

# **NATALIE A. KOZIOL, PhD**

**Research Assistant Professor**

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Nebraska Academy for Methodology, Analytics and Psychometrics (MAP Academy)

Nebraska Center for Research on Children, Youth, Families and Schools (CYFS)

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## **ACADEMIC APPOINTMENT**

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2022 – Present	Affiliate Graduate Faculty, College of Health Professions, Virginia Commonwealth University, Richmond, VA
2022 – Present	Graduate Faculty, Department of Educational Psychology, University of Nebraska–Lincoln, Lincoln, NE
2019 – 2022	Graduate Faculty Associate, Department of Educational Psychology, University of Nebraska–Lincoln, Lincoln, NE
2017 – Present	Research Assistant Professor, Nebraska Center for Research on Children, Youth, Families & Schools, University of Nebraska–Lincoln, Lincoln, NE

## **EDUCATIONAL BACKGROUND AND TRAINING**

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Postdoc	2015 – 2017	Field: Quantitative Methods in the Health, Behavioral, and Education Sciences Nebraska Academy for Methodology, Analytics and Psychometrics University of Nebraska–Lincoln
PhD	2015	Major: Psychological Studies in Education Specialization: Quantitative, Qualitative, & Psychometric Methods University of Nebraska–Lincoln
MS	2013	Major: Statistics University of Nebraska–Lincoln
MA	2010	Major: Educational Psychology Specialization: Quantitative, Qualitative, & Psychometric Methods University of Nebraska–Lincoln
BA	2008	Major: Psychology (with high distinction) Minors: Economics, Ethnic Studies, Mathematics University of Nebraska–Lincoln

## **SPONSORED RESEARCH ACTIVITY<sup>1</sup>**

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### **AWARDED: EXTERNALLY FUNDED RESEARCH**

2023 – 2028	Cost Analysis Consultant. “Efficacy of Teleconsultation with Parents and Teachers to Promote Student Social-Behavioral Outcomes.” Funded by U.S. Department of Education, Institute of Education Sciences. A. Witte, PI. UNL Award: \$3,800,000.
2022 – 2026	Principal Investigator of Subaward/Co-Investigator. “WORDS (Workshops on Reading Development Strategies) for Pandemic Recovery in Nebraska.” Funded by U.S. Department of Education, Institute of Education Sciences, subaward from

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<sup>1</sup> In the case of subawards, only funds awarded to UNL are included in the dollar amounts.

- 2022 – 2023 University of California-Irvine. M. Hebert, PI. UNL Award: \$1,879,219.  
Contractor<sup>2</sup> Principal Investigator. “Sitting Capacity and Performance in Typically Developing Infants and Infants with Motor Delay.” Funded by the University of Southern California. K. Kretch, Contractee PI. Contract Total: \$3,500.
- 2021 – 2025 Co-Investigator. “Cultivating Healthy Intentional Mindful Educators (CHIME): Evaluating the Use of Mindfulness and Compassion to Promote Early Head Start/Head Start Education Staffs’ Well-Being.” Funded by U.S. Department of Health and Human Services, Administration for Children and Families. H. Hatton-Bowers, PI. UNL Award: \$1,998,710.
- 2021 – 2024 Co-Principal Investigator of Subaward/Unnamed methodologist. “School characteristics, classroom processes, and PK-1 Learning and Development.” Funded by the Institute of Education Sciences, subaward from University of North Carolina. M. Bratsch-Hines, PI. UNL Award: \$95,000.
- 2021 – 2022;  
NCE – 2024 Principal Investigator. “Measuring Gross Motor Function Change in 3- to 24-Month-Old Children With or at High Risk for CP: Validation of the Gross Motor Function Measure-66 Item Sets.” Funded by the Cerebral Palsy Alliance Research Foundation. UNL Award: \$24,976.
- 2021; NCE –  
2022 Principal Investigator of Subaward/Mentor. “Exploring the Impact of Emotional Availability on the Efficacy of Physical Therapy Intervention.” Mentored Research Grant. Funded by Academy of Pediatric Physical Therapy, subaward from Virginia Commonwealth University. R. Molinini, PI. UNL Award: \$2,699.
- 2020 – 2025 Principal Investigator of Subaward/Co-Investigator. “Evaluation of the Efficacy of a Physical Therapy Intervention Targeting Sitting and Reaching for Young Children with Cerebral Palsy.” Funded by the National Institutes of Health, National Institute of Child Health & Human Development, sub-award from University of Southern California. S. Dusing, PI. UNL Award: \$330,869.
- 2020 – 2024 Statistician. “Exploring Cognitive and Foundational Processes Underlying Pre-algebra among Students with and without Mathematics Learning Disabilities.” Funded by U.S. Department of Education, Institute of Education Sciences, primary award (2020-2022), subaward from University of Delaware (2022-2024). J. Namkung, PI. UNL Award: \$100,393.
- 2020 – 2022 Principal Investigator of Subaward (starting January 2022). “STEM Lesson Creation Coaching Framework to Improve the Pedagogy of K-5 Teachers Implementing the NGSS.” Funded by U.S. Department of Agriculture, National Institute of Food and Agriculture, subaward from StarrMatica Learning Systems, Inc. E. Starr, PI. UNL Award: \$71,966.
- 2019 – 2023;  
NCE – 2025 Statistician. “Project VIEW: Visual Impairments Education in Writing.” Funded by U.S. Department Education, Institute of Education Sciences, primary award (2019-2022), subaward from University of California-Irvine (2022-2023). M. Hebert, PI. UNL Award: \$730,043.
- 2019 – 2020;  
NCE – 2021 Principal Investigator. “Advancing Measurement of Spanish-Speaking Students’ Mathematics Achievement: A Novel Approach for Controlling Selection Bias in Evaluations of DIF.” Funded by the National Science Foundation via the American Educational Research Association Grants Program (NSF award NSF-DRL #1749275). UNL Award: \$25,000.
- 2017 – 2018 Principal Investigator of Subaward/Lead Methodologist. “Supporting Early Childhood Development in Africa: Capacity-Building Partnership.” Funded by the Children’s Investment Fund Foundation, subaward from University of Nebraska

<sup>2</sup> Contract refers to a MAP Academy Service Center contract with a faculty member who requested support after securing funds.

- 2016 – 2021;  
NCE – 2023 Medical Center. A. Raikes, PI. UNL Award: \$83,192.  
Unnamed Lead Quantitative Methodologist. “Early Learning Contexts in Rural and Urban Nebraska.” Funded by U.S. Department of Education, Institute of Education Sciences. S. Sheridan, PI. UNL Award: \$4,499,878.
- 2015 – 2019;  
Long-Term  
Follow-Up –  
2022 Unnamed Lead Methodologist. “Efficacy of the START-Play Program for Infants with Neuromotor Disorders.” Funded by U.S. Department of Education, Institute of Education Sciences, subaward from Duquesne University. R. Harbourne, PI. UNL Award: \$475,407.

## AWARDED: INTERNALLY FUNDED RESEARCH

- 2023 – 2028 Co-Investigator. “Inspiring Outcomes for Children through Equitable Early Childhood Education Experiences (E<sup>4</sup>).” Funded by University of Nebraska-Lincoln. L. Knoche, PI. UNL Award: \$3,441,322.
- 2023 – 2028 Co-Investigator. “The Nebraska Academy for Methodology, Analytics & Psychometrics Applied Analytics and Data Infrastructure Services.” Funded by University of Nebraska. L. Wheeler, PI. UNL Award: \$1,102,332.
- 2023 – 2024 Contractor Principal Investigator. “4-H DEI Youth Survey Development.” Funded by National 4-H Council. J. Lingard, Contractee PI. Contract Total: \$80,656.
- 2023 Contractor Principal Investigator. “Exploring the Intersection of Mental Health, Equity, and Retention in Engineering Education.” Funded by the University of Nebraska-Lincoln. M. Chin, Contractee PI. Contract Total: \$3,122.
- 2023 Contractor Principal Investigator. “Ignite by 4-H.” Funded by 4-H Common Measures. J. Mullendore, Contractee PI. Contract Total: \$8,942.
- 2023 Contractor Principal Investigator. “NMP Data Analysis.” Funded by 4-H Common Measures. J. Mullendore, Contractee PI. Contract Total: \$1,064.
- 2022 – 2023 Methodologist. “Promoting Women’s Sexual Wellness Using Comprehensive, Rights-Based Adult Sexuality Education.” Funded by University of Nebraska-Lincoln. D. Abbott, PI. UNL Award: \$9,990.
- 2022 Contractor Principal Investigator. “Latent Profile Analysis of Atheists.” Funded by University of Nebraska-Lincoln. D. Abbott, Contractee PI. Contract Total: \$1,248.
- 2022 Contractor Principal Investigator. “NMP Data Analysis.” Funded by 4-H Common Measures. J. Mullendore, Contractee PI. Contract Total: \$237.
- 2022 Contractor Principal Investigator. “Positive Youth Leadership Measurement Invariance.” L.J. McElravy, Contractee PI. Funded by University of Nebraska-Lincoln. Contract Total: \$780.
- 2019 – 2020 Contractor Investigator. “4-H Common Measures.” Funded by 4-H Common Measures. M. Howell Smith, Contractor PI. J. Lingard, Contractee PI. Contract Total: \$34,967.
- 2019 – 2020 Principal Investigator. “Pursuing Causal Inferences With Complex Survey Data.” Funded by the University of Nebraska-Lincoln. UNL Award: \$10,000.
- 2017 – 2018 Contractor Investigator. “4-H Common Measures.” Funded by 4-H Common Measures. L. Hawley, Contractor PI (until July 2018); M. Howell Smith, Contractor PI (after July 2018). J. Lingard, Contractee PI. Contract Total: \$72,578.
- 2017 – 2018;  
NCE – 2019 Co-Principal Investigator (until July 2018), Principal Investigator (after July 2018). “Development and Validation of the *Inventário Dimensional de Avaliação do Desenvolvimento Infantil (IDADI)*; Dimensional Inventory for Child Development Assessment).” Funded by the University of Nebraska-Lincoln. L. Hawley, PI (until July 2018). UNL Award: \$47,806.
- 2016 – 2017 Contractor Investigator. “Common Measures Continued Development.” Funded by 4-H Common Measures. L. Hawley, Contractor PI. J. Lingard, Contractee PI.

Contract Total: \$116,620.

