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# Think political leader — think he or she? A multi-country test of a gender-fair language intervention to reduce gendered leadership stereotypes

Kim Peters [a,b,*], Alma Jeftić [c,d], Timothy Ballard [b], Steven Zhou [e], Niklas K. Steffens [b], Ilke Inceoglu [a], Michelle K. Ryan [f,g], Renata Bongiorno [h,i], Alice Eagly [j], Patrícia Arriaga [k], Agustin Espinosa [l], Balazs Aczel [m], Adeyemi Adetula [n,o], Salvatore M. Aglioti [p,q], Ece Akca [r], Emine Akman Direkçi [s], Zahra Alizadeh [t], Itziar Alonso-Arbiol [u], Muhammad Fahizza Amru [v], John Andre [w], Raquel António [k], Uğur Arcagök [x], Nwadiogo Chisom Arinze [n], Romina Asadollahpour [y], Gayane Alberty Asatryan [z], Muhammed Sukru Aydin [aa], Bülent Aykutoğlu [ab], Parisa Azimisefat [ac,ad], Soufian Azouaghe [ae,af], Sercan Balım [ag], Gabriel Baník [ah], Krystian Barzykowski [ai], Maja Becker [aj], Nora C.G. Benningstad [ak], Julia Berenguer [al], Monika Bidzan-Wiącek [am,an], Bartosz Błaszczak [ao], Ricardo Borges Rodrigues [k], Islam Borinca [ap], Leanne Boucher [aq], Sarah Boukarras [ar], Mustapha Boulahya [as], Olcay Bozkuş-Demir [at], Mark J. Brandt [au], Fabrice Brodard [av], Hilmar Brohmer [aw,ax], Erin M. Buchanan [ay], Jacek Buczny [az], Mehmet Fatih Bükün [ba], Moa Bursell [bb], Andrea Buscemi [bc], Muhammad Mussaffa Butt [bd], Angelica Caicedo-Moreno [be], Cinzia Calluso [bf], Selin Metin Camgöz [bg], Octav Sorin Candel [bh], Thomas Castelain [bi], Pablo Castro-Abril [be], Müge Cavdan [bj,bk], Trawin Chaleeraktrakoon [bl], Abdelilah Charyate [bm], Jennifer Chavanovanich [bn], Mohammed Cherradi [bo], Peilian Chi [bp,bq], Phatthanakit Chobthamkit [br], Shalini Choudhary [bs], Çağla Çınar [bt], Heather M. Claypool [bu], Sharon Coen [bv], W. Matthew Collins [bw], Nadia Sarai Corral-Frías [bx], Cleno Couto [by,bz], Mioara Cristea [ca], Wilson Cyrus-Lai [cb], Anna Dalla Rosa [cc], Trac Vu Dang [cd], Maria Giovanna Devetag [ce], Bojana M. Dinić [cf], Terence D. Dores Cruz [cg], Andrei Dumbravă [ch,ci,cj], Julia Dykla-Bień [ck], Clare Ellen Edge [cl], Sina Eftekhari [cm], Youssef El Mottaleb [cn], Christian T. Elbæk [co], Cécile Emery [a], Simona Epure [cp], Thomas R. Evans [cq], Zuzanna Farny [cr], Shameem Fatima [cs], Mario Muhammad Noer Fauzan [v], Katharina Fellnhofer [ct], Tommaso Feraco [cu], Ángela Fernández-Canseco [cv], Ludovic Ferrand [cw], Paulo Roberto dos Santos Ferreira [cx], Silvia Filippi [cy,cz],

* Corresponding author.
*E-mail address:* K.O.Peters2@exeter.ac.uk (K. Peters).

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Sam Fluit [ak], Raquel Meister Ko Freitag [da], Martha Frias-Armenta [db], Althea Frisanco [dc], Katalin Füzér [dd], Linda Isis Garcia-Estrada [de], Karla Alejandra Garduño-Realivazquez [df,dg], Agata Gasiorowska [dh], Janet Geipel [a], Sophie Gerdel [di,dj], Isabella Giammusso [bc], Vaitsa Giannouli [dk,dl], Konstantinos Giannoulis [dm], Fenne J.J. Gijzen [dn], Magali Ginet [do], Lola Girerd [do], Ilka Helene Gleibs [dp], Hendrik Godbersen [dq], Taylor Gogan [dr], Leticia Horbach Gonçalves [ds,dt], Amélie Gourdon-Kanhukamwe [du], Franca Grafe [dv], Hedy Greijdanus [dw], Rashmi Gupta [dx], Hande Guzel [dy], Pascal Gygax [dz], Constantinos Hadjichristidis [ea], Soufiane Haffou [ae], Marius Duhović Hafstad [ak], Mina Hagen [eb,ec], Peter Halama [ed], Emma Halfmann [ee,ef], Paul H.P. Hanel [eg], Eric M. Hansen [eh], Adriana Hanulíková [ei], Samantha M. Harris [ak], Claire M. Hart [ej], Levke Henningsen [a], Pentti Henttonen [ek], Gabriela Hofer [aw], Caan Hollenbach [el], Xiaoya Huang [em], Joevarian Hudiyana [v], Kotomi Ideishi [en], Izabella Ilea [eo], Hirotaka Imada [ep,eq], Moritz Ingendahl [er], Natalia C. Irrazabal [es,et], Chris Isloi [eu], Izuchukwu Lawrence G. Ndukaihe [n], Lea Jakob [ev], Kigobe Janeth [ew], Hansori Jang [ex], Candela I. Jantus [ey], Juan Rafael Juarez [ez], Nina M. Junker [ak], Pavol Kačmár [fa], Asahi Kanisawa [fb], Alper Karababa [fc], Muhammed Enes Karacoşkun [fd,fe], Gizem Karadeniz [ff], Karlijn Massar [fg], Ahmed Khaoudi [fh], Ji Hye Kim [fi], Mikyoung Kim [fi], SeungMin Kim [fi], Andrew Kloeden [a], Nadine Knab [fj,fk], Michal Kohút [fl], Büşra Kök [fm], Marta Kowal [fn], Tomas Kratochvil [fo], Clara Kulich [cy], Eva Kundtová Klocová [fp], Bahtım Kütük [fq], Anna O. Kuzminska [fr], Duc Anh La [fs], Kelly Ka Lai Lam [bp], Claus Lamm [ft], Jose M. León-Pérez [cv], Badolo Bawala Léopold [fu], Savannah C. Lewis [fv], Claire Linares [fw], Delila Lisica [fx], Zhiyu Liu [fy], Morgana Lizzio-Wilson [i], Wilson López-López [fz], Winnifred R. Louis [b], Jackson G. Lu [ga], Jessica Mesmer-Magnus [gb], Behrooz Mahmoodi-Bakhtiari [gc], Annette Malapally [gd,ge], Klara Malinakova [gf], Winfrida Saimon Malingumu [gg], Nihal Mamatoğlu [gh], Nguyen Duc Manh [ap], Diego Manríquez-Robles [gi,gj], Efisio Manunta [aj], João Mariano [k], Chloé Marie [cw], Marco Marozzi [gk], Magdalena A. Marszałek [gl], Edurne Martinez-Moreno [be], Delphine Martinot [gm], Marcel Martončik [gn], Yuya Maruo [go], Katarina Mašić Đonlić [gp], Buffie McCue-Quinn [gq], Anahita Mehdinejad [gr], Ezgi Mehmetoglu Comert [ap], Zdenek Meier [gs], Ewout H. Meijer [gt], Ethan Meimoun [al], Yuliana G. Melkumyan [gu], Julie Mellul [gv], Irem Metin-Orta [gw], Linaja Mikalonis [ap], Alberto Mirisola [bc], Katarina Mišetić [fx], Michal Misiak [gx,gy], Maria Montefinese [gz], Nicole Moore [ha], Mahmoud Moradi [hb], Eva Moreno-Bella [hc], Lamya Mouhssine [hd], Annakarina Mundorf [he], Houdaifa Nadif [hf], Joaquin Navajas [ey,hg], Eduardo Navarrete [gz], Brett H. Neely Jr [hh], Thuc Hien T. Nguyen [hi,hj], Thi Loan Nguyen [hk], Elena-Gabriela Balint [hl], Milica Ninković [hm], J. Lukas Thürmer [hn,ho], Lukas Novak [hp], Annika Nübold [hq], Armelle Nugier [cw], Ellen K. Nyhus [hr], Boglarka Nyul [hs,ht], Brian A. O'Shea [hu,hv], William G. Obenauer [gq], Chisom E. Ogbonnaya [hw], Oluyinka Ojedokun [hx,hy], Josefine Østergaard R. Pedersen [hz], Begum Otken [ia], Tobias Otterbring [hr,ib], Nestor Motemba Ouoba [ic], Fatih Özdemir [id], Asil Ali Özdoğru [ie], Gökçe Özkılıççı [if], Mariola Paruzel-Czachura [ig,ih], Freya L. Pedersen [ha], Ivana Pedović [ii], Marija Pejičić [ii], Mehmet Peker [ij], Sofia Pelica [ik], Narumol Petchthip [il], Aino Petterson [im], Stefan Pfattheicher [hz], Ivana Piterová [in], Ekaterina Pronizius [ft], Oara Prundeanu [io], Katarzyna Pypno-Blajda [ip], Alain Quiamzade [iq], Jannes Luka Rebel [ir], Sandrine Redersdorff [gm], Sara Redlingshöfer [is], Sylwiusz Retowski [gl], Andres Felipe Reyes [it], Azalea Reyes-Aguilar [iu], Gianni Ribeiro [b], Gabriela Řičařová [gf], Céline Robert [iv,iw], S. Craig Roberts [ix,iy], Marta A. Roczniewska [iz,ja], Jan Philipp Röer [jb], Anette Rohmann [el], Erika J. Rosenberger [jc], Robert M. Ross [jd], Leopold Helmut Otto Roth [je,jf], Susana Ruiz-Fernandez [jg], Shawn M. Russell [jh],

Shaho Sabbar[ji], Fatima Zahra Sahli[jj], Guro R. Sanden[jk], Costanza Scaffidi Abbate[bc], Sarina J. Schäfer[jl,el], Kathleen Schmidt[jm], Julia Schnepf[hq], Sebastian L. Schorch[jn], Sofía Schwartz-Salazar[jo], Karolina Aleksandra Scigala[hz], Ingvild Müller Seljeseth[jp], Esra Cansu Şen-Gümüştaş[jq], Amir Sepehri[jr], Astghik Serobyan[js], Shaul Shalvi[jt], Anna Siegler[eo], Michal Silberg[ju], Slavka Silberg[jv], Emina Sinanović[fx], Samuel Liljaharju[ek], Lea Skewes[jw], Adam R. Smith[jx], Çağlar Solak[s], Fatih Sonmez[x], Agnieszka Sorokowska[jy], Piotr Sorokowski[jy], Jakub Šrol[jz], Franziska A. Stanke[ka], Andreas Stenling[kb,kc], Ian D. Stephen[kd], Julia Stern[ke], Daniel Storage[kf], Anna M. Studzińska[kg,aj], Jihyun Suh[kh], Caterina Suitner[gz], Barnabas Szaszi[ki,m], Alicja Jadwiga Szmidka[kj], Ewa Szumowska[kk], Olivia B. Szwinge[kj], Susanne Tafvelin[kb], Ruri Takizawa[kl], Hande Tasa[km], Theodosios Tasios[ap], Peter Tavel[kn], Julian Tejada[ko], Ahmet Temel[kp], Passagorn Tevichapong[kq], Yukari Jessica Tham[fb], Marija Todosijević[ii], Natalia L. Tome[kr,ks], Fernando Tonini[kt], Mathilde H. Tønnesen[co], Sergio C. Torres[ku], Panagiota Tragantzopoulou[kv], Bastien Trémolière[aj,kw], Jarno Tuominen[kx], Jil Ullenboom[el], Özden Melis Uluğ[ky], Andreea Ursu[kz], Anna Elisabeth van 't Veer[la], David C. Vaidis[aj], Suzanne van Gils[jk], Leigh Ann Vaughn[lb], Marta Vercillo[lc], Michelangelo Vianello[lc], Maria Elena Villarreal Gonzalez[ld], Orsolya Vincze[eo], Vivian dos Santos Miranda[le,lf], Susanne Vogel[lg,lh], Tomas Vojtisek[li], Ulrica von Thiele Schwarz[lj,lk], Marek Vranka[ll], Bich-Phuong Vu[lm], Radosław B.Walczak[ln], Guilherme Welter Wendt[lo], Rahmadina Syarafina Wibowo[v], James S. Williams[dr], Mirella Wojciechowska[kj,lp], Pujith Niel Wood[lq,lr], Deborah J. Wu[ls], Qingyang Wu[lt], Mariel Pauliina Wuolio[ek], Ziqian Xia[lu], Tao Yang[lv], Chunhui Yang[lw], Jane Jingyao Yang[lx], Jinquan Ye[ly], Niyayesh Yousefi-Gerakouhi[lz], Ümran Yüce-Selvi[ma], Whinda Yustisia[v], Daniela Victoria Zaharia[mb], Inesa Zayets[mc], Agata Zdun-Ryżewska[md], Przemyslaw Zdybek[me], Xian Zhao[em], Wang Zheng[fy], Janis H. Zickfeld[co], Radka Zidkova[kn], Artur Ziółkowski[mf]

[a] *Department of Management, University of Exeter, Exeter, UK*
[b] *School of Psychology, The University of Queensland, Brisbane, Australia*
[c] *Swiss Centre for Affective Sciences, University of Geneva, Geneva, Switzerland*
[d] *Peace Research Institute, International Christian University, Tokyo, Japan*
[e] *Department of Psychological Science, Claremont McKenna College, Claremont, USA*
[f] *The Global Institute for Women's Leadership, The Australian National University, Canberra, Australia*
[g] *Faculty of Business and Economics, University of Groningen, Groningen, The Netherlands*
[h] *School of Sciences, Bath Spa University, Bath, UK*
[i] *Department of Psychology, University of Exeter, Exeter, UK*
[j] *Department of Psychology, Northwestern University, Evanston, USA*
[k] *Departamento de Psicologia, Instituto Universitário de Lisboa (Iscte-IUL), CIS-Iscte, Lisboa, Portugal*
[l] *Pontificia Universidad Católica del Perú, Lima, Peru*
[m] *Institute of Psychology, ELTE Eötvös Loránd University, Budapest, Hungary*
[n] *Department of Psychology, Alex Ekwueme Federal University, Ndufu-Alike, Nigeria*
[o] *Univ Grenoble Alpes, Univ Savoie Mont Blanc, LIP/PC2S, 38000 Grenoble, France*
[p] *Department of Psychology, Sapienza University of Rome and Istituto Italiano di Tecnologia, Rome, Italy*
[q] *Fondazione Santa Lucia, Rome, Italy*
[r] *Psychology Department, Ege University, Izmir, Türkiye*
[s] *Department of Psychology, Manisa Celal Bayar University, Manisa, Türkiye*
[t] *Department of Psychology, Persian Gulf University, Busher, Iran*
[u] *Department of Clinical and Health Psychology & Research Methods, University of the Basque Country UPV/EHU, San Sebastian, Spain*
[v] *Faculty of Psychology, Universitas Indonesia, Depok, Indonesia*
[w] *International School of Management and Economics, National Economics University, Hanoi, Viet Nam*
[x] *Mus Alparslan University, Mus, Türkiye*
[y] *Department of Psychology and Education, University of Tehran, Tehran, Iran*
[z] *Sociology and Social Work, Armenian State Pedagogical University, Yerevan, Armenia*
[aa] *Department of Psychology, Selcuk University, Konya, Türkiye*
[ab] *Psychology Department, Nuh Naci Yazgan University, Kayseri, Türkiye*
[ac] *Department of Psychology, Persian Gulf University, Bushehr, Iran*
[ad] *Medical Biology Research Center, Health Technology Institute, Kermanshah University of Medical Science, Kermanshah, Iran*
[ae] *Department of Psychology, Faculty of Lettres and Human Sciences, Mohammed V Universiy in Rabat, Rabat, Morocco*
[af] *Universite Grenoble Alpes, Universite Savoie Mont Blanc, Grenoble, France*
[ag] *Department of Psychology, Bursa Technical University, Bursa, Türkiye*
[ah] *Institute of Social Sciences, Slovak Academy of Sciences, Kosice, Slovakia*
[ai] *Institute of Psychology, Faculty of Philosophy, Jagiellonian University, Kraków, Poland*
[aj] *CLLE, Université de Toulouse, CNRS, Toulouse, France*
[ak] *Department of Psychology, University of Oslo, Oslo, Norway*
[al] *Laboratoire de Psychologie Sociale, Université Paris Cité, Boulogne-Billancourt, France*
[am] *Institute of Psychology, University College of Professional Education (Wyższa Szkoła Kształcenia Zawodowego), Wrocław, Poland*

[an] Medical University of Gdańsk, Gdańsk, Poland
[ao] University College of Professional Education, Wrocław, Poland
[ap] Independent Researcher
[aq] Department of Psychology and Neuroscience, Nova Southeastern University, Fort Lauderdale, USA
[ar] Department of Psychology, Sapienza University of Rome, Rome, Italy
[as] Mohammed V University, Rabat, Morocco
[at] Department of Psychology, Dicle University, Diyarbakır, Türkiye
[au] Department of Psychology, Michigan State University, East Lansing, MI, USA
[av] FADO, University of Lausanne, Lausanne, Switzerland
[aw] Department of Psychology, University of Graz, Graz, Austria
[ax] Psychology of Digitalisation, University of Bern, Bern, Switzerland
[ay] Analytics, Harrisburg University of Science and Technology, Harrisburg, USA
[az] Experimental and Applied Psychology, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands
[ba] Department of Psychology, Bingöl University, Bingöl, Türkiye
[bb] Department of Sociology, Stockholm University, Stockholm, Sweden
[bc] Department of Psychology, Educational Science and Human Movement, University of Palermo, Palermo, Italy
[bd] Department of Psychology, Government College University, Lahore, Pakistan
[be] Department of Social Psychology, University of the Basque Country UPV/EHU, San Sebastian, Spain
[bf] Department of Business & Management, Luiss University, Rome, Italy
[bg] Department of Business Administration, Hacettepe University, Ankara, Türkiye
[bh] Department of Psychology, "Alexandru Ioan Cuza" University of Iași, Iași, Romania
[bi] Serra Húnter Fellow, Comparative Minds Research Group, Departament de Psicologia, Universitat de Girona, Girona, Spain
[bj] Centre for Tactile Internet with Human-in-the-Loop (CeTI), Dresden University of Technology, Dresden, Germany
[bk] Faculty of Psychology, Dresden University of Technology, Dresden, Germany
[bl] Department of Psychology, Thammasat University, Pathum Thani, Thailand
[bm] ESEF, Ibn Tofail University, Kenitra, Morocco
[bn] Faculty of Psychology, Chulalongkorn University, Thailand
[bo] The Psychology Department, Mohammed V University, Rabat, Morocco
[bp] Department of Psychology, University of Macau, Macau SAR, China
[bq] Centre for Cognitive and Brain Sciences, University of Macau, Macau SAR, China
[br] Department of Psychology, Thammasat University, Pathumthani, Thailand
[bs] Department of Psychology, University of Delhi, Delhi, India
[bt] The Department of Psychology, University of Amsterdam, Amsterdam, The Netherlands
[bu] Department of Psychology, Miami University, Oxford, OH, USA
[bv] Directorate of Psychology and Sport, University of Salford, Salford, UK
[bw] Department of Psychology, Neuroscience, Nova Southeastern University, Fort Lauderdale, USA
[bx] Department of Psychology, Universidad de Sonora, Hermosillo, Mexico
[by] University of Brasilia, Brasília, Brazil
[bz] Brazilian Institute of Education, Development and Research (IDP), Brasília, Brazil
[ca] Department of Psychology, Heriot-Watt University, Edinburgh, UK
[cb] Department of Organizational Behavior, INSEAD, Singapore, Singapore
[cc] Department of Philosophy, Sociology, Education and Applied Psychology, University of Padova, Padua, Italy
[cd] Department of Social Sciences and Law, Hoa Sen University, Ho Chi Minh City, Viet Nam
[ce] Department of Business and Management, Luiss University, Rome, Italy
[cf] Department of Psychology, Faculty of Philosophy, University of Novi Sad, Novi Sad, Serbia
[cg] Amsterdam School of Economics, University of Amsterdam, Amsterdam, The Netherlands
[ch] George IM Georgescu Institute of Cardiovascular Diseases, Iași, Romania
[ci] Alexandru Ioan Cuza University, Iași, Romania
[cj] Neurosci.ro Research Group, Romania
[ck] Institute of Psychology, Jagiellonian University, Kraków, Poland
[cl] School of Health and Society, University of Salford, Salford, Greater Manchester, UK
[cm] Faculty of Management and Economics, University of Guilan, Rasht, Iran
[cn] Department of Psychology, Mohammed V University, Rabat, Morocco
[co] Department of Management, Aarhus University, Aarhus, Denmark
[cp] Psychology Department, Alexandru Ioan Cuza University, Iași, Romania
[cq] School of Human Sciences, University of Greenwich, London, UK
[cr] Institute of Psychology, University of Silesia in Katowice, Poland
[cs] Department of Humanities, COMSATS University Islamabad, Lahore, Pakistan
[ct] ETH Zürich, Research and Innovation Management GmbH, Switzerland
[cu] Department of General Psychology, University of Padova, Padova, Italy
[cv] Carmides Research Lab, Department of Social Psychology, Universidad de Sevilla, Sevilla, Spain
[cw] CNRS and France Laboratoire de Psychologie Sociale et Cognitive (LAPSCO), Clermont Auvergne Université, Clermont-Ferrand, France
[cx] Departamento de Psicologia, Universidade Federal de São Carlos (UFSCar), São Carlos, Brazil
[cy] Faculty of Psychology and Educational Sciences, University of Geneva, Geneva, Switzerland
[cz] Department of Developmental Psychology and Socialization, University of Padova, Padova, Italy
[da] Departamento de Letras Vernáculas, Universidade Federal de Sergipe, São Cristóvão, Brazil
[db] Law Department, Universidad de Sonora, Hermosillo, Mexico
[dc] Department of Psychology, Sapienza University of Rome and CLNS@Sapienza, Fondazione Istituto Italiano di Tecnologia (IIT), Rome, Italy
[dd] Department of Sociology, University of Pécs, Pécs, Hungary
[de] Posgrado en Psicología, Universidad de Sonora, Hermosillo, Sonora, Mexico
[df] Department of Accounting, Universidad de Sonora, Hermosillo, Sonora, Mexico
[dg] Department of Administration, Instituto Tecnológico de Sonora, Ciudad Obregón, Sonora, Mexico
[dh] SWPS University, Warsaw, Poland
[di] Department of Philosophy, Sociology, Pedagogy and Applied Psychology, University of Padova, Padova, Italy
[dj] Department of Human and Social Sciences, University of Bergamo, Bergamo, Italy
[dk] Department of Psychology, Democritus University of Thrace, Didymoteicho, Greece
[dl] School of Social Sciences, Hellenic Open University, Patras, Greece
[dm] School of Theology, Aristotle University of Thessaloniki, Thessaloniki, Greece
[dn] Maastricht University, Maastricht, The Netherlands
[do] Laboratoire de Psychologie Sociale et Cognitive (LAPSCO), Université Clermont Auvergne, Clermont-Ferrand, France

