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A teacher like me: the role of teacher gender representation and gender stereotypes in education

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References

A

- Agyapong, E. (2018). Representative bureaucracy: Examining the effects of female teachers on girls' education in Ghana. *International Journal of Public Administration*, 14(16), 1338-1350.
- Akram, S. (2018). Representative bureaucracy and unconscious bias: Exploring the unconscious dimension of active representation. *Public Administration*, 96(1), 119-133. <https://doi.org/10.1111/padm.12376>.
- Alan, S., Ertac, S., & Mumcu, I. (2018). Gender stereotypes in the classroom and effects on achievement. *The Review of Economics and Statistics*, 100(5), 876-890. https://doi.org/10.1162/rest_a_00756.
- An, S. H., Song, M., & Meier, K. J. (2021). Representative bureaucracy and the policy environment: Gender representation in forty-four countries. *Public Administration*, October. <https://doi.org/10.1111/padm.12789>.
- Arens, A.K., Marsh, W.M., Pekrun, R., Lichtenfeld, S., Murayama, K. & vom Hofe, R. (2017). Math selfconcept, grades, and achievement test scores: Longterm reciprocal effects across five waves and three achievement tracks. *Journal of Educational Psychology*, 109(5), 623-634.
- Annot, M., Gray, J., James, M., Rudduck, J., & Duveen, G. (1998). Recent research on gender and educational performance. London: Ofsted.
- Aslam, M., & Kingdon, G. (2011). What can teachers do to raise pupil achievement? *Economics of Education Review*, 30(3), 559–574. <https://doi.org/10.1016/j.econedurev.2011.01.001>.
- Autin, F. & Croizet, J. (2012). Improving memory efficiency by reframing metacognitive interpretation of task difficulty. *Journal of Experimental Psychology*, 141(4), 610-618.

B

- Banaji, M. R., & Greenwald, A. G. (1995). Implicit gender stereotyping in judgments of fame. *Journal of Personality and Social Psychology*, 68(2), 181–198. <https://doi.org/10.1037/0022-3514.68.2.181>.
- Bates, D., Mächler, M., Bolker, B. M., & Walker, S. C. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, 67(1). <https://doi.org/10.18637/jss.v067.i01>.
- Bardbury, M. & Kellough, J.E. (2011). Representative bureaucracy: Assessing the evidence on active representation. *The American Review of Public Administration*, 41(2), 157-167.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5(4), 323–370. <https://doi.org/10.1037/1089-2680.5.4.323>.

- Beilock, S. L., Gunderson, E. A., Ramirez, G., & Levine, S. C. (2010). Female teachers' math anxiety affects girls' math achievement. *Proceedings of the National Academy of Sciences of the United States of America*, 107(5), 1860–1863. <https://doi.org/10.1073/pnas.0910967107>.
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88, 354–364.
- Berg, P., Palmgren, O., & Tyrefors, B. (2020). Gender grading bias in junior high school mathematics. *Applied Economics Letters*, 27(11), 915–919. <https://doi.org/10.1080/13504851.2019.1646862>.
- Biesta, G., Priestley, M., & Robinson, S. (2015). The role of beliefs in teacher agency. *Teachers and teaching*, 21(6), 624–640. <https://doi.org/10.1080/13540602.2015.1044325>
- Blakemore, J.E.O., Berenbaum, S.A. & Liben, L.S. (2009). *Gender Development*. Londen: Psychology Press.
- Blakemore, J.E.O & Hill, C.A. (2008). The child gender socialization scale: A measure to compare traditional and feminist parents, *Sex Roles*, 58, 192–207.
- Blanton, H., Jaccard, J., Klick, J., Mellers, B., Mitchell, G., & Tetlock, P. E. (2009). Strong claims and weak evidence: Reassessing the predictive validity of the IAT. *Journal of Applied Psychology*, 94(3), 567–582. <https://doi.org/10.1037/a0014665>.
- Breda, T., Jouini, E., Napp, C., & Thebault, G. (2020). Gender stereotypes can explain the gender-equality paradox. *Proceedings of the National Academy of Sciences*, 117(49), 31063–31069. <https://doi.org/10.1073/pnas.2008704117>
- Breda, T., & Ly, S. T. (2015). Professors in core science fields are biased in favor of women: evidence from France. *American Economic Journal: Applied Economics*, 7(4), 53–75. <http://www.parisschoolofeconomics.eu/docs/ly-son-thierry/gendergapulm.pdf>.
- Brown, C. S., & Stone, E. A. (2016). Gender stereotypes and discrimination. How sexism impacts development. *Advances in Child Development and Behavior*, 50, 105–133. <https://doi.org/10.1016/bs.acdb.2015.11.001>.
- Bügel, K., Alberts, R.V.J., & Zwitser, R. J. (2011). Hebben jongens een steeds groter wordende onderwijs achterstand? Sekseverschillen in onderwijsprestaties vanaf vijftien jaar. *Tijdschrift Voor Genderstudies*, 4, 63–76. <https://ugp.rug.nl/genderstudies/article/view/1447/1441>.
- Burgess, D., & Borgida, E. (1999). Who women are, who women should be: Descriptive and prescriptive gender stereotyping in sex discrimination. *Psychology, Public Policy, and Law*, 5(3), 665–692. <https://doi.org/10.1037/1076-8971.5.3.665>.
- Burgess, S., & Greaves, E. (2013). Test scores, subjective assessment, and stereotyping of ethnic minorities. *Journal of Labor Economics*, 31(3), 535–576. <https://doi.org/10.1086/669340>.
- Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological Review*, 106(4), 676–713.

