

# Stanford

---



## Benjamin Domingue

Assistant Professor of Education

Graduate School of Education

 Curriculum Vitae available Online

### CONTACT INFORMATION

- **Admin. Support**

Victoria Low

**Email** victoria.low@stanford.edu

### Bio

---

#### BIO

I am a social scientist with a passion for measurement, statistics, and data. I am always looking for interesting projects and am open to collaborations with researchers from Stanford, other places within the US, and abroad.

#### ACADEMIC APPOINTMENTS

- Assistant Professor, Graduate School of Education
- Member, Bio-X

#### ADMINISTRATIVE APPOINTMENTS

- Faculty Affiliate, Stanford Center for Longevity, (2019- present)
- Assistant Professor (by courtesy), Stanford Department of Sociology, (2018- present)
- Faculty Fellow, Stanford Population Health Sciences, (2017- present)
- Steering Committee, Stanford Center for Education Policy Analysis, (2017- present)
- Assistant Professor, Graduate School of Education, Stanford University, (2015- present)
- Visiting Researcher, Population Research Center, The University of Texas at Austin, (2014-2015)
- Visiting Scholar, Colombian Institute for the Evaluation of Education (ICFES), (2013-2013)
- Research Associate, Institute of Behavioral Science, University of Colorado Boulder, (2012- present)
- Graduate Research Assistant, School of Education & Institute of Behavioral Science, University of Colorado Boulder, (2007-2012)
- Teacher, Crested Butte Academy, (2006-2007)

#### HONORS AND AWARDS

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

#### PROFESSIONAL EDUCATION

- PhD, University of Colorado Boulder , Education (2012)

- MA, University of Texas at Austin , Mathematics (2006)
- BS, University of Texas at Austin , Mathematics (2001)

## LINKS

- <http://domingue.stanford.edu/>: <http://domingue.stanford.edu/>
- Google Scholar: <https://scholar.google.com/citations?user=xBU1a9EAAAAAJ&hl=en>

## Research & Scholarship

---

### RESEARCH INTERESTS

- Brain and Learning Sciences
- Child Development
- Data Sciences
- Educational Policy

### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Ben Domingue is an assistant professor in the Graduate School of Education at Stanford University and a faculty fellow at Stanford's Center for Population Health Sciences. I am interested in how item responses collected via test or survey are leveraged to inform our understanding of human behavior (typically in the context of students or patients). I have a particular interest in the technical issues that make it challenging to draw simple inferences from such item responses. My work on student test scores has been done using data from both the US and abroad. While not analyzing item response data, I also work on projects pertaining to the implications for social science of the sudden increase in our capacity to measure human DNA and the promise and pitfalls associated with how this new data may change our understanding of human behavior.

## Teaching

---

### COURSES

#### 2018-19

- Advanced Topics in Quantitative Policy Analysis: EDUC 339 (Aut)
- Introduction to Test Theory: EDUC 252 (Win)
- Introduction to Test Theory - Lab: EDUC 252L (Win)

#### 2017-18

- Introduction to Test Theory: EDUC 252 (Win)
- Introduction to Test Theory - Lab: EDUC 252L (Win)

#### 2016-17

- Genetics and Society: EDUC 373 (Spr)
- Introduction to Test Theory: EDUC 252 (Aut)
- Introduction to Test Theory - Lab: EDUC 252L (Aut)

### STANFORD ADVISEES

#### Doctoral Dissertation Reader (AC)

Sara Dozier

#### Doctoral Dissertation Advisor (AC)

Lief Esbenshade, David Lang, Sam Trejo, Ajay Tripathi

**Doctoral (Program)**

Ishita Ahmed, Thomas Caruso, Saurabh Khanna, Crystal Moore, Ben Stenhaus, Lily Steyer, Sam Trejo