**PUBLICATIONS<sup>3</sup> (2/13/2024: Author h-index: 21; i10-index: 34; total citations: 1,918)<sup>4</sup>**

REFEREED JOURNAL ARTICLES (9 first author)

- [51] Cunha, A. B., Babik, I., Choi, D.-H., **Koziol**, N. A., Harbourne, R. T., Dusing, S. C., Westcott-McCoy, S. W., Willett, S. L., Bovaird, J. A., & Lobo, M. A. (2024 [under review at end of 2023]). The impact of severity of motor delay, timing of task mastery, and START-Play intervention on the development of means-end problem solving in young children. *Brazilian Journal of Physical Therapy*. Online ahead of print. <https://doi.org/10.1016/j.bjpt.2024.100590>
- [50] Rodgers, D. B., Hebert, M., Savaiano, M. E., **Koziol**, N. A., & Bazis, P. S. (2024 [in press at end of 2023]). A national survey of the writing instructional practices of teachers of students with visual impairments. *The Journal of Special Education*. Online ahead of print. <https://doi.org/10.1177/00224669231226325>
- [49] Babik, I., Cunha, A. B., Choi, D., **Koziol**, N. A., Harbourne, R. T., Dusing, S. C., McCoy, S. W., Bovaird, J. A., Willett, S. L., & Lobo, M. A. (2023). The effect of START-Play intervention on reaching-related exploratory behaviors in children with neuromotor delays: A secondary analysis of a randomized controlled trial. *Physical and Occupational Therapy in Pediatrics*, 43(3), 321–337. <https://doi.org/10.1080/01942638.2022.2131501>
- [48] Babik, I., Cunha, A. B., Choi, D.-H., **Koziol**, N. A., Hsu, L.-Y., Harbourne, R. T., Dusing, S. C., Westcott-McCoy, S. W., Bovaird, J. A., Willett, S., & Lobo, M. A. (2023). Socioeconomic status and home affordances moderate effects of motor delay and intervention. *Journal of Applied Developmental Psychology*, 87: 101563. <https://doi.org/10.1016/j.appdev.2023.101563>
- [47] **Koziol**, N. A., Kretch, K. S., Harbourne, R. T., Lobo, M. A., McCoy, S. W., Molinini, R., Hsu, L.-Y., Babik, I., Cunha, A. B., Willett, S. L., Bovaird, J. A., & Dusing, S. C. (2023). START-Play physical therapy intervention indirectly impacts cognition through changes in early motor-based problem-solving skills. *Pediatric Physical Therapy*, 35(3), 293–302. <https://doi.org/10.1097/PEP.0000000000001016>
- \*Received Toby Long Award for Best Paper.
- [46] Kretch, K. S., **Koziol**, N. A., Marcinowski, E. C., Hsu, L.-Y., Harbourne, R. T., Lobo, M. A., McCoy, S. W., Willett, S. L., & Dusing, S. C. (2023). Sitting capacity and performance in infants with typical development and infants with motor delay. *Physical and Occupational Therapy in Pediatrics*. Online ahead of print. <https://doi.org/10.1080/01942638.2023.2241537>
- [45] Kretch, K. S., Marcinowski, E. C., Hsu, L.-Y., **Koziol**, N. A., Harbourne, R. T., Lobo, M. A., & Dusing, S. C. (2023). Opportunities for learning and social interaction in infant sitting: Effects of sitting support, sitting skill, and gross motor delay. *Developmental Science*, 26(3), e13318. <https://doi.org/10.1111/desc.13318>
- [44] Rudasill, K. M., McGinnis, C., Cheng, S.-L., Cormier, D. R., & **Koziol**, N. (2023). White privilege and teacher perceptions of teacher-child relationship quality. *Journal of School Psychology*, 98, 224–239. <https://doi.org/10.1016/j.jsp.2023.04.002>
- [43] Witte, A. L., Knoche, L. L., Sheridan, S. M., & **Koziol**, N. (2023). How teachers use data: Description and differences across preK through third grade. *Early Childhood Education Journal*. Online ahead of print. <https://doi.org/10.1007/s10643-023-01588-3>
- [42] de Mendonça Filho, E. J., Silva, M. A., **Koziol**, N., Hawley, L., & Bandeira, D. R. (2022). Assessing cognitive development through maternal report: Validity evidence from the Dimensional Inventory for Child Development Assessment. *European Journal of Developmental Psychology*,

<sup>3</sup> Names of mentored students are in italics.

<sup>4</sup> From Google Scholar: h-index = “largest number h such that h publications have at least h citations.” I10-index = “number of publications with at least 10 citations.”

- 19(4), 585–600. <https://doi.org/10.1080/17405629.2021.1936490>
- [41] Dusing, S. C., Harbourne, R. T., Hsu, L.-Y., **Koziol**, N. A., Kretch, K., Sargent, B., Jensen-Willett, S., McCoy, S. W., & Vanderbilt, D. (2022). The SIT-PT trial protocol: A dose-matched randomized clinical trial comparing 2 physical therapist interventions for infants and toddlers with cerebral palsy. *Physical Therapy*, 102(7), pzac039. <https://doi.org/10.1093/ptj/pzac039>
- [40] Goodrich, J. M., **Koziol**, N. A., Yoon, H., & Leiva, S. (2022). Do Spanish-English bilingual children outperform monolingual English-speaking children on executive function tasks in early childhood? A propensity score analysis. *Journal of Educational Psychology*, 114(4), 870–892. <https://doi.org/10.1037/edu0000692>
- [39] Iruka, I. U., Sheridan, S., **Koziol**, N., Schumacher, R., Kerby, H., Prokasky, A., & Choi, D.-H. (2022). Examining malleable factors that explain the end-of-kindergarten racial/ethnic gaps. *Elementary School Journal*, 122(3), 378–410. <https://doi.org/10.1086/718072>
- [38] Jensen-Willett, S., Cunha, A., Lobo, M. A., Harbourne, R., Dusing, S. C., McCoy, S. W., **Koziol**, N. A., Hsu, L.-Ya., Marcinowski, E. C., Babik, I., An, M., & Bovaird, J. A. (2022). The effect of early-life seizures on cognitive and motor development: A case series. *Pediatric Physical Therapy*, 34(3), 425–431. <https://doi.org/10.1097/PEP.0000000000000918>
- [37] **Koziol**, N. A., Butera, C. D., Kretch, K. S., Harbourne, R. T., Lobo, M. A., McCoy, S. W., Hsu, L.-Y., Willett, S. L., Kane, A. E., Bovaird, J. A., & Dusing, S. C. (2022). Effect of the START-play physical therapy intervention on cognitive skills depends on caregiver-provided learning opportunities. *Physical & Occupational Therapy in Pediatrics*, 42(5), 510–525. <https://doi.org/10.1080/01942638.2022.2054301>
- [36] **Koziol**, N. A., Goodrich, J. M., & Yoon, H. (2022). A regression discontinuity design framework for controlling selection bias in evaluations of differential item functioning. *Educational and Psychological Measurement*, 82(6), 1247–1277. <https://doi.org/10.1177/00131644322068440>
- [35] Kretch, K. S., **Koziol**, N. A., Marcinowski, E. C., Kane, A. E., Inamdar, K., Brown, E. D., Bovaird, J. A., Harbourne, R. T., Hsu, L.-Y., Lobo, M. A., & Dusing, S. C. (2022). Infant posture and caregiver-provided cognitive opportunities in typically developing infants and infants with motor delay. *Developmental Psychobiology*, 64(1), e22233. <https://doi.org/10.1002/dev.22233>
- [34] Namkung, J. M., Goodrich, J. M., Hebert, M., & **Koziol**, N. (2022). Impacts of the COVID-19 pandemic on student learning and opportunity gaps across the 2020–2021 school year: A national survey of teachers. *Frontiers in Education*, 7(article 921497), 1–8. <https://doi.org/10.3389/educ.2022.921497>
- [33] Sheridan, S. M., Knoche, L. L., Boise, C., Witte, A., **Koziol**, N., Prokasky, A., Schumacher, R., & Kerby, H. (2022). Relationships as malleable factors for children’s social-behavioral skills from preschool to grade 1: A longitudinal analysis. *Early Education and Development*, 33(6), 958–978. <https://doi.org/10.1080/10409289.2021.1936374>
- [32] An, M., Nord, J., **Koziol**, N. A., Dusing, S. C., Kane, A. E., Lobo, M. A., McCoy, S. W., & Harbourne, R. T. (2021). Developing a fidelity measure of early intervention programs for children with neuromotor disorders. *Developmental Medicine and Child Neurology*, 63(1), 97–103. <https://doi.org/10.1111/dmcn.14702>
- [31] Cunha, A. B., Babik, I., **Koziol**, N. A., Hsu, L.-Y., Nord, J., Harbourne, R. T., Westcott-McCoy, S., Dusing, S. C., Bovaird, J. A., & Lobo, M. A. (2021). A novel means-end problem-solving assessment tool for early intervention: Evaluation of validity, reliability, and sensitivity. *Pediatric Physical Therapy*, 33(1), 2–9. <https://doi.org/10.1097/PEP.0000000000000761>
- \*Received Toby Long Award for Best Paper.
- [30] de Mendonça Filho, E. J., Silva, M. A., **Koziol**, N. A., & Bandeira, D. R. (2021). Validation of the short version of the Dimensional Inventory for Child Development Assessment. *Jornal de Pediatria*, 97(6), 603–609. <https://doi.org/10.1016/j.jped.2021.01.005>
- [29] Goodrich, J. M., **Koziol**, N. A., & Yoon, H. (2021). Are translated mathematics items a valid accommodation for dual language learners? Evidence from ECLS-K. *Early Childhood Research*

- Quarterly*, 57, 89–101. <https://doi.org/10.1016/j.ecresq.2021.06.001>
- [28] Harbourne, R. T., Dusing, S. C., Lobo, M. A., McCoy, S. W., **Koziol**, N. A., Hsu, L.-Y., Willett, S., Marcinowski, E. C., Babik, I., Cunha, A. B., An, M., Chang, H.-J., Bovaird, J. A., & Sheridan, S. M. (2021). START-Play physical therapy intervention impacts motor and cognitive outcomes in infants with neuromotor disorders: A multisite randomized clinical trial. *Physical Therapy*, 101(1), pzaa232. <https://doi.org/10.1093/ptj/pzaa232>
- \*Received Chattanooga Research Award for a team whose published work presents innovative study or a theoretical model and discussion of its impact on future clinical practice or physical therapy research.
- [27] Molinini, R. M., **Koziol**, N. A., Marcinowski, E. C., Hsu, L. Y., Tripathi, T., Harbourne, R. T., McCoy, S. W., Lobo, M. A., Bovaird, J. A., & Dusing, S. C. (2021). Early motor skills predict the developmental trajectory of problem solving in young children with motor delays. *Developmental Psychobiology*, 63(6), e22123. <https://doi.org/10.1002/dev.22123>
- [26] Molinini, R. M., **Koziol**, N. A., Tripathi, T., Harbourne, R. T., McCoy, S. W., Lobo, M. A., Bovaird, J. A., & Dusing, S. C. (2021). Measuring early problem-solving in young children with motor delays: A validation study. *Physical & Occupational Therapy in Pediatrics*, 41(4), 390–409. <https://doi.org/10.1080/01942638.2020.1865501>
- [25] Stuyvenberg, C. L., Brown, S. E., Inamdar, K., Evans, M., Hsu, L.-Y., Rolin, O., Harbourne, R. T., McCoy, S. W., Lobo, M. A., **Koziol**, N. A., & Dusing, S. C. (2021). Targeted physical therapy combined with spasticity management changes motor development trajectory for a 2-year-old with cerebral palsy. *Journal of Personalized Medicine*, 11(3), 163–175. <https://doi.org/10.3390/jpm11030163>
- [24] Raikes, A., **Koziol**, N., Davis, D., & Burton, A. (2020). Measuring quality of preprimary education in Sub-Saharan Africa: Evaluation of the Measuring Early Learning Environments Scale. *Early Childhood Research Quarterly*, 53, 571–585. <https://doi.org/10.1016/j.ecresq.2020.06.001>
- [23] Sheridan, S. M., **Koziol**, N., Witte, A. L., Iruka, I., & Knoche, L. L. (2020). Longitudinal and geographic trends in family engagement during the pre-kindergarten to kindergarten transition. *Early Childhood Education Journal*, 48, 365–377. <https://doi.org/10.1007/s10643-019-01008-5>
- [22] Dusing, S. C., Harbourne, R. T., Lobo, M. A., Westcott-McCoy, S., Bovaird, J. A., Kane, A. E., Syed, G., Marcinowski, E. C., **Koziol**, N. A., & Brown, S. E. (2019). A physical therapy intervention to advance cognitive and motor skills: A single subject study of a young child with Cerebral Palsy. *Pediatric Physical Therapy*, 31(4), 347–352. <https://doi.org/10.1097/PEP.0000000000000635>
- [21] **Koziol**, N. A. (2019). Weighted multilevel versus robust single-level methods for analyzing subpopulation data. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 15(2), 67–76. <https://doi.org/10.1027/1614-2241/a000165>
- [20] Raikes, A., **Koziol**, N., Janus, M., Platas, L., Weatherholt, T., Smeby, A., & Sayre, R. (2019). Examination of school readiness constructs in Tanzania: Psychometric evaluation of the MELQO scales. *Journal of Applied Developmental Psychology*, 62, 122–134. <https://doi.org/10.1016/j.appdev.2019.02.003>
- [19] Rispoli, K. M., **Koziol**, N. A., McGoey, K. E., & Schreiber, J. B. (2019). Parenting, childcare, and children's pre-kindergarten skills: Exploring moderation by race and ethnicity. *Early Child Development and Care*, 189(6), 946–964. <https://doi.org/10.1080/03004430.2017.1359580>
- [18] Buhs, E. S., **Koziol**, N. A., Rudasill, K. M., & Crockett, L. J. (2018). Early temperament and middle school engagement: School social relationships as mediating processes. *Journal of Educational Psychology*, 110(3), 338–354. <https://doi.org/10.1037/edu0000224>
- [17] Harbourne, R. T., Dusing, S. C., Lobo, M. A., Westcott-McCoy, S., Bovaird, J., Sheridan, S., Galloway, J. C., Chang, H.-J., Hsu, L.-Y., **Koziol**, N., Marcinowski, E. C., & Babik, I. (2018). Sitting Together and Reaching to Play (START-Play): Protocol for a multisite randomized controlled efficacy trial on intervention for infants with neuromotor disorders. *Physical Therapy*, 98(6), 494–502. <https://doi.org/10.1093/ptj/pzy033>

