

ROBERT J. DUNCAN

Human Development and Family Studies
Colorado State University
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ACADEMIC POSITIONS

- 2024-current Associate Professor in the Department of Human Development & Family Studies, Colorado State University
- 2024-current Adjunct Associate Professor in the Department of Human Development & Family Science, Purdue University
- 2017-2024 Assistant Professor in the Department of Human Development & Family Science, Purdue University
- 2017-2024 Assistant Professor in the Department of Public Health (formerly the Public Health Graduate Program; became Courtesy Faculty in 2024), Purdue University
- 2015-2017 IES Postdoctoral Fellow for the Irvine Network on Interventions in Development, School of Education, University of California, Irvine (Advisors: Greg J. Duncan, Deborah Lowe Vandell)

EDUCATION

- 2015 Ph.D. Human Development and Family Studies, Oregon State University
Dissertation: Early Predictors of Academic Achievement and Externalizing Problems for Children in Low-Income Families; Committee: Megan M. McClelland (Chair), Alan Acock, Adam Branscum, Shannon Lipscomb, G. John Geldhof
- 2015 Master of Public Health, Oregon State University
Concentration: Biostatistics; Internship: Oregon Department of Education (Preceptor: Steve Slater); Committee: Adam Branscum (Chair), Alan Acock, Andrés Houseman
- 2012 M.S. Human Development and Family Studies, Oregon State University
Thesis: Measures of Executive Function: Convergent Validity and Links to Academic Achievement in Preschool; Committee: Megan M. McClelland (Chair), Alan Acock, Leslie Richards
- 2009 B.S. in Psychology, minor in Education, Cum Laude, University of Florida

RESEARCH FOCUS

As a trained developmental methodologist and biostatistician, my research program primarily focuses on using advanced quantitative methods to understand the role of early life experiences and children's skill development. I am particularly interested in how children's early interactions with adults (e.g., conversational turns, stimulating and responsive caregiving) in the home and early educational contexts

shape their development of language, executive function, literacy, and mathematics skills. Additionally, my quantitative expertise is primarily in longitudinal and multilevel modeling, structural equation modeling, and causal inference.

PUBLICATIONS

Mentored ¹undergraduate student, ²graduate student, ³postdoctoral scientist on publication
 Google Scholar page: <https://scholar.google.com/citations?user=BhbUbrwAAAAJ&hl=en>

67. Geer³, E., Devlin³, B. L., Zehner², T., Korucu³, I., Bryant², L. M., Purpura, D. J., **Duncan, R. J.**, & Schmitt, S. A. (In Press). Does executive function moderate the spatial-math link in preschoolers? *Journal of Experimental Child Psychology*.
66. Nordgren², I., Turman, J., Greenberg, J. M., Kester, K., MacDermid Wadsworth, S., & **Duncan, R. J.** (In Press). Improving states' infant and family health equity through equitable housing. *NCFR Policy Brief*.
65. King², Y. A., Eason, S. H., **Duncan, R. J.**, Borovsky, A., & Purpura, D. J. (2025). The factor structure of parents' math-related talk and its relation to children's early academic skills. *Child Development*. <https://doi.org/10.1111/cdev.14244>
64. Ehrman², P., Eason, S. H., **Duncan, R. J.**, Elicker, J., Schmitt, S., & Purpura, D. J. (2025). Profiles of mathematics learners: Mathematical and non-mathematical classifiers. *Learning and Individual Differences*, 120, 102664. <https://doi.org/10.1016/j.lindif.2025.102664>
63. Marceau, K., Lee³, Y., Loviska², A., Robertson³, O. C., & **Duncan, R. J.** (2025). Examining associations between monitoring-related parenting phenotypes and youth externalizing using a Discordant Sibling Random Intercept Cross Lagged Panel Model. *Child Development*. In Principle Acceptance for Stage 1 Registered Report.
62. Mendoza², I. D., **Duncan, R. J.**, & Moding, K. J. (2025). Longitudinal associations between parental screen time monitoring, screen time exposure, diet, and body mass index in young U.S. children. *Journal of Children and Media*, 1-17. <https://doi.org/10.1080/17482798.2025.2450637>
61. Schmitt, S.A., Purpura, D. J., **Duncan, R. J.**, Bryant, L. M., Zehner, T. M., Devlin, B. L., Geer, E.A., Paes, T. M. (2025). Testing block play as an effective mechanism for promoting early math, executive function, and spatial skills in preschoolers from low-income backgrounds. *Early Childhood Research Quarterly*, 71, 163-173. <https://doi.org/10.1016/j.ecresq.2024.12.011>
60. Ramer², J. D., Marquez, D. X., DuBois, D. L., **Duncan, R. J.**, Bustamante, A. S., Vandell, D. L., & Bustamante, E. E. (2025). Childhood predictors of high school sport participation and effects of participation on young adult activity and mental health. *Annals of Medicine*, 57, 2447905. <https://doi.org/10.1080/07853890.2024.2447905>
59. **Duncan, R. J.**, Nordgren², I., Schmitt, S. A., & Vandell, D. L. (2024). Additive and synergistic relations of early mother-child and caregiver-child interactions and socioeconomic outcomes in adulthood (Registered Report). *Infant and Child Development*, 33, e2406. <http://doi.org/10.1002/icd.2406>

58. Bryant², L. M., **Duncan, R. J.**, Purpura, D. J., Banda, J. A., Elicker, J., & Schmitt, S. A. (2024). Testing longitudinal relations among preschool sport and kindergarten executive function and academic outcomes. *Journal of Child and Family Studies*, 33, 835-848. <https://doi.org/10.1007/s10826-023-02671-4>
57. Laily², A., **Duncan, R. J.**, Gabhart, K. M., Nephew, L. D., Christy, S. M., Vadaparampil, S. T., Giuliano, A. R., & Kastings, M. K. (2024). Differences in provider Hepatitis C Virus screening recommendations by patient risk status. *Preventive Medicine Reports*, 38, 102602. <https://doi.org/10.1016/j.pmedr.2024.102602>
56. McCall², C., **Duncan, R. J.**, MacDermid Wadsworth, S., & Gallardo, R. (2024). Reducing the digital divide for families: State and local policy opportunities. *NCFR Policy Brief*, 9, 1-7. <https://www.ncfr.org/system/files/2024-07/Reducing%20the%20Digital%20Divide%20for%20Families%20Brief%20July%202024.pdf>
55. Najmussaib², A., Mushtaq, A., & **Duncan, R. J.** (2024). Effectiveness of Fun FRIENDS on social emotional functioning of Pakistani school children. *Journal of Applied Developmental Psychology*, 93, 101675. <https://doi.org/10.1016/j.appdev.2024.101675>
54. Paes³, T. M., Lin, J., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. (2024). The relations between parent–educator communication, the home environment, and children’s outcomes in preschool. *Child & Youth Care Forum*, 53, 1061-1079. <https://doi.org/10.1007/s10566-023-09785-2>
53. Devlin³, B. L., Ellis, A., Zehner, T. M., **Duncan, R. J.**, Elicker, J. G., Purpura, D. J., & Schmitt, S. A. (2024). Contributions of preschool behavioral self-regulation and social skills to growth in different domains of early math knowledge. *Journal of Experimental Child Psychology*, 241, 105867. <https://doi.org/10.1016/j.jecp.2024.105867>
52. Devlin³, B. L., Geer, E. A., Finders, J., Zehner, T. M., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2024). Individual differences in executive functions for preschoolers from low-income backgrounds: Associations of profiles with pre-academic skills. *Learning and Individual Differences*, 114, 102498. <https://doi.org/10.1016/j.lindif.2024.102498>
51. Zehner², T., Paes, T., Devlin B., Geer, E., Posada, G., **Duncan, R. J.**, Purpura D. J., Schmitt, S. A. (2024). Social-emotional competence as a predictor of early numeracy skills. *Early Education and Development*, 35, 1695-1711. <https://doi.org/10.1080/10409289.2024.2360878>
50. **Duncan, R. J.**, Anderson², K. L., King, Y. A., Finders, J. K., Schmitt, S. A., & Purpura, D. J. (2023). Predictors of preschool language environments and their relations to children’s vocabulary. *Infant and Child Development*, 32, e2381. <https://doi.org/10.1002/icd.2381>
49. **Duncan, R. J.**, Anderson², K. L., Finders, J. K., Purpura, D. J., & Schmitt, S. A. (2023). Factor structure of school readiness skills: Conceptual versus statistical distinctions. *Frontiers in Psychology*, 14, 962651. <https://doi.org/10.3389/fpsyg.2023.962651>
48. **Duncan, R. J.**, Korucu², I., & Schmitt, S. A. (2023). Variations in home environment quality during the first five years and children’s achievement. *Journal of Applied Developmental Psychology*, 85, 101500. <https://doi.org/10.1016/j.appdev.2022.101500>