C

- Caldwell, E., & Hartnett, R. (1967). Sex bias in college grading? *Journal of Educational Measurement*, 4(3), 129–132.
- Cardona López, J.A., Nordfjell, O.B., Gaini, F., Heikkinen, M. (2018). Promising Nordic practices in gender equality promotion: Developing teacher education dialogue, practice, and policy cycles on-line. *Policy Futures in Education*, 16(5), 605-619. <https://doi.org/10.1177/1478210317722286>
- Carnes, M., Devine, P. G., Baier Manwell, L., Byars-Winston, A., Fine, E., Ford, C. E., Forscher, P., Isaac, C., Kaatz, A., Magua, W., Palta, M., & Sheridan, J. (2015). The effect of an intervention to break the gender bias habit for faculty at one institution: A cluster randomized, controlled trial. *Academic medicine journal of the Association of American Medical Colleges*, 90(2), 221–230. <https://doi.org/10.1097/ACM.0000000000000552>
- CBS. (2022). Stedelijkheid. Consulted from. <https://www.cbs.nl/nl-nl/nieuws/2019/44/meeste-afval-per-inwoner-in-minst-stedelijke-gemeenten/stedelijkheid>.
- CBS (2020). Hoeveel mensen met een migratieachtergrond wonen in Nederland? Consulted from: <https://www.cbs.nl/nl-nl/dossier/dossier-asiel-migratie-en-integratie/hoeveel-mensen-met-een-migratieachtergrond-wonen-in-nederland-> .
- Charlesworth, T. E. S., & Banaji, M. R. (2021). Patterns of implicit and explicit stereotypes III: Long-term change in gender stereotypes. *Social Psychological and Personality Science*, 13(1), 14-26. <https://doi.org/10.1177/1948550620988425>.
- Chamorro-Premuzic, T., Harlaar, N., Greven, C.U. & Plomin, R. (2010). More than just IQ: A longitudinal examination of self-perceived abilities as predictors for academic performance in a large sample of UK twins. *Intelligence*, 38(4), 385-392.
- Cho, I. (2012). The effect of teacher-student gender matching: Evidence from OECD countries. *Economics of Education Review*, 31(3), 54–67. <https://doi.org/10.1016/j.econedurev.2012.02.002>.
- Cole, M. S., Feild, H. S., & Giles, W. F. (2004). Interaction of recruiter and applicant gender in resume evaluation: A field study. *Sex Roles*, 51(9–10), 597–608. <https://doi.org/10.1007/s11199-004-5469-1>.
- Collins, P.H., Da Silva, E.C.G., Ergun, E., Furseth, I., Bond, K.D., & Martínez-Palacios, J. (2021). Intersectionality as critical social theory. *Contemporary Political Theory*, 20, 690–725. <https://doi.org/10.1057/s41296-021-00490-0>.
- Cornwell, C., Mustard, D. B., & Van Parys, J. (2013). Noncognitive skills and the gender disparities in test scores and teacher assessments: Evidence from primary school. *Journal of Human Resources*, 48(1), 236–264. <https://doi.org/10.3368/jhr.48.1.236>.
- Crisp, R. J., Bache, L. M., & Maitner, A. T. (2009). Dynamics of social comparison in counter-stereotypic domains: Stereotype boost, not stereotype threat, for women engineering majors. *Social Influence*, 4(3), 171–184. <https://doi.org/10.1080/15534510802607953>.

D

- Daalmans, S., Kleemans, M. & Sadza, A. (2017). Gender representation on gender-targeted television channels: A comparison of female- and male-targeted TV Channels in the Netherlands. *Sex Roles*, 77, 366-378.
- Dasgupta, N. (2004). Implicit ingroup favoritism, outgroup favoritism, and their behavioral manifestations. *Social Justice Research*, 17(2), 143–169. <https://doi.org/10.1023/B:SORE.0000027407.70241.15>.
- De Boer, E., Janssen, F.J.J.M, Dam, M., Van Driel, J.H. (2019). Ontwikkeling van agency van docenten in opleiding: Een ecologisch perspectief. *Pedagogische Studiën*, 96(6), 354-377.
- Dee, T. S. (2005). A teacher like me: Does race, ethnicity, or gender matter? *The American Economic Review*, 95(2), 158-165. <https://www.jstor.org/stable/4132809>
- Denessen, E., Hornstra, L., Van den Bergh, L., & Bijlstra, G. (2022). Implicit measures of teachers' attitudes and stereotypes, and their effects on teacher practice and student outcomes: A review. *Learning and Instruction*, 78, 101437. <https://doi.org/10.1016/j.learninstruc.2020.101437>.
- De Vries, E. E., van der Pol, L. D., Toshkov, D. D., Groeneveld, M. G., & Mesman, J. (2022). Fathers, faith, and family gender messages: Are religiosity and gender talk related to children's gender attitudes and preferences? *Early Childhood Research Quarterly*, 59, 21–31. <https://doi.org/10.1016/j.ecresq.2021.10.002>.
- Deutsch, F. M., & Saxon, S. E. (1998). The double standard of praise and criticism for mothers and fathers. *Psychology of Women Quarterly*, 22(4), 665–683. <https://doi.org/10.1111/j.1471-6402.1998.tb00184.x>.
- Devine, P.G., Forscher, P.S., Cox, W.T.L., Kaatz, A., Sheridan, J., & Carnes, M. (2017). A gender bias habit-breaking intervention led to increased hiring of female faculty in STEMM departments. *Journal of Experimental Social Psychology*, 73, 211-215. <https://doi.org/10.1016/j.jesp.2017.07.002>
- Dhillon, A., & Meier, K. J. (2022). Representative bureaucracy in challenging environments: Gender representation, education, and India. *International Public Management Journal*, 25(1), 43–64. <https://doi.org/10.1080/10967494.2020.1802633>.
- Ding, F., Lu, J., & Riccucci, N.M. (2021). How bureaucratic representation affects public organizational performance: A meta-analysis. *Public Administration Review*, 81(6), 1003-1018. <https://doi.org/10.1111/puar.13361>.
- Disatnik, D. & Sivan, L. (2016). Multicollinearity illusion in moderated regression analysis. *Marketing Letters*, 27, 403-408. DOI 10.1007/s11002-014-9339-5.
- Doornkamp, L., Groeneveld, S., Groeneveld, M. G., Van der Pol, L. D., & Mesman, J. (2021). Understanding the symbolic effects of gender representation: A multi-source study in education. *International Public Management Journal*. <https://doi.org/10.1080/10967494.2021.1991534>.

