany.
- 32. Bowles, R. P., Grimm, K. J., Skibbe, L. E., & Morrison, F. J. (2010, July). *Statistical methods for the study of schooling effects*. Paper presented at the Society for the Scientific Study of Reading, Berlin, Germany.
- 31. +Hubbard, N. A., & Bowles, R. P. (2010, April). *Depression symptoms, family history, and working memory span*. Poster presented at Midwestern Psychological Association Conference, Chicago, IL.

- 30. +Musielak, K. A., +Burdick, J. D., Bowles, R. P., & Skibbe, L. E. (2010, April). *Letter knowledge transfer in preschool children*. Poster presented at the annual meeting of Psi Chi at the Midwestern Psychological Association, Chicago, IL.
- 29. +Smeekens, B., Bowles, R. P. (2010, April). *Exploring mechanisms behind intratask change in working memory*. Poster presented at the annual meeting of Psi Chi at the Midwestern Psychological Association, Chicago, IL.
- 28. +Evans, J. J., & Bowles, R. (2010, April). *Interference in working memory and its relationship to reasoning*. Poster presented at the Midwestern Psychology Association Conference, Chicago, IL.
- 27. Worzalla, S. L., Skibbe, L. E., Hindman, A. H., Bowles, R. P., & Morrison, F. J. (2010, April). *The impact of maternal management language on self-regulation in preschool children*. Poster presented at the Conference on Human Development, New York, NY.
- 26. Bowles, R. P., Pence Turnbull, K., Justice, L. M., Skibbe, L. E., & Wiggins, A. (2009, June). *Explanations for preschoolers' lowercase alphabet knowledge*. Paper presented at the annual meeting of the Society for the Scientific Study of Reading, Boston, MA.
- 25. Skibbe, L. E., Grimm, K. J., Bowles, R. P., & Morrison, F. J. (2009, April). Literacy growth in the academic year and summer from preschool to second grade: Differential schooling effects across four skills. In H. J. Bachman (Organizer), Experimental and nonexperimental instruction effects on early literacy development. Symposium presented at the Annual Meeting of the Society for Research on Child Development, Denver, CO.
- 24. Skibbe, L. E., Grimm, K. J., Bowles, R. P., & Morrison, F. J. (2008, July). *Academic versus summer literacy development: Evidence for differential effects of schooling.* In L. E. Skibbe (Organizer), *The impact of instruction on literacy development: Natural and unnatural experiments.* Symposium presented at the Annual Meeting of the Society for the Scientific Study of Reading, Asheville, NC.
- 23. Bowles, R. P., Grimm, K. J., & +Hunter, M. D. (2008, April). *Item-specific retest effects and the measurement of change*. Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- 22. Skibbe, L. E., Grimm, K. J., Stanton-Chapman, T. L., Justice, L. M., Pence, K. L., & Bowles, R. P. (2007, March). *The reading trajectories of children with specific language impairment from preschool to fifth grade*. Poster presented at the Society for Research in Child Development Biennial Meeting, Boston, MA.
- 21. Bowles, R. P. (2006, November). *Examining intraindividual variability within a single task administration*. In R. P. Bowles (Organizer), *The psychometrics of intraindividual variability*. Symposium presented at the Annual Meeting of the Gerontological Society of America, Dallas, TX.
- 20. Estabrook, R., Grimm, K. J., & Bowles, R. P. (2006, November). *The reliability of variability: A simulation study of measures of individual variability.* In R. P. Bowles (Organizer), *The psychometrics of intraindividual variability.* Symposium presented at the Annual Meeting of the Gerontological Society of America, Dallas, TX.

