

**Outside the ‘Cultural Binary’: Understanding Why Latin American Collectivist
Societies Foster Independent Selves**

SUPPLEMENTAL MATERIAL

Kuba Kryś^{1,2*}, Vivian L. Vignoles^{3*}, Igor de Almeida⁴, Yukiko Uchida²

¹ Institute of Psychology, Polish Academy of Sciences, Warsaw, Poland

² Kokoro Research Center, Kyoto University, Kyoto, Japan

³ School of Psychology, University of Sussex, Brighton, United Kingdom

⁴ Institute of Liberal Arts, Otomon Gakuin University, Osaka, Japan

* corresponding authors: Kuba Kryś, Institute of Psychology, Polish Academy of Sciences,
Jaracza 1, Warsaw, 00-378, Poland; telephone: + 48 608 690 181; e-mail: kuba@krys.pl .

Vivian L Vignoles, School of Psychology, University of Sussex, Falmer, Brighton, BN1 9QH,
UK; e-mail v.l.vignoles@sussex.ac.uk .

The data analysed in the current manuscript, are also available in the SPSS format under the
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S1: Where are Self-Construals Studied?

To estimate how often research into different cultural regions is reported in the self-construal literature, we collected abstracts of all scientific papers recognised by EBSCO database that mention the term “self-construal” in their title or abstract (at the time of our literature search, we identified 1,223 such papers). From these, we extracted those papers that mentioned a name of any country in their title or abstract (558 out of 1,223 articles). Over 60% of the selected papers mentioned one or more North-Western European heritage (a.k.a. “Western”) countries ($N_{\text{North-Western European heritage}} = 345$ articles) and 54% mentioned one or more Confucian cultures ($N_{\text{Confucian Asia}} = 301$). Latin American countries ($N_{\text{Latin America}} = 20$) were mentioned over fifteen times less frequently than Confucian cultures. Among those articles on self-construals mentioning any “non-Western” country, over 75% studied a Confucian country, and only 5% studied a Latin American country. To illustrate this difference from another perspective, the five countries most often mentioned in papers studying self-construals are USA ($N_{\text{USA}} = 238$), China ($N_{\text{China}} = 184$), Japan ($N_{\text{Japan}} = 93$), Germany ($N_{\text{Germany}} = 33$), and Canada ($N_{\text{Canada}} = 31$). We present a summary of our comparisons for all regions in Table S1 and further details in Table S2.

To check whether literature aimed directly at cross-cultural studies is more globally representative, we conducted a similar analysis for the *Journal of Cross-Cultural Psychology* only (see Table S1 and further details in Table S3). From 71 titles and abstracts in the *Journal of Cross-Cultural Psychology* that mention “self-construal” and a name of any country, over 85% mention North-Western European heritage countries ($N_{\text{North-Western European heritage}} = 61$ articles) and over 53% mention Confucian cultures ($N_{\text{Confucian Asia}} = 38$). Latin American countries are mentioned in less than 14% of cases ($N_{\text{Latin America}} = 10$). It seems that, just as theorizing about self-construals originated from comparing North American and European individualism with Confucian collectivism, empirical evidence collected in the subsequent almost thirty years still comes mostly from these two world regions.

S2: Three Analyzed Macro-Cultural Regions

In our quantitative analyses, we compare Latin American countries (i.e., all countries in the Americas where Spanish or Portuguese is the dominant language), with Confucian-influenced Asian countries (i.e., Mainland China, Hong Kong, Japan, Singapore, South Korea, Taiwan). Both groups of countries are commonly described as having collectivistic cultures (Hofstede, 2001; Minkov, 2018). As a point of reference, we also include in our comparisons countries of North-Western European heritage (i.e., European countries excluding post-communist or Southern European countries, together with Australia, Canada, New Zealand, and the USA); these countries are commonly labelled as “Western” nations or WEIRD societies and described as having individualistic cultures (Henrich et al., 2010; Hofstede, 2001; Minkov, 2018). Countries that belonging to each of these three macro-cultural regions are listed in Table S4. We do not wish to suggest that each of these three regions is culturally homogeneous, nor that they are objectively ‘real’ entities with exact boundaries. We distinguish these regions as an analytical heuristic to capture certain broad patterns of socioecology, history, societal organization and psychological culture. Cultural variation can be identified at many different levels of analysis, and alternative groupings of national or other cultural samples may be valid for different research purposes.