**Publications**

---

**PUBLICATIONS**

- **Genetic analysis of social-class mobility in five longitudinal studies** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Belsky, D. W., Domingue, B. W., Wedow, R., Arseneault, L., Boardman, J. D., Caspi, A., Conley, D., Fletcher, J. M., Freese, J., Herd, P., Moffitt, T. E., Poulton, R., Sicinski, et al  
2018; 115 (31): E7275–E7284
- **The social genome of friends and schoolmates in the National Longitudinal Study of Adolescent to Adult Health** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Domingue, B. W., Belsky, D. W., Fletcher, J. M., Conley, D., Boardman, J. D., Harris, K.  
2018; 115 (4): 702–7
- **Mortality selection in a genetic sample and implications for association studies.** *International journal of epidemiology*  
Domingue, B. W., Belsky, D. W., Harrati, A., Conley, D., Weir, D. R., Boardman, J. D.  
2017
- **Genetic Heterogeneity in Depressive Symptoms Following the Death of a Spouse: Polygenic Score Analysis of the U.S. Health and Retirement Study.** *American journal of psychiatry*  
Domingue, B. W., Liu, H., Okbay, A., Belsky, D. W.  
2017: appiajp201716111209-?
- **Polygenic Risk Predicts Obesity in Both White and Black Young Adults** *PLOS ONE*  
Domingue, B. W., Belsky, D. W., Harris, K. M., Smolen, A., McQueen, M. B., Boardman, J. D.  
2014; 9 (7)
- **Genetic and educational assortative mating among US adults** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Domingue, B. W., Fletcher, J., Conley, D., Boardman, J. D.  
2014; 111 (22): 7996-8000
- **Evaluating the Equal-Interval Hypothesis with Test Score Scales** *PSYCHOMETRIKA*  
Domingue, B.  
2014; 79 (1): 1-19
- **How social and genetic factors predict friendship networks** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Boardman, J. D., Domingue, B. W., Fletcher, J. M.  
2012; 109 (43): 17377-17381
- **Shared genetic risk between eating disorder- and substance-use-related phenotypes: Evidence from genome-wide association studies.** *Addiction biology*  
Munn-Chernoff, M. A., Johnson, E. C., Chou, Y., Coleman, J. R., Thornton, L. M., Walters, R. K., Yilmaz, Z., Baker, J. H., Hubel, C., Gordon, S., Medland, S. E., Watson, H. J., Gaspar, et al  
2020: e12880
- **Gender Norms and Weight Control Behaviors in U.S. Adolescents: A Prospective Cohort Study (1994-2002).** *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*  
Nagata, J. M., Domingue, B. W., Darmstadt, G. L., Weber, A. M., Meausoone, V., Cislighi, B., Shakya, H. B.  
2020; 66 (1S): S34–S41
- **Genetic associations with mathematics tracking and persistence in secondary school.** *NPJ science of learning*  
Harden, K. P., Domingue, B. W., Belsky, D. W., Boardman, J. D., Crosnoe, R., Malanchini, M., Nivard, M., Tucker-Drob, E. M., Harris, K. M.  
2020; 5: 1
- **Genetic nature or genetic nurture? Introducing social genetic parameters to quantify bias in polygenic score analyses.** *Biodemography and social biology*