- 19. Bowles, R. P. (Organizer) (2006, November). *The psychometrics of intraindividual variability*. Symposium presented at the Annual Meeting of the Gerontological Society of America, Dallas, TX.
- 18. Steffanucci, J. K., Bowles, R. P., & Spellman, B. A. (2006, May). *Political beliefs predict resiliency to the September 11, 2001 attacks*. Poster presented at the American Psychological Society Annual Meeting, New York, NY.
- 17. Justice, L. M., Pence, K. L., Bowles, R. P., & Wiggins, A. K. (2006, May). *Preschoolers' developing knowledge of alphabet letters*. Paper presented at the Annual Meeting of the International Reading Association, Chicago, IL.
- 16. Bowles, R. P. (2006, April). *The role of proactive interference as intratask change in the aging of working memory.* Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- 15. Ram, N., Bowles, R. P., Adler, E., Nesselroade, J. R., & Baltes, P. (2006, April). *Placing individual-level lifespan changes in cognition within population-level changes in length of life*. Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- 14. Bowles, R. P. (2005, November). *The dedifferentiation of vocabulary knowledge in older adults*. Paper presented at the Annual Meeting of the Gerontological Society of America, Orlando, FL.
- 13. Bowles, R. P., & McArdle, J. J. (2004, April). *The relationship between age and multiple dimensions of vocabulary knowledge in a nationally representative sample*. Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- 12. Bowles, R. P., Kline, T. L., Chow, S.-M., Berry, J., & Schmidt, K. M. (2004, April). *An item factor analysis of the Metamemory in Adulthood (MIA) instrument*. Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- 11. Chow, S-M, Kline, T. L., Bowles, R. P., Berry, J. & Schmidt, K. M. (2004, April). *Factorial invariance of the Metamemory in Adulthood Questionnaire*. Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- 10. Kline, T. L., Bowles, R. P., Chow, S-M, Schmidt, K. M. & Berry, J. (2004, April). *The Metamemory in Adulthood Scale: A rating scale analysis*. Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- 9. Grimm, K. J., McArdle, J. J., Hamagami, F., & Bowles, R. P. (2003, November). *Modeling latent growth curves using longitudinal data with non-repeated measurements*. Paper presented at the Annual Meeting of the Gerotological Society of America, San Diego, CA.
- 8. Bowles, R. P., & Salthouse, T. A. (2003, September). Assessing the age-related effects of interference on working memory tasks using the Rasch model. Paper presented at the Annual Meetings of the Society for Multivariate Experimental Psychology, Keystone, CO.

- 7. Bowles, R. P., & Salthouse, T. A. (2003, August). *Age relations and processing components of synonyms and antonyms*. Poster presented at the Annual Meeting of the American Psychological Association, Toronto.
- 6. McArdle, J., Grimm, K., Hamagami, F., Bowles, R., Ferrer-Caja, E., & Meredith, W. (2002, October). *Modeling latent growth curves using longitudinal data with non-repeated measurements*. Paper presented at the Annual Meetings of the Society of Multivariate Experimental Psychology, Charlottesville, VA.
- 5. Bowles, R. P., & Salthouse, T. A. (2002, June). Assessing the age-related effects of interference on working memory tasks using the Rasch model. In K. M. Schmidt (Chair), Understanding cognitive processes by modeling sources of variation in item difficulty. Symposium presented at the annual meeting of the Psychometric Society, Chapel Hill, NC.
- 4. DeBoeck, P. D., Schmidt, K. M., Bowles, R. P., & Kline, T. L. (2002, June). Effects of group membership on indicators of cognitive engagement. In K. M. Schmidt (Chair), Understanding cognitive processes by modeling sources of variation in item difficulty. Symposium presented at the annual meeting of the Psychometric Society, Chapel Hill, NC.
- 3. Bowles, R. P., & Salthouse, T. A. (2002, April). Assessing the age-related effects of interference on working memory tasks using the Rasch model. Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- 2. Bowles, R. P., & Pommerich, M. (2001, April). *An examination of item review on a CAT using the specific information item selection algorithm*. Paper presented at the annual meeting of the National Council on Measurement in Education, Seattle, WA.
- 1. Bowles, R. P., & Stahl, J. (2000, April). *Is the best good enough? The effect of dropping low scores on ability estimation under the Rasch model.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Other Conference Presentations