- [16] **Koziol, N. A., & Bovaird, J. A.** (2018). The impact of model parameterization and estimation methods on tests of measurement invariance with ordered polytomous data. *Educational and Psychological Measurement, 78*(2), 272–296. <https://doi.org/10.1177/0013164416683754>
- [15] Namkung, J. M., Fuchs, L. S., & **Koziol, N. A.** (2018). Does initial learning about the meaning of fractions present similar challenges for students with and without adequate whole-number skill? *Learning and Individual Differences, 61*, 151–157. <https://doi.org/10.1016/j.lindif.2017.11.018>
- [14] **Koziol, N. A., Bovaird, J. A., & Suarez, S.** (2017). A comparison of population-averaged and cluster-specific approaches in the context of unequal probabilities of selection. *Multivariate Behavioral Research, 52*(3), 325–349. <https://doi.org/10.1080/00273171.2017.1292115>
- [13] Glover, T. A., Nugent, G. C., Chumney, F. L., Ihlo, T., Shapiro, E. S., Guard, K., **Koziol, N., & Bovaird, J.** (2016). Investigating rural teachers' professional development, instructional knowledge, and classroom practice. *Journal of Research in Rural Education, 31*(3), 1–16. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1101917.pdf>
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- [11] **Koziol, N. A.** (2016). Parameter recovery and classification accuracy under conditions of testlet dependency: A comparison of the traditional 2PL, testlet, and bi-factor models. *Applied Measurement in Education, 29*(3), 184–195. <https://doi.org/10.1080/08957347.2016.1171767>
- [10] Swartz, R. A., Wiley, A. R., **Koziol, N. A., & Magerko, K. A.** (2016). Psychosocial influences upon the workforce and professional development participation of family child care providers. *Child and Youth Care Forum, 45*, 781–805. <https://doi.org/10.1007/s10566-016-9353-2>
- [9] DeChenne, S. E., **Koziol, N., Needham, M., & Enochs, L.** (2015). Modeling sources of teaching self-efficacy for science, technology, engineering, and mathematics graduate teaching assistants. *CBE—Life Sciences Education, 14*(3), 1–14. <https://doi.org/10.1187/cbe.14-09-0153>
- [8] Garbacz, S. A., Sheridan, S. M., **Koziol, N. A., Kwon, K., & Holmes, S. R.** (2015). Congruence in parent-teacher communication: Implications for the efficacy of CBC for students with behavioral concerns. *School Psychology Review, 44*(2), 150–168. <https://doi.org/10.17105/spr-14-0035.1>
- [7] **Koziol, N. A., Arthur, A. M., Hawley, L. R., Bovaird, J. A., Bash, K. L., McCormick, C., & Welch, G. W.** (2015). Identifying, analyzing, and communicating rural: A quantitative perspective. *Journal of Research in Rural Education, 30*(4), 1–14. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1059979.pdf>
- [6] **Koziol, N. A., & Bilder, C. R.** (2014). MRCV: A package for analyzing categorical variables with multiple response options. *The R Journal, 6*(1), 144–150. Retrieved from <https://journal.r-project.org/archive/2014/RJ-2014-014/RJ-2014-014.pdf>
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- [1] Rispoli, K. M., McGoey, K. E., **Koziol, N. A., & Schreiber, J. B.** (2013). The relation of parenting, child temperament, and attachment security in early childhood to social competence at school entry. *Journal of School Psychology, 51*(5), 643–658. <https://doi.org/10.1016/j.jsp.2013.05.007>

## NON-REFEREED JOURNAL ARTICLES

- [1] Shanahan Bazis, P., Savaiano, M., Hebert, M., Rodgers, D. B., & **Koziol**, N. A. (2022). Lessons learned from a national survey on writing instruction for students with visual impairment. *Visual Impairment and Deafblind Education Quarterly*, 67(2), 65–71. Retrieved from [https://dvidb.exceptionalchildren.org/sites/default/files/2022-04/vidbeq\\_67.2\\_spring\\_2022.rspdf\\_.pdf](https://dvidb.exceptionalchildren.org/sites/default/files/2022-04/vidbeq_67.2_spring_2022.rspdf_.pdf).

## EDITED BOOK CHAPTERS (2 first author)

- [6] **Koziol**, N. A. (2023). Confirmatory measurement models for dichotomous and ordered polytomous indicators. In R. H. Hoyle (Ed.), *Handbook of structural equation modeling, 2nd ed.* (pp. 277–295). Guilford Press.
- [5] **Koziol**, N. A., & Witte, A. L. (2019). Designing, analyzing, and disseminating research on family–school partnership programs. In S. A. Garbacz (Ed.), *Establishing family–school partnerships in school psychology: Critical skills* (pp. 245–274). New York, NY: Guilford.
- [4] Clarke, B. L., **Koziol**, N. A., & Sheridan, S. M. (2017). The effects of rurality on parents’ engagement in children’s early literacy. In G. C. Nugent, G. M. Kunz, S. M. Sheridan, T. A. Glover, & L. L. Knoche (Eds.), *Rural education research in the United States: State of the science and emerging directions* (pp. 231–250). New York, NY: Springer.
- [3] Hawley, L. R., **Koziol**, N. A., & Bovaird, J. A. (2017). Defining and communicating rural. In G. C. Nugent, G. M. Kunz, S. M. Sheridan, T. A. Glover, & L. L. Knoche (Eds.), *Rural education research in the United States: State of the science and emerging directions* (pp. 31–54). New York, NY: Springer.
- [2] Bovaird, J. A., & **Koziol**, N. A. (2012). High-stakes education research: Enhanced scrutiny of the education system and its consequences. In J. A. Bovaird, K. F. Geisinger, & C. W. Buckendahl (Eds.), *High stakes testing in education: Science and practice in K–12 settings* (pp. 211–228). Washington, DC: APA Books.
- [1] Bovaird, J. A., & **Koziol**, N. A. (2012). Measurement models for ordered categorical indicators in structural equation modeling. In R. H. Hoyle, D. Kaplan, G. Marcoulides, & S. West (Eds.), *Handbook of structural equation modeling* (pp. 495–511). New York, NY: Guilford.

## TEST MANUAL CHAPTERS AND REVIEWS (1 first author)

- [2] de Mendonça Filho, E. J., Silva, M. A., Bandeira, D. R., & **Koziol**, N. (2020). Normas por faixas etárias [*Norms by age groups*]. In M. A. Silva, E. J. de Mendonça Filho, & D. Ruschel Bandeira (Eds.), *Inventário Dimensional de Avaliação do Desenvolvimento Infantil (IDADI)*. (pp. 69–84). Vetor Editora.
- [1] **Koziol**, N. A., & Bash, K. L. (2017). Review of the Pragmatic Language Observation Scale. In J. F. Carlson, K. F. Geisinger, & J. L. Jonson (Eds.), *The twentieth mental measurements yearbook* (pp. 577–579). Lincoln, NE: The University of Nebraska–Lincoln.

## OSF PREREGISTRATIONS

- [2] Ansari, A., Bratsch-Hines, M., **Koziol**, N. A., Lin, T.-J., McCormick, M., Purtell, K., Kuhn, L., & Witte, A. (2023, March). School characteristics and children’s early academic achievement: Multisite evidence from the Early Learning Network. The Open Science Framework. <https://doi.org/10.17605/OSF.IO/SFNHP>
- [1] Bratsch-Hines, M., Kuhn, L., Witte, A., Ansari, A., **Koziol**, N. A., Franco-Jenkins, X., McCormick, M., & Purtell, K. (2023, July). Is a house a home? Associations of elementary school characteristics with prekindergarten student achievement. The Open Science Framework. <https://doi.org/10.17605/OSF.IO/H9RKA>



STATISTICAL SOFTWARE PACKAGES (*1 first author*)

- [1] **Koziol, N. A., & Bilder, C. B.** (2013, September). MRCV: Methods for analyzing multiple response categorical variables (Version 0.1-0) [R software package]. Last updated September 2014 (Version 0.3-3). URL <http://CRAN.R-project.org/package=MRCV>

NEWSLETTERS (*1 first author*)

- [1] **Koziol, N.** (2020). APA's 2020 virtual convention: Div. 5 sessions. *The Score, July 2020*. Retrieved from <https://www.apadivisions.org/division-5/publications/score/2020/07/virtual-convention>

TECHNICAL REPORTS (*6 first author*)

- [18] **Koziol, N. A., & Chavez, A.** (2023). *Ignite by 4-H Evaluation: Final Report*. Lincoln, NE: Nebraska Academy for Methodology, Analytics & Psychometrics.
- [17] **Koziol, N., Howell Smith, M., & Stevens, J.** (2019). *4-H Common Measures 2.0 (CM 2.0): National Call for Data*. Lincoln, NE: Nebraska Academy for Methodology, Analytics & Psychometrics.
- [16] **Koziol, N., Howell Smith, M., & Stevens, J.** (2019). *4-H Common Measures Continued Work: CM 2.0 Implementation Case Study Report*. Lincoln, NE: Nebraska Academy for Methodology, Analytics & Psychometrics.
- [15] **Davis, D., Raikes, A., & Koziol, N., & Challa, S.** (2018). *Lesotho Early Childhood Care and Development National Study: Final Report*. Prepared for the Lesotho Ministry of Education and Training, Maseru, Lesotho.
- [14] **Hawley, L. R., Howell Smith, M., Arthur, A., Koziol, N., Wheeler, L., Stevens, J., Pense, S., & Perez, A.** (2017). *4-H Common Measures: Continued Development of Common Measures 2.0*. Lincoln, NE: Nebraska Academy for Methodology, Analytics & Psychometrics.
- [13] **Koziol, N., Howell Smith, M., Hawley, L. R., Stevens, J., Arthur, A., Pense, S., Perez, A., & Wheeler, L.** (2017). *4-H Common Measures 2.0: Pilot Study Results*. Lincoln, NE: Nebraska Academy for Methodology, Analytics & Psychometrics.
- [12] **Arthur, A., Howell Smith, M., Hawley, L. R., White, A., Koziol, N., & Stevens, J.** (2016). *4-H Common Measures: Development of Common Measures 2.0*. Lincoln, NE: Nebraska Academy for Methodology, Analytics & Psychometrics.
- [11] **Hawley, L. R., Arthur, A., Howell Smith, M., Koziol, N., White, A., & Stevens, J.** (2016). *Evaluation of the 4-H Common Measures: Developing Common Measures Version 2.0*. Lincoln, NE: Nebraska Academy for Methodology, Analytics & Psychometrics.
- [10] **Raikes, A., Janus, M., Platas, L., Koziol, N., Dizona, P., Duku, E., & Hawley, L.** (2016). *Cross-national measurement of early childhood development: Findings from the Measuring Early Learning Quality and Outcomes project*. Omaha, NE: University of Nebraska Medical Center.
- [9] **Hawley, L. R., Koziol, N. A., Smith, M. H., & Arthur, A.** (2015). *Evaluation of the 4-H Common Measures: Psychometric review*. Lincoln, NE: Nebraska Academy for Methodology, Analytics & Psychometrics.
- [8] **Howell Smith, M. C., Arthur, A. M., Hawley, L. R., White, A. S., Koziol, N. A., & Stevens, J.** (2015). *Evaluation of the 4-H Common Measures: Proposed redesign*. Lincoln, NE: Nebraska Academy for Methodology, Analytics & Psychometrics.
- [7] **McCormick, C., Koziol, N., Arthur, A., & Bovaird, J. A.** (2012). *LARRC technical report on data issues*. Lincoln, NE: Nebraska Center for Research on Children, Youth, Families & Schools.
- [6] **McCormick, C., Koziol, N., Arthur, A., & Bovaird, J. A.** (2012). *LARRC technical report on psychometric properties*. Lincoln, NE: Nebraska Center for Research on Children, Youth, Families & Schools.
- [5] **Koziol, N. A., Bovaird, J. A., & Harms, P. D.** (2011). *GAT item analysis and instrument revision*