[dp] Department of Psychological and Behavioural Science, London School of Economics and Political Science, London, UK
[dq] Study Centre Stuttgart, FOM University of Applied Sciences, Stuttgart, Germany
[dr] Department of Psychological Sciences, Swinburne University of Technology, Melbourne, Australia
[ds] Divisão Jurídica de Consultivo Geral, Empresa Brasileira de Serviços Hospitalares (EBSERH), São Carlos, Brazil
[dt] Universidade Federal de São Carlos (UFSCar), São Carlos, Brazil
[du] Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK
[dv] Department of Psychology, University Witten/Herdecke, Witten, Germany
[dw] Department of Social Psychology, University of Groningen, Groningen, The Netherlands
[dx] Cognitive and Behavioural Neurosceince Laboratory, Indian Institute of Technology Bombay, Bombay, India
[dy] Department of Psychology, Kastamonu University, Kastamonu, Türkiye
[dz] Univeristy of Fribourg, Fribourg, Switzerland
[ea] Department of Economics and Management, University of Trento, Trento, Italy
[eb] Department of Psychology, Faculty of Media and Communications, Singidunum University, Belgrade, Serbia
[ec] Faculty of Media and Communications, Singidunum University, Belgrade, Serbia
[ed] Centre of Social and Psychological Science, Slovak Academy of Sciences, Bratislava, Slovakia
[ee] Department of Psychology, Justus-Liebig University of Gießen, Gießen, Germany
[ef] Department of Psychology, University of Salzburg, Salzburg, Austria
[eg] Department of Psychology, University of Essex, Colchester, UK
[eh] Department of Social Sciences and Humanities, Mälardalen University, Eskilstuna, Sweden
[ei] SMARTcognition Lab, Institute for German as Foreign Philology, Heidelberg University, Heidelberg, Germany
[ej] School of Psychology, University of Southampton, Southampton, UK
[ek] Helsinki Institute for Social Sciences and Humanities, University of Helsinki, Helsinki, Finland
[el] Faculty of Psychology, FernUniversität in Hagen, Hagen, Germany
[em] Department of Psychology, Ohio University, Athens, USA
[en] Department of Social, Health & Organizational Psychology, Utrecht University, The Netherlands
[eo] Department of Social and Organisational Psychology, University of Pécs, Pécs, Hungary
[ep] Department of Psychology, Royal Holloway, University of London, Egham, UK
[eq] Kochi University of Technology, Research Institute for Future Design, Kochi, Japan
[er] Department of Psychology, Ruhr University Bochum, Bochum, Germany
[es] Departamento de Psicología, Universidad de Palermo, Buenos Aires, Argentina
[et] Comisión Nacional de Investigaciones Científicas y Técnicas (CONICET), Buenos Aires, Argentina
[eu] Neurosciro Research Group, Romania
[ev] Center for Advanced Behavioral Research (CABR), University of New York in Prague, Prague, Czech Republic
[ew] Department of Curriculum and Instructions, Faculty of Education, The Open University of Tanzania, Tanzania
[ex] Graduate School of Education, Hankuk University of Foreign Studies, Seoul, South Korea
[ey] Laboratorio de Neurociencia, Universidad Torcuato Di Tella, Buenos Aires, Argentina
[ez] Universidad Nacional de San Martin, Tarapoto, Peru
[fa] Department of Psychology, Pavol Jozef Safarik University in Kosice, Košice, Slovakia
[fb] Graduate School of Humanities, Kobe University, Kobe, Japan
[fc] Department of Psychological Counseling and Guidance, Muğla Sıtkı Koçman University, Muğla, Türkiye
[fd] Psychology, Gümüşhane University, Gümüşhane, Türkiye
[fe] Psychology, Bursa Uludağ University, Bursa, Türkiye
[ff] Department of Business Administration, Suleyman Demirel University, Isparta, Türkiye
[fg] Department of Work & Social Psychology, Maastricht University, Maastricht, The Netherlands
[fh] Department of Psychology, Moulay Ismail University (FLSH), Meknes, Morocco
[fi] Department of Sociology, Sogang University, Seoul, South Korea
[fj] Einstein Research Unit Coping with Affective Polarization, Universitätsmedizin Berlin, Berlin, Germany
[fk] Humboldt Universität zu Berlin, Berlin, Germany
[fl] Faculty of Philosophy and Arts, Trnava University, Trnava, Slovakia
[fm] Psychology, Nuh Naci Yazgan University, Kayseri, Türkiye
[fn] IDN Being Human Lab, Institute of Psychology, University of Wrocław, Wrocław, Poland
[fo] International Research Team on Internet and Society, Faculty of Social Studies, Masaryk University, Brno, Czech Republic
[fp] LEVYNA Laboratory for the Experimental Research of Religion, Masaryk University, Brno, Czech Republic
[fq] Department of Psychology, İzmir Katip Çelebi University, İzmir, Türkiye
[fr] Faculty of Management, University of Warsaw, Warsaw, Poland
[fs] Honours College, University of Economics Ho Chi Minh City, Ho Chi Minh City, Viet Nam
[ft] Department of Cognition, Emotion, and Methods in Psychology, Faculty of Psychology, University of Vienna, Vienna, Austria
[fu] Department of Psychology, Université Joseph KI-ZERBO, Ouagadougou, Burkina Faso
[fv] Department of Psychology, The University of Alabama, Tuscaloosa, USA
[fw] Marketing Department, IESE Business School, Barcelona, Spain
[fx] Department of Psychology, University of Sarajevo, Sarajevo, Bosnia and Herzegovina
[fy] The School of Psychology and Cognitive Science, East China Normal University, Shanghai, China
[fz] Departamento de Psicología, Pontificia Universidad Javeriana, Bogotá, Colombia
[ga] MIT Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA, USA
[gb] Department of Management, Cameron School of Business, University of North Carolina Wilmington, Wilmington, NC, USA
[gc] Department of Performing Arts, University of Tehran, Tehran, Iran
[gd] Institute of Psychology, SWPS University, Warsaw, Poland
[ge] Institute for Psychology, Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen, Germany
[gf] Olomouc University Social Health Institute, Palacký University, Olomouc, Czech Republic
[gg] Department of Educational Policy, Planning and Administration, The Open University of Tanzania, Dar es Salaam, Tanzania
[gh] Department of Psychology, Bolu Abant Izzet Baysal University, Bolu, Türkiye
[gi] Departamento de Psicología, Universidad de La Frontera, Temuco, Chile
[gj] Department of Psychological Sciences, Rice University, Houston, TX, USA
[gk] Department of Mathematics and Computer Science, University of Ferrara, Ferrara, Italy
[gl] Faculty of Psychology, SWPS University, Sopot, Poland
[gm] Laboratoire de Psychologie Sociale et Cognitive (LAPSCO), Clermont Auvergne Université, Clermont-Ferrand, France
[gn] Institute of Social Sciences CSPS, SAS, Košice, Slovakia
[go] Department of Health Design, Showa Women's University, Tokyo, Japan
[gp] Department of Psychology, University of Novi Sad, Novi Sad, Serbia
[gq] Maine Business School, University of Maine, Orono, USA

[gr] Department of Psychology, University of Mazandaran, Babolsar, Iran
[gs] Olomouc University Social Health Institute, Palacky University Olomouc, Olomouc, Czech Republic
[gt] Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, The Netherlands
[gu] Sociology, Yerevan State University, Yerevan, Armenia
[gv] Laboratoire de Psychologie Sociale (UR4471), Université Paris Cité, Paris, France
[gw] Department of Psychology, Atilim University, Ankara, Türkiye
[gx] Institute of Psychology, IDN Being Human, Institute of Psychology, University of Wrocław, Wrocław, Poland
[gy] School of Anthropology & Museum Ethnography, University of Oxford, Oxford, UK
[gz] Department of Developmental Psychology and Socialisation, University of Padova, Padova, Italy
[ha] Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, UK
[hb] Management and Economics, University of Guilan, Rasht, Iran
[hc] Department of Social Psychology, University of Granada, Granada, Spain
[hd] Department of Psychology, Mohammed V University of Rabat, Rabat, Morocco
[he] Department of Human Medicine, MSH Medical School Hamburg, ISM Institute for Systems Medicine, Hamburg, Germany
[hf] Doha Institute for Graduate Studies, Doha, Qatar
[hg] Comisión Nacional de Investigaciones Científicas y Técnicas, Buenos Aires, Argentina
[hh] Department of Management, University of Nebraska-Lincoln, Lincoln, NE, USA
[hi] The Business School, RMIT University, Ho Chi Minh City, Viet Nam
[hj] PHENIKAA University, The School of Economics and Business, Hanoi, Viet Nam
[hk] Hoa Sen University, Department of Social Sciences and Law, Ho Chi Minh City, Viet Nam
[hl] Department of Psychology, Alexandru Ioan Cuza University, Iași, Romania
[hm] Department of Psychology and Lira Laboratory, University of Belgrade, Belgrade, Serbia
[hn] Department of Psychology and Salzburg Center of European Union Studies, University of Salzburg, Salzburg, Austria
[ho] Seeburg Castle University, Economic Psychology, Seekirchen am Wallersee, Austria
[hp] Social Health Institute, Olomouc University Social Health Institute, Palacký University, Olomouc, Czech Republic
[hq] Department of Work and Social Psychology, Maastricht University, Maastricht, The Netherlands
[hr] Department of Management and Innovation, University of Agder, Kristiansand, Norway
[hs] School of Behavioural, Social and Legal Sciences, Örebro University, Örebro, Sweden
[ht] ELTE Eötvös Loránd University, Hungary
[hu] School of Psychology, University of Nottingham, Nottingham, UK
[hv] Centre for the Experimental Philosophical Study of Discrimination, Aarhus University, Aarhus, Denmark
[hw] Department of Psychology, Alex Ekwueme Federal University, Ndufu- Alike, Nigeria
[hx] Department of Pure & Applied Psychology, Adekunle Ajasin University, Akungba-Akoko, Nigeria
[hy] Department of Psychology, University of Pretoria, Pretoria, South Africa
[hz] Department of Psychology and Behavioural Sciences, Aarhus University, Aarhus, Denmark
[ia] University of North Carolina Wilmington, Wilmington, USA
[ib] KTH Royal Institute of Technology, Stockholm, Sweden
[ic] Social and Cognitive Processes in Organizations and Health, Catholic University of Lille, Lille, France
[id] Department of Psychology, Bursa Uludağ University, Bursa, Türkiye
[ie] Department of Psychology, Marmara University, İstanbul, Türkiye
[if] Fenerbahce University, Istanbul, Türkiye
[ig] Institute of Psychology, University of Silesia in Katowice, Katowice, Poland
[ih] Penn Center for Neuroaesthetics, University of Pennsylvania, Philadelphia, USA
[ii] Department of Psychology, University of Niš, Niš, Serbia
[ij] Department of Psychology, Ege University, Izmir, Türkiye
[ik] Department of Experimental and Applied Psychology, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands
[il] Department of Psychology, Faculty of Social Sciences, Kasetsart University, Bangkok, Thailand
[im] Department of Political Science, Swedish Defence University, Stockholm, Sweden
[in] Centre of Social and Psychological Sciences, Slovak Academy of Sciences, Košice, Slovakia
[io] Psychology Department, Alexandru Ioan Cuza University of Iasi, Iasi, Romania
[ip] Department of Psychology, University College of Professional Education, Wrocław, Poland
[iq] Department of Psychology, University of Geneva, Geneva, Switzerland
[ir] Department of Work and Social Psychology, Maastricht University, Maastricht, The Netherlands
[is] Lehrstuhl Sozialpsychologie, Friedrich-Alexander Universität Erlangen-Nürnberg, Erlangen, Germany
[it] Universidad El Bosque, Bogota, Colombia
[iu] Department of Psychobiology and Neurosciences, Faculty of Psychology, Universidad Nacional Autónoma de México, Mexio City, Mexico
[iv] Laboratoire de Psychologie Sociale (LPS - UPR 4471), Université Paris Cité, Paris, France
[iw] Laboratoire Inter-universitaire de Psychologie, Personnalité, Cognition, Changement Social (LIP/PC2S), Université Grenoble Alpes, Grenoble, France
[ix] School of Psychology, University of Stirling, Stirling, UK
[iy] Being Human Lab, University of Wrocław, Wrocław, Poland
[iz] Department of Learning, Informatics, Management and Ethics (LIME), Karolinska Institutet, Stockholm, Sweden
[ja] Institute of Psychology, SWPS University, Sopot, Poland
[jb] Department of Psychology and Psychotherapy, Witten/Herdecke University, Witten, Germany
[jc] Department of Psychology, Miami University, Oxford, USA
[jd] School of Psychological Sciences, Macquarie University, Sydney, Australia
[je] Department of Occupational, Economic, and Social Psychology, University of Vienna, Austria
[jf] Leibniz-Institut für Wissensmedien, Tübingen, Germany
[jg] Department of Psychology, Brandenburg University of Technology, Cottbus-Senftenberg, Germany
[jh] Cameron School of Business, UNCW, Wilmington, USA
[ji] Faculty of World Studies, University of Tehran, Tehran, Iran
[jj] LISS, University of Ibn Tofail, Kenitra, Morocco
[jk] Department of Communication and Culture, BI Norwegian Business School, Oslo, Norway
[jl] Psychology, FernUniversität in Hagen, Hagen, Germany
[jm] Ashland University, Ashland, Ohio, USA
[jn] School of Management, Universidad de los Andes, Bogota, Colombia
[jo] Department of Social Psychology, Social Work, and Social Anthropology, University of Málaga, Málaga, Spain
[jp] Department of Leadership and Organization, Kristiania University of Applied Sciences, Oslo, Norway
[jq] Sakarya University, Sakarya, Türkiye
[jr] Marketing Department, ESSEC Business School, Cergy, France
[js] Psychology Research Center, Yerevan State University, Yerevan, Armenia

[jt] School of Economics, University of Amsterdam, Amsterdam, The Netherlands
[ju] Department of Security Studies, Matej Bel University in Banská Bystrica, Banská Bystrica, Slovakia
[jv] Department of Psychology, Palacky University Olomouc, Olomouc, Czech Republic
[jw] Department of Culture and Language, University of Southern Denmark, Odense, Denmark
[jx] Central Research Institute of Electric Power Industry, 2-6-1 Nagasaka, Yokosuka-shi, Kanagawa 240-0196, Japan
[jy] Institute of Psychology, University of Wrocław, Wrocław, Poland
[jz] Institute of Experimental Psychology, Slovak Academy of Sciences, Bratislava, Slovakia
[ka] Department of Psychology, University of Münster, Münster, Germany
[kb] Department of Psychology, Umeå University, Umeå, Sweden
[kc] Department of Sport Science and Physical Education, University of Agder, Kristiansand, Norway
[kd] School of Psychology, Bournemouth University, Poole, UK
[ke] Institute of Psychology, University of Bremen, Bremen, Germany
[kf] Department of Psychology, University of Denver, Denver, USA
[kg] Humanities, Icam School of Engineering, Toulouse, France
[kh] Department of Humanities and Social Sciences, Pohang University of Science and Technology, Pohang-si, South Korea
[ki] Department of Decision Sciences, Corvinus University of Budapest, Budapest, Hungary
[kj] Department of Psychology, Medical University of Gdańsk, Gdańsk, Poland
[kk] Institute of Psychology, Jagiellonian University, Poland
[kl] Department of Management, Technology, and Economics, ETH Zürich, Zurich, Switzerland
[km] Department of Psychology, Istanbul Aydin University, Istanbul, Türkiye
[kn] Olomouc University Social Health Institute, Palacký University Olomouc, Olomouc, Czech Republic
[ko] Department of Psychology, University of Sergipe, São Cristóvão, Brazil
[kp] Department of Psychology, Gümüşhane University, Gümüşhane, Türkiye
[kq] Department of Psychology, Chiang Mai University, Chiang Mai, Thailand
[kr] Department of Psychology, University of Brasilia, Brasilia, Brazil
[ks] Department of Psychology, National Institute of Science and Technology, São Paulo, Brazil
[kt] Facultad de Ciencias Sociales, Universidad de Palermo, Ciudad Autonoma de Buenos Aires, Argentina
[ku] Department of Developmental and Educational Psychology, University of Valencia, Spain
[kv] School of Social Sciences, University of Westminster, London, UK
[kw] Institut Universitaire de France, Paris, France
[kx] Department of Psychology and Speech-Language Pathology, University of Turku, Turku, Finland
[ky] School of Psychology, University of Sussex, Brighton, UK
[kz] Faculty of Psychology and Science of Education, Ștefan cel Mare, University of Suceava, Romania
[la] Methodology and Statistics Unit of Psychology, Leiden University, Leiden, The Netherlands
[lb] Psychology Department, Ithaca College, Ithaca, USA
[lc] Department of Philosophy, Sociology, Education and Applied Psychology, University of Padova, Padova, Italy
[ld] Universidad de Sonora, Hermosillo, Mexico
[le] PostGraduate Program in Social, Work and Organizational Psychology, University of Brasília, Brasília, Brazil
[lf] Clube RH Escola de Negócios, Diretoria de Pesquisa e Aprendizagem, Brasília, Brazil
[lg] Department of Psychology, MSH Medical School Hamburg, Hamburg, Germany
[lh] ICAN Institute for Cognitive and Affective Neuroscience, MSH Medical School Hamburg, Hamburg, Germany
[li] Interdisciplinary Research Team on Internet and Society, Masaryk University, Brno, Czech republic
[lj] Department of Social Sciences and Humanities, Mälardalen University, Västerås, Sweden
[lk] Department of Learning, Informatics, Management & Ethics, Karolinska institutet, Stockholm, Sweden
[ll] Charles University, Prague, Czech Republic
[lm] School of Science, Engineering and Technology, RMIT University Vietnam, Ho Chi Minh City, Viet Nam
[ln] Institute of Psychology, University of Opole, Opole, Poland
[lo] Faculty of Medicine, Universidade Estadual do Oeste do Paraná, Francisco Beltrão, Brazil
[lp] First Department of Cardiology, Medical University of Gdańsk, Gdańsk, Poland
[lq] Department of Marketing, ESSEC Business School, Cergy, France
[lr] Department of Management, University of Exeter, Exeter, United Kingdom
[ls] Department of Psychology, Arizona State University, Tempe, USA
[lt] Fielding School of Public Health, University of California, Los Angeles, USA
[lu] Doerr School of Sustainability, Stanford University, Stanford, USA
[lv] Cameron School of Business, University of North Carolina Wilmington, Wilmington, USA
[lw] Department of Psychology, University of Macau, Macau SAR, China
[lx] Business School, University of Barcelona, Barcelona, Spain
[ly] Division of Environment and Sustainability, Academy of Interdisciplinary Studies, The Hong Kong University of Science and Technology, Hong Kong, China
[lz] Department of Data Science and Technology, University of Tehran, School of Intelligent Systems, Tehran, Iran
[ma] Department of Psychology, Eskisehir Osmangazi University, Eskisehir, Türkiye
[mb] Psychology, Alexandru Ioan Cuza University of Iasi, Iasi, Romania
[mc] Friedrich-Alexander-Universität, Erlangen-Nürnberg, Germany
[md] Department of Psychology, Medical University of Gdansk, Gdansk, Poland
[me] University of Opole, Opole, Poland
[mf] Faculty of Psychology, University College of Professional Education, Wrocław, Poland

A B S T R A C T

Women are greatly underrepresented in positions of political leadership around the world. In seeking to explain this underrepresentation, some researchers have pointed to people's tendencies to stereotype leaders as more similar to men than women as these tendencies can support the belief that women are unsuited to leadership. This project aimed to test whether a subtle linguistic intervention was able to ameliorate this gender bias in political leadership stereotypes across different languages and national contexts (country/region $N = 42$, language $N = 30$, sample $N = 22{,}996$). Specifically, this project examined whether gender-fair language (e.g., the use of paired pronouns ‘he or she’) can reduce the tendency for people to stereotype political leaders as more similar to men than women. To

increase the rigor with which these stereotypes were measured, this project complemented the dominant 'cheap talk' measure of personal stereotype content with an incentivised community measure of this content. As expected, participants stereotyped political leaders as more similar to men than women; this pattern was stronger on the incentivised measure of community stereotypes. Unexpectedly, there was no evidence that paired pronouns reduced this bias (there was weak exploratory evidence that paired nouns increased participants' tendencies to stereotype political leaders as more similar to women). This project suggests that the ability of gender-fair language interventions to ameliorate gender bias in the political leadership domain may be limited.