- 14. Bowles, R. P., Skibbe, L. E., Troia, G. A., Goodwin, S., & Konishi, H. (2018, April). *IPAAR:* An adaptive test of phonological awareness for children with speech production difficulties. Poster presented at the Cerebral Palsy Research Consortium of Michigan, East Lansing, MI.
- 13. Pentimonti, J., Zucker, T., Bowles, R. P., Justice, L. J., & Gort, M. (2014). *Development and validation of the Systematic Assessment of Book Reading*. Poster presented at the Crane Center for Early Childhood Research and Policy Inaugural Symposium. Columbus, OH.
- 12. +Hubbard, N. A., & Bowles, R. P. (2010, April). *Depression symptoms, family history, and working memory span*. Poster presented at the Michigan State University Undergraduate Research Fair, East Lansing, MI.
- 11. +Smeekens, B., & Bowles, R. P. (2010, April). *Exploring mechanisms behind intratask change in working memory*. Poster presented at the Michigan State University Undergraduate Research Fair, East Lansing, MI.

- 10. +Evans, J. J., & Bowles, R. P., (2009, March). *Proactive interference and meta-cognition*. Poster presented at the Michigan State University Graduate Academic Conference, East Lansing, MI.
- 9. +Evans, J. J., & Bowles, R. P., (2009, December). *Interference in working memory and its relationship to reasoning*. Poster presented at the Michigan State University Cognitive Science Poster Session, East Lansing, MI.
- 8. +Burdick, J. D., +Musielak, K. A., Bowles, R. P., & Skibbe, L. E. (2009, April). *Letter knowledge transfer in preschool children*. Poster presented at the Michigan State University Undergraduate Research Fair, East Lansing, MI. *First place in poster competition*.
- 7. Skibbe, L. E., Grimm, K. J., Stanton-Chapman, T. L., Justice, L. M., Pence, K. L., & Bowles, R. P. (2006, June). *The reading trajectories of children with language impairment from preschool to fifth grade: A prospective study of the forecast for school.* Poster presented at the Annual Meeting of the Institute for Education Sciences National Research Conference, Washington, DC.
- 6. Bowles, R. P., Grimm, K. J., & McArdle, J. J. (2005, April). *The relationship between age and multiple dimensions of vocabulary knowledge in a nationally representative sample*. Poster presented at the University of Virginia Graduate Research Fair, Charlottesville, VA.
- 5. Bowles, R. P., Schmidt, K. M., Kline, T. L., & Grimm, K. J. (2003, April). *Ben Wright, Rasch measurement, and cognitive psychology*. Poster presented at the Festschrift to honor Ben Wright, Chicago, IL.
- 4. Bowles, R. P., & Salthouse, T. A. (2002, April). Assessing the age-related effects of interference on working memory tasks using the Rasch model. Paper presented at the International Objective Measurement Workshops XI, New Orleans, LA.
- 3. Bowles, R. P. (2002, April). *The effect of dropping low scores on ability estimates*. Paper presented at the International Objective Measurement Workshops XI, New Orleans, LA.
- 2. Bowles, R. P. (2000, June). *Equating vocabulary tests using predictors of item difficulty*. Paper presented at the Mid-West Objective Measurement Seminar, Chicago, IL.
- 1. Bowles, R. P. (1999, June) *Is the best good enough?* Paper presented at the Mid-West Objective Measurement Seminar, Chicago, IL.

Colloquium Presentations

- Bowles, R. P. (2022, November). *Twitter for academics*. Presented to the LINGO Lab, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2021, February). *The C-word: Causal claims in behavioral science*. Presented to the HDFS Methods and Statistics Discussion Group, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2020, February). *Selecting your measurement model*. Presented to the HDFS Methods and Statistics Discussion Group, Michigan State University, East Lansing, MI.

