

Benjamin W Domingue

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1 Research Interests

Psychometrics, Sociogenomics, Quantitative methods

2 Positions

2.1 Current Position

- Assistant Professor 9/2015–
Graduate School of Education, Stanford University

2.2 Other Affiliations

- Faculty Director, Policy Analysis for California Education (PACE) 2021–
- Faculty Affiliate, Stanford Center for Open and REproducible Science (DSI-CORES) 2020–
- Faculty Affiliate, Stanford Center for Longevity 2019–
- Assistant Professor (by courtesy), Stanford Department of Sociology 2018–
- Steering Committee, Stanford Center for Education Policy Analysis 2017–
- Faculty Fellow, Stanford Population Health Sciences 2017–

2.3 Previous Positions

- Visiting Scholar 2019–2020
Department of Demography, University of California, Berkeley
- Research Associate 2012–2019
Institute of Behavioral Science, University of Colorado Boulder
- Visiting Researcher 9/2014–5/2015
Population Research Center, The University of Texas at Austin
- Visiting Scholar 9/2013–12/2013
Colombian Institute for the Evaluation of Education (ICFES)
- Graduate Research Assistant 8/2007–5/2012
School of Education & Institute of Behavioral Science, University of Colorado Boulder
- Teacher 8/2006–5/2007
Crested Butte Academy

3 Awards

- Outstanding Reviewer for 2019, *AERA Open*.
- Faculty Advising Award, 2018–2019; Student Guild, Stanford Graduate School of Education.
- Outstanding Reviewer for 2018, *AERA Open*.
- 2013 American Educational Research Association Division D (Measurement and Research Methodology) Quantitative Dissertation Award.

4 Education

- PHD – University of Colorado at Boulder, Education [Advisor: Derek Briggs] 2012
- MA – University of Texas at Austin, Mathematics [Advisor: P. Uri Treisman] 2006
- BS – University of Texas at Austin, Mathematics 2001

5 Grants

- Evaluation of utilization and potential effects of the SFUSD Multi-Tiered System of Supports (MTSS).
PI, Stanford GSE & SFUSD
- Constrained Maximization of Universal Free Meals: An Optimization and Regression Discontinuity Analysis
PI, Stanford GSE & SFUSD
- Genetic Cognitive Epidemiology: Using Molecular Genetic Data to Explore the Link Between Cognition and Mortality
PI, Stanford Center on the demography and economics of health and aging (CDEHA) Pilot Project
- Sociogenomics at Stanford
Co-PI (PI: Jeremy Freese), IRiSS Faculty Seed Grant
- Sociogenomics in the WLS: Probing Questions of Validity Regarding the Genetics of Educational Attainment and Subsequent Occupational and Economic Attainments
PI, Russell Sage Foundation
- NIA Network on Life Course Health Dynamics and Disparities in 21st Century America Pilot Research Grant, Building a Data Resource to Test for Increasing Selectivity of Persons at the Low End of the Educational Continuum: Harmonizing Measures in the National Longitudinal Study of Adolescent to Adult Health and the Health and Retirement Study
Co-I (PI: Dan Belsky), NIA (Parent Grant: R24AG045061)
- Quantifying Individual Genetic Risk in Diverse Populations
Co-PI (PI: Laramie Duncan), 2017 Spectrum Pilot Grant for Population Health Sciences
- On the Use of Genetic Data in Social Science Inquiry: Applications and Methodological Considerations with a Focus on UK and European Datasets
Co-Investigator (PI: Melinda Mills), NCRM International Visitor Exchange Scheme
- Psychometric considerations of item quality in a digitally mediated learning environment
PI, Spencer Foundation
- Curating NHANES Genetic Data for Sociogenomic Modeling
Co-I (PI: David Rehkopf), Stanford Center for Clinical and Translational Research and Education (SPECTRUM) Pilot Grant
- Using Structural Differences across Environments to Understand Gene-Environment Correlations and their Implications for Gene-by-Environment Research
PI, University of Colorado Population Center Developmental Grant
- The Social and Genetic Epidemiology of Health Behaviors: An Integrated Approach
MPI w/ Jason Boardman, NIH Exploratory/Developmental Research Grant Award (R21) 1R21HD078031-01

6 Papers

Notational Conventions

‡: Student/postdoctoral collaborators with whom I engaged extensively during course of project.

- ‡: Paper on which I acted as a senior or corresponding author.
- : Joint authorship.
- *: Lengthy authorship list (names omitted).
- §: Alphabetical ordering.

6.1 Peer-Reviewed publications

Unless otherwise noted, publications are journal articles.