Political systems are almost universally led by men. Currently, only one country in about every eight has elected a woman as Head of State or Government, and across the world women make up only one in every four parliamentarians (UN Women, 2021). Some researchers have suggested that it may be possible to improve the representation of women in politics and other positions of power by changing the stereotypes that people hold about leaders (Eagly, Nater, Miller, Kaufmann, & Sczesny, 2020; Eagly & Wood, 2012; Ellemers, 2018). This claim rests on an extensive body of evidence that people tend to stereotype leaders as more similar to men than women and to believe that men are therefore more suited to leadership than women (Conway, Pizzamiglio, & Mount, 1996; Eagly & Karau, 2002; Heilman, 1983, 2001; Schein, 1973, 1975). If the degree of gender bias in political leader stereotypes can be reduced, the reasoning goes, women may be more likely to seek such positions and those who do may be less likely to face gender-based discrimination (e.g., Gaucher, Friesen, & Kay, 2011; Heilman, 2012; Koch, D'Mello, & Sackett, 2015). This reasoning highlights the importance of identifying potential interventions and testing their ability to causally affect gender bias in political leader stereotypes.

In this project, we aim to test whether a subtle linguistic intervention is able to ameliorate gender bias in political leadership stereotypes across a variety of languages and cultures. Specifically, we will examine whether exposing people to feminised gender-fair language when asking them to describe political leaders (e.g., by using the paired pronouns 'he or she') can reduce their tendency to stereotype political leaders as more similar to men than women. In the process, we aim to build on the existing literature in three important ways. First, the existing work on the impact of gender-fair language has primarily focused on the ability of gender encoded language (e.g., the pronoun "she") to increase the salience of the relevant gender category (e.g., women) in working memory. Little, if any, of this work has examined the impact of gender-fair language on the content of people's stereotypes. By providing a causal test of the impact of our gender-fair language intervention on gendered leadership stereotypes we will inform a richer understanding of the implications of people's everyday language for social cognition.

Second, much of the existing work on gender-fair language has examined a relatively narrow set of languages (e.g., English) and contexts (e.g., the US and UK), raising questions of external validity. To assess the extent to which the impact of gender-fair language on gender bias in the political leader stereotype generalizes across different languages and national contexts, we will conduct the broadest test of a gender-fair language intervention to date. Third, the psychological literature has used two main approaches for measuring stereotypes: the first aggregates first-order beliefs about the characteristics of social groups and the second aggregates second-order beliefs about what a community believes these characteristics to be (Kotzur et al., 2020). A similar dichotomy can be observed in the measurement of social norms in the economics literature (e.g., Huffman et al., 2025). To improve robustness, we will measure stereotypes in the form of first-order personal beliefs as well as (incentivised) second-order community beliefs. In this way, we aim to improve our understanding of the implications of different methods of stereotype measurement for stereotype content.

## Gendered leadership stereotypes

In this section, we will review the literature that supports our claim that people tend to stereotype leaders as more similar to men than women. Stereotypes are the beliefs that people hold about the attributes that the members of social categories actually have or should ideally have (Hilton & Von Hippel, 1996). Reflecting the salience of gender as a social category, there is evidence that people have widely shared and consensual stereotypes about the attributes of men and women (Eagly & Wood, 2012; Hentschel, Heilman, & Peus, 2019). Importantly, there are broad differences in the content of stereotypes about each gender (although the strength of these patterns does vary around the world; e.g., Nater, Miller, Eagly, & Sczesny, 2026). Specifically, people tend to believe that women are more communal than men, exhibiting more kindness, sympathy and sensitivity; they also tend to believe that men are more agentic than women, exhibiting more independence, competitiveness and determination (Bem, 1981; Eagly et al., 2020; Eagly & Wood, 2012; Ellemers, 2018; Prentice & Carranza, 2002; Williams & Best, 1982).

If we turn to the stereotypes of leaders, there is evidence that leadership roles are associated with, and believed to require, the agentic attributes that are more typically granted to men than women (e.g., Eagly & Karau, 2002; Froehlich, Olsson, Dorrough, & Martiny, 2020; Heilman, 1983). For instance, Powell, Butterfield, and Parent (2002); see also Powell & Butterfield, 1979, 1989) asked US undergraduate and MBA students to rate a good manager on 10 communal attributes (e.g., affectionate, warm, tender) and 10 agentic attributes (e.g., independent, forceful, dominant) and found that 55% of participants described managers as more agentic than communal. A mere 4 % of participants showed the reverse pattern, describing managers as more communal than agentic. There is also evidence that US participants consider the attribute "masculine" to be more characteristic of managers than the attribute "feminine" (Gatton, Dubois, & Faley, 1999; see also Beggs & Doolittle, 1993; Munoz Sastre, Fouquereau, Igier, Salvatore, & Mullet, 2000).

Consistent with the above findings, when researchers have measured the stereotypes of men, women and leaders at the same time, they have observed a greater degree of overlap between the stereotypes of leaders and those of men than between the stereotypes of leaders and those of women (Eagly & Karau, 2002; Heilman, 1983). In one of the most influential demonstrations of this phenomenon, Schein (1973), see also Schein, 1975; Brenner, Tomkiewicz, & Schein, 1989) asked 300 US middle managers to rate 92 attributes according to how characteristic they were of women in general, men in general or successful middle managers. Schein observed that the ratings that participants gave for managers were more similar to the ratings that they gave to men (relative to women) on 70% of the attributes. The ratings that participants gave for managers were only more similar to the ratings they gave for women (relative to men) on 8 % of attributes. On the basis of these findings, Schein concluded that when people 'think manager', they 'think male'. In the intervening decades, Schein's think manager–think male paradigm has been applied to leaders in a range of occupational settings (e.g., business, military, education), and a meta-analysis of 40 of these studies found that the stereotypes of leaders are, on average, around two to three times more similar to the stereotypes of men than the stereotypes of women (Koenig, Eagly, Mitchell, & Ristikari, 2011).

Together, these findings provide a strong basis for expecting that when people think of leaders in the political domain, they are likely to think male (not female). Indeed, if anything, the association between the stereotypes of leaders and men in the political domain may be especially strong. The competitive nature of the political system and the role of the media in mediating between political leaders and their public arguably make a politician's ability to exercise agency by seizing and exercising

power an essential competency (e.g., Okimoto & Brescoll, 2010; see also Schneider & Bos, 2014). Further, the ability of a person to engage in (verbal) combat and vigorous self-promotion and, ultimately, to dominate their opponents is likely to be seen as central to the acquisition and retention of political leadership positions (Lombard, Azpeitia, & Cheryan, 2021). For all these reasons, people's stereotypes of political leaders can be expected to be more similar to those of men than those of women. This expectation provides the basis for our first hypothesis:

**H1**. : The positive association between people's stereotypes of men and political leaders will be stronger than the association between their stereotypes of women and political leaders.

### *Gender-fair language and gendered leadership stereotypes*

In this project, we aim to test whether the use of gender-fair language (i.e., a strategy of treating men and women symmetrically in language; Sczesny, Formanowicz, & Moser, 2016) may ameliorate gender bias in people's stereotypes of political leaders. Our expectation that gender-fair language may reduce gender bias is based on evidence that, first, gender-fair language can increase the cognitive accessibility of female exemplars and that, second, counter-stereotypical exemplars can reduce bias in stereotypes. We will review both sets of evidence in turn.

Research that has examined the impact of gender-fair language has grown out of a broader programme of work that has sought to understand whether gender encoding in everyday language has consequences for gender equality in society. The starting point for this work is the observation that all languages encode for gender, whether through the lexical meaning of words or grammatical structure (Sczesny et al., 2016; Stahlberg, Braun, Irmen, & Sczesny, 2011). Although all languages encode for gender, there are three general ways in which they can do so. Specifically, some languages (i.e., *neutral* gender languages, like Chinese and Hungarian) only encode gender in the lexical meaning of certain nouns (e.g., the loving *wife*). Other languages (i.e., *natural* gender languages, like English and Swedish) additionally encode gender in the lexical meaning of the corresponding personal pronouns (e.g., the loving *wife, she…*). Finally, *gendered* languages (like Spanish and Hebrew) encode gender grammatically in most nouns as well as in the articles, pronouns and adjectives that accompany them (e.g., *la esposa amorosa, ella…*).

The habitual encoding and decoding of gender in everyday communication can be expected to increase the salience of gender in working memory. When this encoding is asymmetrical, such that one gender is encoded more frequently than another, it may contribute to gender biases (Stahlberg et al., 2011; see also Sczesny et al., 2016). One such asymmetry is the use of the masculine generic, which is when a word with masculine lexical meaning is used to describe mixed gender groups or people whose gender is unknown or irrelevant (Bodine, 1975; Bußmann & Hellinger, 2003). In English, this can be seen in the use of the noun "man" and pronoun "he" to refer to humankind (e.g., Darwin's 1871 book, *The Decent of Man;* Hegarty & Buechel, 2006). In gendered languages, like Spanish, it can also be seen in the use of the masculine plural to refer to any group that includes at least one man. There is evidence that the masculine generic increases the salience of men and male exemplars relative to women and female exemplars (Moulton, Robinson, & Elias, 1978; Stahlberg, Sczesny, & Braun, 2001; Switzer, 1990; Wilson & Ng, 1988). For instance, Bailey, Dovidio, and LaFrance (2022) found that using the masculine generic title *Master* for a university leadership role (rather than the more neutral title *Head*) increased the degree to which students associated the role with men rather than women. It also increased their tendency to recall men (and forget women) who had previously occupied the role. In a similar way, Archer and Kam (2022) found that using the masculine generic title *Chairman* (rather than the more neutral title *Chair*) increased people's tendency to assume that the leader was a man and improved their memory for male occupants.

If an asymmetry in gender encoding is implicated in gender bias, then it should be possible to lessen this bias by increasing symmetry. There are two main ways in which language can counter asymmetrical gender encoding and therefore be gender-fair: neutralisation and feminisation. The former involves replacing gender encoded words with the neutral gender version (e.g., replacing 'Chairman' with 'Chair'). The latter involves retaining the male encoded word and introducing the female encoded version alongside it (e.g., replacing 'Chairman' with the paired nouns 'Chairman or Chairwoman'). There is evidence that people who are exposed to neutralised or feminised gender-fair language show less cognitive bias than those who are exposed to the masculine generic form. In particular, people exposed to gender-fair language are more likely to remember female exemplars or bring images of women to mind (e.g., Archer & Kam, 2022; Bailey et al., 2022; Gastil, 1990).

Although both gender-fair strategies have been shown to lessen bias relative to the masculine generic, there may be differences in their effectiveness in some contexts. Indeed, the core concern of this paper is people's tendency to associate the category of 'leader' with men rather than women, even though this category is gender neutral in many languages, including English (Koenig et al., 2011). The tendency to associate linguistically neutral social categories with men rather than women is not restricted to the leader category, or other roles where men are numerically dominant, but is also observed for a number of other common categories, like 'humans' and 'employees' (e.g., Bailey, LaFrance, & Dovidio, 2019; Hegarty & Parr, 2023). In cases like these, feminisation may be more effective than neutralisation because it encourages people to cognitively activate the category of women alongside the (more accessible) category of men. Evidence for this possibility is provided by Lindqvist, Renström, & Gustafsson Sendén, 2019; see also Khosroshahi, 1989; Switzer, 1990) who described a hypothetical job applicant to English and Swedish speakers and asked them to choose the photograph from a mixed gender array that best captured their mental image of this applicant. When a feminisation strategy was used, such that the applicant was described with paired pronouns (i.e., "he or she"), participants were equally likely to select a photograph of a woman or a man. When a neutralisation strategy was used, such that the applicant was instead described with a neutral pronoun (i.e., "they"), participants were much more likely to select a photograph of a man.

If these findings hold, such that feminised gender-fair language (versus neutralised language) boosts the cognitive accessibility of women when thinking about political leaders, then this may help to reduce gender bias in the associated stereotype. This expectation draws on work that shows that stereotypes are both reasonably stable and also somewhat malleable (Allport, 1954; Blair, 2002; Katz & Braly, 1935, ). Specifically, there is evidence that the content of the stereotypes that are activated in people's working memory at any particular point in time can be shaped by a variety of contextual factors, including a person's social motives and aspects of their immediate social context (e.g., Blair, 2002; Garcia-Marques, Santos, & Mackie, 2006; Haslam, Turner, Oakes, McGarty, & Hayes, 1992; Smith & Zarate, 1992). Of particular relevance for our current project, there is evidence that people who are exposed to, or asked to imagine, counter-stereotypical exemplars show less bias on both implicit and explicit stereotype measures than people who are not (Blair, Ma, & Lenton, 2001; Dasgupta & Greenwald, 2001; Kurdi, Sanchez, Dasgupta, & Banaji, 2024; for a meta-analysis see Forscher et al., 2019).

Much of the work that has examined the impact of counter-stereotypic exemplars has relied on strong and overt manipulations (e.g., instructing participants to imagine a person who is inconsistent with a given stereotype). A feminised gender-fair language intervention offers a more subtle — and more practically useful — way of increasing the cognitive accessibility of women in contexts where they may be counter-stereotypical. Our aim, in this paper, is to test whether exposure to feminised gender-fair language in the form of gender paired nouns or pronouns (versus exposure to gender neutral language) reduces people's tendency to stereotype political leaders as more similar to men than

women. Based on the literature review above, we propose the following additional hypotheses:

**H2a**. : Feminised (versus gender neutral) language will weaken the positive association between people's stereotypes of men and political leaders.

**H2b**. : Feminised (versus gender neutral) language will strengthen the positive association between people's stereotypes of women and political leaders.

### *Study overview*

We tested our hypotheses by asking participants to describe the stereotypes of political leaders, men and women. Importantly, when asked to describe the political leader stereotype, participants were randomly exposed to either feminised or neutralised language. Our primary aim was to assess the causal impact of this linguistic intervention on the association between people's stereotype of political leaders and their stereotypes of men and women. As a secondary aim, we tested the generalisability of our findings by collecting data from 30 different languages,[1] each of which was situated in a different national context (or region, in the case of Macau). This allowed us to look beyond the (predominantly English-speaking) countries that have been the site of much of the cultural discourse around the use of gender-fair language and, more recently, pronouns and the gender binary (Renström, Lindqvist, Klysing, & Gustafsson Sendén, 2024). In our sampling of languages, we ensured that we collected data from at least five languages within each of the three language gender groups (neutral, natural and gendered). Targeting these three groups required some flexibility in our operationalisation of a feminisation strategy because, unlike natural gender and gendered languages, gender neutral languages do not usually encode gender in pronouns.[2] For this reason, in gender neutral languages without gendered pronouns, participants were exposed to gender paired nouns rather than pronouns.

Our third aim was to increase the robustness of our findings by complementing the first-order measure of people's personal stereotype content that is typical of the psychological literature with a second-order incentivised measure of the community stereotype that is more typical of the economics literature. The former approach (as exemplified by Schein, 1973; see also Asbrock, 2010; Bye, Herrebrøden, Hjetland, Røyset, & Westby, 2014; Fiske, 2002) asks participants to rate their personal endorsement of different attributes for the social groups of interest. Because this approach does not incentivise truthful responding, it is vulnerable to social desirability concerns and may be considered to be a kind of 'cheap talk' (Crawford & Sobel, 1982). It has been suggested that second-order measures of community beliefs may be less subject to social desirability concerns (Kotzur et al., 2020), perhaps especially when such measures are incentivised (Fallucchi, Fromell, & Nosenzo, 2026). We therefore adapted the Krupka-Weber incentivised norm elicitation task, which has hitherto been exclusively used to measure injunctive behavioural norms, for our own purposes (Krupka & Weber, 2013; see also Chang, Chen, & Krupka, 2019; Krupka, Leider, & Jiang, 2017). Specifically, the participant in each country whose estimate of their country-sample's modal stereotype was closest to the actual mode received a monetary prize. Any evidence of differences in the stereotypes that are produced by the non-incentivised (first-order) and incentivised (second-order) approaches is likely to advance the theory and practice of stereotype measurement.

The stage 1 "in-principle acceptance" (IPA) manuscript, ethics documentation, translation and survey materials, data and analysis files and the supplementary materials are available on OSF: *https://osf.io/gjv2f/overview?view_only=df334ebb0c7a4fa4802da9f739e7c047*.

## Method

### *Ethics information*

This project was selected for execution by the Psychological Science Accelerator (PSA). In line with PSA protocols, all labs were required to obtain and document ethical approval from their local ethics boards. We obtained informed consent from all participants.

### *Participants*

Participants were 22,996 individuals recruited from labs spanning 30 languages in 42 countries or regions (minimum language-location $N = 240$, after exclusions)[3] across the three gender groups that were part of the PSA network.[4] Our sample was made up of participants from a geographically and culturally diverse set of countries covering six continents. This included Western nations that are well represented in psychological research (e.g., Australia, France, Germany, the United Kingdom, the United States) as well as non-Western nations that are less well represented (e.g., Armenia, Indonesia, Nigeria, Peru, Vietnam).

Participants were adults over the age of 18 who, if they were not born in their country, had been resident in it since at least the age of 12. Participants were excluded from the sample and the data analysis if they (1) did not meet the above age and residence requirement, (2) failed either of the two attention checks or (3) had missing data on more than 20% of survey items. As an additional data quality control, we also excluded participants who provided identical responses to more than 50% of items as well as a small number of participants who did not complete the survey in the intended language. The impact of these exclusion criteria on our sample size is summarised in the Fig. 1 flowchart.

Participants were mostly women ($N = 14{,}946$; men $N = 7557$; non-binary $N = 242$; prefer to self-describe $N = 176$; missing $N = 75$).[5] On average, participants were $M = 28.41$ ($SD = 12.31$) years old. Most participants were undergraduate university students ($N = 15{,}847$; full-time $N = 13{,}585$; part-time $N = 2262$; non-students $N = 7141$; missing $N = 8$). The majority of non-students were in employment, either full-time ($N = 4538$) or part-time ($N = 1167$; missing $N = 15$); almost half of students were employed, either full-time ($N = 1759$) or part-time ($N = 5482$; missing $N = 3$).

Baseline compensation for completing the study was determined by local lab rules. Reflecting the makeup of the PSA network and the norms in psychology departments, many participants participated in exchange for course credit although payment did occur in some labs (course credit only $N = 10{,}027$; payment only $N = 6419$; neither $N = 5951$; both $N =$

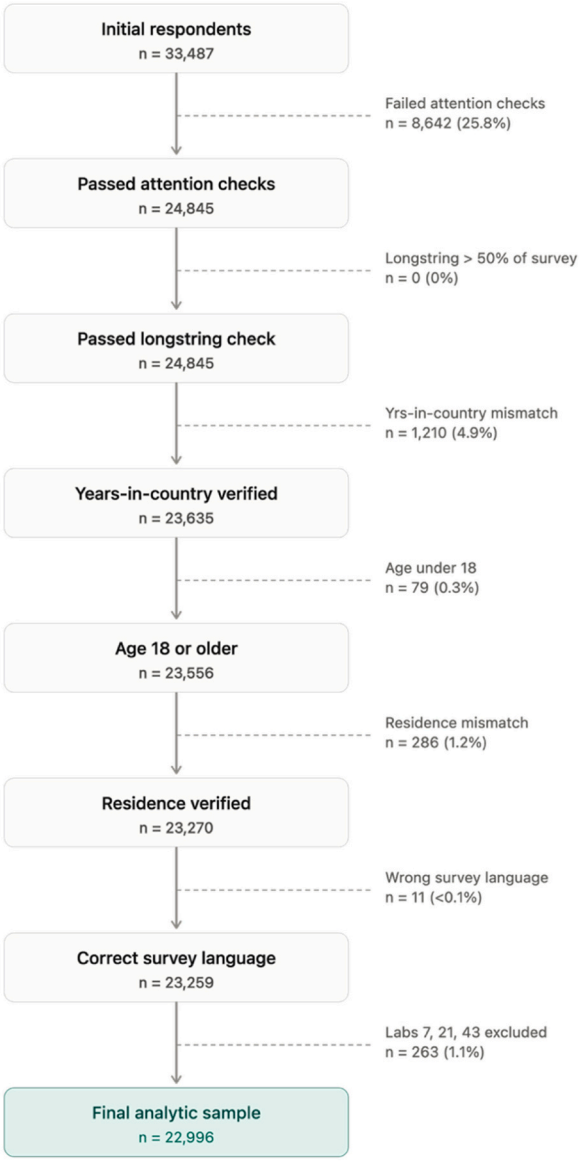
[1] There were two versions of the Chinese survey: simplified Chinese for mainland participants and traditional Chinese for Macau participants.

[2] In our sample, three of the gender neutral languages (Chinese, Japanese and Vietnamese) have gendered pronouns (this is restricted to written forms of Chinese and Japanese).

[3] Three countries did not achieve this minimum: Bosnia ($N = 160$), Tanzania ($N = 110$) and Burkina Faso ($N = 236$). As Burkina Faso barely missed the threshold, we retained this sample in our analysis. The results are unchanged if we omit Burkina Faso (see supplementary materials).

[4] In line with recent performance of the PSA network, most language-locations had few difficulties in meeting this minimum sample size. Where necessary, we topped up samples using paid crowd sourcing websites as appropriate for the target language (e.g., Prolific or Qualtrics panels). For any language-location requiring a top-up sample, we aimed to recruit at least 80 participants (after exclusions) with a similar demographic profile to those collected through PSA labs. As Table 1 reveals, we exceeded this minimum in 11 of 17 countries.

[5] The overrepresentation of women originates in the student and community samples and is likely to reflect the overrepresentation of women in psychology student populations and among investigators that collected community samples. Gender does not affect our findings (see supplementary materials).




*Notes.* The longstring exclusion criterion was not pre-registered but proved to be redundant. Labs 7, 21 and 43 did not formally start data collection and responses are test cases.