- Doornkamp, L. Van den Bekerom, P., & Groeneveld, S. (2019). The individual level effect of symbolic representation: An experimental study on teacher-student gender congruence and students' perceived abilities in math. *Journal of Behavioral Public Administration*, 2(2), 1-11. <https://doi.org/10.30636/jbpa.22.64>.
- Doornkamp, L., Van der Pol, L.D., Groeneveld, S., Mesman, J., Endendijk, J.J., & Groeneveld, M.G. (2022). Understanding gender bias in teachers' grading: The role of gender stereotypical beliefs. *Teaching and Teacher Education*, 118, 1-14. <https://doi.org/10.1016/j.tate.2022.103826>.
- DUO (2020). 03 Lesgevend personeel voortgezet onderwijs (in personen). Consulted from: https://duo.nl/open_onderwijsdata/databestanden/vo/onderwijspersoneel/vo-personeel3.jsp.
- Dutch Report Education Inspectorate (2019). De staat van het onderwijs 2019. Utrecht: Inspectie van onderwijs.

E

- Eagly, H. A., Wood, W. & Diekmann, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. In T. Eckes and H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 123-174). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ellemers, N. (2018). Gender stereotypes. *Annual Review of Psychology*, 69, 275–298. <https://doi.org/10.4324/9781003041870-5>.
- Endendijk, J. J., Groeneveld, M. G., van Berckel, S. R., Hallers-Haalboom, E. T., Mesman, J., & Bakermans-Kranenburg, M. J. (2013). Gender stereotypes in the family context: Mothers, fathers, and siblings. *Sex Roles*, 68(9–10), 577–590. <https://doi.org/10.1007/s11199-013-0265-4>.
- Endendijk, J. J., Van Baar, A. L., & Deković, M. (2020). He is a stud, she is a slut! A meta-analysis on the continued existence of sexual double standards. *Personality and Social Psychology Review*, 24(2), 163-190.
- Espinoza, P., Arêas da Luz Fontes, A. B., & Arms-Chavez, C. J. (2014). Attributional gender bias: Teachers' ability and effort explanations for students' math performance. *Social Psychology of Education*, 17(1), 105–126. <https://doi.org/10.1007/s11218-013-9226-6>.
- Evans, D.K, Akmal, M. and Jakiela, P. (2020). Gender gaps in education: The long view. Center for Global Development Working Paper 523, consulted from: <https://www.edu-links.org/sites/default/files/media/file/gender-gaps-education-long-view.pdf>.
- Education in Numbers (2020). Opleidingsniveau van de bevolking, consulted from: <https://www.onderwijsin cijfers.nl/kengetallen/internationaal/opleidingsniveau-bevolking>.

F

- Falch, T., & Naper, L. R. (2013). Educational evaluation schemes and gender gaps in student achievement. *Economics of Education Review*, 36, 12–25. <https://doi.org/10.1016/j.econedurev.2013.05.002>.
- Fay, D.L., Hicklin Fryar, A., Meier, K.J., & Wilkins, V. (2020). Intersectionality and equity: Dynamic bureaucratic representation in higher education. *Public Administration*, 1-18.
- Fazio, R. H., & Olson, M. A. (2003). Implicit measures in social cognition research: Their meaning and use. *Annual Review of Psychology*, 54, 297–327. <https://doi.org/10.1146/annurev.psych.54.101601.145225>.
- Fiske, S. T. (2017). Prejudices in cultural contexts: Shared stereotypes (gender, age) versus variable stereotypes (race, ethnicity, religion). *Perspectives on Psychological Science*, 12(5), 791–799. <https://doi.org/10.1177/1745691617708204>.
- Forscher, P.S., Mitamura, C., Dix, E.L., Cox, W.T.L., & Devine, P.G. (2017). Breaking the prejudice habit: Mechanisms, timecourse, and longevity. *Journal of Experimental Social Psychology*, 72, 133-146. <https://doi.org/10.1016/j.jesp.2017.04.009>
- Fredriksen, K., & Rhodes, J. (2004). The role of teacher relationships in the lives of students. *New directions for youth development*, 2004(103), 45-54.

G

- Gade, D.M. & Wilkins, V.M. (2013). Where did you serve? Veteran identity, representative bureaucracy, and vocational rehabilitation. *Journal of Public Administration Research and Theory*, 23(2), 267-288.
- Gansen, H. M. (2019). Push-ups versus clean-up: Preschool teachers' gendered beliefs, expectations for behavior, and disciplinary practices. *Sex Roles*, 80, 393-408. <https://doi.org/10.1007/s11199-018-0944-2>.
- Garcia-Retamero, R., Müller, S. M., & López-Zafra, E. (2011). The malleability of gender stereotypes: Influence of population size on perceptions of men and women in the past, present, and future. *Journal of Social Psychology*, 151(5), 635–656. <https://doi.org/10.1080/00224545.2010.522616>.
- Gibbons, S., & Chevalier, A. (2008). Assessment and age 16+ education participation. *Research Papers in Education*, 23(2), 113–123. <https://doi.org/10.1080/02671520802048638>.
- Girod, S. , Fassiotto, M. , Grewal, D. , Ku, M. , Sriram, N. , Nosek, B. & Valentine, H. (2016). Reducing implicit gender leadership bias in academic medicine with an educational intervention. *Academic Medicine*, 91 (8), 1143-1150. doi: 10.1097/ACM.0000000000001099.
- Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the implicit association test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, 85(2), 197–216. <https://doi.org/10.1037/0022-3514.85.2.197>.