- Trejo, S., Domingue, B. W.  
; 64 (3-4): 187–215
- **Genes, Gender Inequality, and Educational Attainment** *AMERICAN SOCIOLOGICAL REVIEW*  
Herd, P., Freese, J., Sicinski, K., Domingue, B. W., Harris, K., Wei, C., Hauser, R. M.  
2019; 84 (6): 1069–98
  - **Cohort Trends in the Gender Distribution of Household Tasks in the United States and the Implications for Understanding Disability** *JOURNAL OF AGING AND HEALTH*  
Sheehan, C., Domingue, B. W., Crimmins, E.  
2019; 31 (10): 1748–69
  - **Sleep-wake disorders in Alzheimer's disease: further genetic analyses in relation to objective sleep measures.** *International psychogeriatrics*  
Yesavage, J. A., Noda, A., Heath, A., McNerney, M. W., Domingue, B. W., Hernandez, Y., Benson, G., Hallmayer, J., O'Hara, R., Williams, L. M., Goldstein-Piekarski, A. N., Zeitzer, J. M., Fairchild, et al  
2019: 1–7
  - **Genes related to education predict frailty among older adults in the United States**  
Huibregtse, B., Newell-Stamper, B., Domingue, B., Boardman, J.  
SPRINGER.2019: 490
  - **Evaluation of the Preliminary Validity of Misuse of Prescription Pain Medication Items from the Patient-Reported Outcomes Measurement Information System (PROMIS)(R)** *PAIN MEDICINE*  
You, D., Hah, J. M., Collins, S., Ziadni, M. S., Domingue, B. W., Cook, K. F., Mackey, S. C.  
2019; 20 (10): 1925–33
  - **Implications of gendered behaviour and contexts for social mobility in the USA: a nationally representative observational study.** *The Lancet. Planetary health*  
Domingue, B. W., Cislighi, B., Nagata, J. M., Shakya, H. B., Weber, A. M., Boardman, J. D., Darmstadt, G. L., Harris, K. M.  
2019; 3 (10): e420–e428
  - **Genetics and the geography of health, behaviour and attainment** *NATURE HUMAN BEHAVIOUR*  
Belsky, D. W., Caspi, A., Arseneault, L., Corcoran, D. L., Domingue, B. W., Harris, K., Houts, R. M., Mill, J. S., Moffitt, T. E., Prinz, J., Sugden, K., Wertz, J., Williams, et al  
2019; 3 (6): 576–86
  - **Genetic risk, body mass index, and weight control behaviors: Unlocking the triad.** *The International journal of eating disorders*  
Nagata, J. M., Braudt, D. B., Domingue, B. W., Bibbins-Domingo, K., Garber, A. K., Griffiths, S., Murray, S. B.  
2019
  - **Genetics and the geography of health, behaviour and attainment.** *Nature human behaviour*  
Belsky, D. W., Caspi, A., Arseneault, L., Corcoran, D. L., Domingue, B. W., Harris, K. M., Houts, R. M., Mill, J. S., Moffitt, T. E., Prinz, J., Sugden, K., Wertz, J., Williams, et al  
2019
  - **New Evidence of Skin Color Bias and Health Outcomes Using Sibling Difference Models: A Research Note** *DEMOGRAPHY*  
Laidley, T., Domingue, B., Sinsub, P., Harris, K., Conley, D.  
2019; 56 (2): 753–62
  - **Evaluation of the Preliminary Validity of Misuse of Prescription Pain Medication Items from the Patient-Reported Outcomes Measurement Information System (PROMIS).** *Pain medicine (Malden, Mass.)*  
You, D. S., Hah, J. M., Collins, S., Ziadni, M. S., Domingue, B. W., Cook, K. F., Mackey, S. C.  
2019
  - **Genetics and Education: Recent Developments in the Context of an Ugly History and an Uncertain Future** *AERA OPEN*  
Martschenko, D., Trejo, S., Domingue, B. W.  
2019; 5 (1)
  - **THE GENETIC RISK FOR BODY MASS INDEX AND WEIGHT LOSS BEHAVIORS**  
Nagata, J., Domingue, B. W., Bibbins-Domingo, K., Garber, A. K., Griffiths, S., Murray, S. B.  
ELSEVIER SCIENCE INC.2019: S53