**Fig. 1.** Flowchart summarising the impact of the exclusion criteria on sample size.
*Notes.* The longstring exclusion criterion was not pre-registered but proved to be redundant. Labs 7, 21 and 43 did not formally start data collection and responses are test cases.

424; missing $N = 175$). Participants additionally had the opportunity of winning a monetary bonus on the basis of their performance on the incentivised measure of stereotype content. The best performing participant in each country received a prize of GBP100 (or Purchasing Power Parity equivalent).[6] See Table 1 for country- or region-level sample characteristics.

A Monte Carlo simulation showed that our minimum sample ($N =$ 3600 participants across 15 languages in the 3 language groups) would enable reliable inferences regarding the parameters of interest. Specifically, we generated 1000 simulated data sets using the proposed design and sample size and examined the extent to which the estimated parameters from models used to analyse these simulated data sets corresponded to the data-generating parameter values. The results revealed a very high degree of correspondence between data-generating and estimated values (average $R > 0.99$).

### *Design*

The study used a 2 (feminised gender-fair language: present versus absent; between) X 3 (stereotype: political leader, men, women; within) mixed design. Participants were randomly allocated to experimental condition. To control for order effects, participants were randomly allocated to one of six possible stereotype presentation orders (this order was retained across the two stereotype measures), where the first

[6] In Thailand, the prize was a Starbucks voucher; in Iran, the prize value was equal to GBP100 (PPP was inaccurate); in panel samples, the prize was typically converted into redeemable points.

**Table 1**
Sample demographics and sampling approaches in each Country or Region.

| Country / Region | Language | *N* | Age (SD) | Gender [a] | Student [b] | Employed [b] | Sample Source [c] | Compensation [d] |
|---|---|---|---|---|---|---|---|---|
| Argentina | Spanish | 463 | 30.51 (11.26) | Men $N = 136$ | No $N = 197$ | No $N = 120$ | Student $N = 0$ | None $N = 463$ |
| | | | | Women $N = 322$ | FT $N = 134$ | FT $N = 220$ | Community $N = 105$ | Credit $N = 0$ |
| | | | | Alternate $N = 5$ | PT $N = 132$ | PT $N = 123$ | Panel $N = 0$ | Money $N = 0$ |
| Armenia | Armenian | 540 | 25.36 (9.44) | Men $N = 187$ | No $N = 210$ | No $N = 262$ | | None $N = 0$ |
| | | | | Women $N = 348$ | FT $N = 304$ | FT $N = 188$ | All Mixed | Credit $N = 540$ |
| | | | | Alternate $N = 5$ | PT $N = 34$ | PT $N = 89$ | | Money $N = 99$ |
| Australia | English | 431 | 26.93 (10.87) | Men $N = 126$ | No $N = 80$ | No $N = 82$ | Student $N = 332$ | None $N = 0$ |
| | | | | Women $N = 289$ | FT $N = 265$ | FT $N = 113$ | Community $N = 0$ | Credit $N = 332$ |
| | | | | Alternate $N = 16$ | PT $N = 86$ | PT $N = 236$ | Panel $N = 99$ | Money $N = 0$ |
| Austria | German | 296 | 29.55 (9.94) | Men $N = 133$ | No $N = 135$ | No $N = 63$ | Student $N = 60$ | None $N = 0$ |
| | | | | Women $N = 155$ | FT $N = 118$ | FT $N = 111$ | Community $N = 0$ | Credit $N = 60$ |
| | | | | Alternate $N = 8$ | PT $N = 43$ | PT $N = 122$ | Panel $N = 176$ | Money $N = 176$ |
| Brazil | Portuguese | 410 | 28.25 (11.68) | Men $N = 133$ | No $N = 94$ | No $N = 172$ | | None $N = 410$ |
| | | | | Women $N = 267$ | FT $N = 165$ | FT $N = 135$ | All Mixed | Credit $N = 0$ |
| | | | | Alternate $N = 10$ | PT $N = 151$ | PT $N = 103$ | | Money $N = 0$ |
| Burkina Faso | French | 236 | 28.25 (9.40) | Men $N = 125$ | No $N = 124$ | No $N = 160$ | | None $N = 0$ |
| | | | | Women $N = 111$ | FT $N = 79$ | FT $N = 43$ | All Mixed | Credit $N = 0$ |
| | | | | Alternate $N = 0$ | PT $N = 33$ | PT $N = 33$ | | Money $N = 236$ |
| China | Chinese (simplified) | 386 | 22.00 (3.62) | Men $N = 112$ | No $N = 78$ | No $N = 177$ | Student $N = 137$ | None $N = 137$ |
| | | | | Women $N = 268$ | FT $N = 284$ | FT $N = 101$ | Community $N = 0$ | Credit $N = 0$ |
| | | | | Alternate $N = 6$ | PT $N = 24$ | PT $N = 107$ | Panel $N = 0$ | Money $N = 249$ |
| Colombia | Spanish | 684 | 30.32 (14.12) | Men $N = 240$ | No $N = 254$ | No $N = 328$ | Student $N = 220$ | None $N = 0$ |
| | | | | Women $N = 435$ | FT $N = 362$ | FT $N = 238$ | Community $N = 0$ | Credit $N = 584$ |
| | | | | Alternate $N = 9$ | PT $N = 67$ | PT $N = 118$ | Panel $N = 0$ | Money $N = 0$ |
| Czech Republic | Czech | 295 | 26.89 (9.07) | Men $N = 84$ | No $N = 60$ | No $N = 95$ | Student $N = 183$ | None $N = 112$ |
| | | | | Women $N = 206$ | FT $N = 181$ | FT $N = 78$ | Community $N = 0$ | Credit $N = 89$ |
| | | | | Alternate $N = 9$ | PT $N = 54$ | PT $N = 122$ | Panel $N = 0$ | Money $N = 94$ |
| Denmark | Danish | 371 | 46.78 (16.66) | Men $N = 193$ | No $N = 316$ | No $N = 107$ | Student $N = 10$ | None $N = 10$ |
| | | | | Women $N = 176$ | FT $N = 47$ | FT $N = 190$ | Community $N = 0$ | Credit $N = 0$ |
| | | | | Alternate $N = 2$ | PT $N = 8$ | PT $N = 71$ | Panel $N = 361$ | Money $N = 361$ |
| Finland | Finnish | 279 | 32.19 (11.47) | Men $N = 77$ | No $N = 79$ | No $N = 110$ | Student $N = 246$ | None $N = 0$ |
| | | | | Women $N = 174$ | FT $N = 174$ | FT $N = 229$ | Community $N = 0$ | Credit $N = 0$ |
| | | | | Alternate $N = 28$ | PT $N = 26$ | PT $N = 193$ | Panel $N = 33$ | Money $N = 279$ |
| France | French | 525 | 35.17 (17.27) | Men $N = 211$ | No $N = 263$ | No $N = 229$ | Student $N = 200$ | None $N = 249$ |
| | | | | Women $N = 306$ | FT $N = 233$ | FT $N = 193$ | Community $N = 0$ | Credit $N = 200$ |
| | | | | Alternate $N = 8$ | PT $N = 29$ | PT $N = 103$ | Panel $N = 76$ | Money $N = 279$ |
| Germany | German | 1286 | 29.63 (11.01) | Men $N = 400$ | No $N = 392$ | No $N = 322$ | Student $N = 541$ | None $N = 308$ |
| | | | | Women $N = 847$ | FT $N = 756$ | FT $N = 338$ | Community $N = 308$ | Credit $N = 681$ |
| | | | | Alternate $N = 38$ | PT $N = 138$ | PT $N = 623$ | Panel $N = 201$ | Money $N = 201$ |
| Greece | Greek | 451 | 37.77 (12.13) | Men $N = 185$ | No $N = 338$ | No $N = 127$ | Student $N = 0$ | None $N = 172$ |
| | | | | Women $N = 261$ | FT $N = 85$ | FT $N = 250$ | Community $N = 0$ | Credit $N = 0$ |
| | | | | Alternate $N = 4$ | PT $N = 28$ | PT $N = 73$ | Panel $N = 279$ | Money $N = 279$ |
| Hungary | Hungarian | 429 | 26.91 (10.94) | Men $N = 107$ | No $N = 51$ | No $N = 129$ | Student $N = 335$ | None $N = 94$ |
| | | | | Women $N = 319$ | FT $N = 313$ | FT $N = 111$ | Community $N = 0$ | Credit $N = 335$ |
| | | | | Alternate $N = 3$ | PT $N = 65$ | PT $N = 189$ | Panel $N = 0$ | Money $N = 0$ |
| India | Hindi | 255 | 25.02 (7.67) | Men $N = 68$ | No $N = 56$ | No $N = 179$ | Student $N = 0$ | None $N = 191$ |
| | | | | Women $N = 183$ | FT $N = 181$ | FT $N = 45$ | Community $N = 0$ | Credit $N = 0$ |
| | | | | Alternate $N = 4$ | PT $N = 18$ | PT $N = 31$ | Panel $N = 64$ | Money $N = 64$ |
| Indonesia | Bahasa Indonesian | 329 | 27.42 (8.31) | Men $N = 143$ | No $N = 113$ | No $N = 127$ | Student $N = 0$ | None $N = 235$ |
| | | | | Women $N = 184$ | FT $N = 169$ | FT $N = 105$ | Community $N = 0$ | Credit $N = 0$ |
| | | | | Alternate $N = 2$ | PT $N = 47$ | PT $N = 97$ | Panel $N = 94$ | Money $N = 94$ |
| Iran | Persian (Farsi) | 368 | 29.84 (9.58) | Men $N = 204$ | No $N = 164$ | No $N = 125$ | Student $N = 105$ | None $N = 0$ |
| | | | | Women $N = 156$ | FT $N = 146$ | FT $N = 103$ | Community $N = 0$ | Credit $N = 0$ |
| | | | | Alternate $N = 8$ | PT $N = 58$ | PT $N = 140$ | Panel $N = 0$ | Money $N = 105$ |
| Italy | Italian | 867 | 32.28 (13.50) | Men $N = 375$ | No $N = 384$ | No $N = 404$ | Student $N = 144$ | None $N = 288$ |
| | | | | Women $N = 479$ | FT $N = 415$ | FT $N = 302$ | Community $N = 60$ | Credit $N = 267$ |
| | | | | Alternate $N = 13$ | PT $N = 67$ | PT $N = 160$ | Panel $N = 312$ | Money $N = 312$ |
| Japan | Japanese | 515 | 33.80 (13.85) | Men $N = 274$ | No $N = 297$ | No $N = 154$ | Student $N = 212$ | None $N = 238$ |
| | | | | Women $N = 240$ | FT $N = 189$ | FT $N = 150$ | Community $N = 26$ | Credit $N = 0$ |
| | | | | Alternate $N = 1$ | PT $N = 29$ | PT $N = 211$ | Panel $N = 255$ | Money $N = 255$ |
| Macau | Chinese (traditional) | 248 | 25.38 (6.32) | Men $N = 72$ | No $N = 103$ | No $N = 47$ | | None $N = 0$ |
| | | | | Women $N = 175$ | FT $N = 116$ | FT $N = 99$ | All Mixed | Credit $N = 0$ |
| | | | | Alternate $N = 1$ | PT $N = 29$ | PT $N = 102$ | | Money $N = 248$ |
| Mexico | Spanish | 619 | 26.27 (11.62) | Men $N = 203$ | No $N = 153$ | No $N = 386$ | | None $N = 619$ |
| | | | | Women $N = 394$ | FT $N = 391$ | FT $N = 113$ | All Mixed | Credit $N = 0$ |
| | | | | Alternate $N = 1$ | PT $N = 75$ | PT $N = 120$ | | Money $N = 0$ |
| Morocco | Arabic | 245 | 33.36 (11.29) | Men $N = 114$ | No $N = 150$ | No $N = 89$ | Student $N = 0$ | None $N = 29$ |
| | | | | Women $N = 107$ | FT $N = 66$ | FT $N = 105$ | Community $N = 0$ | Credit $N = 0$ |
| | | | | Alternate $N = 24$ | PT $N = 29$ | PT $N = 51$ | Panel $N = 178$ | Money $N = 215$ |

(*continued on next page*)

**Table 1** (*continued*)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Netherlands | Dutch | 685 | 33.97 (17.15) | Men $N = 304$<br>Women $N = 376$<br>Alternate $N = 5$ | No $N = 353$<br>FT $N = 315$<br>PT $N = 16$ | No $N = 162$<br>FT $N = 187$<br>PT $N = 334$ | Student $N = 199$<br>Community $N = 0$<br>Panel $N = 380$ | None $N = 0$<br>Credit $N = 199$<br>Money $N = 486$ |
| Nigeria | English | 292 | 25.59 (6.89) | Men $N = 106$<br>Women $N = 107$<br>Alternate $N = 9$ | No $N = 76$<br>FT $N = 177$<br>PT $N = 39$ | No $N = 182$<br>FT $N = 52$<br>PT $N = 58$ | Student $N = 30$<br>Community $N = 169$<br>Panel $N = 0$ | None $N = 0$<br>Credit $N = 0$<br>Money $N = 292$ |
| Norway | Norwegian | 617 | 33.66 (15.41) | Men $N = 149$<br>Women $N = 463$<br>Alternate $N = 5$ | No $N = 217$<br>FT $N = 365$<br>PT $N = 33$ | No $N = 107$<br>FT $N = 169$<br>PT $N = 335$ | Student $N = 348$<br>Community $N = 195$<br>Panel $N = 0$ | None $N = 307$<br>Credit $N = 236$<br>Money $N = 74$ |
| Pakistan | Urdu | 299 | 22.70 (4.86) | Men $N = 79$<br>Women $N = 201$<br>Alternate $N = 19$ | No $N = 34$<br>FT $N = 239$<br>PT $N = 26$ | No $N = 231$<br>FT $N = 27$<br>PT $N = 41$ | Student $N = 202$<br>Community $N = 97$<br>Panel $N = 0$ | None $N = 97$<br>Credit $N = 202$<br>Money $N = 0$ |
| Peru | Spanish | 269 | 28.68 (12.97) | Men $N = 114$<br>Women $N = 151$<br>Alternate $N = 3$ | No $N = 107$<br>FT $N = 111$<br>PT $N = 51$ | No $N = 135$<br>FT $N = 58$<br>PT $N = 76$ | All Mixed | None $N = 0$<br>Credit $N = 269$<br>Money $N = 0$ |
| Poland | Polish | 1319 | 34.06 (16.14) | Men $N = 434$<br>Women $N = 871$<br>Alternate $N = 13$ | No $N = 523$<br>FT $N = 413$<br>PT $N = 382$ | No $N = 444$<br>FT $N = 550$<br>PT $N = 325$ | Student $N = 477$<br>Community $N = 0$<br>Panel $N = 499$ | None $N = 142$<br>Credit $N = 576$<br>Money $N = 599$ |
| Portugal | Portuguese | 397 | 28.96 (10.52) | Men $N = 183$<br>Women $N = 207$<br>Alternate $N = 7$ | No $N = 186$<br>FT $N = 168$<br>PT $N = 43$ | No $N = 161$<br>FT $N = 168$<br>PT $N = 68$ | Student $N = 0$<br>Community $N = 0$<br>Panel $N = 110$ | None $N = 0$<br>Credit $N = 0$<br>Money $N = 227$ |
| Romania | Romanian | 1272 | 23.56 (7.13) | Men $N = 352$<br>Women $N = 905$<br>Alternate $N = 14$ | No $N = 215$<br>FT $N = 1035$<br>PT $N = 22$ | No $N = 793$<br>FT $N = 339$<br>PT $N = 140$ | Student $N = 795$<br>Community $N = 0$<br>Panel $N = 0$ | None $N = 0$<br>Credit $N = 1204$<br>Money $N = 0$ |
| Serbia | Serbian | 355 | 30.40 (12.73) | Men $N = 51$<br>Women $N = 302$<br>Alternate $N = 2$ | No $N = 117$<br>FT $N = 225$<br>PT $N = 12$ | No $N = 146$<br>FT $N = 124$<br>PT $N = 84$ | Student $N = 198$<br>Community $N = 156$<br>Panel $N = 0$ | None $N = 156$<br>Credit $N = 198$<br>Money $N = 0$ |
| Slovakia | Slovak | 490 | 27.34 (11.45) | Men $N = 125$<br>Women $N = 354$<br>Alternate $N = 11$ | No $N = 102$<br>FT $N = 336$<br>PT $N = 52$ | No $N = 177$<br>FT $N = 120$<br>PT $N = 190$ | Student $N = 207$<br>Community $N = 0$<br>Panel $N = 119$ | None $N = 151$<br>Credit $N = 207$<br>Money $N = 119$ |
| South Korea | Korean | 236 | 29.44 (7.16) | Men $N = 100$<br>Women $N = 136$<br>Alternate $N = 0$ | No $N = 105$<br>FT $N = 89$<br>PT $N = 42$ | No $N = 88$<br>FT $N = 108$<br>PT $N = 40$ | Student $N = 218$<br>Community $N = 0$<br>Panel $N = 18$ | None $N = 0$<br>Credit $N = 0$<br>Money $N = 236$ |
| Spain | Spanish | 486 | 22.60 (6.80) | Men $N = 111$<br>Women $N = 369$<br>Alternate $N = 6$ | No $N = 44$<br>FT $N = 401$<br>PT $N = 41$ | No $N = 319$<br>FT $N = 54$<br>PT $N = 113$ | Student $N = 343$<br>Community $N = 0$<br>Panel $N = 0$ | None $N = 13$<br>Credit $N = 472$<br>Money $N = 0$ |
| Sweden | Swedish | 320 | 45.69 (12.11) | Men $N = 142$<br>Women $N = 173$<br>Alternate $N = 5$ | No $N = 296$<br>FT $N = 15$<br>PT $N = 9$ | No $N = 60$<br>FT $N = 217$<br>PT $N = 43$ | Student $N = 0$<br>Community $N = 0$<br>Panel $N = 320$ | None $N = 0$<br>Credit $N = 0$<br>Money $N = 320$ |
| Switzerland | French | 371 | 22.11 (5.65) | Men $N = 57$<br>Women $N = 310$<br>Alternate $N = 4$ | No $N = 11$<br>FT $N = 351$<br>PT $N = 9$ | No $N = 218$<br>FT $N = 6$<br>PT $N = 147$ | Student $N = 355$<br>Community $N = 0$<br>Panel $N = 16$ | None $N = 0$<br>Credit $N = 355$<br>Money $N = 16$ |
| Thailand | Thai | 283 | 29.84 (11.43) | Men $N = 97$<br>Women $N = 169$<br>Alternate $N = 17$ | No $N = 139$<br>FT $N = 141$<br>PT $N = 3$ | No $N = 121$<br>FT $N = 122$<br>PT $N = 40$ | Student $N = 88$<br>Community $N = 20$<br>Panel $N = 122$ | None $N = 161$<br>Credit $N = 0$<br>Money $N = 122$ |
| Turkey | Turkish | 2072 | 23.27 (6.25) | Men $N = 390$<br>Women $N = 1654$<br>Alternate $N = 28$ | No $N = 186$<br>FT $N = 1801$<br>PT $N = 85$ | No $N = 1616$<br>FT $N = 215$<br>PT $N = 240$ | Student $N = 1241$<br>Community $N = 0$<br>Panel $N = 0$ | None $N = 945$<br>Credit $N = 1063$<br>Money $N = 0$ |
| UK | English | 939 | 22.39 (7.05) | Men $N = 252$<br>Women $N = 667$<br>Alternate $N = 20$ | No $N = 108$<br>FT $N = 788$<br>PT $N = 43$ | No $N = 426$<br>FT $N = 91$<br>PT $N = 422$ | Student $N = 782$<br>Community $N = 0$<br>Panel $N = 60$ | None $N = 0$<br>Credit $N = 562$<br>Money $N = 377$ |
| US | English | 1353 | 23.37 (9.49) | Men $N = 488$<br>Women $N = 847$<br>Alternate $N = 18$ | No $N = 184$<br>FT $N = 1127$<br>PT $N = 42$ | No $N = 482$<br>FT $N = 199$<br>PT $N = 672$ | Student $N = 1145$<br>Community $N = 0$<br>Panel $N = 208$ | None $N = 0$<br>Credit $N = 1145$<br>Money $N = 208$ |
| Vietnam | Vietnamese | 413 | 22.16 (5.01) | Men $N = 121$<br>Women $N = 282$<br>Alternate $N = 10$ | No $N = 56$<br>FT $N = 315$<br>PT $N = 42$ | No $N = 163$<br>FT $N = 77$<br>PT $N = 173$ | Student $N = 213$<br>Community $N = 0$<br>Panel $N = 0$ | None $N = 163$<br>Credit $N = 250$<br>Money $N = 0$ |

*Notes:* [a]alternate includes non-binary and self-described; [b] FT = full-time, PT = part-time; [c] *N* only reported for single source samples (mixed samples mainly consist of community plus students; panel includes research panels as well as crowd sourcing sites like Prolific); [d] *N* only reported for single compensation schemes (this excludes $N = 424$ Austrian, Colombian, German and Portuguese participants who were awarded credit plus money).

presentation group was either men, women or political leaders; a distractor group 'the elderly' always followed the first gender group.[7]

Procedure.

We recruited participants to take part in a survey of people's perceptions of social groups. We made the survey available online and it was accessed either in the participating lab or remotely. Surveys were translated into the appropriate language for each country (see Appendix

[7] Although we intended to randomly order the two stereotype measures, translators anticipated that participants would find it more confusing to complete the incentivised measure first rather than second. In the interests of data quality, all participants completed the non-incentivised measure first.

A for the operationalisation of the gender-fair manipulation).[8] The survey measured stereotype content (non-incentivised and incentivised) and demographic variables. (For exploratory purposes, the survey also administered a number of individual difference measures, including the list measure; Blair & Imai, 2012).