- Greven, C.U., Harlaar, N., Kovas, Y., Chamorro-Premuzic, T. & Plomin, R. (2009). More than just IQ: School achievement is predicted by self-perceived abilities – But for genetic rather than environmental reasons. *Psychological Science*, 20(6), 753-762.
- Grissom, J. A., Kern, E. C., & Rodriguez, L. A. (2015). The “representative bureaucracy” in education: Educator workforce diversity, policy outputs, and outcomes for disadvantaged students. *Educational Researcher*, 44(3), 185–192. <https://doi.org/10.3102/0013189X15580102>.
- Groeneveld, S., Andrews, R., Meier, K.J., & Schröter, E. (2015). Representative bureaucracy and public service performance: Where, why and how does representativeness work? <http://dx.doi.org/10.2139/ssrn.3982606>.
- Groeneveld, S. & Meier, K.J. (2022). Theorizing status distance: Rethinking the micro theories of representation and diversity in public organizations. *Administration & Society*, 54(2), 248-276. <https://doi.org/10.1177/00953997211028825>.
- Groeneveld, S. & Van de Walle, S. (2010). A contingency approach to representative bureaucracy: Power, equal opportunities and diversity. *International Review of Administrative Sciences*, 76(2), 239-258.
- Groeneveld, M. G., Van der Pol, L. D., De Vries, E. E., & Mesman, J. (2021). Triadic family conversations about gender: Children as driving forces and messiness in messages they receive. *Journal of Family Psychology*. <https://doi.org/10.1037/fam0000931>.
- Guimond, S., & Roussel, L. (2000). Bragging About One's School Grades: Gender Stereotyping and Students' Perception of Their Abilities in Science, Mathematics, and Language. *Social Psychology of Education*, 4(3-4), 275-293. <https://doi.org/10.1023/A:1011332704215>
- Guul, T.S. (2018). The individual-level effect of gender matching in representative bureaucracy. *Public Administration Review*, 78(3), 398-408.

H

- Haines, E. L., Deaux, K., & Lofaro, N. (2016). The times they are a-changing ... or are they not? A comparison of gender stereotypes, 1983–2014. *Psychology of Women Quarterly*, 40(3), 353–363. <https://doi.org/10.1177/0361684316634081>.
- Hanna, R. N., & Linden, L. L. (2012). Discrimination in grading. *American Economic Journal: Economic Policy*, 4(4), 146–168. <https://doi.org/10.1257/pol.4.4.146>.
- Hausmann, M. (2014). Arts versus science – Academic background implicitly activated gender stereotypes on cognitive abilities with threat raising men's (but lowering women's) performance, *Intelligence*, 46, 235-245.
- Hayes, A.F. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. London: The Guilford Press.

- Heller, K., Finsterwald, M., & Ziegler, A. (2001). Implicit theories of German mathematics and physics teachers on gender specific giftedness and motivation. *Psychologische Beiträge*, 43(1), 172.
- Herrmann, S.D., Adelman, R.M., Bodford, J.E., Graudejus, O., Okun, M.A., & Kwan, V.S.Y. (2016). The effects of a female role model on academic performance and persistence of women in STEM courses. *Basic and Applied Social Psychology*, 38(5), 258-268. <https://dx.doi.org/10.1080/01973533.2016.1209757>.
- Heyder, A., & Kessels, U. (2017). Boys don't work? On the psychological benefits of showing low effort in high school. *Sex Roles*, 77, 72-85. <https://doi.org/10.1007/s11199-016-0683-1>.
- Hilliard, L. J., & Liben, L. S. (2010). Differing levels of gender salience in preschool classrooms: Effects on children's gender attitudes and intergroup bias. *Child Development*, 81(6), 1787-1798. <https://doi.org/10.1111/j.1467-8624.2010.01510.x>.
- Hinnerich, B. T., Högl, E., & Johannesson, M. (2011). Are boys discriminated in Swedish high schools? *Economics of Education Review*, 30(4), 682-690. <https://doi.org/10.1016/j.econedurev.2011.02.007>.
- Holmlund, H., & Sund, K. (2008). Is the gender gap in school performance affected by the sex of the teacher? *Labour Economics*, 15(1), 37-53. <https://doi.org/10.1016/j.labeco.2006.12.002>.
- Hyde, J. S., Bigler, R. S., Joel, D., Tate, C. C., & Van Anders, S. M. (2019). The future of sex and gender in psychology: Five challenges to the gender binary. *American Psychologist*, 74(2), 171-193. <https://doi.org/10.1037/amp0000307>.

I

- Istenič, M. Č. (2007). Attitudes towards gender roles and gender role behaviour among urban, rural, and farm populations in Slovenia. *Journal of Comparative Family Studies*, 38(3), 477-496. <http://www.jstor.org/stable/41604170>.

J

- Jeynes, W. H. (2002). Why religious schools positively impact the academic achievement of children. *International Journal of Education & Religion*, 3, 16-32. <http://dx.doi.org/10.1163/157006202760182418>.
- Jones, S., & Myhill, D. (2004). "Troublesome boys" and "compliant girls": Gender identity and perceptions of achievement and underachievement. *British Journal of Sociology of Education*, 25(5). <https://doi.org/10.1080/0142569042000252044>.