- **New Evidence of Skin Color Bias and Health Outcomes Using Sibling Difference Models: A Research Note.** *Demography*  
Laidley, T., Domingue, B., Sinsub, P., Harris, K. M., Conley, D.  
2019
- **Genes related to education predict frailty among older adults in the United States.** *The journals of gerontology. Series B, Psychological sciences and social sciences*  
Huibregtse, B. M., Newell-Stamper, B. L., Domingue, B. W., Boardman, J. D.  
2019
- **PERFORMANCE OF POLYGENIC SCORES ACROSS ANCESTRALLY DIVERSE POPULATIONS: SCIENTIFIC AND ETHICAL CONSIDERATIONS**  
Duncan, L., Shen, H., Pritchard, J., Feldman, M., Ressler, K., Harris, K., Domingue, B.  
ELSEVIER SCIENCE BV.2019: S833–S834
- **Gender norms and health: insights from global survey data.** *Lancet (London, England)*  
Weber, A. M., Cislighi, B., Meausoone, V., Abdalla, S., Mejía-Guevara, I., Loftus, P., Hallgren, E., Seff, I., Stark, L., Victora, C. G., Buffarini, R., Barros, A. J., Domingue, et al  
2019
- **Adolescent gender norms and adult health outcomes in the USA: a prospective cohort study.** *The Lancet. Child & adolescent health*  
Shakya, H. B., Domingue, B., Nagata, J. M., Cislighi, B., Weber, A., Darmstadt, G. L.  
2019
- **Pathways Between a Polygenic Score for Educational Attainment and Higher Educational Attainment in an African American Sample.** *Behavior genetics*  
Rabinowitz, J. A., Kuo, S. I., Domingue, B., Smart, M., Felder, W., Benke, K., Maher, B. S., Ialongo, N. S., Uhl, G.  
2019
- **Transancestral GWAS of alcohol dependence reveals common genetic underpinnings with psychiatric disorders.** *Nature neuroscience*  
Walters, R. K., Polimanti, R., Johnson, E. C., McClintick, J. N., Adams, M. J., Adkins, A. E., Aliev, F., Bacanu, S., Batzler, A., Bertelsen, S., Biernacka, J. M., Bigdeli, T. B., Chen, et al  
2018; 21 (12): 1656–69
- **Schools as Moderators of Genetic Associations with Life Course Attainments: Evidence from the WLS and Add Health** *SOCIOLOGICAL SCIENCE*  
Trejo, S., Belsky, D. W., Boardman, J. D., Freese, J., Harris, K., Herd, P., Sicinski, K., Domingue, B. W.  
2018; 5: 513–40
- **Education, Smoking, and Cohort Change: Forwarding a Multidimensional Theory of the Environmental Moderation of Genetic Effects** *AMERICAN SOCIOLOGICAL REVIEW*  
Wedow, R., Zacher, M., Huibregtse, B. M., Harris, K., Domingue, B. W., Boardman, J. D.  
2018; 83 (4): 802–32
- **Wide educational disparities in young adult cardiovascular health** *SSM-POPULATION HEALTH*  
Lawrence, E. M., Hummer, R. A., Domingue, B. W., Harris, K.  
2018; 5: 249–56
- **Father Absence and Accelerated Reproductive Development in Non-Hispanic White Women in the United States** *DEMOGRAPHY*  
Gaydosh, L., Belsky, D. W., Domingue, B. W., Boardman, J. D., Harris, K.  
2018; 55 (4): 1245–67
- **A sibling method for identifying vQTLs** *PLOS ONE*  
Conley, D., Johnson, R., Domingue, B., Dawes, C., Boardman, J., Siegal, M.  
2018; 13 (4): e0194541
- **Genetic Risks for Chronic Conditions: Implications for Long-term Wellbeing** *JOURNALS OF GERONTOLOGY SERIES A-BIOLOGICAL SCIENCES AND MEDICAL SCIENCES*  
Wehby, G. L., Domingue, B. W., Wolinsky, F. D.  
2018; 73 (4): 477–83
- **Geographic Clustering of Polygenic Scores at Different Stages of the Life Course.** *The Russell Sage Foundation journal of the social sciences : RSF*  
Domingue, B. W., Rehkopf, D. H., Conley, D., Boardman, J. D.