- Bowles, R. P. (2019, October). *True scores*. Presented to the HDFS Methods and Statistics Discussion Group, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2019, September). *The meaning of p-values*. Presented to the HDFS Methods and Statistics Discussion Group, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2016, October). *Measurement in the study of human development and family studies*. Presented to the HDFS Seminar Series, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2016, March). *Rasch measurement*. Presented to Donuts and Distributions, Second Language Studies, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2013, March). *The Narrative Assessment Protocol*. Presented to the Literacy Achievement Research Center, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2012, October). *Explanations for preschoolers' letter name knowledge*. Presented to the Literacy Colloquy, College of Education, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2011, January). *The role of a child's own name in letter name knowledge*. Presented to the Human Development Initiative, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2010, November). *Explanations for preschoolers' letter name knowledge*. Presented to Department of Communication Science and Disorders, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2010, April). *Explanations for preschoolers' letter name knowledge*. Presented to Department of Human Development and Family Studies, Michigan State University, East Lansing, MI.
- +Evans, J. J., & Bowles, R.P., (2009, November). *Interference in working memory and its relationship to reasoning*. Presented at GLM course conference, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2009, February). *Paradigms, models, and methods of measurement in the social sciences*. Presented to the Measurement and Quantitative Methods seminar series, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2009, January). *Item-specific retest and the assessment of change*. Cognitive Forum, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2008, December). *The philosophy, paradigms, and practice of psychological measurement*. Presented to the Quantitative Psychology Seminar Series, University of California, Davis.
- Bowles, R. P. (2008, September). *Measurement and longitudinal methods in the study of early childhood language and literacy development.* Presented to the Literature Achievement Resource Center, Michigan State University, East Lansing, MI.

- Bowles, R. P. (2008, March). *Lifespan longitudinal changes in vocabulary knowledge with non-repeated measures*. Developmental Brown Bag, University of Michigan, Ann Arbor, MI.
- Bowles, R. P. (2008, January). *Examining lifespan changes in vocabulary knowledge using measurement methodologies*. Cognitive Forum, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2007, May). *Measurement in a dynamical system: Intratask change*. Presented to the Notre Dame Series on Quantitative Methodologies, Notre Dame University, South Bend, IN.
- Bowles, R. P. (2007, May). *Measurement and change*. Quantitative Methods IGERT roundtable, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2007, February). *Item response models for intratask change*. Presented to the Quantitative Psychology seminar series, Notre Dame University, South Bend, IN.
- Bowles, R. P. (2007, February). *Item response models for intratask change*. Presented to the Measurement and Quantitative Methods seminar series, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2007, January). *Item response models for intratask change and intraindividual variability to examine the aging of working memory span.* Presented to the Cognitive Aging Group, University of Michigan, Ann Arbor, MI.
- Bowles, R. P. (2006, November). *The philosophy, theory, and practice of psychological measurement*. Quantitative Methodology and Evaluation Science speaker series, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2006, October). *Measurement and change*. Cognitive Science roundtable, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2006, October). *Intratask change in working memory span tasks*. Cognitive Forum, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2006, March). *Order effects on the NCLEX*. Presented to the Joint Research Council meeting, National Council of State Boards of Nursing, Harrisonburg, VA.
- Bowles, R. P. (2005, September). *Order effect*. Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2005, September). What influences the order children learn print letters? Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2005, February). *Alternative and generalizable methods for estimating item response models*. Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2004, September). *Local person dependence and the measurement of change*. Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.

- Bowles, R. P. (2003, October). *Modeling intratask change with dichotomous outcomes*. Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2003, March). Why do synonym and antonym knowledge have different age relations? Cognitive Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2003, February). Why do synonym and antonym knowledge have different age relations? Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2003, February). *Emotional and behavioral responses to the September 11, 2001 terrorist attacks*. Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2003, January). *Using Rasch measurement to investigate volleyball skills and inform coaching*. Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2002, October). Assessing the age-related effects of proactive interference using the Rasch model. Presented at the Measurement, Statistics, and Evaluation Seminar Series, University of Maryland, College Park, MD.
- Bowles, R. P. (2002, March). Assessing the age-related effects of interference on working memory tasks. Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2001, November). *Psychological measurement: What it is and how to do it.* Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2001, October). *Psychological measurement: What it is and how to do it.* Cognitive Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2001, September). A discussion of Statistics as Principled Argument (Abelson, 1995). Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2001, February). *Item review on computer adaptive tests*. Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2000, September). *Item selection algorithms for computerized adaptive tests*. Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2000, July). An examination of the arguments for and against allowing item review on a CAT implementing the Specific Information Item Selection algorithm. Presented at ACT summer internship program, Iowa City, IA.
- Bowles, R. P. (2000, February). *Regression artifacts: Extreme group selection*. Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (1999, November). *The effect of dropping low scores on ability estimation under the Rasch model.* Design and Data Analysis Lunch, University of Virginia, Charlottesville, VA.