Jungbluth, P. (1982). Docenten over onderwijs aan meisjes. Positieve diskriminatie met een dubbele bodem [Teachers on girls' education. Positive discrimination with a double bottom] (dissertation). ITS, Nijmegen.

K

- Kapitanoff S. & Pandey C. (2017). Stereotype threat, anxiety, instructor gender, and underperformance in women. *Active Learning in Higher Education*, 18(3), 213-229. <https://doi.org/10.1177/1469787417715202>.
- Keiser, L. R., Wilkins, V. M., Meier, K. J., & Holland, C. A. (2002). Lipstick and logarithms: Gender, institutional context, and representative bureaucracy. *The American Political Science Review*, 96(3), 553–564. <https://doi.org/10.1017/S0003055402000321>.
- Kennedy, B. (2014). Unraveling representative bureaucracy: A systematic analysis of the literature. *Administration & Society*, 46(4), 395-421.
- Khalilzadeh, J., & Tasci, A. D. A. (2017). Large sample size, significance level, and the effect size: Solutions to perils of using big data for academic research. *Tourism Management*, 62, 89–96. <https://doi.org/10.1016/j.tourman.2017.03.026>.
- Kiefer, A. K., & Sekaquaptewa, D. (2007). Implicit stereotypes and women's math performance: How implicit gender-math stereotypes influence women's susceptibility to stereotype threat. *Journal of Experimental Social Psychology*, 43(5), 825–832. <https://doi.org/10.1016/j.jesp.2006.08.004>.
- Kingsley, J. D. (1944). Representative bureaucracy. Yellow Springs, OH: Antioch Press.

L

- Lavy, V. (2008). Do gender stereotypes reduce girls' or boys' human capital outcomes? Evidence from a natural experiment. *Journal of Public Economics*, 92(10–11), 2083–2105. <https://doi.org/10.1016/j.jpubeco.2008.02.009>.
- Lavy, V., & Sand, E. (2018). On the origins of gender gaps in human capital: Short- and long-term consequences of teachers' biases. *Journal of Public Economics*, 167, 263–279. <https://doi.org/10.1016/j.jpubeco.2018.09.007>.
- Lee, J., Rhee, D. E., & Rudolf, R. (2019). Teacher gender, student gender, and primary school achievement: Evidence from ten francophone african countries. *Journal of Development Studies*, 55(4), 661–679. <https://doi.org/10.1080/00220388.2018.1453604>.
- Lenton, A. P., Bruder, M., & Sedikides, C. (2009). A meta-analysis on the malleability of automatic gender stereotypes. *Psychology of Women Quarterly*, 33(2), 183–196. <https://doi.org/10.1111/j.1471-6402.2009.01488.x>.

- Liben, L. S., & Bigler, R. S. (2002). The developmental course of gender differentiation: Conceptualizing, measuring, and evaluating constructs and pathways. *Monographs of the Society for Research in Child Development*, 67(2), i-viii+1-183. <https://www.jstor.org/stable/3181530>.
- Lindahl, E. (2016). Are teacher assessments biased? Evidence from Sweden. *Education Economics*, 24(2), 224–238. <https://doi.org/10.1080/09645292.2015.1014882>.
- Lyness, K. S., & Heilman, M. E. (2006). When fit is fundamental: Performance evaluations and promotions of upper-level female and male managers. *Journal of Applied Psychology*, 91(4), 777–785. <https://doi.org/10.1037/0021-9010.91.4.777>.

M

- Maries, A., Karim, N.I., & Singh, C. (2018). Is agreeing with a gender stereotype correlated with the performance of female students in introductory physics? *Physical Review Physics Education Research*, 14(2), 1-10. DOI: 10.1103/PhysRevPhysEducRes.14.020119.
- Maries, A., Karim, N.I., & Singh, C. (2020). Active learning in an inequitable learning environment can increase the gender performance gap: The negative impact of stereotype threat. *The Physics Teacher*, 58, 430-433. <https://doi.org/10.1119/10.0001844>.
- Marsh, H.W., Byrne, B.M. & Shavelson, R.J. (1988). A multifaceted academic self-concept: Its hierarchical structure and its relation to academic achievement. *Journal of Educational Psychology*, 80(3), 366-380.
- Marsh, H.W., Trautwein, U., Lüdtke, O., Köller, O., & Baumert, J. (2005). Academic self-concept, interest, grades, and standardized test scores: Reciprocal effects models of causal ordering. *Child Development*, 76(2), 397–416. <https://doi.org/10.1111/j.1467-8624.2005.00853.x>.
- Martin, C. L., & Dinella, L. M. (2012). Congruence between gender stereotypes and activity preference in self-identified tomboys and non-tomboys. *Archives of Sexual Behavior*, 41(3), 599–610. <https://doi.org/10.1007/s10508-011-9786-5>.
- Marx, D. M., & Roman, J. S. (2002). Female role models: Protecting women's math test performance. *Personality and Social Psychology Bulletin*, 28(9), 1183–1193. <https://doi.org/10.1177/01461672022812004>.
- Matějů, P., & Smith, M. L. (2015). Are boys that bad? Gender gaps in measured skills, grades and aspirations in Czech elementary schools. *British Journal of Sociology of Education*, 36(6), 871–895. <https://doi.org/10.1080/01425692.2013.874278>.
- McFarland, L., Murray, E. & Phillipson, S. (2016). Student-teacher relationships and student self-concept: Relations with teacher and student gender. *Australian Journal of Education* 60(1), 5-25.
- Meier, K.J. (2019). Theoretical frontiers in representative bureaucracy: New directions for research. *Perspectives on Public Management and Governance*, 2(1), 39-56.