47. Finders³, J., F., **Duncan, R. J.**, Purpura, D. J., Elicker, J., & Schmitt, S. A. (2023). Testing theoretical explanations for heterogeneity in associations between a state Quality Rating and Improvement System and prekindergarten children's academic performance. *Contemporary Educational Psychology*, *73*, 102174. <https://doi.org/10.1016/j.cedpsych.2023.102174>
46. Paes³, T. M., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2023). The relations between teacher-child relationships in preschool and children's outcomes in kindergarten. *Journal of Applied Developmental Psychology*, *86*, 101534. <https://doi.org/10.1016/j.appdev.2023.101534>
45. Finders, J. K., Wilson¹, E., & **Duncan, R. J.** (2023). Early childhood education language environments: Considerations for research and practice. *Frontiers in Psychology*, *14*, 1202819. <https://doi.org/10.3389/fpsyg.2023.1202819>
44. Schmitt, S. A., Paes³, T. M., **Duncan, R. J.**, & Vandell, D. L. (2023). Early cumulative risk and outcomes in adolescence and adulthood: The role of executive function and behavioral regulation. *Developmental Psychology*, *59*(11), 1988–2001. <https://doi.org/10.1037/dev0001647>
43. Ellis³, A., Cosso, J., **Duncan, R.J.**, Susperreguy, M.I., Simms, V., & Purpura, D.J. (2023). International comparisons of the home mathematics environment and relations with children's mathematical achievement. *British Journal of Educational Psychology*, *93*, 1171-1187. <https://doi.org/10.1111/bjep.12625>
42. Nair², N. Bellamy¹, L., **Duncan, R. J.**, Settersten, R. A., Normandin, H., & MacDermid Wadsworth, S. (2023). Tackling housing concerns at the state-level: Lessons from Family Impact Seminars. *NCFR Policy Brief*, *8*, 1-8. <https://www.ncfr.org/policy/research-and-policy-briefs/tackling-housing-concerns-state-level-1>
41. Cosso², J., Finders, J. K., **Duncan, R. J.**, Schmitt, S. A., & Purpura, D. J. (2023). The home numeracy environment and children's math skills: The moderating role of parents' math anxiety. *Journal of Experimental Child Psychology*, *105578*. <https://doi.org/10.1016/j.jecp.2022.105578>
40. Li¹, C., Hart², E. R., **Duncan, R. J.**, Watts, T. W. (2023). Bi-directional relations between behavioral problems and executive function: Assessing the longitudinal development of self-regulation. *Developmental Science*, *26*, e13331. <https://doi.org/10.1111/desc.13331>
39. Keskin², G. Lougheed, J. P., & **Duncan, R. J.** (2023). Within- and between-person associations among internalizing and externalizing problems during middle childhood. *Social Development*, *32*, 889-904. <https://doi.org/10.1111/sode.12660>
38. Korucu³, I., Paes, T. M., Costello, L., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2023). The role of peers' executive function and classroom quality in preschoolers' school readiness. *Journal of Applied Developmental Psychology*, *86*, 101532. <https://doi.org/10.1016/j.appdev.2023.101532>
37. Schmitt, S. A., Elicker, J. G., Purpura, D. J., **Duncan, R. J.**, Schmerold, K. Budrevich, A., & Bryant, L. M. (2023). The effects of a high quality state-funded preschool as rated by a Quality Rating and Improvement System on children's school readiness. *Early Childhood Research Quarterly*, *62*, 89-101. <https://doi.org/10.1016/j.ecresq.2022.07.013>
36. Zhou, X., Shein, B. W., Khalil, A., & **Duncan, R. J.** Parent and child adjustment dual-trajectories at the beginning of the COVID-19 syndemic. (2023). *Family Process*, *62*, 352-367. <https://doi.org/10.1111/famp.12761>

35. Devlin, D. L., Paes, T. M., Geer, E. A., Bryant, L. M., Zehner, T. M., Korucu, I., Morse, K. E., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2023). Moving beyond dosage and adherence: A four-step protocol for capturing dimensions of young children's engagement as a measure of implementation fidelity of social-emotional learning interventions. *Frontiers in Psychology, 13*, 1014713. <https://doi.org/10.3389/fpsyg.2022.1014713>
34. Bryant², L. M., **Duncan, R. J.**, Marceau, K., & Schmitt, S. A. (2022). Examining longitudinal associations between internalizing problems, body mass index, and language during childhood. *Developmental Psychology, 58*, 2114-2126. <https://doi.org/10.1037/dev0001426>
33. Loughheed, J. P., **Duncan, R. J.**, Keskin, G., & Marceau, K. (2022). Longitudinal associations between mother-child conflict and child internalizing problems in mid-childhood. *Development and Psychopathology, 34*, 263-272. <https://doi.org/10.1017/S0954579420000863>
32. Robertson², O. C., Marceau, K., **Duncan, R. J.**, Shirtcliff, E. A., Natsuaki, N. M., Shaw, D. S., Reiss, D., Leve, L. D., Neiderhiser, J. M., Ganiban, J. M. (2022). Prenatal programming of developmental trajectories for obesity risk and early pubertal timing. *Developmental Psychology, 58*, 1817-1831. <http://dx.doi.org/10.1037/dev0001405>
31. Becker, M., Litkowski, E. C., **Duncan, R. J.**, Schmitt, S. A., Elicker, J., & Purpura, D. J. (2022). Parents' math anxiety and mathematics performance of pre-kindergarten children. *Journal of Experimental Child Psychology, 214*, 105302. <https://doi.org/10.1016/j.jecp.2021.105302>
30. Ireland, M., Bryant, L. M., Finders, J. K., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2022). Examining associations between food insecurity, inhibitory control, and body mass index in preschoolers. *Journal of Developmental and Behavioral Pediatrics, 43*, e255-262. <https://doi.org/10.1097/DBP.0000000000001014>
29. Bryant², L. M., **Duncan, R. J.**, & Schmitt, S. A. (2021). The cognitive benefits of participating in structured sports for preschoolers. *Early Education and Development, 32*, 729-740. <https://doi.org/10.1080/10409289.2020.1799619>
28. Finders³, J. K., **Duncan, R. J.**, Korucu, I., Bryant, L. B., Purpura, D. J., & Schmitt, S. A. (2021). Examining additive and synergistic relations between preschool self-regulation and executive function skills: Predictions to academic outcomes. *Frontiers in Psychology, 12*, 721282. <https://doi.org/10.3389/fpsyg.2021.721282>
27. Finders³, J. K., Budrevich, A., **Duncan, R. J.**, Purpura, D. J., Elicker, J., & Schmitt, S. A. (2021). Variability in preschool classroom quality and children's school readiness. *AERA Open, 7*, 1-19. <https://doi.org/10.1177/23328584211038938>
26. Purpura, D. J., Litkowski, E. C., **Duncan, R. J.**, & Logan, J. A. (2021). Response to Fuson, Clements, and Sarama commentary on Litkowski, Duncan, Logan, and Purpura (2020). *AERA Open, 7*, 1-3. <https://doi.org/10.1177/23328584211027132>
25. Ramer², J. D., Houser, N. E., **Duncan, R. J.**, & Bustamante, E. (2021). Enjoyment of physical activity—not MVPA during physical education—predicts future MVPA participation and sport self-concept. *Sports, 9*, 128. <https://doi.org/10.3390/sports9090128>