2018; 4 (4): 137–49

- **Genetic Predisposition to Obesity and Medicare Expenditures** *JOURNALS OF GERONTOLOGY SERIES A-BIOLOGICAL SCIENCES AND MEDICAL SCIENCES*  
Wehby, G. L., Domingue, B. W., Ullrich, F., Wolinsky, F. D.  
2018; 73 (1): 66–72
- **Education, Smoking, and Cohort Change: Forwarding a Multidimensional Theory of the Environmental Moderation of Genetic Effects.** *American sociological review*  
Wedow, R., Zacher, M., Huibregtse, B. M., Harris, K. M., Domingue, B. W., Boardman, J. D.  
2018; 83 (4): 802–32
- **CONCEPTUALIZING SCHOOL BELONGINGNESS IN NATIVE YOUTH: FACTOR ANALYSIS OF THE PSYCHOLOGICAL SENSE OF SCHOOL MEMBERSHIP SCALE** *AMERICAN INDIAN AND ALASKA NATIVE MENTAL HEALTH RESEARCH*  
Hussain, S., Domingue, B. W., LaFromboise, T., Ruedas-Gracia, N.  
2018; 25 (3): 26–51
- **Cohort Trends in the Gender Distribution of Household Tasks in the United States and the Implications for Understanding Disability.** *Journal of aging and health*  
Sheehan, C., Domingue, B. W., Crimmins, E.  
2018: 898264318793469
- **Schools as Moderators of Genetic Associations with Life Course Attainments: Evidence from the WLS and Add Health.** *Sociological science*  
Trejo, S., Belsky, D. W., Boardman, J. D., Freese, J., Harris, K. M., Herd, P., Sicinski, K., Domingue, B. W.  
2018; 5: 513–40
- **The social genome: Current findings and implications for the study of human genetics** *PLOS GENETICS*  
Domingue, B. W., Belsky, D. W.  
2017; 13 (3): e1006615
- **The Genetics of Success: How Single-Nucleotide Polymorphisms Associated With Educational Attainment Relate to Life-Course Development.** *Psychological science*  
Belsky, D. W., Moffitt, T. E., Corcoran, D. L., Domingue, B., Harrington, H., Hogan, S., Houts, R., Ramrakha, S., Sugden, K., Williams, B. S., Poulton, R., Caspi, A.  
2016; 27 (7): 957-972
- **Assortative mating and differential fertility by phenotype and genotype across the 20th century** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Conley, D., Laidley, T., Belsky, D. W., Fletcher, J. M., Boardman, J. D., Domingue, B. W.  
2016; 113 (24): 6647-6652
- **The Geographic Distribution of Genetic Risk as Compared to Social Risk for Chronic Diseases in the United States** *BIODEMOGRAPHY AND SOCIAL BIOLOGY*  
Rehkopf, D. H., Domingue, B. W., Cullen, M. R.  
2016; 62 (1): 126-142
- **Genome-Wide Estimates of Heritability for Social Demographic Outcomes** *BIODEMOGRAPHY AND SOCIAL BIOLOGY*  
Domingue, B. W., Wedow, R., Conley, D., McQueen, M., Hoffmann, T. J., Boardman, J. D.  
2016; 62 (1): 1-18
- **Cohort Effects in the Genetic Influence on Smoking** *BEHAVIOR GENETICS*  
Domingue, B. W., Conley, D., Fletcher, J., Boardman, J. D.  
2016; 46 (1): 31-42
- **Cohort Effects in the Genetic Influence on Smoking.** *Behavior genetics*  
Domingue, B. W., Conley, D., Fletcher, J., Boardman, J. D.  
2016; 46 (1): 31–42
- **The Bell Curve Revisited: Testing Controversial Hypotheses with Molecular Genetic Data.** *Sociological science*  
Conley, D., Domingue, B.  
2016; 3: 520–39