- Meier, K.J. & Bohte, J. (2001). Structure and discretion: Missing links in representative bureaucracy. *Journal of Public Administration Research and Theory*, 11(4), 455-470.
- Meier, K.J., Doerfler, C., Hawes, D., Hicklin, A.K. & Rocha, R.R. (2006). The role of management and representation in improving performance of disadvantaged students: An application of Bum Phillips's "don shula rule". *Review of Policy Research*, 23(5), 1095-1110.
- Meier, K.J., Pennington, M.S. & Eller, W.S. (2005). Race, sex and Clarendo Thomas: Representation change in the EEOC. *Public Administration Review*, 65(2), 171-179.
- Meier, K.J. & Stewart, J. (1992). The impact of representative bureaucracies: Educational systems and public policies. *American Review of Public Administration*, 22(3), 157-171.
- Meier, K.J., Wrinkle, R.D. & Polinard, J.L. (1999). Representative bureaucracy and distributional equity: Addressing the hard question. *The Journal of Politics*, 61(4), 1025-1039.
- Muntoni, F., & Retelsdorf, J. (2018). Gender-specific teacher expectations in reading—The role of teachers' gender stereotypes. *Contemporary Educational Psychology*, 54, 212–220. <https://doi.org/10.1016/j.cedpsych.2018.06.012>.
- Muralidharan, K., & Sheth, K. (2016). Bridging education gender gaps in developing countries: The role of female teachers. *Journal of Human Resources*, 51(2), 269–297. doi: 10.3368/jhr.51.2.0813-5901R1.

N

- Neugebauer, M., Helbig, M., & Landmann, A. (2011). Unmasking the myth of the same-sex teacher advantage. *European Sociological Review*, 27(5), 669–689. <https://doi.org/10.1093/esr/jcq038>.
- Nicholson-Crotty, S., Grissom, J.A., Nicholson-Crotty, J. & Redding, C. (2016). Disentangling the causal mechanisms of representative bureaucracy: Evidence from assignment of students to gifted programs. *Journal of Public Administration Research and Theory*, 26(4), 745-757.
- Nosek, B. A., Banaji, M. R., & Greenwald, A. G. (2002a). Harvesting implicit group attitudes and beliefs from a demonstration website. *Group Dynamics*, 6(1), 101–115. <https://doi.org/10.1037/1089-2699.6.1.101>.
- Nosek, B. A., Banaji, M. R., & Greenwald, A. G. (2002b). Math = male, me = female, therefore math ≠ me. *Journal of Personality and Social Psychology*, 83(1), 44–59. <https://doi.org/10.1037/0022-3514.83.1.44>.
- Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2005). Understanding and using the implicit association test: II. Method variables and construct validity. *Personality and Social Psychology Bulletin*, 31(2), 166–80. <https://doi.org/10.1177/0146167204271418>.

- Nosek, B. A., Smyth, F. L., Sriram, N., Lindner, N. M., Devos, T., Ayala, A., et al. (2009). National differences in gender-science stereotypes predict national sex differences in science and math achievement. *Proceedings of the National Academy of Sciences*, 106 (26), 10593–10597. <https://doi.org/10.1073/pnas.0809921106>
- Nürnberg, M., Nerb, J., Schmitz, F., Keller, J., & Sütterlin, S. (2016). Implicit gender stereotypes and essentialist beliefs predict preservice teachers tracking recommendations. *Journal of Experimental Education*, 84(1), 152–174. <https://doi.org/10.1080/00220973.2015.1027807>.

O

- Obioma, I.F., Hentschel, T., & Hernandez Bark, A.S. (2021). Gender stereotypes and self-characterizations in Germany and Nigeria: A cross-cultural comparison. *Journal of Applied Social Psychology*, 00, 1-17. <https://doi.org/10.1111/jasp.12801>
- OESO (2019). Part-time and partly equal: gender and work in the Netherlands. Parijs: OECD Publishing.
- Onderwijsraad (2019). Een verkenning van sekse verschillen in het onderwijs, consulted from: <https://www.onderwijsraad.nl/publicaties/adviezen/2020/10/07/verkenning-sekse-verschillen-onderwijs>.

P

- Pajares, F. & Miller, D. (1994). Role of self-efficacy and self-concept beliefs in mathematical problem solving: A path analysis. *Journal of Educational Psychology*, 86(2), 193-203.
- Palan, K. M. (2001). Gender identity in consumer behavior research: A literature review and research agenda. *Academy of Marketing Science Review*, 2001(10), 1–24.
- Park, S. (2012). Does gender matter? The effect of gender representation of public bureaucracy on governmental performance. *American Review of Public Administration*, 43(2), 221-242.
- Peugh, J.L. (2010). A practical guide to multilevel modeling. *Journal of School Psychology*, 48, 85-112.
- Pitts, D.W. (2007). Representative bureaucracy, ethnicity and public schools: Examining the link between representation and performance. *Administration & Society*, 39(4), 497-526.
- Plante, I., De la Sablonnière, R., Aronson, J.M. & Théorêt, M. (2013). Gender stereotype endorsement and achievement-related outcomes: The role of competence beliefs and task values. *Contemporary Educational Psychology*, 38, 225-235.

- Powell, G. N. (1986). Applicants' qualifications on recruiters' evaluations. *Psychological Reports*, 58, 1003–1010. <https://doi.org/10.2466/pr0.1986.58.3.1003>.
- Prentice, D.A. & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly*, 26, 269-281.
- Priestley, M., Biesta, G.J.J. & Robinson, S. (2015). Teacher agency: What is it and why does it matter? In R. Kneyber & J. Evers (eds.), *Flip the System: Changing Education from the Bottom Up*. London: Routledge.
- Protivínský, T., & Münich, D. (2018). Gender bias in teachers' grading: What is in the grade. *Studies in Educational Evaluation*, 59, 141–149. <https://doi.org/10.1016/j.stueduc.2018.07.006>.