24. Schmitt, S. A., Finders, J. K., **Duncan, R. J.**, Korucu, I., Bryant, L. M., Purpura, D. J., & Elicker, J. G. (2021). Exploring transactional relations between behavioral self-regulation and social-emotional functioning during the transition to kindergarten. *Developmental Psychology, 57*, 2093-2105. <https://doi.org/10.1037/dev0001266>
23. Schmitt, S. A., Geldhof, G. J., Purpura, D. J., **Duncan, R. J.**, & McClelland, M. M. (2021). Commentary on Ellis et al. (2021). *Journal of Numerical Cognition, 7*, 476-478. <https://doi.org/10.5964/jnc.7341>
22. Westerberg, L., Litkowski, E., Finders, J. K., Gerde, H. K., **Duncan, R. J.**, Schmitt, S. A., & Purpura, D. J. (2021). Concurrent predictors of science core knowledge in preschool. *Cognitive Development, 57*, 100981. <https://doi.org/10.1016/j.cogdev.2020.100981>
21. **Duncan, R. J.**, Duncan, G. J., Stanley, L., Aguilar, E., & Halfon, N. (2020). The kindergarten Early Development Instrument predicts third grade academic proficiency. *Early Childhood Research Quarterly, 53*, 287-300. <https://doi.org/10.1016/j.ecresq.2020.05.009>
20. **Duncan, R. J.**, King², Y., Finders, J. K., Elicker, J., Schmitt, S. A., & Purpura, D. J. (2020). Prekindergarten classroom language environments and children's vocabulary skills. *Journal of Experimental Child Psychology, 194*, 104829. <https://doi.org/10.1016/j.jecp.2020.104829>
19. King², Y., **Duncan, R. J.**, Posada, G., & Purpura, D. J. (2020). Construct-specific and timing-specific aspects of the home environment for children's school readiness. *Frontiers in Psychology, 11*, 1959. <https://doi.org/10.3389/fpsyg.2020.01959>
18. Litkowski³, E. C., **Duncan, R. J.**, Logan, J., & Purpura, D. J. (2020). Alignment between children's numeracy performance, the kindergarten common core state standards for math, and state level early learning standards. *AERA Open, 6*, 1-11. <https://doi.org/10.1177/2332858420968546>
17. Litkowski³, E. C., **Duncan, R. J.**, Logan, J., & Purpura, D. J. (2020). When do preschoolers learn specific mathematics skills? Mapping the development of children's early numeracy knowledge. *Journal of Experimental Child Psychology, 195*, 104846. <https://doi.org/10.1016/j.jecp.2020.104846>
16. Schmitt, S. A., **Duncan, R. J.**, Budrevich, A. & Korucu, I. (2020). Benefits of self-regulation in the context of high classroom quality for preschoolers' mathematics. *Early Education and Development, 31*, 323-334. <https://doi.org/10.1080/10409289.2019.1660555>
15. **Duncan, R. J.**, Rolan², E., Marceau, K., Lewis, K. M., Bavarian, N., DuBois, D. L., & Flay, B. (2019). Childhood protective factors and a prevention program reduce later problem behaviors. *Journal of Applied Developmental Psychology, 65*, 101063. <https://doi.org/10.1016/j.appdev.2019.101063>
14. **Duncan, R. J.**, Schmitt, S. A., & Vandell, D. L. (2019). Additive and synergistic relations of early mother-child and caregiver-child interactions for predicting later achievement. *Developmental Psychology, 55*, 2522-2533. <http://dx.doi.org/10.1037/dev0000824>
13. Nguyen², T., **Duncan, R. J.**, & Bailey, D. H. (2019). Theoretical and methodological implications of associations between executive function and mathematics in early childhood. *Contemporary Educational Psychology, 58*, 276-287. <https://doi.org/10.1016/j.cedpsych.2019.04.002>

12. Marceau, K., Abel, E., **Duncan, R.J.**, Moore, P.J., Leve, L.D., Reiss, D., ... & Ganiban, J.M. (2019). Longitudinal associations of cortisol, sleep duration, and body mass index during childhood: An adoption study. *Obesity*, *27*, 645-652. <https://doi.org/10.1002/oby.22420>
11. Cameron, C. E., Kim, H., **Duncan, R. J.**, Becker, D., & McClelland, M. M. (2019). Bidirectional and co-developing associations of cognitive, mathematics, and literacy skills during kindergarten. *Journal of Applied Developmental Psychology*, *62*, 135-144. <https://doi.org/10.1016/j.appdev.2019.02.004>
10. **Duncan, R. J.**, Schmitt, S. A., Burke, M., & McClelland, M. M. (2018). Combining a kindergarten readiness summer program with a self-regulation intervention improves school readiness. *Early Childhood Research Quarterly*, *42*, 291-300. <https://doi.org/10.1016/j.ecresq.2017.10.012>
9. Schmitt, S. A., Lewis, K. L., **Duncan, R. J.**, Korucu, I., & Napoli, A. (2018). The effects of *Positive Action* on preschoolers' social-emotional competence and health behaviors. *Early Childhood Education Journal*, *46*, 141-151. <https://doi.org/10.1007/s10643-017-0851-0>
8. **Duncan, R. J.**, McClelland, M. M., & Acock, A. C. (2017). Relations between executive function, behavioral regulation, and achievement: Moderation by family income. *Journal of Applied Developmental Psychology*, *49*, 21-30. <https://doi.org/10.1016/j.appdev.2017.01.004>
7. **Duncan, R. J.**, Washburn, I. J., Lewis, K. M., Bavarian, N., DuBois, D. L., Acock, A. C., ... Flay, B. R. (2017). Can universal SEL programs benefit universally? Effects of the Positive Action program on multiple trajectories of social-emotional and misconduct behaviors. *Prevention Science*, *18*, 214-224. <https://doi.org/10.1007/s11121-016-0745-1>
6. McClelland, M. M., Tominey, S. L., Schmitt, S. A., & **Duncan, R. J.** (2017). SEL interventions in early childhood. *Future of Children*, *27*, 33-48. <https://www.jstor.org/stable/44219020>
5. Schmitt, S. A., Geldhof, G. J., Purpura, D. J., **Duncan, R. J.**, & McClelland, M. M. (2017). Examining the relations between executive function, math, and literacy during the transition to kindergarten: A multi-analytic approach. *Journal of Educational Psychology*, *109*, 1120-1140. <https://doi.org/10.1037/edu0000193>
4. MacDonald, M., Lipscomb, S., McClelland, M., **Duncan, R. J.**, Becker, D., Anderson, K. & Kile, M. (2016). Relations of preschoolers' visual motor and object manipulation skills with executive function and social behavior. *Research Quarterly for Exercise & Sport*, *87*, 396-407. <https://doi.org/10.1080/02701367.2016.1229862>
3. Bavarian, N., **Duncan, R. J.**, Lewis, K. M., Miao, A., & Washburn, I. J. (2015). Adolescent substance use following participation in a universal drug prevention program: Examining relationships with program recall and baseline use status. *Substance Abuse*, *36*, 359-367. <https://doi.org/10.1080/08897077.2014.952364>
2. Becker, D., Miao, A., **Duncan, R. J.**, & McClelland, M. M. (2014). Behavioral self-regulation and executive function both predict visuomotor skills and early academic achievement. *Early Childhood Research Quarterly*, *29*, 411-424. <https://doi.org/10.1016/j.ecresq.2014.04.014>
1. McClelland, M. M., Cameron, C. E., **Duncan, R. J.**, Bowles, R. P., Acock, A. C., Miao, A., & Pratt, M. (2014). Predictors of early growth in academic achievement: The Head-Toes-Knees-Shoulders task. *Frontiers in Psychology*, *5*, 1-14. <https://doi.org/10.3389/fpsyg.2014.00599>

