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2021

To which world regions does the valence–dominance model of social perception apply?

(📄 Article in press [?](#))[\(Open Access\)](#)Jones, B.C.^a [✉](#), DeBruine, L.M.^b, Flake, J.K.^c, Liuzza, M.T.^d, Antfolk, J.^e, Arinze, N.C.^f, Ndukaihe, I.L.G.^g, Bloxson, N.G.^h, Lewis, S.C.^h, Foroni, F.^h, Willis, M.L.^h, Cubillas, C.P.ⁱ, Vellido, M.A.ⁱ, Turiegano, E.^j, Gilead, M.^k, Simchon, A.^k, Saribay, S.A.^l, Owsley, N.C.^m, Jang, C.^m, Mburu, G.^m, Calvillo, D.P.ⁿ,[View additional authors](#) [v](#)^aSchool of Psychological Sciences and Health, University of Strathclyde, Glasgow, United Kingdom^bInstitute of Neuroscience and Psychology, University of Glasgow, Glasgow, United Kingdom^cDepartment of Psychology, McGill University, Montreal, QC, Canada[View additional affiliations](#) [v](#)

Abstract

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Abstract: Over the past 10 years, Oosterhof and Todorov's valence–dominance model has emerged as the most prominent account of how people evaluate faces on social dimensions. In this model, two dimensions (valence and dominance) underpin social judgements of faces. Because this model has primarily been developed and tested in Western regions, it is unclear whether these findings apply to other regions. We addressed this question by replicating Oosterhof and Todorov's methodology across 11 world regions, 41 countries and 11,570 participants. When we used Oosterhof and Todorov's original analysis strategy, the valence–dominance model generalized across regions. When we used an alternative methodology to allow for correlated dimensions, we observed much less generalization. Collectively, these results suggest that, while the valence–dominance model generalizes very well across regions when dimensions are forced to be orthogonal, regional differences are revealed when we use different extraction methods and correlate and rotate the dimension reduction solution. Protocol registration: The stage 1 protocol for this Registered Report was accepted in principle on 5 November 2018. The protocol, as accepted by the journal, can be found at <https://doi.org/10.6084/m9.figshare.7611443.v1>. © 2021, The Author(s), under exclusive licence to Springer Nature Limited.

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Funding text

C.L. was supported by the Vienna Science and Technology Fund (WWTF VRG13-007); L.M.D. was supported by ERC 647910 (KINSHIP); D.I.B. and N.I. received funding from CONICET, Argentina; L.K., F.K. and Á. Putz were supported by the European Social Fund (EFOP-3.6.1.-16-2016-00004; 'Comprehensive Development for Implementing Smart Specialization Strategies at the University of Pécs'). K.U. and E. Vergauwe were supported by a grant from the Swiss National Science Foundation (PZ00P1_154911 to E. Vergauwe). T.G. is supported by the Social Sciences and Humanities Research Council of Canada (SSHRC). M.A.V. was supported by grants 2016-T1/SOC-1395 (Comunidad de Madrid) and PSI2017-85159-P (AEI/FEDER UE). K.B. was supported by a grant from the National Science Centre, Poland (number 2015/19/D/HS6/00641). J. Bonick and J.W.L. were supported by the Joep Lange Institute. G.B. was supported by the Slovak Research and Development Agency (APVV-17-0418). H.I.J. and E.S. were supported by a French National... [View all](#) ▾

ISSN: 23973374

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Original language: English

DOI: 10.1038/s41562-020-01007-2

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1 of 1

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