**Stereotype Content: Non-Incentivised.** The first-order non-incentivised stereotype measure was based on Schein's (1973) original think manager – think male paradigm. Specifically, participants were told that they will be presented with a series of descriptive terms that commonly characterise people in general and asked to use this list to indicate what they think various social groups are like. Participants were then presented with each of the four target groups in turn: women, men, political leaders and the elderly (the latter group was a distractor that was included to minimise the risks of contrast effects or reactance due to the repeated measures design).[9] The order of the presentation of the groups 'women', 'men' and 'political leaders', was randomised; the final group, 'the elderly', was always presented after the first gender group to ensure that ratings of men and women were temporally separated. This randomisation resulted in 6 presentation orders.

When eliciting the stereotypes of women, men and the elderly, English speaking participants were presented with the following instructions: "*On this page, we would like you to rate [target group]. In making your judgments, it may be helpful to imagine that you are about to meet a person for the first time and the only thing you know in advance is that the person is a [target group member]. Below, you will see 30 pairs of terms. Please select the point between the words in each pair that best describes what [target group] are like in general.*"

When eliciting the stereotype of political leaders, the instructions varied as a function of experimental condition. English speaking participants in the control (feminised language absent) condition were presented with the following instructions: "*On this page, we would like you to rate people who occupy political leadership positions. In making your judgments, it may be helpful to imagine that you are about to meet a person for the first time and the only thing you know in advance is that this person occupies a position of political leadership. Below, you will see 30 pairs of terms. Please select the point between the words in each pair that best describes what people who occupy political leadership positions are like in general.*" English speaking participants in the experimental (feminised language present) condition were instead presented with text that encodes for male and female gender categories in the form of paired pronouns: "*On this page, we would like you to rate people who occupy political leadership positions. In making your judgments, it may be helpful to imagine that you are about to meet a person for the first time and the only thing you know about him or her in advance is that he or she occupies a position of political leadership. Below, you will see 30 pairs of terms. Please select the point between the words in each pair that best describes what people who occupy political leadership positions are like in general.*" In gender neutral languages that lack gender encoding in pronouns, the pronouns in the above text were replaced with the paired nouns "this man or this woman".[10]

Participants were then presented with 30 semantic differentials. These attributes were selected to tap into major facets of social evaluation, including two communal dimensions of friendliness and morality and four agentic dimensions of competence, assertiveness, dominance and self-sufficiency. For each dimension, we surveyed the attributes that had been used in previous stereotype research (Abele et al., 2016; Abele & Hauke, 2020; Ashton & Lee, 2001; Carli, Alawa, Lee, Zhao, & Kim, 2016; Cuddy et al., 2015; Duehr & Bono, 2006; Epitropaki & Martin, 2005; Fiske, 2018; Hentschel et al., 2019; Imhoff, Koch, & Flade, 2018; Koch, Imhoff, Dotsch, Unkelbach, & Alves, 2016; Louvet, Cambon, Milhabet, & Rohmer, 2019; Ma, Rosette, & Koval, 2022; Oliveira, Garcia-Marques, Garcia-Marques, & Dotsch, 2020; Schneider & Bos, 2014) and chose attributes that best met the criteria of being frequently used, non-redundant, and capturing important aspects of the stereotypes of men, women and leaders. We constructed 7-point semantic differentials around these attributes (these are coded such that a score of 1 is given for total endorsement of the attribute on the left pole of the differential and 7 for total endorsement of the attribute on the right pole). We then sought feedback from native speakers of four culturally distant languages (German, Turkish, Arabic and Chinese) about ease of translation and consistency of meaning (following guidelines of the International Test Commission, 2017). This feedback led to some substitutions and amendments.

The attributes for friendliness were "caring—uncaring", "warm—cold", "empathetic—unempathetic", "kind—unkind", "good-natured—bad-natured". The attributes for morality are "fair—unfair", "just—unjust", "moral—immoral", "ethical—unethical", "honourable—dishonourable". The attributes for competence were "capable—incapable", "competent—incompetent", "talented—untalented", "skilled—unskilled", "accomplished—unaccomplished". The attributes for assertiveness were "strong—weak", "confident—hesitant", "decisive—indecisive", "assertive—unassertive", "never-giving-up—giving-up-easily". The attributes for dominance were "dominant—submissive", "conceited—humble", "self-promoting—modest", "overbearing—accommodating", "feeling-superior—feeling-inferior". The attributes for self-sufficiency were "self-controlled—uncontrolled", "self-reliant—other-reliant", "mature—immature", "independent—dependent", "self-sufficient—not self-sufficient".[11] In the survey, the semantic differentials were divided into sets and presented across two survey pages. Within each set, approximately half of the differentials had the positive pole on the right, and the remainder had the positive pole on the left. (For analysis, differentials with the positive pole on the left were reversed so that higher scores indicated positive endorsement of each dimension). The items on each survey page were presented in a random order.

**Stereotype Content: Incentivised.** This measure of second-order beliefs was in most respects the same as the non-incentivised measure described above. Importantly, the order of presentation and the experimental condition was retained across both measures so that participants saw the experimental or control versions of the stimuli twice, in the same order. In order to incentivise estimates of second-order beliefs, we

[8] The translations were overseen by a member of the PSA translation team. For each language, the translation was accomplished by a team of five individuals (two individuals conducted forward translations, another two individuals conducted the back translation and a language expert coordinated their work). In addition, the first author conducted independent checks of the translation using AI translation tools and liaised with the translation team to correct meaning as necessary.

[9] A pilot study of this approach revealed that about half of participants had some insight into the goals of the study, but there was no evidence that high versus low insight participants differed in terms of their stereotype responses (a finding that we replicate; see robustness analysis).

[10] When implementing the feminised instructions, we followed the language's convention for the ordering of the male- and female-encoded pronouns or nouns. We did not randomise this ordering for reasons of experimental power. However, it is possible that the unconventional ordering (e.g., she or he) would provide a greater boost to the salience of the female category, and that the conventional ordering is therefore a weaker test. The impact of using paired pronouns versus nouns was analysed and is reported in the robustness analysis.

[11] In discussion with the translation teams, it was decided to replace "insufficient" with "not self-sufficient" and the pair "pushy—easy-going" with "overbearing—accommodating".

adapted the Krupka-Weber task by making two changes to the non-incentivised measure. First, participants were asked to estimate what *most other members of their community* (i.e., those who were also completing the study in their country) think the four social groups are like (for a similar approach, see Kotzur, Friehs, Asbrock, & van Zalk, 2019; Kotzur et al., 2020).[12] For example, when eliciting the stereotypes of women, English speaking participants were presented with the following instructions: "*On this page, we would like you to rate what other members of your community think women are like. In making your judgments, it may be helpful to imagine that a member of your community is about to meet a person for the first time and the only thing this member knows in advance is that the person is a woman. Below, you will see 30 pairs of terms. Please select the point between the words in each pair that best describes what other members of your community think women are like in general.*" Second, participants were told that we would calculate the distance between their responses and those actually provided by most other members of their community and that the participant who was closest to the community response would receive a bonus of GBP100 (or PPP equivalent).[13]

Finally, participants were asked to provide demographic information about their gender (man, woman, not listed here: please specify if you wish, and prefer not to say[14]), age, country of residence (number of years resided in their country of residence, if not born there), education level and employment status. Participants were also asked to respond to two attention check items: "In this survey, you were asked to rate four social groups. Was one of these groups 'Doctors'?" and "The following question is an attention check. Please select the answer 'very unhappy' below." Finally, participants were asked to respond to an open question that asked what they thought the survey was investigating.[15]

Methodological Deviations.

A number of translation and cultural issues emerged during the translation stage. Contending with these led us, in consultation with the editor, to deviate from the Stage 1 IPA in several ways. First, we always presented the non-incentivised measure first, as some translators were concerned about the ability of local populations to understand the incentivised measure. Second, we changed the attributes "insufficient", "pushy" and "easy-going" to "not self-sufficient", "overbearing" and "accommodating" to ease translation. Third, in a small number of countries, we replaced the reference to "community" in the incentivised measure with the country's name to ease translation. Fourth, we calculated participants' incentivised stereotype accuracy using their average distance from the mode (rather than the standard count of identical scores) to increase metric precision and ease translation. Fifth, in Nigeria and Tanzania, some labs limited their assessment of participant gender to the gender binary for reasons of cultural sensitivity. Sixth, in the gender neutral languages of Chinese, Japanese and Vietnamese, we used the available gender pronoun pairs; in the gendered languages of Hindi, Urdu and Arabic, we either relied on the gendered suffix pair or gendered nouns. Finally, in Poland, we followed the local convention of creating two surveys: one for male identifying participants and one for female identifying participants.

## Results

We will begin by describing the content of participants' stereotypes of women, men and political leaders as well as the correlations between these stereotypes. We will then report the results of our a-priori hypothesis testing for the non-incentivised (first-order/personal) and incentivised (second-order/community) stereotype measures in turn. Finally, we will report the results of analyses that explored the importance of the feminisation strategy operationalisation and checked the robustness of the findings to different sampling strategies and participant insight.

### *Descriptive statistics*

To understand the content of participants' stereotypes of women, men and political leaders, we calculated participants' average endorsement of the six attribute dimensions separately for each location and stereotype measure. These means are depicted in Fig. 2. This figure reveals that participants tended to stereotype women (blue markers) as more communal — friendly and moral — than men (red markers). Participants also tended to stereotype men as more agentic than women, although this was more evident on the dimensions of dominance and assertiveness than those of competence and self-sufficiency. Of relevance for H1, the pattern of endorsements for political leaders (black markers) were more similar to the pattern for men than women.

The figure also reveals some degree of heterogeneity across locations. For instance, gender stereotypes appear to be weaker in some regions (e.g., Burkina Faso, China) than others (e.g., Romania, UK). The figure also suggests that incentivised (community) stereotypes may be more extreme than non-incentivised (personal) stereotypes. In particular, there are larger differences in estimates of the community's endorsement of the attribute dimensions (except self-sufficiency) for each of the three groups.

Next, to examine the similarity of the stereotypes of political leaders, women and men, we calculated the average correlations between attribute endorsements separately for each location and stereotype measure. These correlations are depicted in Fig. 3. An inspection of this figure reveals that the correlations between political leaders and men were consistently positive whereas those between political leaders and women were mostly negative. This figure also provides further support for the possibility that incentivised (community) stereotypes may be more extreme than non-incentivised (personal) stereotypes, as the correlations between the incentivised stereotypes were generally stronger than those for non-incentivised stereotypes.[16]

This figure further distinguishes between the stereotype correlations that are obtained when the political leader stereotype is elicited using gender neutral language (transparent centre markers) or feminised language (black centre markers) and between languages that operationalised feminisation with paired pronouns (blue markers) or with nouns (red markers).[17] Visual inspection of the figure is suggestive of a high degree of consistency in the stereotype associations whether or not feminised language is used. Of relevance to H2, moving from neutral to feminised elicitation weakens associations in some countries and

[12] In a small number of countries (e.g., Norway, Vietnam) there was no satisfactory translation for "community" and participants were asked to think of other members of their country.

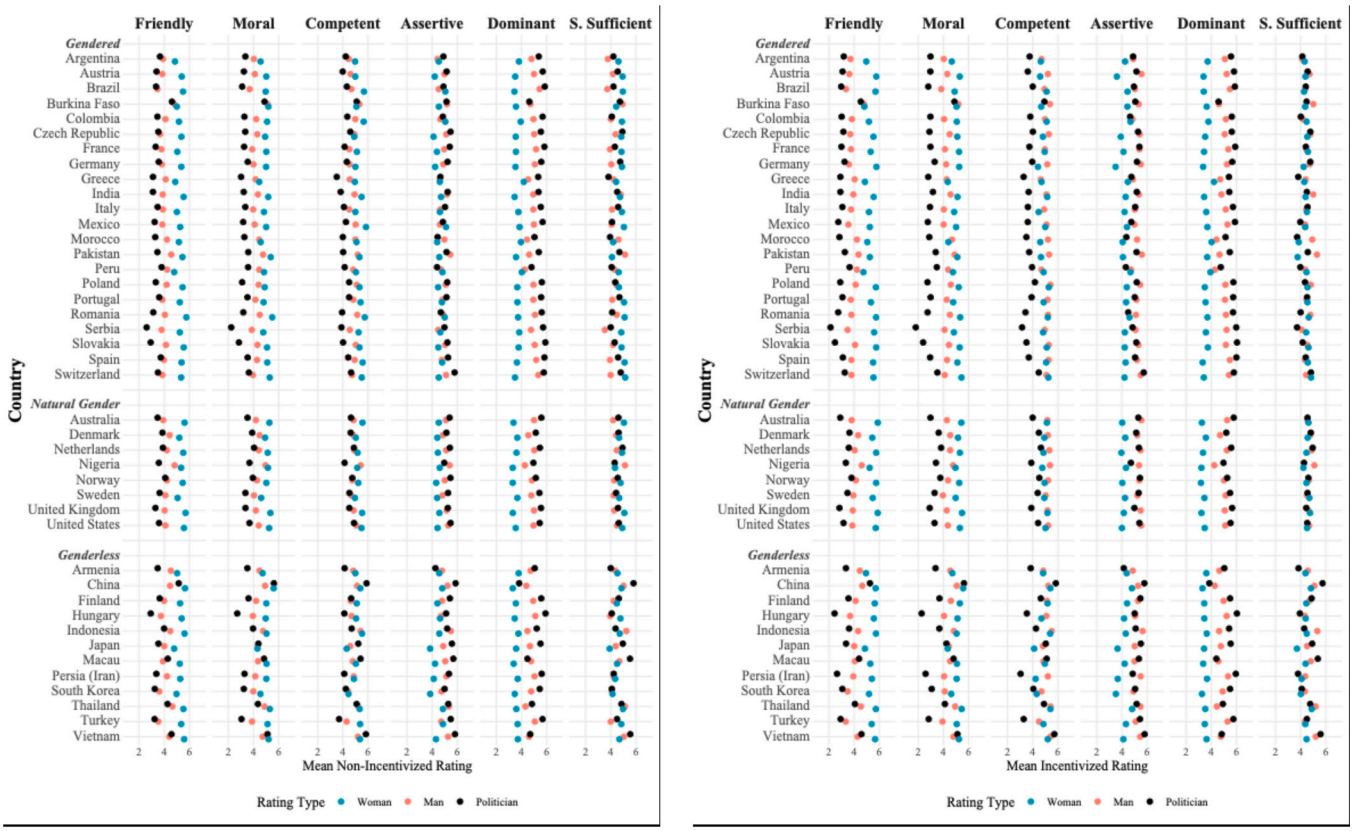
[13] To increase translation ease and more precisely capture accuracy we replaced the count of the number of times participants selected the country's mode with their average distance from it.

[14] Some labs in Nigeria and Tanzania restricted this question to the gender binary.

[15] Local investigators coded these responses for the presence versus absence of insight into the study purpose (insight was coded as present when participants made any reference to stereotypes of men versus women). We test the impact of insight in the robustness analysis.

[16] This conclusion is borne out by an analysis of the average sample-level correlations between the personal endorsement of attributes and the difference between community and personal endorsement: women $r = 0.08$, men $r = 0.60$, politicians $r = 0.71$. This shows that (at least for men and politicians) the stronger (weaker) the personal endorsement of an attribute, the more likely the community endorsement was even stronger (weaker).

[17] In 3 languages with gendered verbs, the operationalisation differed from others in their gendered language group. In Arabic, feminisation was achieved using gendered suffixes on the verb "to hold" (a position of leadership); in India and Pakistan, the paired nouns were used instead. Appendix A lists all operationalisations.




*Notes.* Left-hand panel is non-incentivised (personal) content endorsement; right-hand panel is incentivised (community) content endorsement. Blue dots are endorsements for women; red dots those for men and the black dots those for political leaders.

**Fig. 2.** Average country-level non-incentivised (left) and incentivised (right) stereotype content endorsement for women, men and political leaders.
*Notes.* Left-hand panel is non-incentivised (personal) content endorsement; right-hand panel is incentivised (community) content endorsement. Blue dots are endorsements for women; red dots those for men and the black dots those for political leaders.

strengthens them in others. The picture appears to be similarly mixed for the association between political leaders and men and between political leaders and women.

**A-Priori Hypothesis Tests**

To test our a-priori hypotheses, we used a fixed-effects regression approach with cluster-robust standard errors (McNeish & Kelley, 2019; Antonakis, Bastardoz, & Rönkkö, 2021; Certo, Withers, & Semadeni, 2017). The analysis was implemented via the *fixest* (Berge, 2021) package in R (R Core Team, 2024). We clustered standard errors on country to account for the non-independence of observations due to participants having been recruited in country-specific batches.

We specified fixed effects to match the structure of each hypothesis. The models that tested H1, which related to within participant associations, included fixed effects for participant and for attribute. The participant fixed effect absorbed all between-country variation because participants were perfectly nested within countries; a separate country fixed effect was therefore not necessary. The models testing H2, which related to the gender-fair language manipulation, included fixed effects for country and for attribute. These models did not include participant fixed effects because they would absorb all the variation of the between-participants manipulation. In all models, the attribute fixed effects were included to account for mean differences in how readily particular attributes are endorsed (e.g., participants may on average endorse 'kind' more readily than 'never gives up').

We report the results of our a-priori hypothesis tests for the non-incentivised measure of personal stereotype content and the incentivised measure of community stereotype content in turn. The full results are displayed in Table 2. Because the Stage 1 Monte Carlo, described above, established parameter recovery rather than statistical power, we additionally report the minimum detectable effect (MDE) for each coefficient. This is the smallest coefficient the design would detect with 80% power at $\alpha = 0.05$, given standard errors clustered by country.[18]

**Non-Incentivised Personal Stereotype Content.** According to H1, the association between people's stereotypes of political leaders and men should be more positive than the association between their stereotypes of political leaders and women. To test this expectation, we regressed participants' personal endorsement of an attribute for the non-politician group (i.e., men or women) onto (a) their personal endorsement of the attribute for political leaders, (b) a variable representing the gender of the non-politician group (effect-coded: men = 1, women = −1), and (c) the two-way interaction between these variables. There was a significant negative effect of non-politician group gender, such that men tended to receive lower attribute endorsements than women did. There was also a significant positive association of political leader rating, such that the more an attribute was endorsed for politicians the more it was endorsed for non-politicians. Importantly, however, this was conditioned by a significant positive interaction with the non-politician group gender. Consistent with H1, when people endorsed an attribute for political leaders, they were significantly *more* likely to endorse that attribute for men than they were to endorse that attribute for women.

According to H2a, when the political leader stereotype was elicited

[18] A reviewer suggested re-running these analyses using a wild cluster bootstrap to account for the possibility that the significance tests will over-reject the null due to the relatively low number of countries being clustered over (42). We therefore re-ran these analyses computing *p*-values using this approach and found no difference in the statistical significance of any coefficient in either the tests of hypotheses or exploratory analyses.