- project*. Lincoln, NE: Nebraska Center for Research on Children, Youth, Families & Schools.
- [4] Foley, B. P., Shaw, L., **Koziol**, N. A., & Geisinger, K. F. (2009). *DSTEP Reading alignment activities, 2008-2009: Evaluating the alignment of newly developed items and summarizing the alignment of the full 2009 Dakota STEP Reading assessment forms*. Lincoln, NE: Buros Center for Testing.
- [3] **Koziol**, N. A., McCormick, C., Foley, B. P., & Geisinger, K. F. (2009). *Standard setting study for the 2009 Dakota STEP Reading assessment*. Lincoln, NE: Buros Center for Testing.
- [2] McCormick, C., **Koziol**, N. A., Foley, B. P., & Geisinger, K. F. (2009). *Standard setting study for the 2009 Dakota STEP Alternate Reading assessment*. Lincoln, NE: Buros Institute for Assessment Consultation and Outreach.
- [1] McCormick, C., **Koziol**, N. A., Foley, B. P., & Geisinger, K. F. (2009). *Standard setting study for the 2009 Dakota STEP Alternate Science assessment*. Lincoln, NE: Buros Institute for Assessment Consultation and Outreach.

## RESEARCH PRESENTATIONS

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### REFEREED SESSION AS DISCUSSANT: NATIONAL/INTERNATIONAL CONFERENCES

- [1] Perez, A., Langfus, J. A., Smyth, H. (Authors), & **Koziol**, N. A. (Invited Discussant) (2021, August). *Building from the ground up: Methods for early career engagement*. Symposium presented at the American Psychological Association annual meeting, Virtual.

### REFEREED PRESENTATIONS: NATIONAL/INTERNATIONAL CONFERENCES (19 first author)

- [99] **Koziol**, N. A., Butera, C., Pereira, S., Greenberg, N., Hsu, L.-Y., & Dusing, S. C. (2023, September). *Evaluating responsiveness of the Gross Motor Function Measure-66 Item Sets for young infants with or at high risk for CP*. Free paper presented at the American Academy of Cerebral Palsy and Developmental Medicine annual meeting, Chicago, IL.
- [98] Molinini, R., Stuyvenberg, C., Harbourne, R., Hsu, L.-Y., Lobo, M., McCoy, S., Willett, S., **Koziol**, N., Bovaird, J., Chu, V., Price, S., Shall, M., & Dusing, S. (2023, September). *The effect of early physical therapy interventions on emotional availability in children with neuromotor delay and their caregiver*. Free paper presented at the American Academy of Cerebral Palsy and Developmental Medicine annual meeting, Chicago, IL.
- [97] **Koziol**, N. A. (2023, August). *The impact of differential item functioning on quantile regression estimators*. Poster presented at the American Psychological Association annual meeting, Washington, D.C.
- [96] McManus, B. M., Dusing, S., Khetani, M., **Koziol**, N., & Perrailon, M. (2023, July). *Supporting early relationships among parents and their infants who are hospitalized in the neonatal intensive care unit: A protocol paper*. Paper presented at the 18<sup>th</sup> World Association of Infant Mental Health (WAIMH) World Congress, Dublin, Ireland.
- [95] Rodgers, D., Hebert, M., Savaiano, M., **Koziol**, N., Bazis, P. (2023, July). *Relations among teacher beliefs and writing practices for different categories of students with visual impairments*. Spoken paper presented at the Society for the Scientific Study of Reading conference, Port Douglas, Queensland, Australia.
- [94] Babik, I., Cunha, A. B., Hsu, L.-Y., Harbourne, R. T., Dusing, S. C., **Koziol**, N. A., Westcott-McCoy, S. W., Willett, S. L., Bovaird, J. A., & Lobo, M. A. (2023, March). *Children's mastery motivation is associated with their developmental trajectories*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Salt Lake City, UT.
- [93] Bratsch-Hines, M., Ansari, A., Franco-Jenkins, X., **Koziol**, N., Kuhn, L., Lin, T.-J., McCormick,

- M., Purtell, K., & Witte, A. (2023, March). *School characteristics in relation to PK-G1 gains: Multisite evidence from the early learning network*. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Salt Lake City, UT.
- [92] Cunha, A. B., Babik, I., Harbourne, R. T., Dusing, S. C., Hsu, L.-Y., **Koziol**, N. A., Westcott-McCoy, S. W., Willett, S. L., Bovaird, J. A., & Lobo, M. A. (2023, March). *Executive function in motor delays*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Salt Lake City, UT.
- [91] Hebert, M., Rodgers, D., Goodrich, J. M., Job, K., Toman, G., **Koziol**, N., Bohaty, J., Coffey, N., Schachter, R., Leiva, S., Hines, H., & McElhose, M. J. (2023, March). *Improving K-3 Reading Using Professional Development & Tutoring: Project WORDS*. Paper presented at the Council for Exceptional Children Conference. Louisville, KY.
- [90] Sheridan, S. M., Knoche, L. L., **Koziol**, N., Witte, A. L., Iruka, I. U., Spradlin, C., & Stadheim, J. (2023, March). *Sustained relationships across the early elementary years: Association with children's social-behavioral skills*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Salt Lake City, UT.
- [89] Cunha, A. B., Babik, I., Harbourne, R. T., Dusing, S. C., Westcott-McCoy, S. W., Willett, S., Hsu, L.-Y., **Koziol**, N., Bovaird, J., & Lobo, M. A. (2023, February). *Executive function outcomes in relation to cognitive, language, and motor skills in children with motor delays*. Poster presented at the Combined Sections Meeting of the American Physical Therapy Association, San Diego, CA.
- [88] Hebert, M., Goodrich, J. M., Rodgers, D. B., **Koziol**, N., Bohaty, J., Coffey, N., Schachter, R., Yoon, H., Witte, A., Leiva, S., Hines, H., McElhose, M. J., Toman, G. (2023, February). *Nebraska WORDS: Improving reading achievement in rural elementary schools*. Poster presented at the annual meeting of the Pacific Coast Research Conference, San Diego, CA.
- [87] Hsu, L.-Y., Dusing, S. C., Lobo, M. A., McCoy, S. W., **Koziol**, N. A., Willett, S., Cunha, A. B., Bovaird, J. A., & Harbourne, R. T. (2023, February). *Longer-term effect of START-Play intervention in infants with neuromotor disorders: A multisite randomized clinical trial*. Platform presentation at the Combined Sections Meeting of the American Physical Therapy Association, San Diego, CA.
- [86] *Molinini, R., Choi, T., Koziol, N. A., Stuyvenberg, C. L., Harbourne, R. T., Lobo, M. A., McCoy, S. W., & Dusing, S. C. (2023, February). START-Play physical therapy intervention impacts emotional availability in children with neuromotor disorders*. Platform presentation at the Combined Sections Meeting of the American Physical Therapy Association, San Diego, CA.
- [85] *Molinini, R., Koziol, N., Inamdar, K., Rhee, C., Salgaonkar, A., Harbourne, R., Lobo, M., McCoy, S., Hsu, L.-Y., Burnsed, J., Shall, M., Spence, C., Stevenson, R., & Dusing, S. (2023, February). Measuring problem-solving in children with neuromotor delays 3 months to 4 years: A validation study*. Poster presented at the Combined Sections Meeting of the American Physical Therapy Association, San Diego, CA.
- [84] Namkung, M. J., Peng, P., Pfister, E., & **Koziol**, N. (2023, February). *Cognitive and academic profiles of 7<sup>th</sup> graders with and without mathematics learning difficulties*. Poster presented at the annual meeting of the Pacific Coast Research Conference, San Diego, CA.
- [83] Butera, C., Rhee, C., Brown, S., Kelly, C., Dhollander, T., Thompson, D., Lepore, N., **Koziol**, N., Sargent, B., Burnsed, J., Shall, M., SPEEDI Research Team, & Dusing, S. (2022, September). *Neuroplastic changes in response to therapy intervention for preterm infants in the first months of life: A pilot study*. Paper presented at the American Academy of Cerebral Palsy and Developmental Medicine annual meeting, Las Vegas, NV.
- [82] Jancart, K., Babik, I., Cunha, A. B., **Koziol**, N., Choi, D., Harbourne, R., Lobo, M., McCoy, S. W., Willett, S., Dusing, S., & Bovaird, J. (2022, September). *Early versus late reaching mastery's effect on object permanence in infants with motor delays receiving START-Play and Usual Care-Early*

*Intervention*. Paper presented at the American Academy of Cerebral Palsy and Developmental Medicine annual meeting, Las Vegas, NV.

\*Received Gayle G. Arnold Award for Best Scientific Paper.

- [81] Kretch, K., **Koziol**, N., Choi, D., Marcinowski, E., Hsu, L.-Y., McCoy, S. W., Harbourne, R., Lobo, M., Willett, S., & Dusing, S. (2022, September). *Sitting capacity and performance in typically developing infants and infants with motor delay*. Poster presented at the American Academy of Cerebral Palsy and Developmental Medicine annual meeting, Las Vegas, NV.
- [80] McManus, B., Dusing, S., **Koziol**, N., & Hsu, L.-Y. (2022, September). *Clinical and social characteristics of physical (PT) and occupational (OT) therapy service receipt and dose among infants with confirmed motor delays*. Paper presented at the American Academy of Cerebral Palsy and Developmental Medicine annual meeting, Las Vegas, NV.
- [79] **Koziol**, N. A., Choi, D., Harbourne, R. T., Lobo, M. A., Dusing, S. C., Willett, S. L., Bovaird, J. A., Hsu, L.-Y. (2022, August). *Evaluation of nonequivalent groups equating methods for use in intervention research*. Poster presented at the American Psychological Association annual meeting, Virtual.
- [78] Sheridan, S. M., Knoche, L. L., **Koziol**, N., Witte, A. L., Iruka, I. U., & Escobedo, L. (2022, August). *Closing gaps for children in poverty: The role of play*. Poster presented at the American Psychological Association annual meeting, Minneapolis, MN.
- [77] Babik, I., Cunha, A. B., Choi, D., **Koziol**, N., Harbourne, R. T., Dusing, S. C., McCoy, S. W., Bovaird, J., Willett, S., & Lobo, M. A. (2022, July). *The role of affordances in the home environment in children's motor, cognitive, and language development*. Poster presented at the annual meeting of the International Congress for Infant Studies, Ottawa, Canada.
- [76] Kretch, K. S., Soliman, M., Wazana, S. J., Henigan, A., Garcia, B., Marcinowski, E. C., Hsu, L.-Y., Bovaird, J. A., Harbourne, R. T., **Koziol**, N. A., Lobo, M. A., McCoy, S. W., & Dusing, S. C. (2022, July). *Prerequisites to joint attention: Role of sitting status, sitting skill, and motor delay*. Paper presented at the annual meeting of the International Congress for Infant Studies, Ottawa, Canada.
- [75] *Molinini*, R. M., Stuyvenberg, C., Harbourne, R. T., Lobo, M. A., **Koziol**, N. A., McCoy, S. W., Bovaird, J., & Dusing, S. C. (2022, July). *The impact of learning to walk on emotional availability in children with and without motor delay*. Paper presented at the annual meeting of the International Congress for Infant Studies, Ottawa, Canada.
- [74] Thayer, L., Goodrich, J. M., & **Koziol**, N. (2022, July). *Examining the reading achievement gap between multilingual and monolingual elementary students*. Paper presented at the annual meeting of the Society for the Scientific Study of Reading, Newport Beach, CA.
- [73] *Molinini*, R., Inamdar, K., Evans, M., Bowler, K., Griffin, R., Simmons, R. M., Harbourne, R. T., Lobo, M. A., **Koziol**, N. A., McCoy, S. W., Bovaird, J. A., & Dusing, S. C. (2022, February). *Feasibility and validation of a problem-solving measure for young children with motor delays*. Poster presentation at the Combined Sections Meeting of the American Physical Therapy Association, San Antonio, TX.
- [72] *Molinini*, R. M., Inamdar, K., Harbourne, R. T., Lobo, M. A., **Koziol**, N. A., McCoy, S. W., Bovaird, J., & Dusing, S. C. (2022, February). *Different toys elicit different problem-solving skills in children with mild or significant motor delays*. Platform presentation at the Combined Sections Meeting of the American Physical Therapy Association, San Antonio, TX.
- [71] Marcinowski, E., Hsu, L.-Y., *Molinini*, R., Dusing, S., McCoy, S. W., Harbourne, R., **Koziol**, N., Bovaird, J., & START-Play Consortium. (2021, December). *How do sitting and object exploration impact language in infants with typical or delayed motor development?* Presentation given at the Asia-Pacific BabyLab Constellation (ABC) Conference. Virtual.