1. Stenhaug B‡, **Domingue B‡**. (In press). Predictive Fit Metrics for Item Response Models. *Applied Psychological Measurement*.
2. Alvero AJ‡, Giebel S‡, Gebre-Medhin B, Antonio al, Stevens ML, **Domingue B‡**. (2021). Essay content is strongly related to household income and SAT scores: Evidence from 60,000 Undergraduate Applications. *Science Advances*
doi: 10.1126/sciadv.abi9031
[CEPA Working Paper](#)
3. Martschenko D‡, **Domingue B**, Matthews L, Trejo S. (2021). FoGS Provides a Public FAQ Repository for Social and Behavioral Genomic Discoveries. *Nature Genetics*.
doi: 10.1038/s41588-021-00929-5
4. Dokyoung SY, Cook KF, **Domingue BW**, Ziadni MS, Hah JM, Darnall BD, Mackey SC. (2021). Customizing CAT administration of the PROMIS-Prescription Pain Medication Misuse Item Bank for patients with chronic pain. *Pain Medicine*.
doi: 10.1093/pm/pnab159
5. **Domingue BW**, Kanopka K, Stenhaug B, Soland J, Kuhfeld M, Wise S, Piech C. (2021). Variation in respondent speed and its implications: Evidence from an adaptive testing scenario. *Journal of Educational Measurement*.
doi: 10.1111/jedm.12291
psyArXiv. doi: 10.31234/osf.io/r54ec
6. Crowe CL, **Domingue BW**, Hu G, Keyes KM, Dwon D, Belsky DW. (2021). Associations of Loneliness and Social Isolation with Healthspan and Lifespan in the US Health and Retirement Study. *Journals of Gerontology: Medical Sciences*
doi: 10.1093/gerona/glab128
medRxiv. doi:10.1101/2020.07.10.20147488
7. Caruso T, Armstrong-Carter E, Rama A, Neiman N, Taylor K, Madill M, Lawrence K, Hemphill S, **Domingue B**. (2021). The Physiologic and Emotional Effects of 360-Degree Video Simulation on Head Mounted Display vs In-Person Simulation: A Non-Inferiority, Randomized Controlled Trial. *Simulation in Healthcare*.
doi: 10.1097/SIH.0000000000000587
8. Yeatman JD, Tang KA, Donnelly PM, Yablonski M, Ramamurthy M, Karipidis II, Caffarra S, Takada ME, Kanopka K, Ben-Shachar M, **Domingue BW**. (2021). Measuring reading ability in the web-browser with a lexical decision task. *Scientific Reports*.
doi: 10.1038/s41598-021-85907-x
bioRxiv. doi: 10.1101/2020.07.30.229658
9. Dee TS, **Domingue B**§. (2020). Assessing the Impact of a Test Question: Evidence from the “Underground Railroad” Controversy. *Educational Measurement: Issues and Practice*
doi: 10.1111/emip.12411
edArXiv. doi: 10.35542/osf.io/nx2cj
10. Demange PA, Malanchini M, Mallard TT, Biroli P, Cox SR, Grotzinger AD, Tucker-Drob EM, Abdellaoui A, Arseneault L, Caspi A, Corcoran D, **Domingue BW**, Mitchell C, van Bergen E, Boomsma DI, Harris KM, Ip HF, Moffitt TE, Poulton R, Prinz J, Sugden K, Wertz J, Williams B, de Zeeuw EL, Belsky DW, Harden KP, Nivard MG. (2021). Investigating the Genetic Architecture of Non-Cognitive Skills Using GWAS-by-Subtraction. *Nature Genetics*.

doi: 10.1038/s41588-020-00754-2
bioRxiv doi: 10.1101/2020.01.14.905794
HCEO Working Paper 2020-028

11. Armstrong-Carter E†, Werzt J, **Domingue B**‡. (2021). Genetics and child development: Recent advances and their implications for developmental research. *Child Development Perspectives*
doi: /10.1111/cdep.12400
12. Armstrong-Carter E†, Miller J, Hill L, **Domingue B**‡. (2021). Young Children’s Prosocial Behavior Protects Against Academic Risk in Neighborhoods Facing Adversity. *Child Development*
doi: 10.1111/cdev.13549
psyArXiv. doi: 10.31234/osf.io/zpd27
13. **Domingue BW**, Trejo S†, Armstrong-Carter E†, Tucker-Drob EM. (2020). Interactions between polygenic scores and environments: Methodological and conceptual challenges. *Sociological Science*.
doi: 10.15195/v7.a19
SocArXiv. doi: 10.31235/osf.io/u7sh4
14. Soland J, Lang D, **Domingue B**. (2020). Using Machine Learning to Advance Early Warning Systems: Promise and Pitfalls. *Teachers College Record*, 22, 14.
15. Caruso T†, Qian J, Lawrence K, Armstrong-Carter E†, **Domingue B**. (2020). From Socrates to Virtual Reality: A Historical Review of Learning Theories and their Influence on the Training of Anesthesiologists. *Journal of Education in Perioperative Medicine*.
doi: 10.46374/volxxii-issue2-Caruso
16. Newell-Stamper BL, Huibregtse BM, **Domingue B**, Boardman J. (2020). A mutation associated with stress resistance in mice is associated with human grip strength and mortality. *Biodemography and Social Biology*.
doi: 10.1080/19485565.2020.1744425
17. Johnson E, . . . , **Domingue B***, (2020). A large-scale genome-wide association study meta-analysis of cannabis use disorder. *Lancet Psychiatry*
doi: 10.1016/S2215-0366(20)30339-4
18. *Conference Proceedings*: Wu M, Davis RL, **Domingue B**, Piech C, Goodman N. (2020). Variational Item Response Theory: Fast, Accurate, and Expressive. *Educational Data Mining*
arXiv:2002.00276
19. Munn-Chernoff M, . . . , **Domingue B***, . . . , Agrawal A. (2020). Shared Genetic Risk between Eating Disorder- and Substance-Use-Related Phenotypes: Evidence from Genome-Wide Association Studies. *Addiction Biology*.
doi: 10.1111/adb.12880
bioRxiv. doi: 10.1101/741512
20. Armstrong-Carter E†, Trejo S†, Hill L, Crossley K, Mason D, **Domingue B**‡. (2020). The Earliest Origins of Genetic Nurture: Prenatal Mediation of the Influence of Maternal Genetics on Child Development. *Psychological Science*
doi: 10.1177/0956797620917209
PsyArXiv doi: 10.31234/osf.io/2usk8.
21. **Domingue B**§, Fletcher J. (2020). Separating Measured Genetic and Environmental Effects: Evidence Linking Parental Genotype and Adopted Child Outcomes. *Behavior Genetics*.
doi: 10.1007/s10519-020-10000-4
bioRxiv. doi: 10.1101/698464
22. Horwitz I†, **Domingue B**, Harris KM. (2020). Not a Family Matter: The Effects of Religiosity on Academic Outcomes Based on Evidence From Siblings. *Social Science Research*.
doi: 10.1016/j.ssresearch.2020.102426
23. **Domingue B**, Duncan L, Harrati A, Belsky D. (2020). Short-term mental health sequelae of bereavement predict long-term physical health decline in older adults: US Health and Retirement Study Analysis. *Journal of Gerontology: Series B*.
doi: 10.1093/geronb/gbaa044/5815719