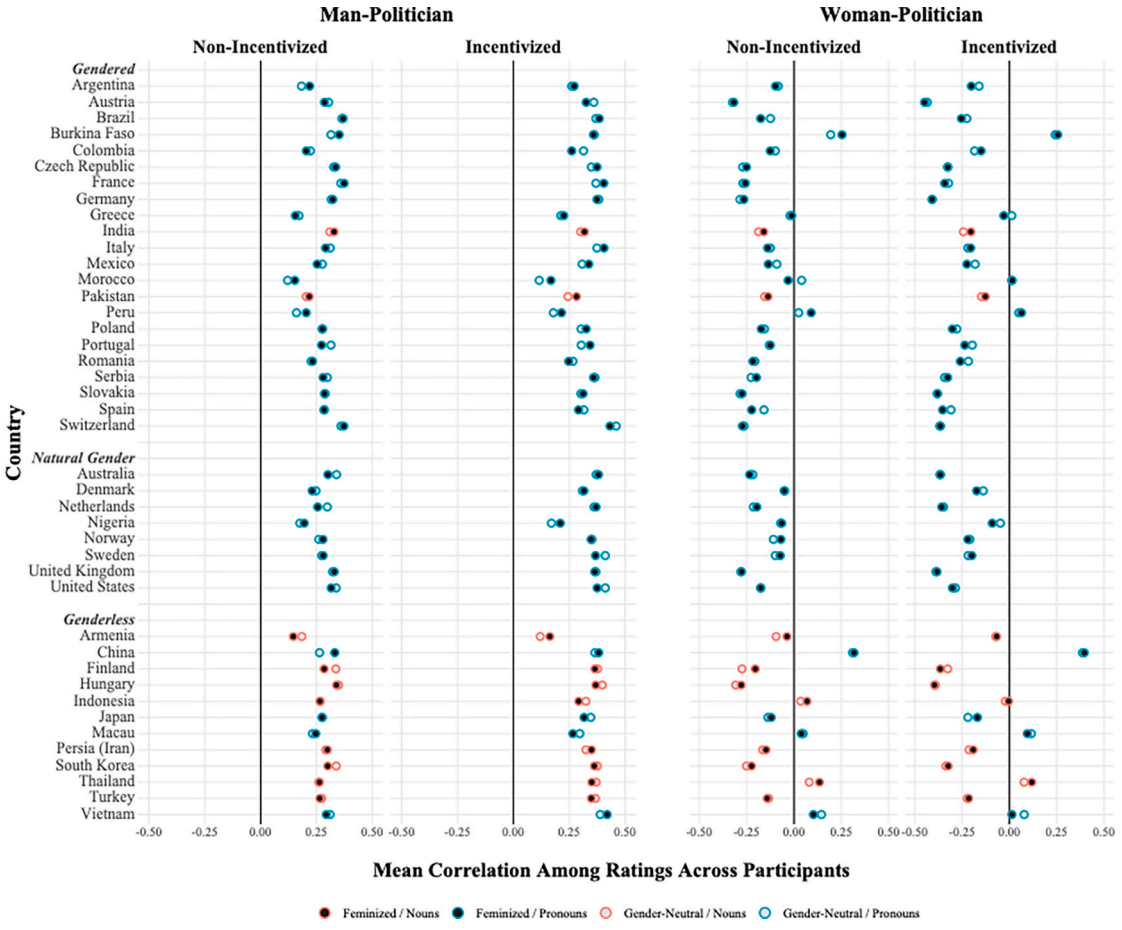



**Fig. 3.** Average correlations between the stereotypes of political leaders and men or women.

**Table 2**
Regression coefficients from models testing a-priori hypotheses with non-incentivised and incentivised stereotypes.

| Hypothesis | Measure | Effect | b | SE | t | B | p | MDE |
|---|---|---|---|---|---|---|---|---|
| H1 | Non-Incentivised | Politician | 0.101 | 0.007 | 13.98 | 0.120 | < 0.001*** | 0.021 |
| | | Gender of Other | −0.830 | 0.045 | −18.52 | −0.560 | < 0.001*** | 0.129 |
| | | Pol × Gender | 0.161 | 0.008 | 19.76 | 0.192 | < 0.001*** | 0.023 |
| | Incentivised | Politician | 0.103 | 0.008 | 12.68 | 0.125 | < 0.001*** | 0.023 |
| | | Gender of Other | −0.832 | 0.050 | −16.50 | −0.526 | < 0.001*** | 0.145 |
| | | Pol × Gender | 0.207 | 0.011 | 18.66 | 0.250 | < 0.001*** | 0.032 |
| H2a (men) | Non-Incentivised | Politician | 0.207 | 0.009 | 22.07 | 0.251 | < 0.001*** | 0.027 |
| | | Gender-Fair | 0.017 | 0.011 | 1.52 | 0.012 | 0.135 | 0.032 |
| | | Pol × Gender-Fair | −0.003 | 0.002 | −1.52 | −0.004 | 0.137 | 0.006 |
| | Incentivised | Politician | 0.232 | 0.009 | 25.82 | 0.287 | < 0.001*** | 0.026 |
| | | Gender-Fair | 0.009 | 0.011 | 0.77 | 0.006 | 0.448 | 0.033 |
| | | Pol × Gender-Fair | −0.001 | 0.002 | −0.55 | −0.002 | 0.588 | 0.006 |
| H2b (women) | Non-Incentivised | Politician | 0.061 | 0.009 | 6.89 | 0.072 | < 0.001*** | 0.025 |
| | | Gender-Fair | 0.006 | 0.010 | 0.62 | 0.004 | 0.536 | 0.029 |
| | | Pol × Gender-Fair | −0.001 | 0.002 | −0.47 | −0.001 | 0.641 | 0.006 |
| | Incentivised | Politician | 0.035 | 0.011 | 3.27 | 0.042 | 0.002** | 0.031 |
| | | Gender-Fair | 0.014 | 0.012 | 1.18 | 0.009 | 0.244 | 0.034 |
| | | Pol × Gender-Fair | −0.002 | 0.002 | −0.93 | −0.002 | 0.360 | 0.007 |

*Notes.* b is the unstandardized coefficient; B is the standardized coefficient; Gender of Other describes the gender of the non-politician group and is effect coded (men = 1, women = −1); Gender-fair describes the language elicitation manipulation and is effect coded (feminised = 1, gender neutral = −1); MDE, the minimum detectable effect, is the smallest b detectable with 80% power at α = 0.05; * $p < .05$, ** $p < .01$, *** $p < .001$.

using feminised (versus gender neutral) language, the association between people's stereotypes of men and political leaders should be less positive. To test this hypothesis, we regressed participants' personal endorsement of an attribute for men onto (a) their endorsement of the attribute for political leaders, (b) a variable representing the gender-fair language manipulation (effect-coded: feminised = 1, gender neutral = −1), and (c) the two-way interaction between these variables. There was a significant positive association of the personal endorsement of an attribute for political leaders with the endorsement of that same attribute for men, replicating the finding reported above. There was no evidence that eliciting the political leader stereotype with feminised (versus gender neutral) language affected the extent to which

participants tended to endorse the attributes for men. Importantly, and contra H2a, the two-way interaction was not significant. This means that there was no evidence that the strength of the association between the endorsement of attributes for political leaders and men varied as a function of the gender-fair language manipulation. This result was obtained despite the design being well powered to detect an effect of this kind (with 80% power it would have detected an interaction coefficient of 0.006).

According to H2b, when the political leader stereotype was elicited using feminised (versus gender neutral) language, the association between people's stereotypes of women and political leaders should be more positive. To test this hypothesis, we regressed participants' personal endorsement of an attribute for women onto (a) their endorsement of the attribute for political leaders, (b) a variable representing the gender-fair language manipulation (effect-coded: feminised = 1, gender neutral = −1), and (c) the two-way interaction between these variables. There was a significant positive association of the personal endorsement of an attribute for political leaders with the endorsement of that same attribute for women (this association was substantially weaker than that for men; see Table 2). There was no evidence that eliciting the political leader stereotype with feminised (versus gender neutral) language affected the extent to which participants endorsed the attributes for women. Further, and contra H2b, the two-way interaction was not significant. Thus, there was no evidence that the strength of the association between the endorsement of attributes for political leaders and women varied as a function of the gender-fair language manipulation.

**Incentivised Community Stereotype Content.** In order to test our hypotheses with the incentivised (community) stereotype measure we re-ran the models described above. We largely replicated our findings for H1 (see Table 2). Specifically, there was a significant negative effect of non-politician group gender, indicating that participants believed that their community was less likely to endorse the attributes for men than for women. There was also a significant positive association of political leader rating, such that attributes that were endorsed for politicians were more likely to be endorsed for non-politicians. Importantly, the two-way interaction was positive and significant. In line with H1, when people endorsed an attribute for political leaders, they were significantly *more* likely to endorse that attribute for men than they were to endorse that attribute for women. This interaction is significantly stronger than that observed for the non-incentivised stereotypes ($b = 0.02$, $SE = 0.003$, $t = 7.56$, $p < .001$; tested via a three-way interaction with measure type where incentivised = 1 and non-incentivised = −1).

We also replicated our findings of the impact of the gender-fair language elicitation on the association between community stereotypes of political leaders and men (H2a). Specifically, there was a significant positive association of the community's endorsement of an attribute for political leaders and their endorsement of that attribute for men. Neither the main effect of the gender-fair manipulation nor its interaction with the community's endorsement of attributes for political leaders was significant. Finally, we replicated our findings about the impact of the gender-fair language elicitation on the association between community stereotypes of political leaders and women (H2b). Specifically, there was a significant — and weakly positive — association of the community's endorsement of an attribute for political leaders on their endorsement of that attribute for women. Neither the main effect of the gender-fair manipulation nor its interaction with the community's endorsement of attributes for political leaders was significant.

### *Exploratory analyses*

As we previously discussed, we were required to operationalise the gender-fair manipulation in somewhat different ways in different languages. Specifically, for languages that did not have gender encoding in pronouns (most, although not all, neutral gender languages in our sample) we used the gendered noun pair in place of the gendered pronoun pair. We also used the gendered noun pair for two of the languages in our sample that have gendered encoding in verbs (Hindi and Urdu). We were therefore interested in exploring whether this operationalisation mattered for the impact of the linguistic intervention. To test this possibility, we ran the models testing H2a and H2b described above with an additional variable that captured operationalization (effect coded: pronouns = 1, nouns = −1) and the associated two-way and three-way interactions. Because intervention operationalization varied by country/region, these models only included the attribute fixed effect. Full results are reported in the supplementary materials.

We first ran these models for ratings of *men.* Operationalization had no significant effects, either alone or as part of an interaction, on either participants' *personal endorsement* or their estimates of *community stereotypes*. There was thus no evidence that operationalising the gender-fair manipulation with pronouns versus nouns affected ratings of men, or the tendency to stereotype political leaders as similar to men. In contrast, when we ran these models for participants' ratings of *women*, operationalization positively interacted with gender-fair condition for both *personal endorsement* ($b = 0.03$, $SE = 0.01$, $t = 2.86$, $p = .007$) and estimates of *community stereotypes* ($b = 0.03$, $SE = 0.01$, $t = 2.62$, $p = .012$). In both cases feminised (versus neutral) language was associated with slightly higher ratings of women when the manipulation was operationalised with pronouns, but slightly lower ratings when it was operationalised with nouns. These results were further qualified by a significant negative three-way interaction with political-leader attribute ratings for both *personal endorsement* ($b = -0.01$, $SE = 0.002$, $t = -2.43$, $p = .020$) and estimates of *community stereotypes* ($b = -0.01$, $SE = 0.002$, $t = -2.22$, $p = .032$). These interactions are consistent with the possibility that feminised (versus neutral) language was more likely to increase people's tendencies to stereotype political leaders as similar to women when the intervention was operationalised using nouns (versus pronouns). It is, however, important to note that these effects were very weak; additionally, because operationalization varies at the country level, they may reflect country-level differences rather than the operationalization itself.

### *Robustness analyses*

To evaluate the robustness of our findings to participant insight and different sampling approaches, we ran four sets of follow-up analyses. The first robustness check examined the impact of participant insight into the study aims. Overall, 15% of participants were coded as having a high degree of insight into the study aims (specifically, that we were comparing stereotypes of men versus women). We re-ran all the analyses above separately on participants with and without insight. The second robustness check examined whether the results changed as a function of participants' status as students, members of the local community, or panel participants. As sample source information was encoded at the laboratory level, this analysis focused on the 65% of observations that were recruited by labs that targeted a single source: students (42%), community members (5%) or paid panel participants (18%). This approach enabled us to isolate the effect of sample source by removing labs where the source was ambiguous. The remaining observations, which were produced by labs that recruited from a mix of sources, were dropped. The third robustness check compared findings for participants who were recruited by labs that awarded participants exclusively with course credit (44% of observations) or monetary compensation (28%); labs using a mixed strategy were dropped from the analysis. The final robustness check compared findings between participants who identified as women (65% of observations) versus men (33% of observations), dropping the small number of participants who identified as non-binary or preferred to self-describe.

The full results of these robustness analyses are reported in Table 3. All three effects in the model used to test H1 were confirmed for all participant groups for both stereotype measures. The results for H2a and H2b were also largely unchanged. The politician X gender-fair interaction was non-significant for every participant group on the incentivised

**Table 3**
Unstandardised regression coefficients from subgroup robustness analyses.

| | | H1 | | | H2a (Men) | | | H2b (Women) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Measure | Subgroup | Politician Rating | Gender of Other | Pol × Gender | Politician Rating | Gender Fair | Pol × Fair | Politician Rating | Gender Fair | Pol × Fair |
| Non-Incentivised | Full sample | 0.101*** | −0.830*** | 0.161*** | 0.207*** | 0.017 | −0.003 | 0.061*** | 0.006 | −0.001 |
| | Insight | 0.093*** | −0.822*** | 0.161*** | 0.200*** | −0.030 | 0.007 | 0.054*** | 0.003 | −0.000 |
| | No insight | 0.103*** | −0.837*** | 0.162*** | 0.208*** | 0.024 | −0.005* | 0.064*** | 0.004 | −0.001 |
| | Students | 0.101*** | −0.899*** | 0.170*** | 0.212*** | 0.025* | −0.004 | 0.054*** | 0.005 | −0.001 |
| | Community | 0.106*** | −0.756*** | 0.147*** | 0.206*** | −0.006 | 0.002 | 0.061*** | −0.004 | 0.002 |
| | Panel | 0.104*** | −0.613*** | 0.131*** | 0.201*** | 0.016 | −0.005 | 0.093*** | 0.027 | −0.005 |
| | Course credit | 0.085*** | −0.979*** | 0.184*** | 0.201*** | 0.027 | −0.007* | 0.035*** | 0.000 | −0.001 |
| | Money | 0.126*** | −0.565*** | 0.124*** | 0.222*** | 0.022 | −0.004 | 0.109*** | 0.003 | −0.000 |
| | Male | 0.095*** | −0.405*** | 0.102*** | 0.170*** | 0.027 | −0.008 | 0.082*** | 0.007 | −0.002 |
| | Female | 0.102*** | −1.063*** | 0.194*** | 0.227*** | 0.015 | −0.002 | 0.044*** | 0.001 | −0.000 |
| Incentivised | Full sample | 0.103*** | −0.832*** | 0.207*** | 0.232*** | 0.009 | −0.001 | 0.035** | 0.014 | −0.002 |
| | Insight | 0.099*** | −0.759*** | 0.198*** | 0.218*** | −0.005 | 0.003 | 0.043** | 0.012 | −0.002 |
| | No insight | 0.105*** | −0.855*** | 0.211*** | 0.235*** | 0.011 | −0.002 | 0.036** | 0.019 | −0.003 |
| | Students | 0.104*** | −0.886*** | 0.214*** | 0.236*** | 0.011 | −0.001 | 0.027* | 0.017 | −0.002 |
| | Community | 0.111*** | −0.728*** | 0.187*** | 0.233*** | −0.010 | 0.003 | 0.040* | 0.004 | 0.000 |
| | Panel | 0.107*** | −0.664*** | 0.181*** | 0.229*** | 0.004 | −0.003 | 0.074*** | 0.009 | −0.002 |
| | Course credit | 0.082*** | −0.955*** | 0.230*** | 0.214*** | 0.008 | −0.002 | 0.003 | 0.022 | −0.004 |
| | Money | 0.131*** | −0.603*** | 0.165*** | 0.248*** | 0.021 | −0.004 | 0.090*** | 0.005 | −0.000 |
| | Male | 0.110*** | −0.612*** | 0.164*** | 0.221*** | 0.010 | −0.005 | 0.058*** | 0.002 | −0.001 |
| | Female | 0.099*** | −0.955*** | 0.230*** | 0.236*** | 0.008 | 0.000 | 0.022 | 0.021 | −0.003 |

*Notes.* Gender of Other (men = 1, women = −1) and Gender-fair (feminised = 1, gender neutral = −1) are effect coded, so their interaction coefficients are half the difference between the corresponding slopes.
* p < .05, ** p < .01, *** p < .001.

(community) measure and seven of the nine groups on the non-incentivised (personal) measure. The two exceptions were participants without insight and participants compensated with course credit for whom the interaction crossed the threshold for significance in the direction predicted by H2a. However, these effects are very weak,do not appear to be systematic, and are infrequent (the interaction only reaches significance in two of the 20 analyses conducted). We're therefore inclined to treat them cautiously and interpret them as chance findings. The three remaining departures from the full-sample results were confined to effects that are not hypothesis relevant. Taken together, these analyses suggest that our conclusions likely depend little on participant insight, sample source, compensation method, or participant gender.

## Discussion

Our primary aim in this project was to test whether a subtle linguistic intervention could reduce people's tendencies to stereotype political leaders as more similar to men than women. Specifically, drawing on a growing body of work that has suggested that the encoding of gender in language has consequences for gender bias (e.g., Archer & Kam, 2022; Lindqvist et al., 2019) we tested whether eliciting stereotypes of political leaders with feminised language ("he or she"; "this man or this woman") rather than gender neutral language ("this person") caused participants to stereotype politicians as relatively more similar to women and less similar to men.

To test the impact of our linguistic intervention on gender bias in political leader stereotypes we recruited participants from 42 geographically and culturally diverse countries or regions covering six continents. We accordingly administered the intervention in 30 different languages. This included gendered languages (like Arabic and German) that encode gender grammatically, natural gender languages (like Dutch and English) that encode gender lexically in certain nouns as well as pronouns and gender neutral or genderless languages (like Farsi and Indonesian) that typically only encode for gender lexically in certain nouns. Our sample, therefore, was able to test the impact of our linguistic intervention in a much broader array of contexts than is typically examined by the literature on gendered language and gender bias (this existing literature has largely focused on a small number of locations with gendered and natural gender languages, like German, English and Swedish, that may differ in important linguistic and cultural ways from others).

Across these many contexts and languages, the picture that was produced by our analysis was one of broad consistency in the content and associations between the stereotypes of political leaders, women and men. Specifically, in line with H1 and the existing literature, we found that there was more similarity in the stereotypes that people endorsed for political leaders and men than for the stereotypes that they endorsed for political leaders and women. The positive association between the stereotypes of political leaders and men was present in all countries or regions in our sample; the weakly positive association between the stereotypes of political leaders and women was present in most of them, but with much greater heterogeneity. This raises the possibility that some cultures may have weaker stereotypes around these social categories and thus see politicians, women and men as rather similar.

In line with previous research and existing understandings about the content of gender stereotypes, women were generally perceived to be more communal — friendly and moral — than men. Moving to the agentic domain, again confirming the existing literature, men were generally perceived to be more dominant and, to a lesser degree, more assertive; the findings for the agentic dimensions of competence and self-sufficiently were more mixed. Thus, the masculine advantage was strongest on dimensions like dominance. Importantly, it is in the absence of communality and the presence of dominance that men were seen to be more similar to political leaders. These findings are consistent with previous findings that suggest that the seizure of power and dominance of others is seen as a core political competency (e.g., Lombard et al., 2021; Okimoto & Brescoll, 2010).

Unexpectedly, we did not find any evidence that a feminisation strategy led participants to stereotype political leaders as less similar to men and more similar to women. H2a and H2b were, therefore, not supported. In other words, this subtle linguistic intervention appears to hold very little promise as a mechanism for the reduction of gender bias in the context of political leadership. Importantly, with some exceptions that we will discuss below, this null result was robust to participant

insight and sampling approach (i.e., students versus community, credit versus payment). These findings are surprising in light of the growing body of work that has shown that using a feminisation strategy when asking participants to think of some social category (i.e., using paired pronouns "he or she" when asking people to imagine an employee) increases the likelihood that people will activate the social category of women and female exemplars relative to a neutralisation strategy (e.g., using the neutral pronoun "they"). These findings are also inconsistent with work that has shown that increasing the cognitive accessibility of counter-stereotypical exemplars (here, female politicians) can shift the content of people's stereotypes. Our findings are also inconsistent with work that has shown that gender encoding in language can have a direct effect on people's endorsement of gender stereotypes and support for strategies that aim to improve gender equality in the political domain (e.g., Pérez & Tavits, 2019).

We can think of at least three possible explanations for our null findings. The first is the possibility that our feminisation strategy was too subtle and did not activate the social category of women or female exemplars in the working memory of participants who were thinking of political leaders to a greater degree than the neutralisation strategy. Our findings that H2a was supported among samples receiving course credit (the educational context may increase sensitivity to the encoding of gender in language) and that H2b received stronger support when feminisation was operationalised through nouns rather than pronouns could be seen as supporting this possibility. The second possibility is that the feminisation strategy did indeed increase the salience of women and female exemplars, but that this did not shift the content of people's stereotypes. This could be because stereotype change requires that people more actively engage with the counter-stereotype (as is typical in most of the existing work; see Forscher et al., 2019) or because people stereotype men and women in positions of political leadership in the same way (for evidence that male and female political candidates may be stereotyped identically see Takizawa, Iacoviello, Ryan, & Kulich, 2024). And third, it is of course possible that the fact that previous work has focused on a relatively small number of cultural and linguistic contexts limits the generalizability of these findings to a broader set of contexts.

An additional aim of this project was to increase the rigor with which we measured stereotypes by complementing the first-order measure of personal stereotypes (dominant among psychologists) with an incentivised second-order measure of community stereotypes (dominant among economists). To do this, we adapted the Krupka-Weber measure, which has hitherto been exclusively applied to injunctive behavioural norms, to descriptive trait stereotypes. Although this measure was more complicated than our personal stereotype endorsement measure (requiring participants to estimate the community's estimate of the community's endorsement of attributes), participants were able to complete it. Additionally, it appeared that there were differences in the stereotypes that emerged from the two measures. Specifically, participants seemed to perceive that the community held more extreme stereotypes (i.e., both more positive and more negative) than they themselves did. This is consistent with Kotzur et al.'s (2020) finding that participants reported that their society held more negative stereotypes on derogated dimensions than they themselves did.

This project has many of the strengths of many-lab projects of this kind. Specifically, by assembling a large research team to answer a question of shared interest, we were able to conduct a highly powered test of our hypotheses. Additionally, we were able to exploit the variation associated with the large number of contexts (e.g., different language gender groups) and sampling approaches (e.g., student versus paid samples) to better understand the robustness in our findings and, hence, the likelihood that they would replicate in the future. This approach is also able to shine a light on heterogeneity that can inform future research. For instance, we observed a greater degree of cross-national consistency in participants' tendency to see political leaders as similar to men than in the tendency to see political leaders as (not) similar to women. This may suggest that the position of women in society shows greater geographical and cultural variation than the position of men.

Our findings point to several other avenues for future research. For instance, it is possible that increasing the salience of a feminisation strategy (e.g., reversing the typical order to pronouns to "she or he") could increase the likelihood that it affects gender bias. It is also possible that our linguistic intervention would shape gender bias outside of the political leadership domain — that is, for broader social categories that are less elaborated (e.g., employees, managers or leaders). It is also possible that the feminisation strategy could have consequences for outcomes other than stereotype content. For instance, a feminisation strategy could increase the likelihood that women see a political career as an option for women, increasing their motivation to pursue it, even if it doesn't change their stereotypes.

Turning to our use of non-incentivised first-order and incentivised second-order measures it would be worth understanding whether the variation in stereotype content that we observed reflects the shift from personal endorsement to community endorsement or from non-incentivisation to incentivisation (or indeed both). Research that compares the stereotypes that emerge from non-incentivised and incentivised estimates of the community's beliefs is needed to resolve this. It is also important to understand whether these stereotype measures are differentially able to predict different kinds of outcomes. Finally, the fact that we did not randomise the order of the stereotype measures raises the possibility that the differences that we observed across the two measures reflects an order or learning effect. Although the specific pattern of findings (i.e., such that stereotypes were more extreme for the incentivised measure) does not obviously align with this possibility, it would be important to explore this in future work.