- [70] Kretch, K., Marcinowski, E., Kane, A., Bovaird, J., Harbourne, R., Hsu, L.-Y., **Koziol, N.**, Lobo, M., McCoy, S., & Dusing, S. (2021, October). *Posture and caregiver-provided learning opportunities in typically developing infants and infants with motor delay*. Poster presented at the American Academy of Cerebral Palsy and Developmental Medicine, Virtual.
- [69] Babik, I., Cunha, A. B., Choi, D.-H., **Koziol, N.**, Harbourne, R. T., Dusing, S. C., McCoy, S. W., Bovaird, J., & Lobo, M. A. (2021, September). *The effect of the START-Play intervention on the development of reaching skills in children with mild vs. significant motor delays*. Poster presented at the international meeting on Early Detection and Early Intervention in Neurodevelopmental Disorders. Virtual.
- [68] Cunha, A. B., Babik, I., Choi, D.-H., **Koziol, N.**, Harbourne, R. T., Dusing, S. C., McCoy, S. W., Bovaird, J., & Lobo, M. A. (2021, September). *Effects of the START-Play intervention on performance of means-end problem solving in children with mild vs. significant motor delays*. Presentation given at the Fifth Assembly of the International Motor Development Research Consortium. Virtual.
- [67] Jancart, K. L., Dusing, S. C., Lobo, M. A., McCoy, S. W., **Koziol, N. A.**, Hsu, L. Y., Bovaird, J. A., An, M., Delprince, A., Tommer, M., Spirnak, J., Boe, C., & Harbourne, R. (2021, August). *Long-Term Object Permanence and Sitting in Infants with Motor Delays*. Poster presented at the American Psychological Association annual meeting, Virtual.
- [66] Sheridan, S. M., Knoche, L. L., Boise, C., Witte, A. L., **Koziol, N.**, Kerby, H., & Schumacher, R. (2021, August). *Enhancing relationships during early childhood to promote children's social-behavioral skills*. Poster presented at the American Psychological Association annual meeting, Virtual.
- [65] Cunha, A. B., Babik, I., Choi, D.-H., **Koziol, N. A.**, Harbourne, R. T., Dusing, S. C., McCoy, S. W., Bovaird, J., & Lobo, M. A. (2021, April). *Performance after mastery of means-end problem solving differs in children with mild versus significant motor delays*. Poster presented at the Society for Research in Child Development Biennial Meeting, Virtual.
- [64] Goodrich, J. M., **Koziol, N. A.**, Yoon, H., & Leiva, S. (2021, April). *Is bilingualism associated with executive function in early childhood? A propensity score analysis*. Poster presented at the Society for Research in Child Development Biennial Meeting, Virtual.
- [63] Babik, I., Cunha, A. B., Choi, D.-H., **Koziol, N.**, Harbourne, R., Dusing, S. C., McCoy, S. W., Bovaird, J., & Lobo, M. A. (2021, February). *START-Play intervention advanced reaching outcomes in children with significant but not mild motor delay*. Oral presentation presented at the Combined Sections Meeting of the American Physical Therapy Association, Virtual.
- [62] Hsu, L.-Y., Chang, H.-J., Gregory, W., Harbourne, R. T., Dusing, S. C., Lobo, M. A., **Koziol, N.**, & McCoy, S. W. (2021, February). *Validity of the Gross Motor Function Measure-66 item-sets in high risk infants*. Oral presentation presented at the Combined Sections Meeting of the American Physical Therapy Association, Virtual.
- [61] Cunha, A. B., Babik, I., **Koziol, N. A.**, Hsu, L.-Y., Nord, J., Harbourne, R. T., McCoy, S. W., Dusing, S. C., Bovaird, J. A., & Lobo, M. A. (2020, September). *Sensitivity of the Means-End Problem Solving Assessment Tool (MEPSAT) for discriminating among infants with varying levels of motor delay*. Poster presented at the American Academy of Cerebral Palsy and Developmental Medicine, Virtual.
- [60] Inamdar, K., Molinini, R., Kane, A., Hsu, L.-Y., **Koziol, N.**, Harbourne, R., McCoy, S. W., Lobo, M., Bovaird, J., & Dusing, S. (2020, September). *Relationship between mobility and problem solving skills in young children with heterogeneous motor abilities*. Oral presentation at the American Academy of Cerebral Palsy and Developmental Medicine, Virtual.
- [59] Jancart, K., Harbourne, R., Dusing, S., Lobo, M., **Koziol, N.**, Bovaird, J., McCoy, S. W., Hsu, L.-Y., Cunha, A. B., & An, M. (2020, September). *Long term change in object permanence in infants*

- with motor delays: Group and individual differences in START-Play and usual Early Intervention.* Oral presentation at the American Academy of Cerebral Palsy and Developmental Medicine, Virtual.
- [58] Kane, A., **Koziol**, N., Hsu, L.-Y., Inamdar, K., *Molinini*, R., Harbourne, R., Lobo, M., McCoy, S. W., Bovaird, J., & Dusing, S. (2020, September). *Relationship between mobility and parent-provided cognitive opportunities in young children with heterogeneous motor abilities.* Oral presentation at the American Academy of Cerebral Palsy and Developmental Medicine, Virtual.
- [57] *Molinini*, R., **Koziol**, N., Tripathi, T., Inamdar, K., Harbourne, R., Lobo, M., McCoy, S. W., Bovaird, J., & Dusing, S. (2020, September). *Measuring early problem solving skills in young children with motor impairment: A validation study.* Oral presentation at the American Academy of Cerebral Palsy and Developmental Medicine, Virtual.
- [56] **Koziol**, N. A., Yoon, H., & Goodrich, M. (2020, August). *Traditional versus regression discontinuity methods for evaluating DIF: A simulation study.* Poster presented at the American Psychological Association annual meeting, Virtual.
- [55] Cunha, A. B., Babik, I., Chrobot, B., **Koziol**, N., Hsu, L.-Y., Lobo, M., & START-Play Consortium (2020, July). *Positive effects of START-Play intervention on reaching and cognitive outcomes in young children with motor delays.* Poster presented at the International Congress of Infant Studies, Virtual.
- [54] Cunha, A. B., Babik, I., **Koziol**, N., Hsu, L.-Y., Nord, J., Lobo, M., & START-Play Consortium (2020, July). *A novel means-end problem solving assessment tool (MEPSAT): Evaluation of validity and reliability.* Poster presented at the International Congress of Infant Studies, Virtual.
- [53] *Molinini*, R., Kane, A., Marcinowski, E., **Koziol**, N., Dusing, S., & START-Play Consortium (2020, July). *Parent sensitive play predicts the development of problem solving skills in young children with motor impairments.* Poster presented at the International Congress of Infant Studies, Virtual.
- [52] Goodrich, J. M., & **Koziol**, N. A. (2020, April). *Using regression discontinuity designs to control for selection bias in evaluations of DIF.* Poster accepted for presentation at the American Educational Research Association annual meeting, San Francisco, CA. (Conference cancelled due to COVID-19 pandemic).
- [51] **Koziol**, N. A., & Goodrich, J. M. (2020, April). *Differential functioning of English and Spanish-adapted kindergarten mathematics achievement items: A regression discontinuity design application.* Poster accepted for presentation at the American Educational Research Association annual meeting, San Francisco, CA. (Conference cancelled due to COVID-19 pandemic).
- [50] An, M., Harbourne, R. T., Dusing, S. C., Kane, A., Nord, J., **Koziol**, N. A., McCoy, S. W., Lobo, M. A., & Bovaird, J. A. (2020, February). *Implementation of a multi-dimensional fidelity measure in the START-Play clinical trial.* Platform presentation at the American Physical Therapy Association Combined Section Meeting, Denver, CO.
- [49] Dusing, S. C., Harbourne, R. T., Lobo, M. A., McCoy, S. W., Hsu, L.-Y., Bovaird, J. A., & **Koziol**, N. A. (2020, February). *Efficacy of the START-Play intervention compared to usual care in children with cerebral palsy.* Platform presentation at the American Physical Therapy Association Combined Section Meeting, Denver, CO.
- [48] Kerby, H. M., Schumacher, R. E., Sheridan, S. M., Iruka, I. U., **Koziol**, N. A., Witte, A. L., & Prokasky, A. (2020, February). *Student-teacher relationships and classroom quality: Implications for children of color.* Paper presented at the annual convention of the National Association of School Psychologists (NASP), Baltimore, MD.
- [47] Khurana, S., Kane, A., Marcinowski, E., Harbourne, R. T., Lobo, M. A., McCoy, S. W., Bovaird, J. A., **Koziol**, N. A., & Dusing, S. C. (2020, February). *Changes in parent child interaction following START-Play intervention.* Platform presentation at the American Physical Therapy Association

Combined Section Meeting, Denver, CO.