TECHNICAL REPORTS

- Finders, J. K., Carlson, S. L., Litkowski, E., Nordgren, I., Purcell, M., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2024). Updated Comprehensive Statewide Needs Assessment of Indiana's Early Care and Education System: Findings from Family and Educator Survey Data.
- Finders, J. K., Carlson, S. L., Litkowski, E., Nordgren, I., Purcell, M., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2024). Updated comprehensive statewide needs assessment of Indiana's Early Care and Education system.
- Kielb, E., **Duncan, R. J.**, & Kester, K. (2024). Reducing poverty and producing prosperity in Indiana. Report from the Indiana Family Impact Seminar. https://centers.purdue.edu/cff/wp-content/uploads/sites/6/2024/03/2024-INFIS-Report_FINAL_web.pdf
- Nordgren, I., **Duncan, R. J.**, Kester, K., & MacDermid Wadsworth, S. (2023). Protecting new Hoosiers and their parents. Report from the Indiana Family Impact Seminar. <https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1086&context=cffpub>
- Nair, N., MacDermid Wadsworth, S., & **Duncan, R. J.** (2022). Growing the labor force in the post-COVID era. Report from the Indiana Family Impact Seminar. https://centers.purdue.edu/cff/wp-content/uploads/sites/6/2022/08/2021-INFIS-Issue-Overview-Report_FINAL_web.pdf
- McCall, C., MacDermid Wadsworth, S., & **Duncan, R. J.** (2021). The digital divide: How does it divide Hoosiers? Report from the Indiana Family Impact Seminar. <https://centers.purdue.edu/cff/wp-content/uploads/sites/6/2021/12/2020-INFIS-Issue-Overview-Report.pdf>
- Schmitt, S. A., Litkowski, E., **Duncan, R. J.**, Elicker, J., Purcell, M., & Purpura, D. J. (2019). Indiana's Birth to Age Five Mixed Delivery System Needs Assessment. Report for the Office of Early Childhood and Out of School Learning.
- Schmitt, S. A., **Duncan, R. J.**, Purpura, D. J., Elicker, J., Finders, J., Budrevich, A., & Bryant, L. (2019). On My Way Pre-K Expansion Program Evaluation Progress Report. Report for the Office of Early Childhood and Out of School Learning.
- McClelland, M. M. & **Duncan, R. J.** (2015). Fairfax County Public School District Bridge to Kindergarten Summer 2014 and 2015 Program Evaluation.
- Galardi, T., Scholl, K., **Duncan, R. J.**, & Oregon Family Impact Seminar Team. (2015). Oregon Family Impact Seminar 2015: Two-Generation Approaches to Poverty.
- Duncan, R. J.** (2014). Kindergarten Assessment Pilot Data (2012-2013) for the Oregon Department of Education.

GRANTS

Key Personnel

- 2024-2030 Co-Investigator (David Purpura, PI; formerly PI before Purdue departure), *On My Way Prekindergarten 2024 Cohort*. State of Indiana. \$1,000,000.
- 2024-2029 Co-Principal Investigator (Sara Schmitt, PI), *An Initial Efficacy Trial of the Early Learning Matters (ELM) Curriculum*. IES R305A220205. \$3,997,929.
- 2024-2027 Training Faculty (Kristine Marceau, PI), *Interdisciplinary Summer Institute on the Analysis of Complex, Large-Scale Longitudinal Data*. NIH R25 DA061822. \$934,950.
- 2024-2026 Co-Investigator (Kristine Marceau, PI), *Improving Causal Inference for National Adolescent Substance Use Datasets*. NIH R21 DA059778. \$431,750.
- 2022-2026 Co-Investigator (Jennifer Finders and David Purpura as PIs), *Center for Early Learning State Research and Evaluation Projects on Educational Effectiveness Phase I and II*. State of Indiana. \$3,219,871.
- 2022-2025 Co-Investigator (David Purpura, PI), *STEM Ed PRF: The PURPOSE Postdoctoral Training Initiative*. NSF #2222061. \$1,250,000.
- 2023-2025 Co-Investigator (Jennifer Finders, PI), *Needs Assessment of the ECE System in Indiana: PDG B-5 Renewal Activity*. State of Indiana. \$408,626.
- 2020-2023 Co-Investigator (David Purpura, PI), *My Math Stories: Taking My Place in Our Mathematical World*. New Schools Venture Fund. \$2,000,000.
- 2020-2023 Co-Investigator (Sara Schmitt, PI), *Examining Potential Causal Connections and Mechanisms between Children's Block Play and Mathematics Learning*. NSF #2000641. \$1,347,370.
- 2018-2023 Principal Investigator (formerly Co-PI with Sara Schmitt as PI), *Evaluation of the On My Way Prekindergarten Expansion*. State of Indiana. \$1,193,243.
- 2020-2021 Principal Investigator, *Childcare Language Environments and Children's School Readiness*. Purdue Research Foundation Research Grant. \$31,119.
- 2020 Principal Investigator, *Early Childhood Language Environments and Children's Skill Development*. Purdue Research Foundation Summer Faculty Grant. \$10,400.
- 2019-2020 Principal Investigator, *Childcare Language Environments and Children's School Readiness*. Purdue Clifford B. Kinley Trust Award. \$20,000.
- 2014-2015 Principal Investigator, *Early Childhood Predictors of Later Academic and Socio-emotional Success: Using a Complex Interaction Framework*. University of Michigan Institute for Social Research James N. Morgan Fund for Complex Interactions. \$15,000.

Non-Key Personnel

- 2017-2019 Statistical Consultant (David Purpura, PI), *ISTAR-KR Enhancement Project*. State of Indiana and Early Learning Indiana. \$733,011.

2017-2018 Statistical Consultant (Sara Schmitt, PI), *Evaluation of the Indiana Early Learning Pilot Grant Program*, State of Indiana. \$1,400,607.

FELLOWSHIPS, AWARDS, and LEADERSHIP POSITIONS

2023-current LENA Community Advisory Board
 2024 Family Tree Award, Center for Families
 2022-2024 Faculty Leadership Council, Center for Early Learning
 2021-2024 Associate Director for Policy, Center for Families
 2017-2024 Core Faculty Member, Advanced Methods at Purdue
 2021-2022 Excellence in Graduate Teaching Award (Public Health)
 2019-2021 Family Policy Scholar, Center for Families
 2019-2020 Junior Fellow in the Teaching for Tomorrow Fellowship program
 2017-2018 AERA-SRCD Early Career Fellow in Early Childhood Education and Development
 2016 Society for Prevention Research conference travel award
 2013-2015 Fang Fellowship (OSU internal award)
 2013-2014 Hawthorne Fellowship (OSU internal award)
 2012-2013 Thayer Raymond Fellowship (OSU internal award)
 2009-2012 Gravatt Scholarship (OSU internal award)

TEACHING EXPERIENCE

Colorado State University

2024 Research Methods (HDFS 350)

Purdue University

2018-2024 Linear Regression (HDFS 617 or HDFS 590)
 2020-2023 Child and Family Social/Health Policy (HDFS 625 or PUBH 546 or HDFS 590)
 2018-2022 Introduction to Quantitative Methods of Public Health (PUBH 601 or HK 510)
 2020 Core Knowledge in Early Childhood Education (HDFS 590)

Oregon State University

2015 E-Campus Instructor for Child Development (HDFS 311)
 2013-2014 E-Campus Instructor for Applied Research Methods (HDFS 361)
 2013 Teaching Assistant for Applied Research Methods (HDFS 361)
 2012 Instructor for Applied Research Methods (HDFS 361)
 2010-2012 Teaching Assistant/Lab Instructor for Research I, II, and III in Human Development and Family Sciences (H524/HDFS 530-532)
 2010 Teaching Assistant for Professions in Early Childhood Education (HDFS 233)
 2009-2010 Teaching Assistant for Contemporary Families in the U.S. (HDFS 201)

MENTORSHIP

Post-Doctoral Fellows (Mentor)

1. Jasmine Ernst (HDFS – Purdue University). 2023-2025.

Ph.D. Dissertation Committee (Chair/Co-Chair)

1. Inga Nordgren (HDFS – Purdue University). In Progress.
2. Kirsten Anderson (HDFS – Purdue University). “*The Development of a Teacher-Report Measure of the Preschool Executive Function Environment*”. 2025.