S3: Quantitative Synthesis of Self-Construal Studies

We conducted a quantitative synthesis (Johnson & Eagly, 2000) of multi-national studies on self-construals that included samples from Latin American and Confucian East Asian societies (as defined in Supplement S2). We considered that findings from multi-national studies would be more representative than two- or three-country comparisons, because we expected that the findings of larger studies would have a higher chance of publication even if they were incongruent with common theorizing, whereas smaller studies might suffer a greater risk of publication bias. In fact, our review of EBSCO abstracts (see Supplement S1) did not reveal any smaller studies comparing independent and interdependent self-construals between Latin American and Confucian Asian cultures.¹

We identified four major international projects that included measures of self-construal collected from samples in eight or more countries. Three of the analyzed studies (Church et al., 2012; Fernandez, Paez, & Gonzalez, 2005; Krys et al., 2019; in total 49 cultural samples from 39 countries) used versions of the Singelis (1994) self-construal scale; this scale assumes a two-factor model of self-construals, such that independent and interdependent self-construals form two separate and orthogonal dimensions (Singelis, 1994). Two limitations of the Singelis scale are that it includes no control for acquiescent response style—which may confound cross-cultural comparisons (Smith, 2004)—and that it treats both independence and interdependence as monolithic constructs—which does not allow for the possibility that a person may be independent in some respects and interdependent in other respects (Hardin, 2006). The fourth study (Vignoles et al., 2016, Study 2; 55 cultural samples from 33 countries) was based on an acquiescence-adjusted model of self-construal covering

¹ Haberstroh et al. (2018, Study 2) included samples from both China and Brazil, but they measured interdependent self-construal only and did not report sample means.

seven dimensions, in which each dimension contrasts an independent with an interdependent pole (e.g., difference vs. similarity; self-reliance vs. dependence on others; Vignoles et al., 2016). Following the assumptions of these two different approaches, we treat independent and interdependent self-construals as separate dimensions in our re-analysis if a study was based on Singelis’ (1994) scale, whereas we focus on the seven distinct bipolar dimensions when examining the data collected by Vignoles and colleagues (2016).

Findings Using the Singelis Scale

We re-analyzed data from three studies reporting eight or more country-level means for independent and interdependent self-construal measured with versions of the Singelis scale: Fernandez, Paez, and Gonzalez (2005: 29 countries), Church et al. (2012: 8 countries), and Kryś et al. (2019: 12 countries).² As shown in Table S5, in all three studies, Latin American countries were significantly higher on independent self-construals than Confucian-influenced countries; they were also significantly higher than North-Western European heritage countries. In none of the three studies was there a significant difference for interdependent self-construals between Latin American and Confucian-influenced countries. Since the two regions differed in independent self-construal but not in interdependent self-construal, the results cannot easily be explained away by differences in scale usage.

Next, we adopted a meta-analytical approach, and pooled the three studies into one analysis. In case a given country was covered by more than one study, we used a pooled

² We identified a fourth large cross-cultural study using the Singelis scale (Georgas, Berry, van de Vijver, Kağitçibaşı, & Poortinga, 2006: 27 countries). However, the mean scores were never published, because the authors concluded that the scale had inadequate psychometric properties across their samples. Because of this, the authors also did not agree we use their scores in the current paper (Fons van de Vijver, personal communication).

average score from the available studies. Because the three studies used different response scales, we needed to put the country means on a common metric, prior to comparing the three groups of countries. We did this in two different ways: For a first analysis, we standardized the country-level averages of self-construals within each of the three studies, prior to combining the data. This allowed us to analyze the relative position of a given group of countries among the other countries sampled; however, the positions are partly dependent on the pool of other countries involved in each study. Hence, for a second analysis, we rescaled results of all studies onto a common metric ranging from 1 to 7, as in the original Singelis (1994) scale. This allowed us to analyze absolute rather than relative ratings (i.e., results are not dependent on which other countries were included in the studies), but it ignores differences in scale anchors across studies. For both versions of the pooled data, we calculated and compared means for the three cultural regions of interest (see Table S5).