In sum, this project supports our expectation that stereotypes about political leaders play a role in the underrepresentation of women in politics. Specifically, in most of the countries and regions that we studied, participants believed that political leaders lacked the positive, communal, attributes that are characteristic of women and had (some of) the agentic characteristics that are more characteristic of men. Encouraging participants to encode for gender symmetrically when eliciting these stereotypes did not appear to change these beliefs. This suggests that subtle and limited linguistic interventions are unlikely to be the solution to persistent gender bias, especially when this may be reinforced more widely in a language's grammatical and lexical structure.

## CRediT authorship contribution statement

**Kim Peters:** Conceptualization, Methodology, Project administration, Writing – original draft, Writing – review & editing. **Alma Jeftić:** Project administration, Writing – review & editing. **Timothy Ballard:** Data curation, Formal analysis, Visualization, Writing – original draft, Writing – review & editing. **Steven Zhou:** Data curation, Formal analysis, Methodology, Project administration, Software, Writing – review & editing. **Niklas K. Steffens:** Conceptualization, Methodology, Writing – review & editing. **Ilke Inceoglu:** Conceptualization, Methodology, Writing – review & editing. **Michelle K. Ryan:** Conceptualization, Methodology, Writing – review & editing. **Renata Bongiorno:** Conceptualization, Methodology, Writing – review & editing. **Alice Eagly:** Conceptualization, Methodology, Writing – review & editing. **Patrícia Arriaga:** Investigation, Methodology, Project administration, Writing – review & editing. **Agustin Espinosa:** Investigation, Methodology, Project administration, Writing – review & editing. **Balazs Aczel:** Investigation, Methodology, Writing – review & editing. **Adeyemi Adetula:** Investigation, Writing – review & editing. **Salvatore M. Aglioti:** Investigation, Methodology, Writing – review & editing. **Ece Akca:** Investigation, Writing – review & editing. **Emine Akman Direkçi:** Investigation, Writing – review & editing. **Zahra Alizadeh:** Investigation, Writing – review & editing. **Itziar Alonso-Arbiol:**

Investigation, Methodology, Writing – review & editing. **Muhammad Fahizza Amru:** Investigation, Methodology, Writing – review & editing. **John Andre:** Investigation, Writing – review & editing. **Raquel António:** Investigation, Methodology, Writing – review & editing. **Uğur Arcagök:** Investigation, Writing – review & editing. **Nwadiogo Chisom Arinze:** Investigation, Writing – review & editing. **Romina Asadollahpour:** Investigation, Methodology, Writing – review & editing. **Gayane Alberty Asatryan:** Investigation, Methodology, Writing – review & editing. **Muhammed Sukru Aydin:** Investigation, Methodology, Writing – review & editing. **Bülent Aykutoğlu:** Investigation, Writing – review & editing. **Parisa Azimisefat:** Investigation, Methodology, Writing – review & editing. **Soufian Azouaghe:** Investigation, Methodology, Writing – review & editing. **Sercan Balım:** Investigation, Writing – review & editing. **Gabriel Baník:** Investigation, Writing – review & editing. **Krystian Barzykowski:** Investigation, Writing – review & editing. **Maja Becker:** Investigation, Methodology, Writing – review & editing. **Nora C.G. Benningstad:** Investigation, Methodology, Writing – review & editing. **Julia Berenguer:** Investigation, Writing – review & editing. **Monika Bidzan-Wiącek:** Investigation, Writing – review & editing. **Bartosz Błaszczak:** Investigation, Writing – review & editing. **Ricardo Borges Rodrigues:** Investigation, Methodology, Writing – review & editing. **Islam Borinca:** Investigation, Writing – review & editing. **Leanne Boucher:** Investigation, Writing – review & editing. **Sarah Boukarras:** Investigation, Writing – review & editing. **Mustapha Boulahya:** Investigation, Writing – review & editing. **Olcay Bozkuş-Demir:** Investigation, Writing – review & editing. **Mark J. Brandt:** Investigation, Writing – review & editing. **Fabrice Brodard:** Investigation, Writing – review & editing. **Hilmar Brohmer:** Investigation, Writing – review & editing. **Erin M. Buchanan:** Project administration, Software, Writing – review & editing. **Jacek Buczny:** Investigation, Writing – review & editing. **Mehmet Fatih Bükün:** Investigation, Writing – review & editing. **Moa Bursell:** Investigation, Methodology, Writing – review & editing. **Andrea Buscemi:** Investigation, Writing – review & editing. **Muhammad Mussaffa Butt:** Investigation, Methodology, Writing – review & editing. **Angelica Caicedo-Moreno:** Investigation, Writing – review & editing. **Cinzia Calluso:** Investigation, Writing – review & editing. **Selin Metin Camgöz:** Investigation, Writing – review & editing. **Octav Sorin Candel:** Investigation, Writing – review & editing. **Thomas Castelain:** Investigation, Methodology, Writing – review & editing. **Pablo Castro-Abril:** Investigation, Writing – review & editing. **Müge Cavdan:** Investigation, Methodology, Writing – review & editing. **Trawin Chaleeraktrakoon:** Investigation, Methodology, Writing – review & editing. **Abdelilah Charyate:** Investigation, Methodology, Writing – review & editing. **Jennifer Chavanovanich:** Funding acquisition, Investigation, Methodology, Writing – review & editing. **Mohammed Cherradi:** Investigation, Writing – review & editing. **Peilian Chi:** Investigation, Methodology, Writing – review & editing. **Phatthanakit Chobthamkit:** Investigation, Methodology, Writing – review & editing. **Shalini Choudhary:** Investigation, Writing – review & editing. **Çağla Çınar:** Investigation, Writing – review & editing. **Heather M. Claypool:** Investigation, Supervision, Writing – review & editing. **Sharon Coen:** Investigation, Writing – review & editing. **W. Matthew Collins:** Investigation, Writing – review & editing. **Nadia Sarai Corral-Frías:** Investigation, Writing – review & editing. **Cleno Couto:** Investigation, Writing – review & editing. **Mioara Cristea:** Investigation, Methodology, Writing – review & editing. **Wilson Cyrus-Lai:** Investigation, Methodology, Writing – review & editing. **Anna Dalla Rosa:** Investigation, Writing – review & editing. **Trac Vu Dang:** Investigation, Methodology, Writing – review & editing. **Maria Giovanna Devetag:** Investigation, Writing – review & editing. **Bojana M. Dinić:** Investigation, Methodology, Writing – review & editing. **Terence D. Dores Cruz:** Investigation, Methodology, Writing – review & editing. **Andrei Dumbravă:** Investigation, Writing – review & editing. **Julia Dykla-Bień:** Investigation, Writing – review & editing. **Clare Ellen Edge:** Investigation, Writing – review & editing. **Sina Eftekhari:** Investigation, Methodology, Writing – review & editing. **Youssef El Mottaleb:** Investigation, Writing – review & editing. **Christian T. Elbæk:** Investigation, Methodology, Writing – review & editing. **Cécile Emery:** Funding acquisition, Investigation, Writing – review & editing. **Simona Epure:** Investigation, Methodology, Writing – review & editing. **Thomas R. Evans:** Investigation, Writing – review & editing. **Zuzanna Farny:** Investigation, Methodology, Writing – review & editing. **Shameem Fatima:** Investigation, Writing – review & editing. **Mario Muhammad Noer Fauzan:** Investigation, Methodology, Writing – review & editing. **Katharina Fellnhofer:** Investigation, Methodology, Writing – review & editing. **Tommaso Feraco:** Investigation, Writing – review & editing. **Ángela Fernández-Canseco:** Investigation, Writing – review & editing. **Ludovic Ferrand:** Investigation, Writing – review & editing. **Paulo Roberto dos Santos Ferreira:** Investigation, Writing – review & editing. **Silvia Filippi:** Investigation, Writing – review & editing. **Sam Fluit:** Investigation, Writing – review & editing. **Raquel Meister Ko Freitag:** Investigation, Writing – review & editing. **Martha Frias-Armenta:** Investigation, Writing – review & editing. **Althea Frisanco:** Investigation, Methodology, Writing – review & editing. **Katalin Füzér:** Investigation, Methodology, Writing – review & editing. **Linda Isis Garcia-Estrada:** Investigation, Writing – review & editing. **Karla Alejandra Garduño-Realivazquez:** Investigation, Writing – review & editing. **Agata Gasiorowska:** Investigation, Supervision, Methodology, Writing – review & editing. **Janet Geipel:** Funding acquisition, Investigation, Writing – review & editing. **Sophie Gerdel:** Investigation, Writing – review&editing.**Isabella Giammusso:** Investigation, Methodology, Writing – review & editing. **Vaitsa Giannouli:** Investigation, Methodology, Writing – review & editing. **Konstantinos Giannoulis:** Investigation, Writing – review & editing. **Fenne J.J. Gijzen:** Investigation, Methodology, Writing – review & editing. **Magali Ginet:** Investigation, Writing – review & editing. **Lola Girerd:** Investigation, Methodology, Writing – review & editing. **Ilka Helene Gleibs:** Investigation, Methodology, Writing – review & editing. **Hendrik Godbersen:** Investigation, Writing – review & editing. **Taylor Gogan:** Investigation, Writing – review & editing. **Leticia Horbach Gonçalves:** Investigation, Writing – review & editing. **Amélie Gourdon-Kanhukamwe:** Investigation, Writing – review & editing. **Franca Grafe:** Investigation, Writing – review & editing. **Hedy Greijdanus:** Investigation, Methodology, Writing – review & editing. **Rashmi Gupta:** Investigation, Methodology, Writing – review & editing. **Hande Guzel:** Investigation, Writing – review & editing. **Pascal Gygax:** Investigation, Writing – review & editing. **Constantinos Hadjichristidis:** Funding acquisition, Investigation, Writing – review & editing. **Soufiane Haffou:** Investigation, Writing – review & editing. **Marius Duhović Hafstad:** Investigation, Writing – review & editing. **Mina Hagen:** Investigation, Writing – review & editing. **Peter Halama:** Investigation, Methodology, Writing – review & editing. **Emma Halfmann:** Investigation, Writing – review & editing. **Paul H.P. Hanel:** Investigation, Writing – review & editing. **Eric M. Hansen:** Investigation, Methodology, Writing – review & editing. **Adriana Hanulíková:** Investigation, Writing – review & editing. **Samantha M. Harris:** Investigation, Methodology, Writing – review & editing. **Claire M. Hart:** Investigation, Writing – review & editing. **Levke Henningsen:** Funding acquisition, Investigation, Writing – review & editing. **Pentti Henttonen:** Investigation, Methodology, Writing – review & editing. **Gabriela Hofer:** Investigation, Writing – review & editing. **Caan Hollenbach:** Investigation, Writing – review & editing. **Xiaoya Huang:** Investigation, Writing – review & editing. **Joevarian Hudiyana:** Investigation, Methodology, Writing – review & editing. **Kotomi Ideishi:** Investigation, Methodology, Writing – review & editing. **Izabella Ilea:** Investigation, Methodology, Writing – review & editing. **Hirotaka Imada:** Investigation, Methodology, Writing – review & editing. **Moritz Ingendahl:** Investigation, Writing – review & editing. **Natalia C. Irrazabal:** Investigation, Writing – review & editing. **Chris Isloi:** Investigation, Writing – review & editing. **Izuchukwu Lawrence G. Ndukaihe:** Investigation, Writing – review & editing. **Lea Jakob:** Investigation, Methodology, Writing – review & editing. **Kigobe**

**Janeth:** Investigation, Writing – review & editing. **Hansori Jang:** Investigation, Methodology, Writing – review & editing. **Candela I. Jantus:** Investigation, Writing – review & editing. **Juan Rafael Juarez:** Investigation, Writing – review & editing. **Nina M. Junker:** Investigation, Writing – review & editing. **Pavol Kačmár:** Investigation, Writing – review & editing. **Asahi Kanisawa:** Investigation, Methodology, Writing – review & editing. **Alper Karababa:** Investigation, Writing – review & editing. **Muhammed Enes Karacoşkun:** Investigation, Writing – review & editing. **Gizem Karadeniz:** Investigation, Writing – review & editing. **Karlijn Massar:** Investigation, Writing – review & editing. **Ahmed Khaoudi:** Investigation, Methodology, Writing – review & editing. **Ji Hye Kim:** Investigation, Methodology, Writing – review & editing. **Mikyoung Kim:** Methodology, Writing – review & editing. **SeungMin Kim:** Investigation, Methodology, Writing – review & editing. **Andrew Kloeden:** Investigation, Writing – review & editing. **Nadine Knab:** Investigation, Methodology, Writing – review & editing. **Michal Kohút:** Investigation, Methodology, Writing – review & editing. **Büşra Kök:** Investigation, Methodology, Writing – review & editing. **Marta Kowal:** Investigation, Writing – review & editing. **Tomas Kratochvil:** Investigation, Methodology, Writing – review & editing. **Clara Kulich:** Investigation, Writing – review & editing. **Eva Kundtová Klocová:** Investigation, Methodology, Writing – review & editing. **Bahtım Kütük:** Investigation, Methodology, Writing – review & editing. **Anna O. Kuzminska:** Investigation, Writing – review & editing. **Duc Anh La:** Investigation, Writing – review & editing. **Kelly Ka Lai Lam:** Investigation, Writing – review & editing. **Claus Lamm:** Investigation, Writing – review & editing. **Jose M. León-Pérez:** Investigation, Methodology, Writing – review & editing. **Badolo Bawala Léopold:** Investigation, Writing – review & editing. **Savannah C. Lewis:** Project administration, Software, Writing – review & editing. **Claire Linares:** Investigation, Writing – review & editing. **Delila Lisica:** Investigation, Methodology, Writing – review & editing. **Zhiyu Liu:** Investigation, Writing – review & editing. **Morgana Lizzio-Wilson:** Funding acquisition, Investigation, Writing – review & editing. **Wilson López-López:** Investigation, Writing – review & editing. **Winnifred R. Louis:** Investigation, Writing – review & editing. **Jackson G. Lu:** Investigation, Writing – review & editing. **Jessica Mesmer-Magnus:** Investigation, Writing – review & editing. **Behrooz Mahmoodi-Bakhtiari:** Investigation, Methodology, Writing – review & editing. **Annette Malapally:** Investigation, Writing – review & editing. **Klara Malinakova:** Investigation, Writing – review & editing. **Winfrida Saimon Malingumu:** Investigation, Writing – review & editing. **Nihal Mamatoğlu:** Investigation, Writing – review & editing. **Nguyen Duc Manh:** Investigation, Methodology, Writing – review & editing. **Diego Manríquez-Robles:** Investigation, Writing – review & editing. **Efisio Manunta:** Investigation, Writing – review & editing. **João Mariano:** Investigation, Methodology, Writing – review & editing. **Chloé Marie:** Investigation, Writing – review & editing. **Marco Marozzi:** Investigation, Writing – review & editing. **Magdalena A. Marszałek:** Investigation, Writing – review & editing. **Edurne Martinez-Moreno:** Investigation, Writing – review & editing. **Delphine Martinot:** Investigation, Writing – review & editing. **Marcel Martončik:** Investigation, Writing – review & editing. **Yuya Maruo:** Investigation, Writing – review & editing. **Katarina Mašić Đonlić:** Investigation, Writing – review & editing. **Buffie McCue-Quinn:** Investigation, Writing – review & editing. **Anahita Mehdinejad:** Investigation, Writing – review & editing. **Ezgi Mehmetoglu Comert:** Investigation, Methodology, Writing – review & editing. **Zdenek Meier:** Investigation, Writing – review & editing. **Ewout H. Meijer:** Investigation, Methodology, Writing – review & editing. **Ethan Meimoun:** Investigation, Methodology, Writing – review & editing. **Yuliana G. Melkumyan:** Investigation, Methodology, Writing – review & editing. **Julie Mellul:** Investigation, Methodology, Writing – review & editing. **Irem Metin-Orta:** Investigation, Writing – review & editing. **Linaja Mikalonis:** Investigation, Writing – review & editing. **Alberto Mirisola:** Investigation, Writing – review & editing. **Katarina Mišetić:** Investigation, Methodology, Writing – review & editing. **Michal Misiak:** Investigation, Writing – review & editing. **Maria Montefinese:** Investigation, Writing – review & editing. **Nicole Moore:** Investigation, Writing – review & editing. **Mahmoud Moradi:**Investigation,Writing –review & editing. **Eva Moreno-Bella:** Investigation, Methodology, Writing – review & editing. **Lamya Mouhssine:** Investigation, Writing – review & editing. **Annakarina Mundorf:** Investigation, Writing – review & editing. **Houdaifa Nadif:** Investigation, Writing – review & editing. **Joaquin Navajas:** Investigation, Writing – review & editing. **Eduardo Navarrete:** Investigation, Writing – review & editing. **Brett H. Neely:** Investigation, Writing – review & editing. **Thuc Hien T. Nguyen:** Investigation, Methodology, Writing – review & editing. **Thi Loan Nguyen:** Investigation, Methodology, Writing – review & editing. **Elena-Gabriela Balint:** Investigation, Methodology, Writing – review & editing. **Milica Ninković:** Investigation, Writing – review & editing. **J. Lukas Thürmer:** Investigation, Writing – review & editing. **Lukas Novak:** Investigation, Writing – review & editing. **Annika Nübold:** Investigation, Writing – review & editing. **Armelle Nugier:** Investigation, Writing – review & editing. **Ellen K. Nyhus:** Investigation, Methodology, Writing – review & editing. **Boglarka Nyul:** Investigation, Methodology, Writing – review & editing. **Brian A. O'Shea:** Investigation, Writing – review & editing. **William G. Obenauer:** Investigation, Writing – review & editing. **Chisom E. Ogbonnaya:** Investigation, Writing – review & editing. **Oluyinka Ojedokun:** Investigation, Writing – review & editing. **Josefine Østergaard R. Pedersen:** Investigation, Methodology, Writing – review & editing. **Begum Otken:** Investigation, Writing – review & editing. **Tobias Otterbring:** Investigation, Writing – review & editing. **Nestor Motemba Ouoba:** Investigation, Writing – review & editing. **Fatih Özdemir:** Investigation, Writing – review & editing. **Asil Ali Özdoğru:** Investigation, Writing – review & editing. **Gökçe Özkılıççı:** Investigation, Writing – review & editing. **Mariola Paruzel-Czachura:** Investigation, Writing – review & editing. **Freya L. 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Zickfeld:** Investigation, Methodology, Writing – review & editing. **Radka Zidkova:** Investigation, Writing – review & editing. **Artur Ziółkowski:** Investigation, Writing – review & editing.

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The precise operationalisation was agreed through discussion between the first author and the translation team. Most languages utilised 2 paired pronouns (although Serbia had 3 pairs and Vietnam had 1 pair). Most neutral gender (or genderless) languages utilised 1 noun pair. Chinese, Japanese and Vietnamese were the exceptions, as they had paired pronouns (if only in written Chinese and Japanese). Polish participants completed a version of the survey that aligned with their gender identity (masculine or feminine).

| Language | Country / Region | Operation-alisation | Neutral | Feminised |
|---|---|---|---|---|
| Arabic | Morocco | 1 verb pair | في هذه الصفحة، نرجو منك تقييم الأشخاص الذين يشغلون مناصب سياسية قيادية. عند إصدار أحكامك، قد يكون من المفيد تخيل أنك على وشك مقابلة شخص ما لأول مرة وأن الشيء الوحيد الذي تعرفه مسبقًا هو أن هذا الشخص شخص يشغل منصبا سياسيا قياديا. | في هذه الصفحة، نرجو منك تقييم الأشخاص الذين يشغلون مناصب سياسية قيادية. عند إصدار أحكامك، قد يكون من المفيد تخيل أنك على وشك مقابلة شخص ما لأول مرة وأن الشيء الوحيد الذي تعرفه مسبقًا هو أن هذا الشخص شخص يشغل أو تشغل منصبًا سياسيًا قياديًا. |
| Armenian | Armenia | 1 noun pair | Այս էջում խնդրում ենք գնահատել **ղեկավար քաղաքական պաշտոններ զբաղեցնող մարդկանց**. Ձեր դատողությունները անելուն կարող է օգնել, որ պատկերացնեք, թե հանդիպում եք տվյալ մարդուն առաջին անգամ և միակ բանը, որ նախապես գիտեք իր մասին այն է, որ այդ մարդը **քաղաքական ղեկավար պաշտոն է զբաղեցնում.** | Այս էջում խնդրում ենք գնահատել **ղեկավար քաղաքական պաշտոններ զբաղեցնող մարդկանց**. Ձեր դատողությունները անելուն կարող է օգնել, որ պատկերացնեք, թե հանդիպում եք տվյալ տղամարդուն կամ կնոջը առաջին անգամ և միակ բանը, որ նախապես գիտեք իր մասին այն է, որ նա **քաղաքական ղեկավար պաշտոն է զբաղեցնում.** |
| Bahasa Indonesian | Indonesia | 1 noun pair | Pada halaman ini, kami ingin meminta Anda menilai seperti apa **orang yang menempati sebuah jabatan kepemimpinan politik** secara umum. Dalam membuat penilaian, mungkin akan berguna jika Anda membayangkan Anda akan bertemu seseorang untuk pertama kalinya dan satu-satunya hal yang Anda ketahui adalah **orang tersebut menempati sebuah jabatan kepemimpinan politik.** | Pada halaman ini, kami ingin meminta Anda menilai **orang yang menempati sebuah jabatan kepemimpinan politik** secara umum. Dalam membuat penilaian, mungkin akan berguna jika Anda membayangkan akan bertemu seseorang untuk pertama kalinya dan satu-satunya hal yang Anda ketahui tentang orang tersebut adalah ia (laki-laki atau perempuan) **menempati sebuah jabatan kepemimpinan politik.** |
| Bosnian | Bosnia | 2 pronoun pairs | Na ovoj stranici zamolili bismo Vas da ocijenite **ljude na političkim liderskim pozicijama.** Prilikom davanja Vaših procjena, može biti korisno da pokušate zamisliti situaciju u kojoj se pripremate za susret s osobom o kojoj jedino znate da je ta **osoba na političkoj liderskoj poziciji.** | Na ovoj stranici željeli bismo da ocijenite **ljude na političkim liderskim pozicijama**. Prilikom Vašeg procjenjivanja, može biti korisno da zamislite da ćete upoznati neku osobu prvi put, pri čemu je jedina stvar koju unaprijed znate o njemu ili njoj je da on ili ona **na političkoj liderskoj poziciji.** |
| Chinese (simplified) | China | 2 pronoun pairs | 在这一页中，我们希望您对**担任政治领导职务的人**进行评分。 在做出判断时，不妨设想您即将与一个人初次见面，而您事先知道的唯一信息是这个人**担任政治领导职务。** | 在这一页中，我们希望您对**担任政治领导职务的人**进行评分。 在做出判断时，不妨设想您即将与一个人初次见面，而您对他或她事先知道的唯一信息就是他或她**担任政治领导职务。** |
| Chinese (traditional) | Macau | 2 pronoun pairs | 在這一頁中，我們希望您對**擔任政治領導職務的人**進行評分。 在做出判斷時，不妨設想您即將與一個人初次見面，而您事先知道的唯一資訊是這個人**擔任政治領導職務。** | 在這一頁中，我們希望您對**擔任政治領導職務的人**進行評分。 在做出判斷時，不妨設想您即將與一個人初次見面，而您對他或她事先知道的唯一資訊就是他或她**擔任政治領導職務。** |
| Czech | Czech Republic | 2 pronoun pairs | Na této stránce bychom Vás chtěli požádat o hodnocení **lidí, kteří zastávají vedoucí pozici v politice**. Během posuzování může být užitečné představit si, že se s nějakou osobou setkáváte poprvé a že jediné, co o ní předem víte, je, že tato osoba je **člověk na vedoucí pozici v politice.** | Na této stránce bychom Vás chtěli požádat o hodnocení **lidí, kteří zastávají vedoucí pozici v politice**. Během posuzování může být užitečné představit si, že se s nějakou osobou setkáváte poprvé a že jediné, co o ní nebo o něm předem víte, je, že **on nebo ona zastává vedoucí pozici v politice.** |
| Danish | Denmark | 2 pronoun pairs | På denne side vil vi bede dig om at vurdere **personer, der besidder en politisk lederstilling.** Når du skal lave din vurdering, kan det være brugbart at forestille sig, at du skal møde en person for første gang, og den eneste ting, du ved om vedkommende på forhånd, er, at denne **person besidder en politisk lederstilling.** | På denne side vil vi bede dig om at vurdere **personer, der besidder en politisk lederstilling**. Når du skal lave din vurdering, kan det være brugbart at forestille sig, at du skal møde en person for første gang, og den eneste ting, du ved om ham eller hende på forhånd, er, at han eller hun **besidder en politisk lederstilling**. |