medRxiv. doi: 10.1101/19009878

24. Harden KP, **Domingue B**, Belsky DW, Boardman JD, Crosnoe R, Malanchini M, Nivard M, Tucker-Drob EM, Harris KM. (2020). Genetic Associations with Mathematics Tracking and Persistence in Secondary School. *npj Science of Learning*.
doi: 10.1038/s41539-020-0060-2
bioRxiv. doi: 10.1101/598532
25. Nagata JM, **Domingue B**, Darmstadt G, Weber AM, Meausoone V, Cislighi B, Shakya HB. (2020). Gender Norms and Weight Control Behaviors in U.S. Adolescents: A Prospective Cohort Study (1994-2002). *Journal of Adolescent Health*.
doi: 10.1016/j.jadohealth.2019.08.020
26. *Conference Proceedings*: Tripathi A, **Domingue B**. (Accepted, Short Paper). Curve Fitting from Probabilistic Emissions and Applications to Dynamic Item Response Theory. (2020). *IEEE International Conference on Data Mining (IEEE ICDM 2019)*.
doi: 10.1109/ICDM.2019.00170
arXiv:1909.03586
27. *Conference Proceedings*: Alvero A, Arthurs N, Antonio A, **Domingue B**, Gebre-Medhin B, Giebel S, Mitchell S. (2019). AI and Holistic Review: Informing Human Reading in College Admissions. (2020). *Proceedings of the 2020 AAAI/ACM Conference on AI, Ethics, and Society*.
doi: 10.1145/3375627.3375871
arXiv:1912.09318
28. Trejo S, **Domingue B**. (2019). Genetic Nature or Genetic Nurture? Quantifying Bias in Analyses Using Polygenic Scores. *Biodemography and Social Biology*
doi: 10.1080/19485565.2019.1681257
bioRxiv doi: 10.1101/524850
29. Rabinowitz JA, Kuo S, **Domingue B**, Smart M, Felder W, Benke K, Maher BS, Ialongo N, Uhl G. (2019). Pathways between an Educational Attainment Polygenic Score and Higher Educational Attainment in an African American Sample. *Behavior Genetics*.
doi: 10.1007/s10519-019-09982-7
30. Herd P, Freese J, Sicinski K, **Domingue B**, Harris KM, Wei C, Hauser R. (2019). Genes, Gender Inequality, and Educational Attainment. *American Sociological Review*.
doi: 10.1177/0003122419886550
31. Yesavage JA, Noda A, Heath A, McNerney MW, **Domingue B**, Hernandez Y, Benson G, Hallmayer J, O'Hara R, Williams, L, Goldstein-Piekarski A, Zeitzer J, Fairchild JK. (2019). Sleep-wake Disorders in Alzheimer's disease Further Genetic Analyses in Relation to Objective Sleep Measures. *International Psychogeriatrics*.
doi: doi:10.1017/S1041610219001777
32. **Domingue B**, Cislighi B, Nagata JN, Shakya HB, Weber AM, Boardman JD, Darmstadt GL, Harris KM. (2019). Implications of Gendered Behaviour and Contexts for Social Mobility. *The Lancet Planetary Health*.
doi: 10.1016/S2542-5196(19)30191-3
33. Barnes JC, Liu H, Motz RT, Tanksley PT, Kail R, Beckley AL, Belsky DW, **Domingue B**, Moffitt T, Pratt TC, Wertz J. (2019). The Propensity for Aggressive Behavior and Lifetime Incarceration Risk: A Test for Gene-environment Interaction (GxE) Using Whole-genome Data. *Aggression and Violent Behavior*.
doi: 10.1016/j.avb.2019.07.002
34. Huibregtse B, Newell B, **Domingue B**, Boardman J. (2019). Genes related to education predict frailty among older adults in the United States. *Journal of Gerontology: Social Sciences*.
doi: 10.1093/geronb/gbz092
35. Duncan L, Shen H, Gelaye B, Ressler K, Feldman M, Peterson R, **Domingue B**. (2019). Analysis of Polygenic Score Usage and Performance across Diverse Human Populations. *Nature Communications*.
doi: 10.1038/s41467-019-11112-0
bioRxiv doi: 10.1101/398396