Press Coverage

Regarding Farero, Blow, Bowles, (Gorman) Ufer, Kees, & Guty (2022).

Military REACH Review, April 2022

[https://militaryreach.auburn.edu/dr?id=bf98f386-eed2-4329-9db3-d6fa3a00bebd&rt=rs]

Regarding Bowles, Justice, Khan, Piasta, Skibbe, & Foster (2019).

The Informed SLP (subscription-based website for speech-language pathologists)

[https://www.theinformedslpmembers.com/reviews/dont-sleep-on-this-narrative-assessme nt]

Regarding Deshmukh, Zucker, Tambyraja, Pentimonti, Bowles, & Justice (2019)

Moms.com, July 2019

[https://www.moms.com/preschool-teachers-ask-children-too-many-simple-questions-study-finds/]

Science Daily, July 2019

[https://www.sciencedaily.com/releases/2019/07/190725091902.htm]

Regarding Skibbe, Montroy, Bowles, & Morrison (2019).

Young Yoga Masters, Sept. 2018

[https://youngyogamasters.com/2018/09/26/4-keys-to-teaching-literacy-and-language-wit h-the-yoga-alphabet/]

Futurity, May 2018

[https://www.futurity.org/self-regulation-childhood-language-literacy-1769222/]

Michigan Radio, May 2018

[http://www.michiganradio.org/post/msu-study-links-self-regulation-early-development-language-and-literacy-skills]

MSU Today, May 2018

[https://msutoday.msu.edu/news/2018/honing-childrens-language-and-literacy-skills/?utm_campaign=standard-promo&utm_source=msunewstwitter-post&utm_medium=social]

Regarding Douglas and Bowles Michigan Applied Public Policy Research Program

MSU Institute for Public Policy and Social Research Blog, Aug. 2017. Douglas, S. N., & Bowles, R. P., *Michigan's need for policies and systematic training for paraeducators*. [https://ippsr.msu.edu/public-policy/michigan-wonk-blog/michigan%E2%80%99s-need-policies-and-systematic-training-paraeducators]

Regarding Montroy, Bowles, Skibbe, McClelland, & Morrison (2016).

MSU Today, Oct. 2016

[http://msutoday.msu.edu/news/2016/many-kindergartners-struggle-with-self-regulation]

Daily Mail, Oct. 2016

[http://www.dailymail.co.uk/sciencetech/article-3872596/Are-kids-REALLY-ready-kindergarten-Researchers-reveal-Head-Toes-Knees-Shoulders-test-tell-you.html]

Futurity, Oct. 2016 [http://www.futurity.org/kindergarten-self-regulation-1281132]

PsychCentral, Oct. 2016

[http://psychcentral.com/news/2016/10/26/many-kids-not-ready-for-kindergarten/111631. html]

Science Daily, Oct. 2016

[https://www.sciencedaily.com/releases/2016/10/161025092958.htm]

Parents.com, Oct. 2016

[http://www.parents.com/toddlers-preschoolers/everything-kids/one-reason-your-kid-may-not-be-ready-for-kindergarten/]

Consumer Affairs, Oct. 2016

[https://www.consumeraffairs.com/news/why-your-child-may-not-be-ready-to-enter-kind ergarten-102516.html]

Fox 47 News, Oct. 2016

[http://www.fox47news.com/we-are-spartans/many-kindergartners-struggle-with-self-reg ulation]

NewKerala.com, Oct. 2016

[http://www.newkerala.com/news/2016/fullnews-135470.html]

Kinstantly, Nov. 2016 [https://blog.kinstantly.com/self-regulation/]

Regarding Hubbard, Hutchison, Turner, Montroy, Bowles, & Rypma (2015).