(*continued on next page*)

(*continued*)

| Language | Country / Region | Operation-alisation | Neutral | Feminised |
|---|---|---|---|---|
| Dutch | Netherlands | 2 pronoun pairs | Op deze pagina willen we dat je **mensen die politieke leiderschapsposities bekleden** beoordeelt. Bij het beoordelen kan het helpen om je voor te stellen dat je op het punt staat om een persoon voor het eerst te ontmoeten en dat het enige wat je van tevoren weet is dat deze persoon iemand is die **een politieke leiderschapspositie bekleedt**. | Op deze pagina willen we dat je **mensen die politieke leiderschapsposities bekleden** beoordeelt. Bij het beoordelen kan het helpen om je voor te stellen dat je op het punt staat om een persoon voor het eerst te ontmoeten en dat het enige wat je van tevoren over hem of haar weet is dat hij of zij **een politieke leiderschapspositie bekleedt.** |
| English | Australia, Nigeria, Tanzania, UK, US | 2 pronoun pairs | On this page, we would like you to rate **people who occupy political leadership positions.** In making your judgments, it may be helpful to imagine that you are about to meet a person for the first time and the only thing you know in advance is that this **person occupies a position of political leadership.** | On this page, we would like you to rate **people who occupy political leadership positions.** In making your judgments, it may be helpful to imagine that you are about to meet a person for the first time and the only thing you know about him or her in advance is that he or she **occupies a position of political leadership.** |
| Finnish | Finland | 1 noun pair | Tällä sivulla pyydämme sinua arvioimaan **poliittisissa johtotehtävissä olevia henkilöitä**. Arvioita tehdessäsi voi olla hyödyllistä kuvitella, että olet juuri tapaamassa henkilöä ensimmäistä kertaa, ja ainoa asia, jonka tiedät etukäteen, on se, että tämä henkilö toimii poliittisessa johtotehtävässä. | Tällä sivulla pyydämme sinua arvioimaan **poliittisissa johtotehtävissä olevia henkilöitä**. Arvioita tehdessäsi voi olla hyödyllistä kuvitella, että olet juuri tapaamassa henkilöä ensimmäistä kertaa, ja ainoa asia, jonka tiedät etukäteen, on se, että tämä mies tai nainen **toimii poliittisessa johtotehtävässä**. |
| French | Burkina Faso, France, Switzerland | 2 pronoun pairs | Sur cette page, nous aimerions que vous évaluiez **les personnes occupant des fonctions de direction en politique**. En formulant votre jugement, il peut être utile d'imaginer que vous êtes sur le point de rencontrer une personne pour la première fois et que la seule chose que vous savez à l'avance est. que cette personne est. **une personne occupant une fonction de direction en politique.** | Sur cette page, nous aimerions que vous évaluiez les **personnes occupant des fonctions de direction en politique.** En formulant votre jugement, il peut être utile d'imaginer que vous êtes sur le point de rencontrer quelqu'un pour la première fois et que la seule chose que vous savez de lui ou d'elle à l'avance est. qu'il ou elle **occupe une fonction de direction en politique.** |
| German | Austria, Germany | 2 pronoun pairs | Auf dieser Seite möchten wir Sie bitten, dass Sie **Personen in politischen Führungspositionen** bewerten. Bei Ihren Bewertungen kann es hilfreich sein, sich vorzustellen, dass Sie eine Person zum ersten Mal treffen, und das Einzige, was Sie im Voraus wissen, ist, dass diese Person **in einer politischen Führungsposition** ist. | Auf dieser Seite möchten wir Sie bitten, dass Sie **Personen in politischen Führungspositionen** bewerten. Bei Ihren Bewertungen kann es hilfreich sein, sich vorzustellen, dass Sie eine Person zum ersten Mal treffen, und das Einzige, was Sie im Voraus über ihn oder sie wissen, ist, dass er oder sie **in einer politischen Führungsposition** ist. |
| Greek | Greece | 1 pronoun pairs | Σε αυτήν τη σελίδα, θα θέλαμε να αξιολογήσετε **άτομα που έχουν θέση στην πολιτική εξουσία**. Για να διαμορφώσετε την κρίση σας, μπορεί να σας φανεί χρήσιμο να φανταστείτε ότι πρόκειται να συναντήσετε κάποιο άτομο για πρώτη φορά και το μόνο που γνωρίζετε εκ των προτέρων είναι ότι αυτό **το άτομο έχει θέση στην πολιτική εξουσία**. | Σε αυτήν τη σελίδα, θα θέλαμε να αξιολογήσετε **άτομα που έχουν θέση στην πολιτική εξουσία**. Για να διαμορφώσετε την κρίση σας, μπορεί να σας φανεί χρήσιμο να φανταστείτε ότι πρόκειται να συναντήσετε κάποιο άτομο για πρώτη φορά και το μόνο που γνωρίζετε εκ των προτέρων είναι ότι **εκείνος ή εκείνη έχει θέση στην πολιτική εξουσία**. |
| Hindi | India | 1 noun pair | इस पृष्ठ पर, हम चाहते हैं कि आप उन लोगों का मूल्यांकन करें जो **राजनीतिक नेतृत्व के पदों पर आसीन हैं**। अपने निर्णय करते समय, यह कल्पना करना सहायक हो सकता है कि आप किसी व्यक्ति से पहली बार मिलने वाले हैं और पहले से आपको केवल यह पता है कि यह व्यक्ति **एक राजनीतिक नेतृत्व की भूमिका में है**। | इस पृष्ठ पर, हम चाहते हैं कि आप उन लोगों का मूल्यांकन करें जो **राजनीतिक नेतृत्व के पदों पर आसीन हैं**। अपने निर्णय करते समय, यह कल्पना करना सहायक हो सकता है कि आप किसी व्यक्ति से पहली बार मिल रहे हैं और आपके पास उनके बारे में पहले से केवल इतनी जानकारी है कि वह पुरुष या महिला **राजनीतिक नेतृत्व की स्थिति में है**। |
| Hungarian | Hungary | 1 noun pair | Ezen az oldalon arra kérjük, hogy jellemezze **a politikai vezető pozíciókat betöltő személyeket.** Az értékelések meghozatalához hasznos lehet, ha elképzeli, hogy most találkozik először egy személlyel, és az egyetlen dolog, amit előre tud róla, az az, hogy az illető egy **politikai vezető pozíciót tölt be**. | Ezen az oldalon arra kérjük, hogy jellemezze a **politikai vezető pozíciókat betöltő személyeket**. Az értékelések meghozatalához hasznos lehet, ha elképzeli, hogy most találkozik először egy személlyel, és az egyetlen dolog, amit előre tud, az az, hogy az a nő vagy férfi **politikai vezető pozíciót tölt be**. |
| Italian | Italy | 2 pronoun pairs | In questa pagina, vorremmo che valutasse **le persone che ricoprono posizioni di leadership politica**. Nel formulare i suoi giudizi, potrebbe esserle utile immaginare che sta per incontrare una persona per la prima | In questa pagina, vorremmo che valutasse **le persone che ricoprono posizioni di leadership politica**. Nel formulare i suoi giudizi, potrebbe esserle utile immaginare che sta per incontrare una persona per la prima volta e l'unica cosa che sa di lui |

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| Language | Country / Region | Operation-alisation | Neutral | Feminised |
|---|---|---|---|---|
| | | | volta e l'unica cosa che sa di questa persona prima di incontrarla è che **ricopre una posizione di leadership politica.** | o di lei prima di incontrarla è che lui o lei **ricopre una posizione di leadership politica.** |
| Japanese | Japan | 2 pronoun pairs | このページでは、**政治的リーダーの立場にある人**について評価していただきます。判断を行う際に、初めて会う人を想像し、その人について事前に分かっているのは、その人が**政治的リーダーの立場にある人**であるということだけだと想像するといいかもしれません。 | このページでは、**政治的リーダーの立場にある人**について評価していただきます。判断を行う際に、初めて会う人を想像し、彼または彼女について事前に分かっているのは、彼または彼女が**政治的リーダーの立場にある人**であるということだけだと想像するといいかもしれません。 |
| Korean | South Korea | 1 noun pair | 이 페이지에서는 **정치 지도자들을** 평가하게 됩니다. 이 사람을 처음 만날 때, 이 사람에 대해 알고 있는 유일한 정보가 **정치 지도자**라는 점을 가정한다면, 판단에 도움이 될 수 있습니다. | 이 페이지에서는 **정치 지도자**들을 평가하게 됩니다. 이 사람에 대해 알고 있는 유일한 정보가 **남성 혹은 여성 정치 지도자**라는 점을 가정한다면 판단에 도움이 될 수 있습니다. |
| Norwegian | Norway | 2 pronoun pairs | På denne siden vil vi at du skal vurdere **personer som har politiske lederstillinger.** Når du gjør dine vurderinger, kan det være nyttig at du forestiller deg. at du skal møte en person for første gang og det eneste du vet på forhånd er at denne **personen har en politisk lederstilling.** | På denne siden vil vi at du skal vurdere **personer som har politiske lederstillinger.** Når du gjør dine vurderinger, kan det være nyttig å forestille seg at du skal møte en person for første gang, og det eneste du vet om ham eller henne på forhånd er at han eller hun **har en politisk lederstilling.** |
| Persian (Farsi) | Iran | 1 noun pair | در این صفحه، از شما میخواهیم که به افرادی که مناصب مدیریتی سیاسی را اشغال میکنند، امتیاز دهید. در انجام این قضاوت، شاید مفید باشد که تصور کنید که قرار است فردی را برای نخستین بار ملاقات کنید، و تنها چیزی که از او میدانید آن است که این شخص مقام رهبری سیاسی را اشغال میکند. | در این صفحه، از شما میخواهیم که به افرادی که مناصب مدیریتی سیاسی را اشغال میکنند، امتیاز دهید. در انجام این قضاوت، شاید مفید باشد که تصور کنید که قرار است فردی را برای نخستین بار ملاقات کنید، و تنها چیزی که از این مرد یا این زن میدانید آن است که این شخص مقام رهبری سیاسی را اشغال میکند. |
| Polish (Version for female-identifying participants) | Poland | 2 pronoun pairs | Na tej stronie chcielibyśmy, abyś oceniła **osoby zajmujące stanowiska przywódcze w polityce**. Dokonując swoich ocen, możesz wyobrazić sobie, że masz spotkać kogoś po raz pierwszy, a jedyna rzecz, jaką wiesz o tej osobie, to to, że **zajmuje stanowisko przywódcze w polityce**. | Na tej stronie chcielibyśmy, abyś oceniła osoby **zajmujące stanowiska przywódcze w polityce** . Dokonując swoich ocen, możesz wyobrazić sobie, że masz spotkaćgo lub ją po raz pierwszy, a jedyna rzecz, jaką wiesz o nim lub o niej, to to, że **zajmuje stanowisko przywódcze w polityce.** |
| Portuguese | Portugal, Brazil | 2 pronoun pairs | Nesta página, gostaríamos que avaliasse **as pessoas que ocupam cargos de liderança política**. Para fazer as suas avaliações, pode ser útil imaginar que está prestes a conhecer uma pessoa pela primeira vez e que a única coisa que sabe de antemão é que essa pessoa **ocupa um cargo de liderança política**. | Nesta página, gostaríamos que avaliasse **as pessoas que ocupam cargos de liderança política**. Para fazer as suas avaliações, pode ser útil imaginar que está prestes a conhecer uma pessoa pela primeira vez e que a única coisa que sabe de antemão sobre ele ou ela é que ele ou ela **ocupa um cargo de liderança política**. |
| Romanian | Romania | 2 pronoun pairs | Pe această pagină, am dori să evaluați **persoanele care ocupă funcții politice de conducere.** În evaluările dumneavoastră, poate fi util să vă imaginați că sunteți pe cale să întâlniți o persoană pentru prima dată și singurul lucru pe care îl știți în prealabil este că această **persoană ocupă o poziție politică de conducere.** | Pe această pagină, am dori să evaluați **persoanele care ocupă funcții politice de conducere.** În evaluările dumneavoastră, poate fi util să vă imaginați că sunteți pe cale să întâlniți o persoană pentru prima dată și singurul lucru pe care îl știți despre el sau ea. în prealabil este că el sau ea. **ocupă o poziție politică de conducere.** |
| Serbian | Serbia | 3 pronoun pairs | Na ovoj stranici zamolili bismo Vas da ocenite **ljude koji zauzimaju pozicije političkog vođstva.** Prilikom davanja Vaših procena, može biti korisno da zamislite da treba da se sretnete s nekom osobom i da je jedina stvar koju unapred znate o toj osobi je da je ta **zauzima poziciju političkog vođstva.** | Na ovoj stranici zamolili bismo Vas da ocenite **ljude koji zauzimaju pozicije političkog vođstva.** Prilikom davanja Vaših procena, može biti korisno da zamislite da treba da se sretnete s nekom osobom i da je jedina stvar koju unapred znate o toj osobi je da je ta **zauzima poziciju političkog vođstva.** |
| Slovak | Slovakia | 2 pronoun pairs | Na tejto stránke by sme chceli, aby ste ohodnotili **ľudí zastávajúcich vedúce politické pozície**. Pri posudzovaní vám môže pomôcť predstava, že sa chystáte prvýkrát stretnúť s nejakou osobou a jediné, čo vopred viete, je, že je to **osoba zastávajúca vedúcu politickú pozíciu.** | Na tejto stránke by sme chceli, aby ste ohodnotili **ľudí zastávajúcich vedúce politické pozície**. Pri posudzovaní vám môže pomôcť predstava, že sa chystáte prvýkrát stretnúť s nejakou osobou a jediné, čo o ňom či nej vopred viete, je, že on alebo ona **zastáva vedúcu politickú pozíciu.** |
| Spanish | Argentina, Colombia, Mexico, Peru, Spain | 2 pronoun pairs | En esta página, nos gustaría que evalúe a **las personas que ocupan cargos de liderazgo político.** Al hacer sus juicios, puede resultarle útil imaginar que está a punto de conocer a una | En esta página, nos gustaría que evalúe a **las personas que ocupan cargos de liderazgo político.** Al hacer sus juicios, puede resultarle útil imaginar que está a punto de conocer a una persona |

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| Language | Country / Region | Operation-alisation | Neutral | Feminised |
|---|---|---|---|---|
| | | | persona por primera vez y lo único que sabe de antemano es que esta **persona ocupa un cargo de liderazgo político.** | por primera vez y lo único que sabe de él o ella de antemano es que él o ella **ocupa un cargo de liderazgo político.** |
| Swedish | Sweden | 2 pronoun pairs | På den här sidan skulle vi vilja att du bedömer **personer som har politiska ledarroller**. När du gör dina bedömningar kan det vara hjälpsamt att föreställa dig att du ska träffa en person för första gången och det enda du vet i förväg är att den här **personen har en politisk ledarroll.** | På den här sidan skulle vi vilja att du bedömer **personer som har politiska ledarroller**. När du gör dina bedömningar kan det vara hjälpsamt att föreställa dig att du ska träffa en person för första gången och det enda du vet om honom eller henne i förväg är att han eller hon **har en politisk ledarroll.** |
| Thai | Thailand | 1 noun pair | ผู้ดำรงตำแหน่งผู้นำทางการเมือง ในการตัดสินใจ ถ้าคุณจินตนาการว่า คุณกำลังจะพบกับบุคคลคนหนึ่งเป็นครั้งแรก และสิ่งเดียวที่คุณรู้ล่วงหน้าคือบุคคลนี้เป็น **ผู้ดำรงตำแหน่งผู้นำทางการเมือง** | ในหน้านี้ เราต้องการ**ผู้ดำรงตำแหน่งผู้นำทางการเมือง** อาจเป็นประโยชน์ในการตัดสินใจ ถ้าคุณจินตนาการว่า คุณกำลังจะพบกับบุคคลคนหนึ่งเป็นครั้งแรก และสิ่งเดียว**ที่ผู้นำรู้ล่วงหน้าเกี่ยวกับ**คนนี้ คือ บุคคลนี้เป็น **ผู้ดำรงตำแหน่งผู้นำทางการเมือง** |
| Turkish | Turkey | 1 noun pair | Bu sayfada sizden **siyasi liderlik konumunda bulunan kişileri** derecelendirmenizi istiyoruz. Karar verirken, biriyle ilk kez tanışmak üzere olduğunuzu ve önceden bildiğiniz tek şeyin bu. kişinin **siyasi liderlik konumunda bulunan biri** olduğunu düşünmeniz yardımcı olabilir. | Bu sayfada sizden **siyasi liderlik konumunda bulunan kişileri** derecelendirmenizi istiyoruz. Karar verirken, biriyle ilk kez tanışmak üzere olduğunuzu ve önceden bildiğiniz tek şeyin bu. kişinin **erkek veya kadın siyasi liderlik konumunda bulunan biri** olduğunu düşünmeniz yardımcı olabilir. |
| Urdu | Pakistan | 1 noun pair | اس حصے میں، ہم چاہتے ہیں کہ آپ سیاسی قیادت کے عہدوں پر فائز لوگوں کی درجہ بندی کریں۔ اپنے فیصلے کرتے وقت، یہ تصور کرنا مددگار ہو سکتا ہے کہ آپ پہلی بار کسی شخص سے ملنے والے/والی ہیں اور آپ کو پہلے سے صرف اتنا معلوم ہے کہ وہ شخص سیاسی قیادت کے عہدے پر فائز ہے۔ | اس صفحہ پر، ہم چاہتے ہیں کہ آپ ان لوگوں کی درجہ بندی کریں جو سیاسی قیادت کے عہدوں پر فائز ہیں۔ اپنے فیصلے کرتے وقت، یہ تصور کرنا مددگار ہو سکتا ہے کہ آپ پہلی بار کسی شخص سے ملنے والے/والی ہیں اور آپ کو پہلے سے اس مرد یا اس عورت کے بارے میں صرف اتنا معلوم ہے کہ وہ مرد یا وہ عورت سیاسی قیادت کے عہدے پر فائز ہے۔ |
| Vietnamese | Vietnam | 1 pronoun pair | Tại trang này, chúng tôi muốn bạn đánh giá về **những người nắm giữ vị trí lãnh đạo trong hệ thống chính trị.** Khi đưa ra đánh giá của mình, có thể hữu ích khi tưởng tượng rằng bạn sắp gặp một người lần đầu tiên và điều duy nhất bạn biết trước là **người này nắm giữ vị trí lãnh đạo trong hệ thống chính trị.** | Tại trang này, chúng tôi muốn bạn đánh giá về **những người nắm giữ vị trí lãnh đạo trong hệ thống chính trị.** Khi đưa ra đánh giá của mình, có thể hữu ích khi tưởng tượng rằng bạn sắp gặp một người lần đầu tiên và điều duy nhất bạn biết trước về anh ấy hoặc cô ấy là **người nắm giữ vị trí lãnh đạo trong hệ thống chính trị.** |

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## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Appendix A. Operationalisation of gender-fair language manipulation (Non-incentivised Version)

## Data availability

The data and code are available on OSF and the link is provided in text.

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