Using standardized measures, we found that Confucian Asian samples reported their independent self-construals as significantly lower than did samples from other countries (z score from three studies: $M = -.90$, $SD = .62$, for comparison with zero point that represents middle point for all analysed countries $t[4] = 3.28$, $p = .031$). In contrast, Latin American samples reported themselves as holding independent self-construals significantly higher than the average (z score from three studies: $M = .68$, $SD = .82$, for comparison with zero point $t[10] = 2.76$, $p = .020$). The direct comparison of standardized means showed that Latin Americans describe themselves as holding significantly more independent selves than Confucian Asians, $t(14) = 3.83$, $p = .002$, and the difference reached 2.21 standard deviations, which represents a very large difference (Cohen, 1988). Interestingly, Latin Americans reported themselves to hold even more independent selves than samples from North-Western

European heritage countries, $M = -.41$, $SD = .68$, $t(18) = 3.19$, $p = .005$, $d = 1.46^3$. As in our analyses of separate studies, the three groups of countries did not differ significantly on interdependent self-construals.

Using rescaled measures, we found that all analyzed countries scored above the theoretical mid-point of the scale for independent self-construals (middle point = 4.00; $M = 4.94$; $SD = .33$; range: from 4.43 [Japan] to 5.64 [Mexico]); thus, across all three cultural regions, on average, participants tended to agree (rather than disagree) with statements describing themselves as independent. Next, similar to findings on standardized measures, we found that Confucian Asian samples reported their independent-self construals as significantly lower than did Latin Americans (see Table S5). Again, similar to findings on standardized measures, North-Western European heritage countries occupied an intermediate position between Latin American and Confucian-influenced countries (with the re-scaled measures, differences among all three groups of countries reached statistical significance; see Table S5). The mapping of these three groups of countries, plotted against Hofstede’s measure of individualism-collectivism, is presented in Figure 2 in the main article. On re-scaled measures, Latin Americans tended to report marginally higher levels of interdependent self-construals than members of Confucian societies ($p = .095$). This may reflect marginally

³ Among the North-Western European heritage group, Francophone countries (i.e., France, Belgium, and the French-speaking part of Switzerland) showed relatively low levels of independent selfhoods (see Figure 2 in the main article). When we excluded Francophones from the North-Western European heritage group, thus forming an Anglo-Northern European heritage group ($M = -.02$, $SD = .42$), the difference between Anglo-Northern European heritage and Latin American countries remained marginally significant, $t(15) = 1.96$, $p = .069$, $d = 1.14$; Anglo-Northern European heritage countries significantly differed from Confucian Asian countries, $t(9) = 2.82$, $p = .020$, $d = 1.70$.

higher interdependent self-construal in Latin America, but it was not found in our other analyses, and it could also be attributable to differences in scale usage.

Findings based on the Singelis (1994) self-construal scale show a clear pattern such that participants from Latin American countries rate themselves higher on independence than those from Confucian Asian countries—whereas North-Western European heritage samples occupy an intermediate position. However, cross-cultural studies using this self-construal scale, including the three studies examined here, have often reported problems of poor reliability or cross-cultural non-equivalence (Levine et al., 2003). Moreover, the Singelis scale includes no adjustment for acquiescent responding, nor does it distinguish among multiple ways of being independent or interdependent. Furthermore, all three studies using the Singelis scale relied on student samples, who may not necessarily be representative of the broader cultural trends in their nations of origin. Hence, these findings on their own may be an approximation only to the models of selfhood fostered by these cultures. In the next section, we show convergent findings using a finer-grained measure of self-construal.

Findings Using the Vignoles et al. Scale

Based on two large-scale multinational studies, Vignoles and colleagues (2016) distinguished seven dimensions that were previously confounded within commonly used measures of independence and interdependence such as Singelis’ (1994) scale. According to their findings, selves may be construed as independent or interdependent in at least seven different domains of psychological functioning: in terms of defining the self (i.e., difference vs. similarity), experiencing the self (i.e., self-containment vs. connection to others), making decisions (i.e., self-direction vs. receptiveness to influence), looking after oneself (i.e., self-reliance vs. dependence on others), moving between contexts (i.e., consistency vs. variability), communicating with others (i.e., self-expression vs. harmony), or dealing with conflicting interests (i.e., self-interest vs. commitment to others). Vignoles et al. reported culture-level factor scores on these seven dimensions for adult samples from 55 cultural

groups spanning 33 countries. They ensured that the factor scores were not distorted by acquiescent responding by modelling this as a separate method factor (Welkenhuysen-Gybels, Billiet, & Cambré, 2003). We re-analyzed these scores among cultural groups from the three groups of countries that were of interest here.⁴ Figure 3, in the main article, shows the distribution of culture-level factor scores for each of the seven selfhood dimensions across samples from each of the three macro-cultural regions.