- [46] *Molinini, R., Inamdar, K., Russell, D., Harbourne, R., Lobo, M. A., McCoy, S. W., Bovaird, J. A., Koziol, N. A., & Dusing, S. C. (2020, February). Developing a sensitive model measuring change in problem-solving skills in infants with motor delays.* Platform presentation at the American Physical Therapy Association Combined Section Meeting, Denver, CO.
- [45] *Molinini, R., Inamdar, K., Russell, D., Harbourne, R. T., McCoy, S. W., Koziol, N. A., Bovaird, J. A., & Dusing, S. C. (2020, February). Validation of a measure of change in problem-solving skills in infants with motor delays.* Poster presented at the American Physical Therapy Association Combined Section Meeting, Denver, CO.
- [44] *Marcinowski, E., Hsu, L.-Y., Dusing, S., Bovaird, J., Harbourne, R., Lobo, M., McCoy, S., Koziol, N., & START-Play Consortium. (2019, November). Sit long, talk much. The relation between language and independent sitting ability for infants with motor delays.* Paper presented at the Workshop on Early Language in Neurodevelopmental Disorders (NeuroD-WELL), Lisbon, Portugal.
- [43] *Cunha, A. B., Babik, I., Koziol, N. A., Nord, J., Hsu, L.-Y., Harbourne, R. T., Bovaird, J. A., Dusing, S. C., McCoy, S. W., & Lobo, M. A. (2019, September). Feasibility, validity, and reliability of a novel Means-End Problem Solving Assessment Tool (MEPSAT).* Poster presented at the Combined American Academy for Cerebral Palsy and Developmental Medicine (AAPDM) 73<sup>rd</sup> Annual and International Alliance of Academies of Childhood Disability (IAACD) 2<sup>nd</sup> Triannual Meeting, Anaheim, CA.
- [42] *Harbourne, R., Dusing, S. C., Lobo, M., McCoy, S. W., Koziol, N. A., Hsu, L.-Y., Willett, S., Marcinowski, E. C., Babik, I., Cunha, A. B., An, M., Chang, H.-J., Bovaird, J. A., & Sheridan, S. (2019, September). Efficacy of the START-Play program for infants with neuromotor disorders: Cognitive outcomes.* Paper presented at the Combined American Academy for Cerebral Palsy and Developmental Medicine (AAPDM) 73<sup>rd</sup> Annual and International Alliance of Academies of Childhood Disability (IAACD) 2<sup>nd</sup> Triannual Meeting, Anaheim, CA.
- \*Received Gayle G. Arnold Award for Best Scientific Paper.
- [41] *Lobo, M., Harbourne, R. T., Dusing, S. C., McCoy, S. W., Cunha, A. B., Babik, I., Hsu, L.-Y., Koziol, N. A., Bovaird, J. A., Marcinowski, E. C., Chang, H.-J., An, M., Sheridan, S., & Willett, S. (2019, September). Efficacy of the START-Play program for infants with neuromotor disorders: Motor outcomes.* Paper presented at the Combined American Academy for Cerebral Palsy and Developmental Medicine (AAPDM) 73<sup>rd</sup> Annual and International Alliance of Academies of Childhood Disability (IAACD) 2<sup>nd</sup> Triannual Meeting, Anaheim, CA.
- [40] *Molinini, R., Inamdar, K., Marcinowski, E., Dusing, S., Koziol, N., Lobo, M. A., Harbourne, R. T., McCoy, S. W., & Bovaird, J. A. (2019, September). Measuring early problem-solving in children with motor impairments: Evaluating responsiveness over time using a modification of the Early Problem Solving Indicator.* Paper presented at the Combined American Academy for Cerebral Palsy and Developmental Medicine (AAPDM) 73<sup>rd</sup> Annual and International Alliance of Academies of Childhood Disability (IAACD) 2<sup>nd</sup> Triannual Meeting, Anaheim, CA.
- [39] *Kerby, H. M., Schumacher, R. E., Sheridan, S. M., Koziol, N. A., Racine, B. C., Overfield, R. A., & Spradlin, C. A. (2019, August). Neighborhood characteristics and geographic contexts: Impacts on children's social-emotional skills.* Poster presented at the American Psychological Association annual meeting, Chicago, IL.
- [38] *Koziol, N. A. (2019, August). An investigation of sample weighted multilevel propensity score analysis.* Poster presented at the American Psychological Association annual meeting, Chicago, IL.
- [37] *Kane, A. E., Marcinowski, E. C., Hsu, L.-Y., Koziol, N., & Dusing, S. C. (2019, April). Parent-provided cognitive opportunities for children with motor impairments.* Presented at the Annual Conference for the American Occupational Therapy Association, New Orleans, LA.

- [36] Knoche, L., Sheridan, S. M., **Koziol**, N. A., Witte, A. L., & Iruka, I. U. (2019, April). *Exploring preschool participation: What are the benefits for students from rural and urban communities in the Midwest?* Paper presented at the American Educational Research Association annual meeting, Toronto, ON.
- [35] Lester, H. F., **Koziol**, N., & Hysong, S. J. (2019, April). *Improving power to detect moderation*. Poster presented at the Society for Industrial and Organizational Psychology annual conference, National Harbor, MD.
- [34] Bandeira, D. R., Mendonça, E., Silva, M. A., **Koziol**, N., & Hawley, L. (2019, March). *Dimensional Inventory for Child Development Assessment Socioemotional Scale: Validity evidence based on the internal structure*. Poster presented at the Society for Research in Child Development biennial meeting, Baltimore, MD.
- [33] Sheridan, S., Knoche, L., Witte, A., & **Koziol**, N. (2019, March). *Parent engagement in rural and urban contexts*. Paper presented at the Society for Research in Child Development biennial meeting, Baltimore, MD.
- [32] Schumacher, R. E., Kerby, H. M., Sheridan, S. M., Witte, A. L., **Koziol**, N., & Knoche, L.L. (2019, February). *Family school partnerships during the transition into kindergarten: Does geography matter?* Paper presented at the annual convention of the National Association of School Psychologists (NASP), Atlanta, GA.
- [31] **Koziol**, N. A. (2018, October). *An evaluation of the alignment method for testing measurement invariance with secondary data and complex sampling designs*. Poster presented at the Society for Research in Child Development – DEVSEC: Conference on the Use of Secondary and Open Source Data in Developmental Science, Phoenix, AZ.
- [30] Sparapani, N., **Koziol**, N., & Mackintosh, B. (2018, October). *Measurement invariance of foundational learning skills in kindergarten boys with and without autism. A secondary data analysis*. Paper presented at the Society for Research in Child Development – DEVSEC: Conference on the Use of Secondary and Open Source Data in Developmental Science, Phoenix, AZ.
- [29] **Koziol**, N. A. (2018, August). *Recommended versus actual practices for analyzing complex probability samples*. Poster presented at the American Psychological Association annual meeting, San Francisco, CA.
- [28] Mendonça Filho, E., Silva, M., Miranda, J., **Koziol**, N., Hawley, L., & Bandeira, D. (2018, July). *Psychometric properties, refinement and clinical application of the Dimensional Inventory for Child Development Assessment*. Paper presented at the Conference of the International Test Commission, Montreal, ON.
- [27] Buhs, E. S., Koziol, N. A., Rudasill, K. M., & Crockett, L. J. (2018, April). *Predicting adolescent externalizing problems and school adjustment: Teacher-child relationships mediate links to early temperament*. Poster presented at the Society for Research on Adolescence biennial meeting, Minneapolis, MN.
- [26] Tripathi, T., Syed, G., Marcinowski, E., Hsu, L.-Y., **Koziol**, N., & Dusing, S. C. (2018, February). *Sitting abilities predict early problem solving skills in infants with motor delays*. Platform presentation at the Combined Section Meeting, New Orleans, LA.
- [25] Syed, G., Tripathi, T., Marcinowski, E. C., Hsu, L.-Y., **Koziol**, N., & Dusing, S. C. (2017, November). *The impact of increasing sitting ability and age in developing early problem solving skills*. Poster presented at the International Society for Developmental Psychobiology annual meeting, Washington, DC.
- [24] Tripathi, T., Hsu, L.-Y., **Koziol**, N., Syed, G., & Dusing, S. C. (2017, September). *Concurrent validity of the Bayley cognitive subtest and early problem solving indicator in infants with neuromotor impairments*. Poster presented at the American Academy for Cerebral Palsy and



- Developmental Medicine annual meeting, Montreal, Québec.
- [23] Arthur, A. M., **Koziol**, N., Hawley, L., Howell Smith, M., Stevens, J., & Bovaird, J. (2017, August). *The impact of negative valence on responses and response times*. Poster presented at the American Psychological Association annual meeting, Washington, DC.
- [22] **Koziol**, N., Arthur, A. M., Hawley, L., Howell Smith, M., & Stevens, J. (2017, August). *Examining the impact of negative valence on factor structures*. Poster presented at the American Psychological Association annual meeting, Washington, DC.
- [21] Buhs, E. S., **Koziol**, N. A., Rudasill, K. M., & Crockett, L. (2017, April). *Children's temperament and later school engagement: Peer and teacher relationships in elementary school as mediating processes*. Poster presented at the American Educational Research Association annual meeting, San Antonio, TX.
- [20] Crockett, L., **Koziol**, N., Rudasill, K., & Buhs, E. (2017, April). *Child temperament predicts adolescent externalizing behavior through mother-child and teacher-child relationship quality*. Poster presented at the Society for Research in Child Development biennial meeting, Austin, TX.
- [19] Hawley, L., **Koziol**, N. A., Arthur, A., & Howell Smith, M. C. (2017, April). *Creating a brief tool for measuring positive youth development: Applying validity theory in scale development*. Paper presented at the American Educational Research Association annual meeting, San Antonio, TX.
- [18] Howell Smith, M. C., Arthur, A., Hawley, L., & **Koziol**, N. A. (2017, April). *Expanding mixed methods instrument development designs*. Paper presented at the American Educational Research Association annual meeting, San Antonio, TX.
- [17] **Koziol**, N. A., Lester, H. F., & Nord, J. (2017, April). *Evaluating methods for analyzing subpopulation data with single-level and multilevel pseudo maximum likelihood*. Paper presented at the American Educational Research Association annual meeting, San Antonio, TX.
- [16] Howell Smith, M., Arthur, A., Hawley, L., & **Koziol**, N. (2016, April). *What happens in the "→"? Expanding mixed methods instrument development designs*. Paper presented at the American Educational Research Association annual meeting, Washington, DC.
- [15] Crockett, L., **Koziol**, N., & Buhs, E. S. (2016, March). *Mother-child conflict partially mediates the associations between early temperament traits and adolescents' externalizing behavior*. Poster presented at the Society for Research on Adolescence biennial meeting, Baltimore, MD.
- [14] **Koziol**, N. A., Bovaird, J. A., & Lee, H. (2015, April). *A comparison of population-averaged and cluster-specific approaches in the context of unequal probabilities of selection*. Paper presented at the American Educational Research Association annual meeting, Chicago, IL.
- [13] Rispoli, K., **Koziol**, N. A., Schreiber, J. B., & McGoey, K. E. (2014, April). *Context, parenting practices, and children's school readiness*. Paper presented at the American Educational Research Association annual meeting, Philadelphia, PA.
- [12] **Koziol**, N. A., & Bilder, C. R. (2013, July). *MRCV: A package for analyzing the association among categorical variables with multiple response options*. Paper presented at the userR! – International R User Conference, Albacete, Spain.
- [11] **Koziol**, N. A., Clarke, B. L., & Sheridan, S. M. (2012, October). *Rurality and reading readiness: The longitudinal effects of setting on parent engagement and children's early literacy*. Paper presented at the National Rural Education Association annual convention, Cincinnati, OH.
- [10] Kim, E. M., Minke, K. M., Sheridan, S. M., **Koziol**, N. A., Ryoo, J., & Rispoli, K. M. (2012, August). *Congruence within the parent-teacher relationship: Associations with children's functioning*. Poster presented at the American Psychological Association annual meeting, Orlando, FL.
- [9] **Koziol**, N. A., & Templin, J. (2012, April). *Quantifying the impact of misusing examinee latent variable estimates in item response models*. Paper presented at the National Council on

- Measurement in Education annual meeting, Vancouver, British Columbia.
- [8] Bovaird, J. A., **Koziol**, N. A., & Chumney, F. (2011, October). *An ecological model of school readiness: A methodological investigation into the role of rurality*. Paper presented at the Building Solutions to Poverty: Methods and Metrics for Identifying Success conference, Columbus, OH.
- [7] **Koziol**, N. A., & Bovaird, J. A. (2011, May). *Comparing the bias of two dyadic indexes under conditions of ordinality*. Poster presented at the Association for Psychological Science annual convention, Washington, DC.
- [6] **Koziol**, N. A. (2011, April). *Estimating IRT parameters under conditions of testlet dependency: A comparison of the traditional 2PL, Bayesian random effects, and bi-factor models*. Paper presented in roundtable format at the American Educational Research Association annual meeting, New Orleans, LA.
- [5] Kupzyk, K. A., Welch, G. W., Bovaird, J. A., & **Koziol**, N. A. (2011, April). *Missing data in cluster randomized trials: Imputations and auxiliary variables*. Poster presented at the Society for Research in Child Development biennial meeting, Montreal, Québec.
- [4] **Koziol**, N. A., & Bovaird, J. A. (2010, August). *Evaluating measurement invariance with censored ordinal data: A Monte Carlo comparison of alternative model estimators and scales of measurement*. Poster presented at the American Psychological Association annual meeting, San Diego, CA.
- [3] Glover, T. A., Bovaird, J. A., **Koziol**, N. A., Glenn, B., & Chumney, F. (2010, August). *School psychology intervention research: Methodological considerations with implications for practice*. Poster presented at the American Psychological Association annual meeting, San Diego, CA.
- [2] **Koziol**, N. A., & Bovaird, J. A. (2010, April). *Evaluating complementary structural models of dynamic change: Latent differences versus piecewise growth*. Paper presented in roundtable format at the American Educational Research Association annual meeting, Denver, CO.
- [1] **Koziol**, N. A., & Bovaird, J. A. (2009, August). *Using experimental designs to evoke construct validity evidence*. Poster presented at the American Psychological Association annual meeting, Toronto, Canada.