R

- Riccucci, N. M., & Van Ryzin, G. G. (2017). Representative bureaucracy: A lever to enhance social equity, coproduction, and democracy. *Public Administration Review*, 77(1), 21–30. <https://doi.org/10.1111/puar.12649>.
- Riccucci, N.M., Van Ryzin, G.G. & Jackson, K. (2018). Representative bureaucracy, race and policing: A survey experiment. *Journal of Public Administration Research and Theory*, 28(4), 506-518.
- Riccucci, N.M., Van Ryzin, G.G. & Lavena, C.F. (2014). Representative bureaucracy in policing: Does it increase perceived legitimacy? *Journal of Public Administration Research and Theory*, 24(3), 537-551.
- Riegle-Crumb, C., & Humphries, M. (2012). Exploring bias in math teachers' perceptions of students' ability by gender and race/ethnicity. *Gender and Society*, 26(2), 290-322. <https://doi.org/10.1177/0891243211434614>.
- Roch, C.H., Pitts, D.W. & Navarro, I. (2010). Representative bureaucracy and policy tools: Ethnicity, student discipline, and representation in public schools. *Administration & Society*, 42(1), 38-65.
- Rudman, L. A., & Kilianski, S. E. (2000). Implicit and explicit attitudes toward female authority. *Personality and Social Psychology Bulletin*, 26(11), 1315–1328. <https://doi.org/10.1177/0146167200263001>.

S

- Sagebin Bordini, G., & Sperb, T. M. (2013). Sexual double standard: A review of the literature between 2001 and 2010. *Sexuality and Culture*, 17(4), 686–704. <https://doi.org/10.1007/s12119-012-9163-0>.

- Saifi, S., & Mehmood, T. (2011). Effects of socioeconomic status on student achievement. *International Journal of Social Sciences and Education*, 1(2), 119–128.
- Schmenk, B. (2004). Language learning: A feminine domain? The role of stereotyping in constructing gendered learner identities. *TESOL Quarterly*, 38(3), 514–524. <https://doi.org/10.2307/3588352>.
- Schulze, E., & Tomal, A. (2005). Perceptions of gender competence: Are christian colleges different. *Growth*, 5(5). https://pillars.taylor.edu/acsd_growth/vol5/iss5/2.
- Schussler, D.L., Stooksberry, L.M., & Bercaw, L.A. (2010). Understanding teacher candidate dispositions: Reflecting to build self-awareness. *Journal of Teacher Education*, 61(4), 350–363. <https://doi.org/10.1177/0022487110371377>
- Shieh, G. (2010). On the misconception of multicollinearity in detection of moderating effects: Multicollinearity is not always detrimental. *Multivariate Behavioral Research*, 45(3), 483–507. <https://doi.org/10.1080/00273171.2010.483393>.
- Shields, S.A., (2008). Gender: An intersectionality perspective. *Sex Roles*, 59, 301–311. DOI 10.1007/s11199-008-9501-8.
- Shih, M., Pittinsky, T. L., & Ambady, N. (1999). Stereotype susceptibility: Identity salience and shifts in quantitative performance. *Psychological Science*, 10(1), 80–83. <https://doi.org/10.1111/1467-9280.00111>.
- Siegle, D., & Reis, S. M. (1998). Gender differences in teacher and student perceptions of gifted students' ability and effort. *Gifted Child Quarterly*, 42(1), 39–47. <https://doi.org/10.1177/001698629804200105>.
- Smeding, A. (2012). Women in science, technology, engineering, and mathematics (STEM): An investigation of their implicit gender stereotypes and stereotypes' connectedness to math performance. *Sex Roles*, 67(11–12), 617–629. <https://doi.org/10.1007/s11199-012-0209-4>.
- Smetackova, I. (2015). Gender stereotypes, performance and identification with math. *Procedia- Social and Behavioral Science*, 190, 211–219.
- Solanki, S.M. & Xu, D. (2018). Looking beyond academic performance: The influence of instructor gender on student motivation in STEM fields. *American Educational Research Journal*, 55(4), 801–835. <https://doi.org/10.3102/0002831218759034>.
- Song, M. (2018). Gender representation and student performance: Representative bureaucracy goes to Korea. *American Review of Public Administration*, 48(4), 346–358. <https://doi.org/10.1177/0275074016676888>.
- Sowa, J.E., & Selden, S.C. (2003). Administrative discretion and active representation: An expansion of the theory on representative bureaucracy. *Public Administration Review*, 63(6), 700–710.
- Spencer, S. J., Logel, C., & Davies, P. G. (2016). Stereotype threat. *Annual Review of Psychology*, 67, 415–437. <https://doi.org/10.1146/annurev-psych-073115-103235>.

- Spinath, B., Spinath F.M., Harlaar, N. and Plomin, R. (2006). Predicting school achievement from general cognitive ability, self-perceived ability, and intrinsic value. *Intelligence*, 34, 363-374.
- Steele, J. (2003). Children's gender stereotypes about math: The role of stereotype stratification. *Journal of Applied Social Psychology*, 33(12), 2587-2606.
- Steffens, M.C. & Jelenec, P. (2011). Separating implicit gender stereotypes regarding math and language: Implicit ability stereotypes are self-serving for boys and men, but not for girls and woman. *Sex Roles*, 64(5), 324-335.
- Stobart, G., Elwood, J., & Quinlan, M. (1992). Gender bias in examinations: How equal are the opportunities? *British Educational Research*, 18(3), 261–276. <https://www.jstor.org/stable/1500831>
- Song, M. (2018). Gender representation and student performance: Representative bureaucracy goes to Korea. *The American Review of Public Administration*, 48(4), 346-358.
- Szymanowicz, A. & Furnham, A. (2011). Do intelligent women stay single? Cultural stereotypes concerning the intellectual abilities of men and women. *Journal of Gender Studies*, 20(1), 43-54.