36. Shakya HB, **Domingue B**, Nagata JM, Cislighi B, Weber A, Darmstadt GL. (2019). Adolescent gender norms and adult health outcomes in the US: a prospective cohort study. *The Lancet Child and Adolescent Health*.
doi: 10.1016/S2352-4642(19)30160-9
37. Weber A, Cislighi B, Meausoone V, Abdalla S, Mejia-Guevara I, Loftus P, Hallgren E, Seff I, Stark L, Victoria CG, Buffarini R, Barros A, **Domingue B**, Bhsuhan D, Gupta R, Nagata J, Shakya H, Richter L, Norris S, Ngo T, Chae S, Haberland N, McCarthy K, Cullen M, Darmstadt G. (2019). Gender norms and health: insights from global survey data. *The Lancet*.
doi: 10.1016/S0140-6736(19)30765-2
38. Nagata JM†, Braudt DB, **Domingue B**, Bibbins-Domingo K, Garber AK, Griffiths S, Murray SB. (2019). Genetic Risk, Body Mass Index, and Weight Control Behaviors: Unlocking the Triad. *International Journal of Eating Disorders*.
doi: 10.1002/eat.23083
39. Belsky DW, Caspi A, Arseneault L, Corcoran D, **Domingue B**, Harris KM, Houts R, Mill J, Moffitt TE, Prinz J, Sugden K, Wertz J, Williams B, Odgers C. (2019). Genetics & the Geography of Health, Behavior, and Attainment. *Nature Human Behaviour*.
doi: 10.1038/s41562-019-0562-1
bioRxiv doi: 10.1101/376897
40. You DS†, Hah J, Collins S, Ziadni M, **Domingue B**, Cook K, Mackey S. (2019). Evaluation of the Preliminary Validity of Misuse of Prescription Pain Medication Items from the Patient-Reported Outcomes Measurement Information System (PROMIS). *Pain Medicine*.
doi: 10.1093/pm/pnz001
41. Conley D, Laidley T, **Domingue B**, Sinsub P, Harris KM. (2019). New evidence of skin color bias and health outcomes using sibling difference models: A research note. *Demography*.
doi: 10.1007/s13524-018-0756-6
42. Martschenko D†•, Trejo S†•, & **Domingue B**†•. (2019). Genetics and Education: Recent developments in the context of an ugly history and an uncertain future. *AERA Open*
doi: 10.1177/2332858418810516
socArXiv doi: 10.31235/osf.io/74b8m
43. Walters RK, . . . , **Domingue B***, . . . , Agrawal A. (2018). Trans-ancestral GWAS of alcohol dependence reveals common genetic underpinnings with psychiatric disorders. *Nature Neuroscience*
doi: 10.1038/s41593-018-0275-1
bioRxiv. doi: 10.1101/257311
44. Hussain SF†, **Domingue B**, LaFramboise T, Ruedas-Gracia N. (2018). Conceptualizing School Belongingness in Native Youth: Factor Analysis of the Psychological Sense of School Membership Scale. *American Indian and Alaska Native Mental Health Research*. 25 (3).
doi: 10.5820/aian.2503.2018.26
45. Sheehan C†, **Domingue B**, Crimmins E. (2018). Cohort Trends in the Gender Distribution of Household Tasks in the United States and the Implications for Understanding Disability. *Journal of Aging and Health*.
doi: 10.1177/0898264318793469
46. Trejo S†, Belsky DW, Boardman JD, Freese J, Harris KM, Herd P, Sicinski K, **Domingue B**†. (2018). Schools as moderators of genetic associations with lifecourse attainments: Evidence from the WLS and Add Health. *Sociological Science*.
doi: 10.15195/v5.a22
47. Lawrence E, Hummer R, **Domingue B**, Harris KM. (2018). Wide Educational Disparities in Young Adult Cardiovascular Health. *SSM - Population Health*.
doi: 10.1016/j.ssmph.2018.07.006
48. Wedow R†, Zacher M†, Huibregtse B, Harris KM, **Domingue B**†, Boardman JD. (2018). Education, smoking, and cohort change: Forwarding a multidimensional theory of the environmental moderation of genetic effects. *American Sociological Review*. 83, 4.