#### REFEREED PRESENTATIONS: REGIONAL/LOCAL CONFERENCES (4 first author)

- [10] Choi, D., & **Koziol**, N. (2022, April). *Longitudinal invariance of parental involvement in school*. Poster presented at the CYFS Summit on Research in Early Childhood, Lincoln, NE.
- [9] **Koziol**, N. A., Butera, C. D., Kretch, K. S., Harbourne, R. T., Lobo, M. A., McCoy, S. W., Hsu, L.-Y., Willett, S. L., Kane, A. E., Bovaird, J. A., & Dusing, S. C. (2022, April). *Caregiver-provided learning opportunities boost intervention effects for infants with neuromotor delays*. Ignite session presentation at the CYFS Summit on Research in Early Childhood, Lincoln, NE.
- [8] Sheridan, S., Knoche, L., **Koziol**, N., & Witte, A. (2022, April). *Closing gaps for children in poverty: The role of play*. Research exchange session presentation at the CYFS Summit on Research in Early Childhood, Lincoln, NE.
- [7] Goodrich, J. M., & **Koziol**, N. (2020, April). *Examining differential item functioning across English and Spanish-adapted mathematics assessments?* Oral presentation accepted for the CYFS Summit on Research in Early Childhood, Lincoln, NE. (Conference cancelled due to COVID-19 pandemic).
- [6] Schumacher, R. E., Kerby, H. M., Sheridan, S. M., Witte, A. L., Knoche, L., & **Koziol**, N. (2020, April). *Family-school partnerships during the transition into kindergarten: Does geography matter?* Poster accepted for presentation at the CYFS Summit on Research in Early Childhood, Lincoln, NE. (Conference cancelled due to COVID-19 pandemic).
- [5] **Koziol**, N., Bandeira, D., Hawley, L., Mendonça Filho, E., & Silva, M. (2018, April). *Development*

*of the Dimensional Inventory for Child Development Assessment*. Poster presented at the CYFS Summit on Research in Early Childhood, Lincoln, NE.

- [4] Raikes, A., **Koziol**, N., & Davis, D. (2018, April). *Evidence for using school readiness measures in sub-Saharan Africa*. Poster presented at the CYFS Summit on Research in Early Childhood, Lincoln, NE.
- [3] Sheridan, S., Knoche, L., **Koziol**, N., Witte, A., Mackintosh, B., Iruka, I., Bovaird, J., DeKraai, M., & Walther, J. (2018, April). *Preschool profile in urban/rural Nebraska: Preliminary findings from network research*. Presented at the CYFS Summit on Research in Early Childhood, Lincoln, NE.
- [2] **Koziol**, N. A. (2007, March). *Linear discrimination of sexual offenders in relation to recidivism rates*. Poster presented at the 27<sup>th</sup> Annual Great Plains Students' Psychology Convention, Wichita, KS.

\*Received 2<sup>nd</sup> place poster.

- [1] **Koziol**, N. A. (2006, November). *The interaction of Greek affiliation, gender, and binge drinking in relation to alcohol, drug, and condom use prior to sexual activities*. Poster presented at the 7<sup>th</sup> Biennial Joint PERK/NPS Convention, Hays, KS.

#### NON-REFEREED PRESENTATIONS: FUNDING AGENCY MEETINGS

- [4] Lawrence, E. L., Valero-Cuevas, E. J., Reid, N. K., Chen, J., **Koziol**, N. A., & Valero-Cuevas, F. J. (2023, February). Training leg dexterity while seated enhances standing balance and postural control more than strength and endurance training alone. NASA Human Research Program Investigators' Workshop, "To the Moon: The Next Golden Age of Human Spaceflight," Galveston, TX.
- [3] Sheridan, S., Knoche, L., Iruka, I., Witte, A., **Koziol**, N., Dekraai, M., & Bovaird, J. (2019, January). *Trajectories for children in rural and urban Nebraska*. Presented at the Institute of Education Sciences Early Learning Network meeting, Washington, DC.
- [2] Bandeira, D. R., Silva, M. A., Mendonca Filho, E. J., **Koziol**, N. A., & Hawley, L. (2018, May). *Development and Validation of the Inventario Dimensional de Avaliacao do Desenvolvimento Infantil (IDADI; Dimensional Inventory for Child Development Assessment)*. Presented at the University of Nebraska-Lincoln/Brazil Early Childhood Partnership Research luncheon, Lincoln, NE.
- [1] Sheridan, S., Knoche, L., Iruka, I., Witte, A., Dekraai, M., Bovaird, J., **Koziol**, N. A., Mackintosh, B. (2018, January). *Learning frontiers PreK to grade 3*. Presented at the Institute of Education Sciences Early Learning Network meeting, Omaha, NE.

#### NON-REFEREED PRESENTATIONS: REGIONAL/LOCAL CONFERENCES (1 first author)

- [2] Witte, A. L., Sheridan, S. M., Knoche, L. L., **Koziol**, N. A., Schumacher, R. E., Kerby, H. M., & Iruka, I. U. (2018, October). *The Early Learning Network: Overview and preliminary findings from urban and rural Nebraska*. Poster presented at the CEHS Research Showcase, University of Nebraska-Lincoln, Lincoln, NE.
- [1] **Koziol**, N. A. (2008, April). *The relationship between childhood maltreatment and subsequent decreased marital satisfaction: Does spousal affect have a mediating role?* Poster presented at the 2008 Undergraduate Research Conference, Lincoln, NE.

#### NON-REFEREED PRESENTATIONS: LOCAL DEPARTMENT SEMINARS (7 first author)

- [7] **Koziol**, N. (2023, March). *Grant writing*. Presented at the MAP Academy Undergraduate and Graduate Training Seminar, Nebraska Academy for Methodology, Analytics and Psychometrics, University of Nebraska-Lincoln, Lincoln, NE.

- [6] **Koziol, N. A.** (2018, October). *Investigation of the alignment method for testing measurement invariance with complex probability sampling designs*. Presented to the Department of Educational Psychology, University of Nebraska–Lincoln, Lincoln, NE.
- [5] **Koziol, N. A., Bovaird, J. A., & Lee, H.** (2015, December). *A comparison of population-averaged and cluster-specific approaches in the context of unequal probabilities of selection*. Presented to the Department of Educational Psychology, University of Nebraska–Lincoln, Lincoln, NE.
- [4] **Koziol, N. A., & Bilder, C. R.** (2013, April). *MRCV: A package for analyzing the association among categorical variables with multiple response options*. Presented to the Departments of Statistics and Educational Psychology, University of Nebraska–Lincoln, Lincoln, NE.
- [3] **Koziol, N. A., & Templin, J.** (2012, April). *Quantifying the impact of misusing examinee latent variable estimates in item response models*. Presented to the Department of Educational Psychology, University of Nebraska–Lincoln, Lincoln, NE.
- [2] **Koziol, N. A., & Bovaird, J. A.** (2010, September). *Evaluating measurement invariance with censored ordinal data: A Monte Carlo comparison of alternative model estimators and scales of measurement*. Presented to the Department of Educational Psychology, University of Nebraska–Lincoln, Lincoln, NE.
- [1] **Koziol, N. A., & Bovaird, J. A.** (2009, December). *Using experimental designs to evoke construct validity evidence*. Presented to the Department of Educational Psychology, University of Nebraska–Lincoln, Lincoln, NE.

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## MEDIA

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### INTERVIEWS

- [2] Willett, S., **Koziol, N. A.**, Garcia, S. M., & Cunha, A. B. (2023, June). Invited interview for the *Pediatric Physical Therapy* YouTube Channel. “START-Play Physical Therapy Intervention Blends Motor With Cognitive Development.”
- [1] **Koziol, N. A.**, Harbourne, R. T., & Dusing, S. C. (2021, October). Invited interview with the University of Nebraska-Lincoln’s 90.3 KRNU Radio re: “Evaluation of the Efficacy of a Physical Therapy Intervention Targeting Sitting and Reaching for Young Children With Cerebral Palsy” (R01HD101900).

### NEWS RELEASES CITING RESEARCH

- [11] Green, C. (2024, January). “Grand Challenges project aims to strengthen early childhood workforce.” *Nebraska Today*. <https://news.unl.edu/newsrooms/today/article/grand-challenges-project-aims-to-strengthen-early-childhood-workforce/>
- [10] Green, C. (2023, December). “Nebraska WORDS targets post-pandemic reading success, educator growth.” *Nebraska Today*. <https://news.unl.edu/newsrooms/today/article/nebraska-words-targets-post-pandemic-reading-success-educator-growth/>
- [9] Green, C. (2021, October). “Nebraska joins national study on infant, toddler cerebral palsy interventions.” *Nebraska Today*. <https://news.unl.edu/newsrooms/today/article/nebraska-joins-national-study-on-infant-toddler-cerebral-palsy-interventions/>
- [8] Ludvik, D. (2020, June). “Brazil early childhood research partnership continues to thrive.” <https://news.unl.edu/newsrooms/today/article/brazil-early-childhood-research-partnership-continues-to-thrive/>
- [7] Ludvik, D. (2020, June). “Tool uses cultural lens to evaluate young children’s development.” *Nebraska Today*. <https://news.unl.edu/newsrooms/today/article/tool-uses-cultural-lens-to-evaluate-young-children-s-development/>

- [6] Green, C. (2020, January). "Research seeks to boost STEM proficiency in Latino youth." *Nebraska Today*. <https://news.unl.edu/newsrooms/today/article/research-seeks-to-boost-stem-proficiency-in-latino-youth/>
- [5] Buck, K. (2019, July). "Project explores how visually impaired children are taught to write." *Nebraska Today*. <https://news.unl.edu/newsrooms/today/article/project-explores-how-visually-impaired-children-are-taught-to-write/>
- [4] Green, C. (2019, March). "Abrica examines STEM pathways in community college." *Nebraska Today*. <https://news.unl.edu/newsrooms/today/article/abrica-examines-stem-pathways-in-community-college/>
- [3] Green, C. (2017, December). "Researchers examine global tools that measure childhood learning." *Nebraska Today*. <https://news.unl.edu/newsrooms/today/article/researchers-examine-global-tools-that-measure-childhood-learning/>
- [2] Green, C. (2017, July). "Huskers create tools to aid in developmental diagnoses." *Nebraska Today*. <https://news.unl.edu/newsrooms/today/article/huskers-create-tools-to-aid-in-developmental-diagnoses/>
- [1] Amen, A. (2015, June). "Research team awarded national 4-H grant." *Nebraska Today*. <https://news.unl.edu/newsrooms/unltoday/article/research-team-awarded-national-4-h-grant/>