T

- Tabachnick, B. G., & Fidell, L. S. (2012). Using multivariate statistics (6th ed.). Harper Collins.
- Ten Dam, G.T.M., Van Eck, E., Volman, M.L.L. (1997). Research Programmes on Gender and Education: results and conceptualisations. *European Journal of Education*, 32(4), 411-425. <https://www.jstor.org/stable/1503475>
- Ten Dam, G.T.M. & Volman, M.M. (1991). Conceptualising Gender Differences in Educational Research: The Case of the Netherlands. *British Journal of Sociology of Education*, 12(3), 309-321. <https://www.jstor.org/stable/1393040>
- Tenenbaum, H.R. & Leaper, C. (2002). Are parents' gender schema's related to their children's gender-related cognitions. *Developmental Psychology*, 38(4), 615-630.
- Theobald, N.A., & Haider-Markel, D.P. (2008). Race, bureaucracy, and symbolic representation: Interactions between citizens and police. *Journal of Public Administration Research and Theory*, 19(2), 409-426.
- Thompson, A. (2003). Caring in Context: Four Feminist Theories on Gender and Education, *Curriculum Inquiry*, 33(1), 9-65. <http://www.jstor.org/stable/3202137>
- TIMMS & PIRLS (2015). About TIMMS 2015. Retrieved from: <https://timssandpirls.bc.edu/timss2015/>.

- Trusty, J., Robinson, C. R., Plata, M., & Ng, K. (2000). Effects of gender, socioeconomic status, and early academic performance on postsecondary educational choice. *Journal of Counseling & Development*, 78, 87–96. <https://doi.org/10.1002/j.1556-6676.2000.tb01930.x>.
- Turner, S. L., Joeng, J. R., Sims, M. D., Dade, S. N., & Reid, M. F. (2019). SES, gender, and STEM career interests, goals, and actions: A test of SCCT. *Journal of Career Assessment*, 27(1), 134–150. <https://doi.org/10.1177/1069072717748665>.

V

- Van den Bergh, L., Denessen, E., Hornstra, L., Voeten, M., & Holland, R. W. (2010). The implicit prejudiced attitudes of teachers: Relations to teacher expectations and the ethnic achievement gap. *American Educational Research Journal*, 47(2), 497–527. <https://doi.org/10.3102/0002831209353594>.
- Vinopal, K. (2018). Understanding individual and organizational level representation: The case of parental involvement in schools. *Journal of Public Administration Research and Theory*, 28(1), 1-15.
- Volman, M.L.L., Ten Dam, G.T.M., Van Eck, E. (1995). Girls in science and technology: the development of a discourse, *Gender and Education*, 7(3), 283-292. <https://doi.org/10.1080/09540259550039004>

W

- Wach, F. S., Spengler, M., Gottschling, J., & Spinath, F. M. (2015). Sex differences in secondary school achievement - The contribution of self-perceived abilities and fear of failure. *Learning and Instruction*, 36, 104–112. <https://doi.org/10.1016/j.learninstruc.2015.01.005>.
- Walton, G.M. & Spencer, S.J. (2009). Latent ability: Grades and test scores systematically underestimate the intellectual ability of negatively stereotyped students. *Psychological Science*, 20(9), 1132-1139. <https://doi.org/10.1111/j.1467-9280.2009.02417>.
- Wang, Y. A., Sparks, J., Gonzales, J. E., Hess, Y. D., & Ledgerwood, A. (2017). Using independent covariates in experimental designs: Quantifying the tradeoff between power boost and Type I error inflation. *Journal of Experimental Social Psychology*, 72, 118-124.
- Weber, H.S., Lu, L., Shi, J. & Spinath, F.M. (2013). The roles of cognitive and motivational predictors in explaining school achievement in elementary school. *Learning and Individual Differences*, 25, 85-92.

- Wilkins, V.M. (2007). Exploring the causal story: Gender, active representation, and bureaucratic priorities. *Journal of Public Administration Research and Theory*, 17(1), 77-94.
- Wilkins, V.M. & Keiser, L.R. (2006). Linking passive and active representation by gender: The case of child support agencies. *Journal of Public Administration Research and Theory*, 16(1), 87-102.
- Winters, M.A., Haight, R.C., Swaim, T.T., & Pickering, K.A. (2013). The effect of same-gender teacher assignment on student achievement in the elementary and secondary grades: Evidence from panel data. *Economics of Education Review*, 34, 69-75. <http://dx.doi.org/10.1016/j.econedurev.2013.01.007>.
- Wulff, J. N., & Villadsen, A. R. (2019). Are survey experiments as valid as field experiments in management research? An empirical comparison using the case of ethnic employment discrimination. *European Management Review*, 17(1), 347-356. <https://doi.org/10.1111/emre.12342>.

X

- Xu, X., & Meier, K. J. (2021). Separating symbolic and active representation: A mixed methods study of gender and education in China. *Public Management Review*, 00(00), 1–23. <https://doi.org/10.1080/14719037.2021.1900352>.

Z

- Zhang, Y. (2019). Representative bureaucracy, gender congruence, and student performance in China. *International Public Management Journal*, 22(2), 321–342. <https://doi.org/10.1080/10967494.2018.1428702>.