Master’s Thesis Committee (Chair)

1. Sara Brown (HDFS – Purdue University). Non-Thesis Master of Science (posthumous). 2024.
2. Inga Nordgren (HDFS – Purdue University). “*Sociodemographic Characteristics and Prenatal Care: Associations with Infant Health and Postpartum Maternal Wellbeing*.” 2022.

Preliminary Exam Committee (Chair)

1. Inga Nordgren (HDFS – Purdue University). 2023.
2. Kirsten Anderson (HDFS – Purdue University). 2021.

Ph.D. Dissertation Committee (Member)

1. Can Carkoglu (HDFS – Purdue University). In Progress.
2. Elizabeth Kielb (HDFS – Purdue University). In Progress.
3. Alfu Laily (Public Health – Purdue University). In Progress.
4. Layla Claire (Public Health – Purdue University). In Progress.
5. Mrithula Suresh Babu (Public Health – Purdue University). In Progress.
6. Carly Evich (HDFS – Purdue University). “*Exploring Intersectionality in the Political Lives of Adolescents: Associations with Discrimination, Civic Beliefs, and Political Activity*.” 2024.
7. Emily Abel (HDFS – Purdue University). “*The Multifinality of Sleep in Early Development – Links to Typical Development, Attention, and Autism*.” 2022.
8. Lindsey Bryant (HDFS – Purdue University). “*Relations Between Sport Participation, Executive functioning and Academic Outcomes in Childhood*.” 2022.
9. Yemimah King (HDFS – Purdue University). “*The Factor Structure of Parents’ Math-Related Talk and Its Relation to Children’s Early Academic Skills*.” 2022.
10. Anna Shen (HDFS – Purdue University). “*Peer Relationships and Chinese Adolescents’ Academic Achievement: Processes of Selection and Influence*.” 2022.
11. Jared Ramer (Department of Kinesiology and Nutrition – University of Illinois, Chicago). “*The Longitudinal Influence of Parents on Physical Activity Enjoyment—A Vital Construct for Children’s Physical Literacy from Age 9 to 15*.” 2022.
12. Irem Korucu (HDFS – Purdue University). “*Pathways to Early School Success: Exploring the Individual and Collective Contributions of Contextual Factors and School Readiness Skills*.” 2018.

Master’s Thesis Committee (Member)

1. Patrick Ehrman (HDFS – Purdue University). “*Profiles of Mathematics Learners: Domain-Specific and Domain-General Classifiers*.” 2023.
2. Lindsey Bryant (HDFS – Purdue University). “*Physical Activity, Structured Sport Participation, and Executive Function in Preschoolers*.” 2019.
3. Yemimah King (HDFS – Purdue University). “*The association between the home numeracy environment and early math skills: Math language as a moderator*.” 2019.

4. Anna Shen (HDFS – Purdue University). “*Romance and the Psychosocial Adjustment of Indonesian Adolescents.*” 2019.

Preliminary Exam Committee (Member)

1. Mrithula Suresh Babu (Public Health – Purdue University). 2025.
2. Layla Claire (Public Health – Purdue University). 2024.
3. Patrick Ehrman (HDFS – Purdue University). 2024.
4. Alfu Laily (Public Health – Purdue University). 2024.
5. Can Carkoglu (HDFS – Purdue University). 2023.
6. Anna Shen (HDFS – Purdue University). 2020.
7. Lindsey Bryant (HDFS – Purdue University). 2019.
8. Yemimah King (HDFS – Purdue University). 2019.

PROFESSIONAL SERVICE

Editorial Board

2022-present Consulting Editor, *Developmental Psychology*
2021-present Editorial Board Member, *Journal of Applied Developmental Psychology*

Federal Grant Review Panels

2023 Administration for Children and Families
2021 Administration for Children and Families
2021 National Science Foundation Review Panel
2020 Administration for Children and Families

International Grant Review

2020 Deutsche Forschungsgemeinschaft (DFG) Grant (Germany)

Ad Hoc Journal Reviewer (since 2017)

Child Development, Developmental Psychology, Early Childhood Research Quarterly, Journal of Educational Psychology, Journal of Experimental Child Psychology, Journal of Applied Developmental Psychology, Applied Developmental Science, AERA Open, Early Education and Development, Assessment for Effective Intervention, British Journal of Developmental Psychology, British Journal of Educational Psychology, Frontiers in Psychology, Mind, Brain, and Education, Infant and Child Development, Contemporary Educational Psychology, Developmental Science

Affiliations

Society for Research in Child Development (SRCD)
American Educational Research Association (AERA)

UNIVERSITY AND DEPARTMENTAL SERVICE

Colorado State University

2024-2025 CHHS IT Advisory Committee

Purdue University

2023-2024 HHS Faculty Affairs Committee (faculty-elected position; HDFS)
 2023-2024 Assistant Professor in HDFS Search Committee (HDFS)
 2020-2024 Diversity, Equity, and Inclusion Committee (HDFS)
 2023 MPH Residential Curriculum Committee (PUBH)
 2021-2022 Family Relationships and Diversity Faculty Search Committee (HDFS)
 2021-2022 Global Health Faculty Search Committee (PUBH)
 2021-2022 Health Disparities Faculty Search Committee (PUBH)
 2021-2022 Digital Instruction Committee (HDFS)
 2020-2022 Awards Committee (PUBH)
 2020-2022 Birth to Five SEL Taskforce for Indiana’s Family and Social Services Administration
 2020-2021 Academic Graduate Committee (PUBH)
 2020 Graduate Coordinator Search Committee (PUBH)
 2020-2021 Family Diversity Faculty Search Committee (HDFS)
 2019-2021 Social Committee (HDFS)
 2019-2020 Head Search Committee (HDFS)
 2019-2020 Graduate Committee (PUBH)
 2019 Policy Committee (PUBH)
 2018-2019 Child Health Faculty Search Committee (HDFS)
 2017-2020 MPH Online Program Admissions Committee (PUBH)
 2017-2018 MPH Statistics Taskforce (PUBH)
 2012-2014 College of Public Health and Human Sciences Graduate Student Council (Ph.D.-elected Representative for HDFS)
 2013, 2014 Leadership Training for the CPHHS Graduate Student Council
 2013 Graduate Student Representative on Search Committee for Two Tenure-Track Professor Positions in HDFS
 2012 Student Evaluation Committee for Tenure Review – Dr. Adam Branscum

CONFERENCE PRESENTATIONS

Lee, Y., Loviska, A., **Duncan, R. J.**, & Marceau, K. (2025, June). Simulation-Based Power Analysis for the Discordant-Sibling Random Intercept Cross-Lagged Panel Model (DS-RI-CLPM). Paper presented at the Annual Meeting of the Behavior Genetics Association, Atlanta, GA.

Duncan, R. J., Purpura, D. J., Anderson, K. L., & Schmitt, S. A. (2025, May). Conversational Turn Variability in Preschool Classrooms. In **R. J. Duncan** (Chair), *Conversational Turns Across the First Five Years and in Home and Early Childhood Education Contexts*. Paper presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.

Duncan, R. J. (2025, May). *Measurement of Different School Readiness Skills: The New Way of Looking at the “Old” Construct* [Discussant]. In I. Korucu (Chair), *Measurement of Different School Readiness Skills: The New Way of Looking at the “Old” Construct*. Symposium conducted at the meeting of the Society for Research in Child Development, Minneapolis, MN.