doi: 10.1177/0003122418785368

49. Belsky DW●, **Domingue B●**, Wedow R†, Arseneault L, Boardman JD, Caspi A, Conley D, Fletcher JM, Freese J, Herd P, Moffitt TE, Poulton R, Sicinski K, Wertz J, Harris KM. (2018). Genetic analysis of social-class mobility in five longitudinal studies. *Proceedings of the National Academy of Sciences*
doi: 10.1073/pnas.1801238115
50. Gaydosh L, Belsky D, **Domingue B**, Boardman JD, Harris KM. (2018). Father absence and accelerated reproductive development in non-Hispanic white women in the United States. *Demography*.
doi: 10.1007/s1352
bioRxiv. doi: 10.1101/123711
51. Conley D, Johnson R, **Domingue B**, Dawes C, Boardman J, Siegal M. (2018). A sibling method for identifying vQTLs. *PLOS One*.
doi: 10.1371/journal.pone.0194541
bioRxiv. doi: 10.1101/175596
52. **Domingue B**, Rehkopf DH, Conley D, Boardman JD. (2018). Geographic clustering of polygenic scores at different stages of the life course. *RSF: The Russell Sage Foundation Journal of the Social Sciences*.
doi: 10.7758/RSF.2018.4.4.08
53. **Domingue B**, Belsky D, Fletcher J, Conley D, Boardman J, Harris KM. (2018). The social genome of friends and schoolmates in the National Longitudinal Study of Adolescent to Adult Health *Proceedings of the National Academy of Sciences*
doi: 10.1073/pnas.1711803115
bioRxiv. doi: 10.1101/107045
54. **Domingue B** and Belsky D. (2017). The Social Genome: Current Findings and Implications for the Study of Human Genetics. *PLOS Genetics*.
doi: 10.1371/journal.pgen.1006615
55. Wehby G, **Domingue B**, Wolinsky F. (2017). Genetic Risks for Chronic Conditions: Implications for Long-Term Wellbeing. *Journals of Gerontology: Series A*.
doi: 10.1093/gerona/glx154
56. Wehby G, **Domingue B**, Ullrich F, Wolinsky F. (2017). Genetic Predisposition to Obesity and Medicare Expenditures. *The Journals of Gerontology, Series A*.
doi: 10.1093/gerona/glx062
57. Alzen J†, Fahle E†, **Domingue B ‡**. (2017). The implications of reduced testing for teacher accountability. *AERA Open*.
doi: 10.1177/2332858417704411
58. **Domingue B**, Belsky DW, Harrati A, Conley D, Weir D, Boardman J. (2017). Mortality Selection in a Genetic Sample and Implications for Association Studies. *The International Journal of Epidemiology*.
doi: 10.1093/ije/dyx041
bioRxiv, doi: 10.1101/049635
59. *Conference Proceedings*: Lang D†, Kindel A, **Domingue B**, Paepcke A. (2017). Making the Grade: How Passing a Course Affects Learner Engagement. *Proceedings of the 10th International Conference on Educational Data Mining*.
[link](#)
60. **Domingue B**, Liu H, Okbay A, Belsky D. (2017). Genetic heterogeneity in depressive symptoms following the death of a spouse: Polygenic score analysis of the US Health and Retirement Study. *The American Journal of Psychiatry*.
doi: 10.1176/appi.ajp.2017.16111209
bioRxiv, doi: 10.1101/065847
61. **Domingue B**, Lang D†, Cuevas ML, Castellanos M, Lopera C, Marino JP, Molina A, Shavelson R. (2017). Measuring student learning in technical programs: A case study from Colombia. *AERA Open*.
doi: 10.1177/2332858417692997
62. Conley D, Laidley T, Boardman J, **Domingue B ‡**. (2016). Changing Polygenic Penetrance on Phenotypes in the 20 th Century Among Adults in the US Population. *Scientific Reports*.

doi: 10.1038/srep30348

63. Conley D, **Domingue B**. (2016). The Bell Curve Revisited: Testing Controversial Hypotheses with Molecular Genetic Data. *Sociological Science*.
doi: 10.15195/v3.a23
64. Conley D, Laidley T, Belsky D, Fletcher J, Boardman J, **Domingue B**†. (2016). Assortative mating and differential fertility by phenotype and genotype across the 20th century. *Proceedings of the National Academy of Sciences*.
doi: 10.1073/pnas.1523592113
65. Belsky DW, Moffitt TE, Corcoran DL, **Domingue B**, Harrington HL, Hogan S, Houts R, Ramrakha S, Sugden K, Williams B, Poulton R, Caspi A. (2016). The genetics of success: How SNPs associated with educational attainment relate to life course development. *Psychological Science*.
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66. Shavelson RJ, **Domingue B**, Marino J, Mantilla AM, Morales JA, Wiley, E. (2016). On the Practices and Challenges of Measuring Higher Education Value Added: The Case of Colombia. *Assessment and Evaluation in Higher Education*.
doi:10.1080/02602938.2016.1168772
67. Rehkopf D, **Domingue B**, Cullen M. (2016). Gene-environment correlation: the geographic distribution of genetic risk for chronic disease in the United States. *Biodemography and Social Biology*. 62(1), 126-142.
doi: 10.1080/19485565.2016.1141353
68. **Domingue B**, Wedow R†, Conley D, McQueen M, Hoffman T, Boardman J. (2016). Genome-wide estimates of heritability for social demographic outcomes. *Biodemography and Social Biology*. 62(1), 1-16.
doi: 10.1080/19485565.2015.1068106
69. Bohr AD, Boardman JD, **Domingue B**, McQueen M. (2015). Breastfeeding is associated with waist-to-height ratio in young adults. *BMC Public Health*. 15:1281.
doi: 10.1186/s12889-015-2611-7
70. **Domingue B**, Belsky D, Conley D, Harris, KM, Boardman JD. (2015). Polygenic Influence on Educational Attainment: New evidence from The National Longitudinal Study of Adolescent to Adult Health. *AERA Open*.
doi: 10.1177/2332858415599972
71. **Domingue B**, Conley D, Fletcher J, Boardman J. (2015). Cohort effects in the genetic influence on smoking. *Behavior Genetics*. 46, 31-42.
doi: 10.1007/s10519-015-9731-9
72. Wehby GL, **Domingue B**, Boardman J. (2015). Preventions, use of health services, and genes: Implications of genetics for policy formation. *Journal of Policy Analysis and Management*.
doi: 10.1002/pam.21835
73. Conley D, **Domingue B**, Cesarini D, Dawes C, Rietveld CA, Boardman JD. (2015). Is the effect of parental education on offspring biased or moderated by genotype? *Sociological Science*.
doi: 10.15195/v2.a6
74. McQueen MB, Boardman JD, **Domingue B**, Smolen A, Tabor J, Killea-Jones L, Halpern CT, Whitsel EA, Harris KM. (2014). The National Longitudinal Study of Adolescent Health (Add Health) Sibling Pairs Genome-Wide Data. *Behavior Genetics*.
doi: 10.1007/s10519-014-9692-4
75. Cornelius AR, Conley D, Eriksson N, Esko T, Medland SE, Vinkhuyzen AAE, Yang J, Boardman JD, Chabris C, Dawes CT, **Domingue B**, Hinds DA, Johannesson M, Kiefer AK, Laibson D, Magnusson PKE, Mountain JL, Oskarsson S, Teumer A, Tung JY, Visscher PM, Benjamin DJ, Cesarini D, Koellinger PD, and the Social Science Genetics Association Consortium. (2014). Replicability and Robustness of GWAS for Behavioral Traits. *Psychological Science*.
doi: 10.1177/0956797614545132
76. Boardman JD, **Domingue B**, Daw J. (2014). What can genes tell us about the causal relationship

between education and health? *Social Science and Medicine*.