## HONORS AND AWARDS

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2023	Toby Long Award for best paper published in 2023 in the Pediatric Physical Therapy Journal, " <i>START-Play physical therapy intervention indirectly impacts cognition through changes in early motor-based problem-solving skills</i> " (lead author)
2023	3 <sup>rd</sup> Place Central Region Winner, Program Excellence Through Research, <i>Cultivating Healthy Intentional Mindful Educators (CHIME)</i> (team member), National Extension Association of Family & Consumer Sciences Annual Awards Program
2022	Chattanooga Research Award for a team whose published work in Physical Therapy & Rehabilitation Journal, " <i>START-Play physical therapy intervention impacts motor and cognitive outcomes in infants with neuromotor disorders: A multisite randomized clinical trial</i> " (co-author), presents innovative study or a theoretical model and discussion of its impact on future clinical practice or physical therapy research
2022	Gayle G. Arnold Award for Best Scientific Paper, " <i>Early versus late reaching mastery's effect on object permanence in infants with motor delays receiving START-Play and Usual Care-Early Intervention</i> " (co-author), presented at the 76 <sup>th</sup> Annual Meeting of the American Academy for Cerebral Palsy and Developmental Medicine, \$2,000 honorarium
2021	Toby Long Award for best paper published in 2021 in the Pediatric Physical Therapy Journal, " <i>A Novel Means-End Problem-Solving Assessment Tool for Early Intervention: Evaluation of Validity, Reliability, and Sensitivity</i> " (co-author)
2019	Gayle G. Arnold Award for Best Scientific Paper, " <i>Efficacy of the START-Play Program for Infants with Neuromotor Disorders: Cognitive Outcomes</i> " (co-author), presented at the 73 <sup>rd</sup> Annual Meeting of the American Academy for Cerebral Palsy and Developmental Medicine, \$2,000 honorarium
2011 – 2013	GAANN Fellowship, University of Nebraska–Lincoln, full tuition and stipend
2011	John & Elaine Bath Fellowship, University of Nebraska–Lincoln, \$750
2011	Folsom Distinguished Master's Thesis Award, University of Nebraska–Lincoln

2010	AERA Division D Student Travel Award, \$1,000
2009	APA Student Travel Award, \$300
2008 – 2010	Chancellor’s Fellowship, University of Nebraska–Lincoln, \$4,000/year
2008	Chancellor’s Scholar: Completion of Degree with a Perfect Cumulative Grade Point Average, University of Nebraska–Lincoln
2008	Harry K. Wolfe Award: Most Outstanding Senior Psychology Major, University of Nebraska–Lincoln
2007 – 2008	Undergraduate Creative Activities and Research Experiences (UCARE) grant, University of Nebraska–Lincoln, \$2,000
2007	Great Plains Student Psychology Convention, Undergraduate Empirical Poster Presentation, 2 <sup>nd</sup> place poster
2005 – 2008	Phi Beta Kappa, Psi Chi, and Alpha Lambda Delta National Honor Societies
2004 – 2008	Nebraska Top Scholar, University of Nebraska–Lincoln, \$1,500/year
2004 – 2008	Regents Scholar, University of Nebraska–Lincoln, full tuition
2004 – 2008	Honors Program, University of Nebraska–Lincoln, full textbook scholarship

## SERVICE

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### COURSE INSTRUCTOR

2018, Spring	EDPS 859 (graduate): Statistical Methods, University of Nebraska–Lincoln.
2011, Spring/Fall	EDPS 459 (undergraduate): Statistical Methods, University of Nebraska–Lincoln.

### GUEST LECTURER

2017, Spring	“Analysis of Complex Survey Data: Sampling, Survey Weights, and Robust Estimation (Part II).” EDPS 991 (graduate): Advanced Modeling, University of Nebraska–Lincoln. J. Bovaird, Instructor.
2017, Spring	“Evaluating Models: Identification, Fit, and Comparison.” EDPS 971 (graduate course): Structural Equation Modeling, University of Nebraska–Lincoln. J. Bovaird, Instructor.
2014, Spring	“Overview of Secondary Datasets.” EDPS 995 (graduate course): Doctoral Seminar, University of Nebraska–Lincoln. S. Sheridan, Instructor.

### TEACHING ASSISTANT

2011, Summer	“Item Response Theory.” Interuniversity Consortium for Political and Social Research (ICPSR) Summer Institute Workshop, University of Michigan. J. Templin, Instructor.
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### METHODOLOGY TRAINING SPEAKER

- [7] Sheridan, S., & **Koziol**, N. (2021, July). *Cost & cost-effectiveness analyses: What, why and how?* Session 5 of the Nebraska Center for Research on Children, Youth, Families and Schools’ 2021 IES Grant Essentials Series, University of Nebraska–Lincoln, Lincoln, NE.  
<http://cyfs.unl.edu/resources/video-library-page.php?id=396a4805eee8dc52b17f056c88c02af4>  
 Role: Led presentation and materials
- [6] **Koziol**, N. A. (2021, June). *A practical introduction to cost and cost-effectiveness analysis in the social sciences*. Invited virtual workshop presented to the School of Education and College of

Humanities and Sciences, Virginia Commonwealth University.

- [5] **Koziol, N. A.** (2020, February). *Pursuing causal inferences in the absence (or failure) of random assignment: An introduction to propensity score analysis*. Speaker for the Methodology Applications Series, Nebraska Academy for Methodology, Analytics & Psychometrics, University of Nebraska–Lincoln. <https://mapacademy.unl.edu/training/video-presentations-page.php?id=8afd5f63c6821c6cf91c7369f22b562b>
- [4] Wheeler, L., & **Koziol, N. A.** (2020, February). *Accessing and using publicly available datasets*. Speaker for the NAECR Knowledge Series, Nebraska Academy for Early Childhood Research, University of Nebraska–Lincoln. <https://cyfs.unl.edu/resources/video-library-page.php?id=c1b207fbb69399a249944aea88109622>  
Role: Co-led presentation and materials
- [3] **Koziol, N. A.** (2017, September). *An introduction to cost-effectiveness and benefit-cost analyses in education research*. Speaker for the Methodology Applications Series, Nebraska Academy for Methodology, Analytics & Psychometrics, University of Nebraska–Lincoln. <https://mapacademy.unl.edu/training/video-presentations-page.php?id=cbeddaf4798e794116109e333a3d6e12>
- [2] **Koziol, N. A.** (2014, December). *Analyzing data from complex sampling designs: An overview and illustration*. Speaker for the Methodology Applications Series, Nebraska Academy for Methodology, Analytics & Psychometrics, University of Nebraska–Lincoln. <https://mapacademy.unl.edu/training/video-presentations-page.php?id=5230dbcc8948aeb09444ba528abab8ce>
- [1] **Koziol, N. A.**, & Arthur, A. M. (2011, December). *An introduction to secondary data analysis*. Speaker for the Methodology Applications Series, Nebraska Academy for Methodology, Analytics & Psychometrics, University of Nebraska–Lincoln. <https://mapacademy.unl.edu/training/video-presentations-page.php?id=d2b184c528399f3aefe2c91b01714681>

#### DOCTORAL COMMITTEE MEMBER

- [4] Rebecca Molinini, Physical Therapy, Rehabilitation and Movement Science, Virginia Commonwealth University (completed 2023)
- [3] Jayden Nord, Educational Psychology, Quantitative, Qualitative, and Psychometric Methods, University of Nebraska–Lincoln (completed 2023)
- [2] Paul Dizona, Educational Psychology, Quantitative, Qualitative, and Psychometric Methods, University of Nebraska–Lincoln (completed 2022)
- [1] Hannah Kerby, Educational Psychology, School Psychology, University of Nebraska–Lincoln (completed 2022)

#### MASTER'S COMMITTEE MEMBER

- [1] Tom Choi, Educational Psychology, Quantitative, Qualitative, and Psychometric Methods, University of Nebraska–Lincoln (completed 2022)

#### OTHER UNIVERSITY COMMITTEES

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|-------------|--|
| 2023        | Committee Member: Staff Search Committee, MAP Academy            |
| 2023        | Committee Member: Postdoctoral Search Committee, MAP Academy     |
| 2020 – 2021 | Committee Member: Strategic Planning Workgroup, CYFS             |
| 2020        | Chair: Annual Evaluation Review Committee, CYFS                  |
| 2019        | Committee Member: Research Faculty Search Committee, MAP Academy |
| 2019        | Committee Member: Annual Evaluation Review Committee, CYFS       |

2019 – present	Chair: Methodology Application Series Training Committee, MAP Academy
2018 – 2019	Committee Member: Data Subcommittee, CYFS
2018	Committee Member: Database Developer & Analyst Search Committee, CYFS
2017 – 2019	Committee Member: Data Management Committee, CYFS
2015 – 2016	Outside Faculty Rater: Institute for International Teaching Assistants, UNL

#### PARTICIPATION IN PROFESSIONAL AND GOVERNMENTAL ORGANIZATIONS

2022 – present	Coordinating Officer and Secretary (Appointed); American Psychological Association, Division 5, Executive Committee
2021	Member; American Academy for Cerebral Palsy and Developmental Medicine
2019 – present	Senator (Elected by department): Faculty Senate, UNL
2020	Chair (Appointed): American Psychological Association, Division 5, Annual Meeting Program Committee
2018 – present	Member; American Educational Research Association, Division D: Measurement and Research Methodologies
2018 – present	Member; American Psychological Association, Division 5: Quantitative and Qualitative Methods
2010	Student Representative (Appointed): American Psychological Association, Division 5, Annual Meeting Program Committee

#### PANEL REVIEWER: FEDERAL GRANT PROPOSALS AND REPORTS

2021 – 2025	Principal Member (Invited): Institute of Education Sciences' Social and Behavioral Education Research Peer Review Panel
2021	Panel Member (Invited): National Center for Education Evaluation and Regional Assistance Report Review Panel
2020	Panel Member (Invited): Institute of Education Sciences' Social and Behavioral Education Research Peer Review Panel

#### AD HOC REVIEWER: SCHOLARLY JOURNALS (2013-PRESENT)

*Children and Youth Services Review*  
*Community Development*  
*Educational and Psychological Measurement*  
*Infant Behavior and Development*  
*Journal of Educational and Behavioral Statistics*  
*Journal of Educational Measurement*  
*Journal of Early Childhood Research*  
*Journal of Experimental Education*  
*Journal of School Improvement*  
*Journal of Survey Statistics and Methodology*  
*Psicológica; Statistics and Its Interface*  
*Structural Equation Modeling – A Multidisciplinary Journal*  
*Survey Research Methods*  
*The Journal of Educational Research*

#### REVIEWER: BOOK CHAPTERS



- 2019 *Basic elements of survey research in education: Addressing the problems your advisor never told you about*, edited by Ulemu Luhanga and Gregg Harbaugh, Information Age Publishing (Chapter 3, Chapter 16)
- 2017 *Qualitative secondary research: A step-by-step guide*, by Claire Largen and Theresa Morris, SAGE Publishing (Chapters 1-4)

**REVIEWER: CONFERENCE PROPOSALS (2015-PRESENT)**

American Educational Research Association (AERA)  
Division D: Measurement and Research Methodologies

American Psychological Association (APA)  
Division 5: Quantitative and Qualitative Methods

**OTHER RESEARCH AND WORK EXPERIENCE**

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- 2014 – 2015 Graduate Research Assistant  
Nebraska Center for Research on Children, Youth, Families & Schools  
University of Nebraska–Lincoln
- 2014 Statistical Consultant  
Alpine Testing Solutions, Inc.  
Orem, UT
- 2012 – 2013 Statistical Consultant  
Nebraska Department of Health and Human Services  
Lincoln, NE
- 2009 – 2014 Graduate Research Assistant  
National Center for Research on Rural Education (R<sup>2</sup>Ed)  
University of Nebraska–Lincoln
- 2008 – 2009 Graduate Assistant  
Buros Center for Testing  
University of Nebraska–Lincoln