- Ernst, J. R., Purpura, D. J., Schmitt, S.A., & **Duncan, R. J.** (2025, May). Mutualism or Differentiation: Relations Among School Readiness Skills Across Age and Ability Levels. Poster presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Anderson, K. L., Finders, J. K., Purpura, D. J., Karalunas, S. L., Knopik, V. S., & **Duncan, R. J.** (2025, May). The development of a teacher-report measure of the preschool classroom executive function environment. Poster presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Amaral Machado, D., **Duncan, R. J.**, Gubert, M., Pereira, J. M. D., Buccini, G. (2025, May). Mediation Effects of Social Support on Authoritative Parenting Styles and Childhood Development among Brazilian Families. Paper presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Korucu, I., **Duncan R. J.**, Kenny, S. A., Gonzales, C. R., Ahmadi, A., Karing, J. T., & McClelland, M. M. (2025, May). The Head-Toes-Knees-Shoulders Task as a Screening Tool for Kindergarten-level Achievement. Paper presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Ernst, J. R., Finders, J. K., **Duncan, R. J.**, Carlson, S. L., Purpura, D. J., & Schmitt, S. A. (2025, May). Analytic techniques for estimating prekindergarten effects from quasi-experimental designs: A within-study comparison. Paper presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Finders, J. K., Anderson, K. L., **Duncan, R. J.**, Eason, S. H., Purpura, D. J., & Schmitt, S. A. (2025, May). Early Childhood Teachers' Perspectives on Curriculum: Associations with Children's Learning. Paper presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Carkoglu, C., Ganley, C., **Duncan, R. J.**, Purpura, D. J., & Eason, S. H. (2025, May). Does Children's Math Anxiety Moderate the Relation Between Classroom-Level Math Abilities and Children's Math Achievement? Poster presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Robbins, P. A., Fisher, K., & **Duncan, R. J.** (2025, May). Within and cross-domain influences on youth's development of academic and athletic self-concepts. Poster presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Joy, A., Finders, J.K., **Duncan, R. J.**, Purpura, D. J., Schmitt, S.A. (2025, May). Parents' Roles in Preschoolers' Early Math Skills: Testing the mediating effect of the Home Environment. Poster presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Devlin, B., Wilke, E., White, L., White, A., Faazenbaker, R., Didrichsen, S., Zehner, T., Geer, E., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2025, May). Measuring Math Language: Relations Among Preschoolers' Comprehension and Use of Math Language Terms. Paper presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Laily, A., **Duncan, R. J.**, Hubach, R. D., LaRoche, K., Rodriguez, N. M., Zimet, G. D., & Kasting, M. L. (2025, March). Faith and Immunity: Exploring the Associations of Religious Factors on Human

Papillomavirus (HPV) Vaccination Uptake Among Indiana Adults. Poster presented at the 46th Annual Meeting and Scientific Session, Society of Behavioral Medicine, San Francisco, CA.

Duncan, R. J., Ernst, J., Anderson, K. L., Purpura, D. J., & Schmitt, S. A. (2024, June). Longitudinal models of skill development: Conceptual and statistical considerations. Paper presented at the International Society for the Study of Behavioral Development, Lisbon, Portugal.

Mendoza, I. D., **Duncan, R. J.**, & Moding, K. J. (2024, June). Longitudinal associations between parental screen time monitoring, screen time exposure, diet, and body mass index in young children. Poster presented at NUTRITION 2024. Chicago, IL. <https://doi.org/10.1016/j.cdnut.2024.103264>

Robbins, P. A., & **Duncan, R. J.** (2024, April). Developing math, English, & athletic self-concepts from 6th grade to high school. Poster presented at the Society for Research in Adolescence, Chicago, IL.

Nordgren, I., & **Duncan, R. J.** (2023, September). U.S. prenatal care experiences on infant health and postpartum maternal wellbeing: Within-group analyses of Black, Latina, and White mothers. Poster presented at the CityMatCH Maternal and Child Health Leadership Conference, New Orleans, LA.

Ehrman, P., **Duncan, R. J.**, Schmitt, S. A., Elicker, J. & Purpura, D.J. (2023, June). Predicting 3rd and 4th grade mathematics proficiency using domain-specific and domain-general preschool assessments. Symposium presentation made at the annual meeting of the Mathematical Cognition and Learning Society. Loughborough, UK.

Carkoglu, C., **Duncan, R. J.**, Eason, S. H., Purpura, D. J., Schmitt, S., (2023, June). Classroom Peer Effects on Preschool Children's Mathematics Learning. Poster presented at the MCLS conference, Loughborough, U.K.

Ramer, J.D., Marquez, D.X., DuBois, D.L., **Duncan, R. J.**, Bustamante, A.S., Vandell, D.L., Bustamante, E.E. (2023, June). Factors and effects of high school sport participation on young adult physical, mental, and social health. Poster presented at the 70th Annual Meeting and Scientific sessions of the American College of Sports Medicine. Denver, CO.

Ramer, J.D., Marquez, D.X., DuBois, D.L., **Duncan, R. J.**, Bustamante, A.S., Vandell, D.L., Bustamante, E.E. (2023, May). Longitudinal effects of coaches and peers on a child's enjoyment of physical activities: A Structural Equation Modeling Analysis. Paper presentation at the International Physical Literacy Conference. New York, NY.

Laily A, **Duncan, R. J.**, Gabhart K, Nephew LD, Christy SM, Giuliano AR, Vadaparampil ST, Kasting ML. (2023, April). Differences in provider Hepatitis C Virus screening recommendations by patient risk status. Poster presented at the Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine. Pheonix, AZ.

Anderson, K., **Duncan, R. J.**, Finders, J., Purpura D. J., & Schmitt, S. A. (2023, March). The association between preschool teachers' attentional & inhibitory control and students' executive function skills. Poster presented at the biennial meeting of the Society for Research in Child Development. Salt Lake City, UT.

Closser, A., Westerberg, L., Geer, E., **Duncan, R. J.**, Schmitt, S. A., & Purpura D. J. (2023, March). How do spatial skills take shape? Examining preschoolers' performance on 2D and 3D assembly tasks.

- Poster presented at the biennial meeting of the Society for Research in Child Development. Salt Lake City, UT.
- Devlin, B., Paes, T., Geer, E., Bryant, L., Zehner, T., Korucu, I., Morse, K., **Duncan, R. J.**, Purpura D. J., & Schmitt, S. A. (2023, March). Applying a four-step protocol for capturing young children's engagement as a measure of implementation fidelity of a semi-structured block play intervention. Paper presented at the biennial meeting of the Society for Research in Child Development. Salt Lake City, UT.
- Duncan, R. J.**, Nordgren, I., Schmitt, S. A., & Vandell, D. L. (2023, March). Additive and synergistic relations of early mother-child and caregiver-child interactions and socioeconomic outcomes in adulthood. Poster presented at the biennial meeting of the Society for Research in Child Development. Salt Lake City, UT.
- McElveen, T., Hornburg, C., Wilkey, E., Ribner, A., Schmitt, S. A., **Duncan, R. J.**, Miller-Cotto, D., Mayes, A., Andres-Salgarino, M. B., Powell, S., & Purpura D. J. (2023, March). Examining classroom-based executive functioning tasks and relations to elementary students' mathematical word-problem solving. Paper presented at the biennial meeting of the Society for Research in Child Development. Salt Lake City, UT.
- Schmitt, S. A., Purpura D. J., **Duncan, R. J.**, Bryant, L., Zehner, T., Devlin, B., Geer, E., & Paes, T. (2023, March). Examining causal connections between block play, mathematics, and executive function. Paper presented at the biennial meeting of the Society for Research in Child Development. Salt Lake City, UT.
- Zehner, T., Paes, T., Devlin B., Geer, E., Posada, G., **Duncan, R. J.**, Purpura D. J., Schmitt, S. A. (2023, March). The relations of social skills subscales and preschool math skills. Poster presented at the biennial meeting of the Society for Research in Child Development. Salt Lake City, UT.
- Zehner, T., Devlin B., Paes, T., Geer, E., **Duncan, R. J.**, Purpura D. J., Schmitt, S. A. (2023, March). Teacher and parent burnout associations with preschool social and self-regulatory development. Poster presented at the biennial meeting of the Society for Research in Child Development. Salt Lake City, UT.
- Nordgren, I. J., & **Duncan, R. J.** (2022, November). Associations between sociodemographic factors, prenatal care experiences, and postpartum maternal wellbeing. Poster presented at National Council on Family Relations, Minneapolis, MN.
- Paes, T. M., Lin, J., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2022, November). The relations between parent-educator communication, the home environment, and preschoolers' numeracy, literacy, executive function, and vocabulary skills. Paper presented at the 63rd Annual Meeting of the Psychonomic Society, Boston, MA.
- Nordgren, I. J., & **Duncan, R. J.** (2022, July). Pregnant women and their prenatal care experience: Associations with adverse infant birth outcomes. Poster presented at International Congress of Infant Studies, Ottawa, Ontario, Canada.
- Paes, T. M., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S.A. (2022, July). The relations between teacher-child closeness and conflict in preschool and children's outcomes in kindergarten. Paper presented at the 2022 International Mind, Brain and Education Society's Conference, Montréal, Canada.