doi: 10.1016/j.socscimed.2014.08.001

77. **Domingue B**, Belsky DW, Harris KM, Smolen A, McQueen MB, and Boardman JD. (2014). Polygenic Risk Predicts Obesity in Both White and Black Young Adults. *PLOS ONE*.
doi: 10.1371/journal.pone.0101596
78. *Book Chapter*: Briggs D and **Domingue B**. (2014) Value-added to what? The paradox of multidimensionality. Lissitz R & Jiao H (eds.), *Value-added Modeling and Growth Modeling with Particular Application to Teacher and School Effectiveness*. Charlotte, NC: Information Age Publishing.
doi: 10.13140/2.1.1130.6565
79. Mollborn S, **Domingue B**, and Boardman J. (2014). Racial, Socioeconomic, and Religious Influences on School-Level Teen Pregnancy Norms and Behaviors. *Social Forces*.
doi: 10.1093/sf/sou063
80. **Domingue B**, Fletcher J, Conley D, Boardman J. (2014). Genetic and educational assortative mating among US adults. *Proceedings of the National Academy of Sciences*.
doi: 10.1073/pnas.1321426111
81. Conley D, Siegal M, **Domingue B**, Harris K, McQueen M, Boardman J. (2014). Testing the Key Assumption of Heritability Estimates Based on Genome-wide Genetic Relatedness. *Journal of Human Genetics*.
doi: 10.1038/jhg.2014.14
82. Mollborn S, **Domingue B**, and Boardman J. (2014). Understanding Multiple Levels of Norms about Teen Pregnancy and Their Relationships to Teens Sexual Behaviors. *Advances in Life Course Research*.
doi: 10.1016/j.alcr.2013.12.004
83. Briggs D and **Domingue B**. (2013). The Gains from Vertical Scaling. *Journal of Educational and Behavioral Statistics*, 38(6), 551-576.
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6.2 Editorials, Replies, and Comments

90. McFarland D, Khanna S, **Domingue B**, Pardos Z. (In press). Education Data Science: Past, Present, Future. *AERA Open*.
91. **Domingue B**, Fletcher J, Conley D, Boardman J. (2014). Reply to Zeitsch et al: Interpreting GAM. *Proceedings of the National Academy of Sciences*.

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92. **Domingue B.** (2013). Editorial (on cover art). *Educational Measurement: Issues and Practice*. doi: 10.1111/emip.12006
93. **Domingue B,** Thomas S, Circi R, & Camilli G. (2011). Comment on “Schools and Inequality: A Multilevel Analysis of Coleman’s Equality of Educational Opportunity Data”. *Teachers College Record*, Number 16544.

6.3 Technical Reports, Preprints, Working Papers, etc.

94. **Domingue B,** Dell M, Lang DN, Silverman RD, Yeatman JD, Hough H. (2021). The effect of COVID on Oral Reading Fluency during the 2020-2021 Academic Year. *EdArXiv*. doi: 10.35542/osf.io/6zqjr
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97. Boyle J†, **Domingue B.** (2021). The Maldistribution of Pediatric Providers as a Potential Driver of Reduced Educational Outcomes. *medRxiv*. doi: 10.1101/2021.05.24.21257733
98. **Domingue B,** Kanopka K, Trejo S, Tucker-Drob EM. (2021). False discovery in the analysis of interactions as a function of the distributional and metric properties of the outcome. *PsyArXiv*. doi: 10.31234/osf.io/932fm
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101. **Domingue B,** Hough H, Lang D†, Yeatman J. (2021). Changing patterns of growth in oral reading fluency during the COVID pandemic. [PACE Policy Brief](#)
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102. **Domingue B,** Kanopka K†, Stenhaug B†, Sulik MJ, Beverly T, Brinkhuis M, Circi R, Faul J, Liao D, McCandliss B, Obradović J, Piech C, Porter T, Soland J, Weeks J, Wise S, Yeatman J. (2020). Speed accuracy tradeoff? Not so fast: Marginal changes in speed have inconsistent relationships with accuracy in real-world settings. *psyArXiv*. doi: 10.31234/osf.io/kduv5
103. Demange PA, Hottenga JJ, Abdellaoui A, Malanchini M, **Domingue BW,** de Zeeuw EL, Rimfeld K, Eley T, Boomsma DI, van Bergen E, Breen G, Nivard MG, Cheesman R. (2020). Parental influences on offspring education: indirect genetic effects of non-cognitive skills. *bioRxiv*. doi: 10.1101/2020.09.15.296236
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105. Gebre-Medhin B†, Giebel S†, Alvero AJ†, antonio al, **Domingue B,** Stevens M. (2020). Application Essays and the Performance of Merit in US Selective Admissions. *socArXiv*. doi: 10.31235/osf.io/njhg9
106. Freese J, **Domingue B,** Trejo S, Sicinski K, Herd P. (2019). Problems with a Causal Interpretation of Polygenic Score Differences between Jewish and non-Jewish Respondents in the Wisconsin Longitu-

dinal Study. *SocArXiv*.