Fox News, Jan. 2015

[http://www.foxnews.com/health/2015/01/07/depressive-thoughts-reduce-short-term-memory-study-finds/]

Huffington Post, Jan. 2015

[http://www.huffingtonpost.com/center-for-brainhealth/how-depressive-thoughts-e_b_64 29940.html]

KERA Breakthroughs, Feb. 2015

[http://breakthroughs.kera.org/how-depression-can-hinder-memory/]

Men's Health, Feb. 2015

[http://www.menshealth.com/health/depression-hurts-your-memory]

Teaching Experience

Seminars

Single Case Design. Training seminar for graduate students and faculty, Center for Statistical Training and Consulting, Michigan State University. February 2018.

Introduction to Item Response Modeling. Training seminar for graduate students and faculty, Center for Statistical Training and Consulting, Michigan State University. October 2017.

- Introduction to Item Response Modeling. Training seminar for graduate students and faculty, Center for Statistical Training and Consulting, Michigan State University. November 2013.
- Basic Mediation. Training seminar for graduate students and faculty, Department of Human Development and Family Studies, Michigan State University, September 2012.
- Regression and ANOVA. Training seminar for graduate students and faculty, Department of Human Development and Family Studies, Michigan State University, April 2012.
- *Introduction to Item Response Modeling*. Training seminar for graduate students and faculty, Center for Statistical Training and Consulting, Michigan State University. February 2012.
- Missing Data Analysis. Training seminar for graduate students and faculty, Department of Human Development and Family Studies, Michigan State University, November 2011.
- Introduction to Latent Growth Curve Modeling. Training seminar for graduate students and faculty, Center for Statistical Training and Consulting, Michigan State University. March 2011.
- Longitudinal Methods with Structural Equation Modeling. Training seminar for graduate students and faculty, Center for Statistical Training and Consulting, Michigan State University. March 2010.
- *Item Response Theory.* Training seminar for graduate students and faculty, Curry School of Education Risk and Prevention Program, University of Virginia. May 2005.
- *Item Response Theory.* Training seminar for graduate students and faculty, Millmont Methodology Series, University of Virginia. November 2005.
- Longitudinal Methods. Computer section as part of training seminar for graduate students and faculty, American Psychological Association Advanced Training Institute. July 2001.

Courses Taught

Quantitative Methods in HDFS

Graduate seminar, Michigan State University, Department of Human Development and Family Studies

Spring 2020, Spring 2021, Spring 2022, Fall 2022

Structural Equation Modeling

Graduate seminar, Michigan State University, Department of Human Development and Family Studies

Fall 2019

Multivariate Analysis (renamed Applied Multivariate Analysis, Fall 2020)

Graduate seminar, Michigan State University, Department of Human Development and Family Studies

Fall 2017, Fall 2020

Longitudinal Data Analysis and Structural Equation Modeling II

Graduate seminar, Michigan State University, Department of Human Development and Family Studies

Spring 2013, Spring 2015

Advanced Measurement (renamed Applied Measurement, Fall 2020)

Graduate seminar, Michigan State University, Department of Human Development and Family Studies

Spring 2012, Fall 2014, Fall 2016, Fall 2020

Graduate seminar, Michigan State University, Department of Psychology Spring 2010

Multivariate Analysis and Structural Equation Modeling I

Graduate seminar, Michigan State University, Department of Human Development and Family Studies

Spring 2012, Spring 2014, Fall 2015

Longitudinal Data Analysis

Graduate seminar, Michigan State University, Department of Psychology Spring 2011, Spring 2009, Fall 2007

Multivariate Analysis

Graduate seminar, Michigan State University, Department of Psychology Fall 2009, Fall 2008, Spring 2007

Data Analysis in Psychological Research

Undergraduate introductory course, Michigan State University, Department of Psychology

Fall 2009, Fall 2008, Spring 2007, Fall 2006

Teaching Assistantship

Research Methods and Data Analysis II

Undergraduate lab section, University of Virginia, Department of Psychology Spring 2003

Item Response Theory

Graduate seminar, University of Virginia, Department of Psychology

Fall 2002

Spring 2001

Quantitative Methods II

Graduate seminar and lab section, University of Virginia, Department of Psychology Spring 2002

Quantitative Methods I

Graduate seminar and lab section, University of Virginia, Department of Psychology Fall 2001

Applications of Psychological Research Methods to Real Life

Undergraduate and graduate seminar, University of Virginia, Department of Psychology Spring 2001