- Paes, T. M., Lin, J., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2022, July). The relations between parent–educator communication, the home environment, and children’s outcomes in preschool. Paper presented at the Cognitive Science Society’s 44th Annual Conference, Toronto, Canada.
- King, Y. A., Eason, S. H., **Duncan, R. J.**, Borovsky, A., & Purpura, D. J. (2022, June). The factor structure of parents’ math-related talk and its relation to children’s early academic skills. Paper Symposium at the Mathematical Cognition and Learning Society Conference, Belgium.
- Westerberg, L., Schmitt, S. A., **Duncan, R. J.**, & Purpura, D. J. (2022, June). Bidirectional Relations Between Science and Other School Readiness Domains During Preschool. Poster presented at the National Research Conference on Early Childhood (virtual).
- Anderson, K. L., **Duncan, R. J.**, King, Y. A., Finders, J. K., Purpura, D. J., & Schmitt, S. A. (2022, June). Preschool Language Environments and Children’s School Readiness Skills. Poster presented at the National Research Conference on Early Childhood (virtual).
- King, Y. A., Eason, S. H., **Duncan, R. J.**, Borovsky, A., & Purpura, D. J. (2022, June). The factor structure of parents’ math-related talk and its relation to children’s early academic skills. Poster presented at the National Research Conference on Early Childhood (virtual).
- Finders, J. K., **Duncan, R. J.**, Purpura, D. J., Elicker, J., & Schmitt, S. A. (2022, April). Heterogeneity in Effects of a State Quality Rating and Improvement System among Prekindergarten Children. Poster presented at the American Educational Research Association Conference. San Diego, CA.
- Paes, T. M., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S.A. (2021, November). The relations between teacher-child closeness and conflict in preschool and children’s outcomes in kindergarten. Poster presented at the Psychonomic Society’s 62nd Annual Meeting, virtual conference.
- Duncan, R. J.**, Korucu, I., & Schmitt, S. A. (2021, August). Variations in home environment quality during the first five years and children’s achievement. Paper presented at the American Psychological Association (virtual).
- Paes, T.M., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S.A. (2021, July). The association between preschool teacher-child relationship and children’s kindergarten outcomes. Poster presented at CogSci 2021 (virtual).
- Anderson, K. L., **Duncan, R. J.**, Finders, J. K., Purpura, D. J., Elicker, J. G., & Schmitt, S. A. (2021, April). The Factor Structure of Cognitive School Readiness Skills: Conceptual Versus Statistical Distinctions. Poster presented at the biennial meeting of the Society for Research in Child Development (virtual).
- Bryant, L., **Duncan, R. J.**, Marceau, K., & Schmitt, S. A. (2021, April). Examining Longitudinal Associations between Internalizing Problems, Body Mass Index, and Language during Childhood. Poster presented at the biennial meeting of the Society for Research in Child Development (virtual).
- Bryant, L., **Duncan, R. J.**, Purpura, D. J., Elicker, J. G., & Schmitt, S. A. (2021, April). Structured Sports Participation in Preschool Predicts Later Math and Literacy. Paper presented at the biennial meeting of the Society for Research in Child Development (virtual).

- Cosso, J. Finders, J. K., **Duncan, R. J.**, Schmitt, S. A., & Purpura, D. J. (2021, April) The Home Numeracy Environment and Children's Math Skills: The Moderating Role of Parents' Math Anxiety. Paper presented at the biennial meeting of the Society for Research in Child Development (virtual).
- Duncan, R. J.**, Anderson, K. L., King, Y., Finders, J. K., Schmitt, S. A., & Purpura, D. J. (2021, April). Preschool language environments: Variation throughout the day and year, and between- and within-classrooms. Paper presented at the biennial meeting of the Society for Research in Child Development (virtual).
- Finders, J. K., Korucu, I., Bryant, L., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2021, April). Examining additive and synergistic relations between preschool self-regulation and executive function skills: Predictions to kindergarten academic outcomes. Poster presented at the biennial meeting of the Society for Research in Child Development (virtual).
- Ireland, M., Bryant, L., Finders, J. K., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2021, April). Unpacking Associations between Food Insecurity, Inhibitory Control, and Body Mass Index in Preschoolers. Poster presented at the biennial meeting of the Society for Research in Child Development (virtual).
- Keskin, G., Lougheed, J. P., & Duncan, R. J. (2021, April). Within- and Between-Person Associations among Internalizing and Externalizing Problems during Middle Childhood. Poster presented at the biennial meeting of the Society for Research in Child Development (virtual).
- Korucu, I., Paes, T. M., **Duncan, R. J.**, Purpura, D. J., & Schmitt, S. A. (2021, April). The role of Peers' EF and Classroom Quality in Preschoolers' EF and Academic Skills. Paper presented at the biennial meeting of the Society for Research in Child Development (virtual).
- Lougheed, J. P., **Duncan, R. J.**, Keskin, G., & Marceau, K. (2021, April). The Development of Mother-Child Conflict and Child Internalizing Problems in Mid-Childhood. Poster presented at the biennial meeting of the Society for Research in Child Development (virtual).
- Duncan, R. J.**, Korucu, I., & Schmitt, S. A. (2020, June). Variations in home environment quality during the first five years and children's achievement. Paper accepted at the International Society for the Study of Behavioural Development (conference canceled due to COVID-19). Island of Rhodes, Greece.
- Duncan, R. J.** (2020, February). Additive and synergistic relations of early mother-child and caregiver-child interactions for predicting later achievement. Paper presented at the AERA-NSF Institute on Statistical Analysis: Development of Mathematics Competencies in Early Childhood. Laguna Beach, CA.
- Duncan, R. J.**, King, Y., Schmitt, S. A., & Purpura, D. J. (2019, October). Prekindergarten language environments and children's language abilities. Paper presented at the Society for the Study of Human Development. Portland, OR.
- Schmitt, S. A., **Duncan, R. J.**, Budrevich, A., & Korucu, I. (2019, October). Benefits of behavioral self-regulation in the context of high classroom quality for preschoolers' mathematics. Paper presented at the Society for the Study of Human Development. Portland, OR.

- Finders, J. K., Budrevich, A., **Duncan, R. J.**, Purpura, D. J., Elicker, J., & Schmitt, S. A. (2019, October). A multi-method analysis of variability in classroom quality and links to early literacy outcomes. Paper presented at the Society for the Study of Human Development. Portland, OR.
- Routh, M., King, Y., & **Duncan, R. J.** (2019, April). Associations between Gender and Children's Language Environments. Poster presented at the Purdue Undergraduate Research Conference, West Lafayette, IN.
- Duncan, R. J.**, Korucu, I., & Schmitt, S.A. (2019, March). Time-specific variations in the home environment during the first five years and children's academic achievement. Paper accepted at the biennial meeting of the Society for Research in Child Development, Baltimore, MD.
- Nguyen, T., **Duncan, R. J.**, & Bailey, D. (2019, March). Theoretical and methodological implications of associations between executive function and mathematics in early childhood. Paper presented at the biennial meeting of the Society for Research in Child Development, Baltimore, MD.
- McClelland, M., Cameron, C., Kim, H., **Duncan, R. J.**, & Becker, D. (2019, March). The role of executive function and motor skills in academic success among children in the U.S. Paper presented at the biennial meeting of the Society for Research in Child Development, Baltimore, MD.
- Bryant, L., **Duncan, R. J.**, Purpura, D., Elicker, J., & Schmitt, S. (2019, March). Structured sports participation, executive function, and early math skills in preschoolers. Poster presented at the biennial meeting of the Society for Research in Child Development, Baltimore, MD.
- Litkowski, E., **Duncan, R. J.**, Logan, J., & Purpura, D. (2019, March). When do preschoolers learn specific mathematics skills? Mapping the development of children's early numeracy knowledge. Poster presented at the biennial meeting of the Society for Research in Child Development, Baltimore, MD.
- Becker, M., Litkowski, E., **Duncan, R. J.**, Schmitt, S., Elicker, J., & Purpura, D. (2019, March). Investigating the relation between parents' math anxiety and preschool children's math performance. Poster presented at the biennial meeting of the Society for Research in Child Development, Baltimore, MD.
- Duncan, R. J.**, Rolan, E., Marceau, K., Lewis, K., Bavarian, N., DuBois, D., & Flay, B. (2018, October). The prevailing impacts of a universal social and emotional learning program on problem behaviors. Poster presented at the Promoting Character Development Among Diverse Children and Adolescents: The Roles of Families, Schools, and Out-Of-School-Time Youth Development Programs (Society for Research in Child Development special topics), Philadelphia, PA.
- Duncan, R. J.**, Duncan, G. J., Stanley, L., Aguilar, E., Halfon, N. (2018, April). Predicting Third Grade Math and English Language Arts Proficiency with the Early Development Instrument. Poster presented at the annual meeting for American Education Research Association, New York, NY.
- Duncan, R. J.**, Lipscomb, S., Geldhof, G. J., & Acock, A. C. (2017, April). A person-centered approach for predicting 5th grade literacy proficiency among low-income children. Poster presented at the biennial meeting of the Society for Research in Child Development, Austin, TX.