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107. Cantu P†, Sheehan CM†, **Domingue B.** (2016). A broad sense measure of health and its properties in the HRS. *bioRxiv*.
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108. **Domingue B.**, Boardman J. (2016). Using Genome Wide Estimates of Heritability to Examine the Relevance of Gene-Environment Interplay. *bioRxiv*.
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110. Alzen J† and **Domingue B.** (2013). A characterization of sorting and implications for value-added estimates. ERIC Number: ED545383.
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111. Briggs D & **Domingue B.** (2011). Due Diligence and the Evaluation of Teachers: A review of the value-added analysis underlying the effectiveness rankings of Los Angeles Unified School District teachers by the Los Angeles Times. Boulder, CO: National Education Policy Center. ERIC Number: ED516008.
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7 Talks, Meetings, Etc

Recorded versions of talks can be found [here](#)

7.1 Invited talks

- 2021: Biancasrosa Lab, University of Oregon; The Notestein Seminars Series, Office of Population Research, Princeton University; Berkeley BEAR Center; CREST (Center for Research in Economics and Statistics) Seminar, ENSAE; Population Dynamics and Health Program (PDHP), University of Michigan; International Objective Measurement Workshop (IOMW)
- 2020: McCandliss Lab; Webinar with Brazilian Educational Assessment Association President and colleagues; Stanford Sociology Colloquium; NORFACE mini-conference on Gene-Environment interactions, Erasmus University; Social Genomics Group, University of Wisconsin Madison; Conference on Educational Data Science, Stanford; Berkeley BEAR Center; Inequality Workshop, Stanford Center on Poverty and Inequality; Special Interest Group, Learning Analytics, Utrecht University
- 2019: Scancor Seminar; Uses of Polygenic Scores meeting, New York Genome Center; NIH DIR (Division of Intramural Research) Genome Seminar Series; Demography Brown Bag (University of California)
- 2018: Conference on Polygenic Prediction and Its Application in Social Science; Division of Public Health, College of Human Medicine, Michigan State University; Stanford Classes without Quizzes; Geriatric Psychiatry and Neuroscience Grand Rounds, Stanford Medicine, Department of Psychiatry and Behavioral Sciences; University of California Berkeley, Graduate School of Education Colloquium; Stanford BIO-X
- 2017: Duke Population Research Center; Stanford Center for Education Policy Analysis; Broad Online Journal Club; Feldman Lab; Stanford Center for Computational, Evolutionary, and Human Genomic Symposium; Oxford Sociology; University of North Carolina Population Center
- 2016: Pritchard Lab; Stanford SCOPE; USC Population Center; Stanford Gardner Center; Berkeley Center on the Economics and Demography of Aging, Genes and Complex Human Phenotypes Workshop; Russell Sage Foundation; Add Health User's Conference; Integrating biology and the social sciences: Challenges

and opportunities, El Colegio de Mexico; Demography Seminar, University of Wisconsin; Conference on Genetics and Social Science, Human capital and economic opportunity global working group; Biomarker Network Meeting

- 2015: Berkeley BEAR Center; University of Iowa College of Public Health; Stanford Graduate School of Education; University of Colorado Boulder School of Education
- 2014: Harvard Graduate School of Education
- 2013: The Fourth Annual Seminario Internacional de Investigación sobre Calidad de la Educación (Bogotá, Colombia)

7.2 Talks & Posters at Annual Meetings

Society for Research on Educational Effectiveness; Gerontological Society of America; Eastern Sociological Society; Interdisciplinary Association for Population Health Science, Behavior Genetics Association, Society of Research on Child Development, National Council on Measurement in Education, American Educational Research Association, Population Association of America, American Sociological Association, Integrating Genetics and the Social Science, International Meeting of the Psychometric Society

7.3 Conference Awards

- van Alten S, Domingue B, Galama T, Marees AT. The effects of demographic-based selection bias on GWAS results in the UK Biobank. ASHG 2021 Charles J. Epstein Trainee Awards Semifinalist
- Wu M, Davis RL, Domingue, Piech C, Goodman N. Variational Item Response Theory: Fast, Accurate, and Expressive. Best Paper, EDM 2020
- Duncan, Shen, Pritchard, Feldman, Harris, Domingue. Performance of Polygenic Scores across Populations. Reviewer's Choice Award, American Society of Human Genetics 2017 Meeting.
- Eckhouse, Domingue, Freeman, Henslee, Henriksen, Waldrop, Sparkman, Eagon, Salles. Comparing Post-operative Nausea and Vomiting After Bariatric Surgery Using a Shortened Version of a Validated Questionnaire. Poster of Distinction, American Society for Metabolic & Bariatric Surgery at ObesityWeek 2019.

8 Teaching & Mentorship

8.1 Classes

- Stanford University
 - Education 339: Advanced Topics in Quantitative Policy Analysis (Fall 2018, Fall 2020).
 - Education 252: Introduction to Test Theory (Fall 2015, Fall 2016, Winter 2018, Winter 2019, Winter 2021).
 - Education 252L: Introduction to Test Theory Lab (Fall 2016, Winter 2018, Winter 2019, Winter 2021).
 - Education 353A: Problems in Measurement: Item Response Theory (Spring 2016, Spring 2021).
 - Education 373: Genetics and Society (Spring 2017; also Soc232/Humbio158S).
- University of Colorado Boulder
 - Education 4716: Basic statistical methods (Fall 2009)
 - Supervised a group of 5 student teachers in the Boulder Valley School District (Fall 2007).
- High School Teacher: Precalculus, Calculus, Physics (Crested Butte Academy, 2006-2007).