Introduction to Social Psychology

Undergraduate introductory course and lab section, University of Virginia, Department of Psychology

Fall 2000

Introduction to Cognition

Undergraduate introductory course, University of Virginia, Department of Psychology Spring 2000

Guest Lectures for Courses

- Bowles, R. P. (2021, January). *Validity and reliability*. Guest lecture in Assessment of the Young Child, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2019, September). *Review of the Common Factor Model*. Guest lecture in Applied Structural Equation Modeling, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2019, September). *Background basics for Structural Equation Modeling*. Guest lecture in Applied Structural Equation Modeling, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2019, March). *Latent growth curves*. Guest lecture in Applied Quantitative Analysis, Florida State University, Tallahassee, FL.
- Bowles, R. P. (2011, January). *Statistical analysis of assessments*. Guest lecture in Assessment of the Young Child, Michigan State University, East Lansing, MI.
- Bowles, R. P. (2002, October). *Computer adaptive testing*. Guest lecture in Item Response Theory class, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2001, December). *Example of logistic regression*. Guest lecture in Quantitative Methods I class, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2001, April). *Computer adaptive testing*. Guest lecture in Item Response Theory class, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2001, February). *Measuring change in IRT.* Guest lecture in Human Lifespan Development class, University of Virginia, Charlottesville, VA.
- Bowles, R. P. (2001, February). *Measuring change in IRT.* Guest lecture in Item Response Theory class, University of Virginia, Charlottesville, VA.

Mentoring

* denotes chair

Undergraduate Honors Thesis

2008 Michael Hunter*
2010 Bridget Smeekens*
2011 Torrin Liddell

Master's Capstone Project

2020 Stephanie Atwood

Master's Thesis		
2011	Janelle Montroy*	
2014	Catherine (Run) Tan*	
2016	Megan Goetsch	
2018	Kyla McRoy	
2020	Alexa Meier	
2022	*Ellen Searle	
Apprenticeship		
2013	Kayla Musielak	
	Mohammed Palejwala	
Guidance Committee		
2015	Mohammed Palejwala	
	Jing-Ru Xu	
	Chelsea Samples-Steele	
	Unhee Ju	
	Yuqing Liu	
2017	Adam Farero	
2023	Maddy Klotz*	
Comprehensive Exams		
2007	Lisa Helder	
2009	Emily Darowski*	
2012	Laura Froyen	
2013	Janelle Montroy*	
	Tricia Foster	
	Neda Senehi	
2014	Michael Whitehead	
	Wen Wang	
2016	Chelsea Samples-Steele	
	Jing-Ru Xu	
	Unhee Ju	
2018	Adam Farero	
2020	Finneran Muzzey	
	Arianna Pikus	
	Kyla McRoy	
2021	*Tiantian Sun	
	Kyla Cary	
2023	Burcu Ozkum	
Doctoral Dissertation		
2007	Laura Sheridan Pierce	
2009	Adam Wyse	
2010	Evelyn Wang	
2010	Meagan Shedd	

2011 Larissa Morlock Emily Darowski 2012 Jay (Jonghwan) Lee Katherine Corker 2013 Ivana Inusic 2014 Laura Froyen Janelle Montroy* Lihong Yang 2015 Tricia Foster 2016 Michael Whitehead (co-chair)* 2017 B. William Demere Seema Mahdavi You-kyung Lee 2018 Wen Wang Danielle Wexler Neda Senehi Magda Tigchelaar Marianne Clinton 2019 Adam Farero 2020 Mingcai Zhang 2021 Lin Li Dylan Burton Wenyue Ma in progress Kyla McRoy Arianna Pikus Tyler Ryan *Tiantian Sun Kyla Cary