- Duncan, R. J.**, Schmitt, S. A., McClelland, M. M., & Burke, M. (2017, April). Promoting school readiness by integrating a self-regulation intervention into a school-based summer program. Paper presented at the biennial meeting of the Society for Research in Child Development, Austin, TX.
- Korucu, I., Schmitt, S. A., Lewis, K. L., & **Duncan, R. J.** (2017, April). *Positive Action*: Social-emotional skill and health behavior promotion intervention. Poster presented at the biennial meeting of the Society for Research in Child Development, Austin, TX.
- McClelland, M. M., Schmitt, S. A., Geldhof, G. J., Purpura, D. J., & **Duncan, R. J.** (2017, April). Examining the relations between executive function, math, & literacy during the transition to kindergarten: A multimethod approach. Paper presented at the biennial meeting of the Society for Research in Child Development, Austin, TX.
- Duncan, R. J.** (2016, September). A person-centered approach for predicting 5th grade literacy proficiency among low-income children. Paper presented at the UCI Postdoctoral Symposium, Irvine, CA.
- Schmitt, S. A., McClelland, M.M., **Duncan, R. J.**, Burke, M. (2016, July). Promoting school readiness by integrating a self-regulation intervention into a school-based summer program. Poster presented at the annual meeting for The National Research Conference on Early Childhood, Washington, D.C.
- Duncan, R. J.**, Hanselman, P., Jenkins, J. M., Watts, T., Bailey, D., & Duncan, G. (2016, June). Parent relationship quality and BMI. Paper presented at the annual meeting for the Society for Prevention Research, San Francisco, CA.
- McClelland, M.M., Tominey, S. L., Schmitt, S. A., & **Duncan, R. J.** (2016, April). The state of the science on SEL interventions in early childhood/preschool. Paper presented at the Future of Children's authors' conference, Princeton, NJ.
- Cameron, C. E., Kim, H., **Duncan, R. J.**, Becker, D. B., & McClelland, M. M. (2016, April). Beyond Initial Level, Does Improvement in EF and Visuo-motor Integration Predict Kindergarten Achievement Gains? Evidence from Two U. S. States. Poster presented at the annual meeting for the American Educational Research Association, Washington, D.C.
- Duncan, R. J.**, Nguyen, T., Miao, A., McClelland, M. M., & Bailey, D. (2016, March). Executive function and mathematics achievement: Are effects construct- and time-general or specific? Paper presented at the annual meeting for the Society for Research on Educational Effectiveness, Washington, D.C.
- Duncan, R. J.**, Nguyen, T., Miao, A., McClelland, M. M., & Bailey, D. (2016, January). Executive function and mathematics achievement: Are effects construct- and time-general or specific? Poster presented at the P01 NICHD *Human Capital Interventions in Development* Advisory Board meeting, Laguna Beach, CA.
- Schmitt, S. A., Geldhof, G. J., Purpura, D. J., **Duncan, R. J.**, & McClelland, M. M. (2015, October). Examining the relations between executive function, math, and literacy during the transition to kindergarten: A multi-method approach. Paper presented at the biennial meeting for the Society for the Study of Human Development, Austin, TX.

- Duncan, R. J.,** McClelland, M. M., & Acock, A. C. (2015, March). The effects of early life factors on later achievement: Using a complex interaction framework. Poster presented at the biennial meeting of the Society for Research in Child Development, Philadelphia, PA.
- Gilmore, B., McClelland, M. M., & **Duncan, R. J.** (2014, May). *Exploring gender differences among Head Start and non-Head Start kids*. Poster presented at Undergraduate Research Awards Program, Corvallis, OR.
- Duncan, R. J.,** McClelland, M. M., & Slater, S. (2014, April). *School Readiness as State Policy: The Oregon Kindergarten Assessment*. Poster presented at Strengthening Connections Among Child and Family Research, Policy and Practice, Alexandria, VA.
- Duncan, R. J.,** Washburn, I. J., DuBois, D., Lewis, K., Bavarian, N., & Flay, B. (2014, April). *Trajectories of Social-Emotional and Misconduct Behaviors: An Investigation of Intervention Effects and Adolescent Health*. Poster presented at Strengthening Connections Among Child and Family Research, Policy and Practice, Alexandria, VA.
- Duncan, R. J.,** Miao, A., McClelland, M. M., Branscum, A., Acock, A. C. (2013, April). *Executive Function and Academic Achievement in Preschool: Fixed Effects and Random Effects Models*. Presented at the biennial meeting of the Society for Research in Child Development, Seattle, WA.
- Duncan, R. J.,** Miao, A., McClelland, M. M., Acock, A. C. (2013, April). *Executive Function Tasks as Diagnostic Tools for School Readiness*. Presented at the biennial meeting of the Society for Research in Child Development, Seattle, WA.
- Becker, D. R., **Duncan, R. J.,** Miao, A., McClelland, M. M. (2013, April). *Longitudinal Relations between Fine Motor Skills, Executive Functions, and Early Academic Achievement*. Presented at the biennial meeting of the Society for Research in Child Development, Seattle, WA.
- Pratt, M., Diaz, G., Becker, D., Lewis, K., **Duncan, R. J.,** McClelland, M. M. (2013, April). *Understanding the Predictors and Consequences of Early Self-Regulation: The Critical Role of Moderators*. Presented at the biennial meeting of the Society for Research in Child Development, Seattle, WA.
- Duncan, R. J.,** & McClelland, M. M. (2012, July). *Convergent Validity of Executive Function Tasks During the Transition to School and Links to Academic Achievement*. Presented at the biennial meeting of the International Society for the Study of Behavioral Development, Edmonton, Alberta.
- Becker, D., Miao, A., **Duncan, R. J.,** & McClelland, M. M. (2012, July). *Self Regulation Predicts both Fine Motor Skills and Early Academic Achievement*. Presented at the biennial meeting of the International Society for the Study of Behavioral Development, Edmonton, Alberta.
- Bavarian, N., **Duncan, R. J.,** Lewis, K., Miao, A., Washburn, I., Flay, B., & Acock, A. (2012, May). *Does Recall of a Prevention Program Moderate the Effects on Targeted Outcomes*. Presented at the annual meeting of the Society for Prevention Research, Washington D.C.
- Duncan, R. J.,** & McClelland, M. M. (2011, March). *Measures of Executive Function and Behavior Self Regulation: Convergent Validity and Links to Academic Achievement in Preschool*. Presented at the biennial meeting of the Society for Research in Child Development, Montreal, Quebec

McLean, L. E., **Duncan, R. J.**, & McClelland, M. M. (2010, April). *Socioeconomic Status as a Factor Predicting Early Self-Regulation*. Poster presented at Undergraduate Research Awards Program, Corvallis, OR.