8.2 Dissertation Advisor

- Ben Stenhaug
- Sam Trejo, Assistant Professor, Princeton University

8.3 Postdoctoral and Professional Mentorship

- Jermaine Dambi (University of Zimbabwe), External Mentor, Global Health Equity Scholars Fellowship Program
- Dokyoung (Sophia) You, Mentor NIDA K23, Effect of pain catastrophizing on prescription opioid craving

8.4 Dissertation Committee Membership

- Anna Popova, Sara Dozier, Daniel Greene, Jing Liu, Erin Fahle, Jenna Finch, Joseph Townsend, Christopher Candelaria, Ben Shear, Elisa Garcia,

8.5 Dissertation Committee Membership, University Chair

- Sid Krishna-Kumar (Biology), Chenru Liu (Management Science & Engineering)

8.6 External Committee Membership

- Evelina Akimova, Oxford Sociology (Doctoral Defense); Bryna Cooper, Palo Alto University (Doctoral Defense, Psy.D.); Xuejie Ding, Oxford Sociology (Doctoral Defense); Maximilian Stiefel, UCSB Geography (Qualifying Exam)

9 Service

9.1 University Service

- Member, CIRTL Network (Center for Integration of Research, Teaching and Learning), 2021–
- Member, Academic Council Committee on Academic Computing and Information Systems (C-ACIS), 2019
- Member, GSE Task force on Data Science
- Member, Data and Safety Monitoring Boards (DSMB) for Maisa Ziadni (K23DA047473)

9.2 External Advisory Boards and Committees

- NCME, Annual Conference Program Committee, 2022 Annual Meeting
- The Collge Board's Admissions Research Consortium (ARC) Research Advisory Committee, 2021–

9.3 Editorial Duties

- Discover Social Science and Health, Editorial Board, 3/2021–
- AERA Open, Associate Editor for special issue on Educational Data Science
- AERA Open Editorial Board, 1/2017-present
- PLOS Genetics (Guest Associate Editor)
- Visuals Editor, Educational Measurement: Issues and Practice, 2013

9.4 Ad Hoc Review

- Grant Proposals: NSF; NIH; MQ: Transforming mental health; Stanford Population Health Sciences, Spectrum Pilot Grants; TELOS: Technology for Equity in Learning Opportunities; Nuffield Foundation; Russell Sage Foundation
- Journals: Educational Assessment; Journal of Research on Educational Effectiveness; Educational Evaluation and Policy Analysis; Science Advances; Perspectives on Psychological Science; BMJ Open; Translational Psychiatry; Research in Social Stratification and Mobility; Journal of Research on Adolescence; Child Development; International Journal of Obesity; Molecular Psychiatry; Demography; Advances in Life Course Research; SSM - Population Health; Journal of Aging and Health; Journals of Gerontology: Series B (Social Sciences); Scientific Reports; Developmental Psychology; Journal of Health and Social Behavior; Psychological Science; American Journal of Public Health; Proceedings of the National Academy of Sciences; Social Science and Medicine; JAMA Psychiatry; Journal of Learning Analytics; Journal of Educational Data Mining; Sociology Compass; Nature Human Behaviour; American Sociological Review; Review of Education; Social Forces; Psychometrika; Journal of Marriage and Family; AERA Open; Journal of the European Economic Association; PLOS Genetics; Behavior Genetics; Journal of Educational Measurement; Biodemography and Social Biology; Educational Researcher; Journal of Educational and Behavioral Statistics; Educational Measurement: Issues and Practice; African Educational Research Journal; Assessment in Education: Principles, Policy & Practice; BMC Public Health; Education Policy Analysis Archives; Educational Policy
- Conferences: SREE Conference; NCME Conference; L@S (Learning at Scale); Population Association of America; International Objective Measurement Workshop (IOMW); Interdisciplinary Association for Population Health Science (IAPHS)
- Other: PACE Working Papers

9.5 Training

- Instructor, University of Michigan Genomics for Social Scientists Workshop, 2018
- Instructor, Oxford NCRM Summer School: An introduction to combining social science and molecular genetic research, 2017
- Instructor, Genome-wide data, Summer Workshop, El Colegio de México 2016
- Instructor, Genome-wide genetic risk score construction, IGSS 2015
- Instructor, A workshop in genome-wide data: Concepts and tools for the population sciences, University of Texas Population Research Center, 2015
- Instructor, A workshop in genome-wide data, University of Iowa College of Public Health, 2015
- Assistant Instructor, IRT-Based Test Linking in R, Training Session at 2013 NCME meeting
- Webcast Moderator, IRT-Based Test Linking in R, Training Session at 2012 NCME meeting

10 Consulting

- Psychometrics consulting for Literably. 2017–2019
- Psychometrics consulting for TrueSkills. 2015
- Evaluation of test score scale in Saudi Arabia. 2015
- Effect of test preparation in Colombia. 2014
- Replication of Teacher MGPs in Hawaii. 2014
- Teacher Effectiveness in Denver Public Schools. 2012–2013, 2015
- University Effectiveness in Colombia. 2012–2014

- School Effectiveness in Wyoming. 2012–2013
- Time Series Modeling for Northfield Trading. 2012
- Analysis and Software Development for the Center for Assessment. 2011–2012
- School Effectiveness in Hawaii. 2010–2012
- Survey Analysis for Alta Colleges. 2008–2009