Jenna Beffel

Awards and Honors

April 2009	First place, Poster competition, Michigan State University Undergraduate
	Research Fair
April 2005	First place, Poster competition, University of Virginia Research Fair
September 2003	National Institute of Aging Training Grant
April 2001	Huskey Grant for conference travel, University of Virginia
March 2001	Finalist, University of Virginia Graduate Teaching Award
July 2000	Graduate Arts and Sciences Fellowship, University of Virginia
September 1997	President's Fellowship, University of Chicago
September 1996	Mathematics Scholarship, Wake Forest University
April 1995	Inducted into Phi Beta Kappa
September 1993	Honors Scholarship, Wake Forest University
September 2003 April 2001 March 2001 July 2000 September 1997 September 1996 April 1995	National Institute of Aging Training Grant Huskey Grant for conference travel, University of Virginia Finalist, University of Virginia Graduate Teaching Award Graduate Arts and Sciences Fellowship, University of Virginia President's Fellowship, University of Chicago Mathematics Scholarship, Wake Forest University Inducted into Phi Beta Kappa

Professional Service

Manuscript reviewer	Aging, Neuropsychology, and Cognition, American Journal of Evaluation, American Journal of Speech-Language Pathology, Child Development, Developmental Psychology, Early Childhood Research Quarterly, Journal of Children and Poverty, Journal of Early Adolescence, Journal of Gerontology, Journal of Learning Disabilities, Journal of Psychoeducational Assessment, Journal of Psychopathology and Behavioral Assessment, Journal of School Psychology, Journal of Statistical Software, Language, Speech, and Hearing Services in Schools, Learning and Instruction, Psychological Assessment, Psychological Methods, Psychology and Aging, Psychiatry Research, Research on Human Development, Sociological Methods, Structural Equation Modeling, Scientific Studies of Reading, Violence Against Women
2021 - current	Member, Michigan State University College of Social Science Faculty Advisory Council.
2020 - 2022	Member, Michigan State University College of Social Science Research Committee.
2020	Grant reviewer, Icelandic Research Fund.
2019 - current	Organizer, Methods and Statistics Discussion Group, Department of Human Development and Family Studies, Michigan State University
2019 - 2022	Chair, Child Development program, Department of Human Development and Family Studies, Michigan State University.
2019 - current	Chair, Grant Review committee, Department of Human Development and Family Studies, Michigan State University.
2019	Panel member, Administration for Children and Families, Department of Health and Human Services, Child Care Policy Research Partnership Grant panel.
2018	Panel member, Administration for Children and Families, Department of Health and Human Services, Early Care and Education Research Scholars: Head Start Graduate Student Research Grant panel.
2017 - 2021	Editorial Board, Psychological Assessment
2016 – 2017	Chair, BA to PhD subcommittee, Department of Human Development and Family Studies, Michigan State University
2016	Panel member, Institute of Education Sciences, Department of Education, Center review panel
2016 – current	Editorial Board, Journal of Educational Psychology

2015 – 2019	Grant Review Committee, Department of Human Development and Family Studies, Michigan State University
2015	Panel member, Health Resources and Services Administration, Department of Health and Human Services, Secondary Data Analysis panel.
2014 - 2015	Ad hoc reviewer, National Science Foundation
2014 – 2015	Department Advisory Committee, Department of Human Development and Family Studies, Michigan State University
2012 – 2014	Chair, Undergraduate Education committee, Department of Human Development and Family Studies, Michigan State University
2012 – 2014	Governing Board, Literacy Achievement Research Center, Michigan State University.
2010 – 2016	Advisory Board member, Center for Statistical Training and Consulting, Michigan State University.
2009 – 2013	Panel member, Institute of Education Sciences, Department of Education, Reading, Writing, and Language Development panel.
2010 – 2011	Chair, Quantitative Methods and Evaluation Science concentration, Michigan State University Department of Psychology
2007 – 2010	Chair of ad hoc committee to revise comprehensive exam requirements for Cognition and Cognitive Neuroscience program.
2006 – 2009	Founder and organizer of Michigan State University Department of Psychology Quantitative Methodology and Evaluation Science speaker series.
2002 - 2003	Founder and organizer of Society of Multivariate Experimental Psychology graduate student preconference.
2001- 2003	Representative of psychology department to University of Virginia Graduate Council. Elected representative to university-wide organization dealing with graduate student issues.
2001- 2002	Organizer of Design and Data Analysis Lunch Seminar. Recruited speakers and organized seminar series in quantitative methods.