- **Changing Polygenic Penetrance on Phenotypes in the 20(th) Century Among Adults in the US Population.** *Scientific reports*  
Conley, D., Laidley, T. M., Boardman, J. D., Domingue, B. W.  
2016; 6: 30348-?
- **On the practices and challenges of measuring higher education value added: the case of Colombia** *ASSESSMENT & EVALUATION IN HIGHER EDUCATION*  
Shavelson, R. J., Domingue, B. W., Marino, J. P., Molina Mantilla, A., Morales Forero, A., Wiley, E. E.  
2016; 41 (5): 695-720
- **Breastfeeding is associated with waist-to-height ratio in young adults** *BMC PUBLIC HEALTH*  
Bohr, A. D., Boardman, J. D., Domingue, B. W., McQueen, M. B.  
2015; 15
- **Polygenic Influence on Educational Attainment: New evidence from The National Longitudinal Study of Adolescent to Adult Health.** *AERA open*  
Domingue, B. W., Belsky, D., Conley, D., Harris, K. M., Boardman, J. D.  
2015; 1 (3): 1-13
- **Prevention, Use of Health Services, and Genes: Implications of Genetics for Policy Formation** *JOURNAL OF POLICY ANALYSIS AND MANAGEMENT*  
Wehby, G. L., Domingue, B. W., Boardman, J. D.  
2015; 34 (3): 519-U228
- **What can genes tell us about the relationship between education and health?** *SOCIAL SCIENCE & MEDICINE*  
Boardman, J. D., Domingue, B. W., Daw, J.  
2015; 127: 171-180
- **The National Longitudinal Study of Adolescent to Adult Health (Add Health) Sibling Pairs Genome-Wide Data** *BEHAVIOR GENETICS*  
McQueen, M. B., Boardman, J. D., Domingue, B. W., Smolen, A., Tabor, J., Killeya-Jones, L., Halpern, C. T., Whitsel, E. A., Harris, K. M.  
2015; 45 (1): 12-23
- **Replicability and Robustness of Genome-Wide-Association Studies for Behavioral Traits** *PSYCHOLOGICAL SCIENCE*  
Rietveld, C. A., Conley, D., Eriksson, N., Esko, T., Medland, S. E., Vinkhuyzen, A. A., Yang, J., Boardman, J. D., Chabris, C. F., Dawes, C. T., Domingue, B. W., Hinds, D. A., Johannesson, et al  
2014; 25 (11): 1975-1986
- **Norms as Group-Level Constructs: Investigating School-Level Teen Pregnancy Norms and Behaviors** *SOCIAL FORCES*  
Mollborn, S., Domingue, B. W., Boardman, J. D.  
2014; 93 (1): 241-267
- **Testing the key assumption of heritability estimates based on genome-wide genetic relatedness** *JOURNAL OF HUMAN GENETICS*  
Conley, D., Siegal, M. L., Domingue, B. W., Harris, K. M., McQueen, M. B., Boardman, J. D.  
2014; 59 (6): 342-345
- **Understanding multiple levels of norms about teen pregnancy and their relationships to teens' sexual behaviors** *ADVANCES IN LIFE COURSE RESEARCH*  
Mollborn, S., Domingue, B. W., Boardman, J. D.  
2014; 20: 1-15
- **Is the Gene-Environment Interaction Paradigm Relevant to Genome-Wide Studies? The Case of Education and Body Mass Index** *DEMOGRAPHY*  
Boardman, J. D., Domingue, B. W., Blalock, C. L., Haberstick, B. C., Harris, K. M., McQueen, M. B.  
2014; 51 (1): 119-139
- **The Gains From Vertical Scaling** *JOURNAL OF EDUCATIONAL AND BEHAVIORAL STATISTICS*  
Briggs, D. C., Domingue, B.  
2013; 38 (6): 551-576
- **Gene-environment interactions related to body mass: School policies and social context as environmental moderators** *JOURNAL OF THEORETICAL POLITICS*  
Boardman, J. D., Roettger, M. E., Domingue, B. W., McQueen, M. B., Haberstick, B. C., Harris, K. M.  
2012; 24 (3): 370-388
- **Ethnicity, Body Mass, and Genome-Wide Data** *BIODEMOGRAPHY AND SOCIAL BIOLOGY*

Boardman, J. D., Blalock, C. L., Corley, R. P., Stallings, M. C., Domingue, B. W., McQueen, M. B., Crowley, T. J., Hewitt, J. K., Lu, Y., Field, S. H.  
2010; 56 (2): 123-136