As shown in Table S5, models of selfhood in Latin American countries were more independent than those in Confucian-influenced countries in five out of seven domains: defining the self (i.e., difference vs. similarity to others), looking after oneself (i.e., self-reliance vs. dependence), moving between contexts (i.e., consistency vs. variability), communicating with others (i.e., self-expression vs. harmony), and dealing with conflicting interests (i.e., self-interest vs. commitment), all $p < .03$, all $d > 1.33$. Differences did not reach significance in two domains: making decisions (i.e., self-direction vs. receptivity to influence) and experiencing the self (i.e., self-containment vs. connection to others). Thus, evidence for a greater focus on independent self-construal in Latin American societies, compared to Confucian-influenced societies, cannot be explained away in terms of measurement problems with the Singelis (1994) scale, nor is it an artifact of relying on student samples.

⁴ Vignoles et al. (2016, Study 2b) compared latent means across six “world regions” within their data, including “Western”, “Southern/Eastern Asian”, and “Latin American” groupings. However, they defined these groupings more broadly than we do here: their Latin American grouping included Hispanic Americans in the USA, their “Western” grouping included samples from Southern Europe, which have sometimes been described as collectivist cultures, and their Southern/Eastern Asian grouping included samples from Malaysia, Thailand and the Philippines, which are not necessarily seen as Confucian cultures.

Furthermore, Latin American models of selfhood were more independent than those of North-Western European heritage countries in two domains: moving between contexts (i.e., consistency vs. variability, $p = .004$, $d = 1.55$) and dealing with conflicting interests (i.e., self-interest vs. commitment to others, $p < .001$, $d = 2.92$); samples from these two regions did not differ significantly in another four domains, and in only one domain were Latin American samples significantly more interdependent than Western samples: making decisions (i.e., receptivity to influence vs. self-direction, $p = .012$, $d = 1.31$).

Finally, models of selfhood in Confucian-influenced cultures were significantly more interdependent than those of North-Western European heritage cultures in defining the self (i.e., similarity vs. difference, $p = .006$, $d = 1.66$), moving between contexts (i.e., variability vs. consistency, $p = .027$, $d = 1.29$), and communicating with others (i.e., harmony vs. self-expression, $p = .003$, $d = 1.98$), but they were more independent in dealing with conflicting interests (i.e., self-interest vs. commitment to others, $p = .018$, $d = 1.43$), and samples from these two regions did not differ significantly in the remaining three domains.

S4: Quantitative Review of Potential Explanatory Variables

We identified, reviewed and reanalyzed various cultural characteristics that could theoretically be linked to different forms of selfhood and for which multi-national quantifications were available in psychological literature. We compiled the available data and compared mean levels across Latin American, Confucian East Asian, and North-Western European heritage regions as defined in Supplement S2. When preparing our initial “catalogue of differences”, we used our general knowledge on cross-cultural differences and brainstormed about which cultural qualities may differentiate self-construals in Confucian Asia from Latin America. For two constructs (desired/perceived control and maximization principle), we first noticed that differences had been found between the two regions and we proposed theoretical links to models of selfhood *post hoc*. The variables we identified are summarized in the main article, and all data sources are cited in Table S6.

For many of these dimensions, Latin American cultures were positioned on the opposite pole from Confucian cultures, with “Western” cultures located somewhere in between (see Figure 4 in the main article for an overview). Quantitative comparisons across the three macro-cultural regions of interest are reported in Table S6. Latin American societies differed significantly from Confucian East Asian societies on 7 out of 8 socioecological and historical variables, 2 out of 2 modes of societal organization, and 7 out of 11 measures of psychological culture, highlighting the numerous ways that these societies differ.

Table S6 also includes six indicators of cultural individualism-collectivism: Hofstede’s (2017) individualism index; Minkov and colleagues’ (2017) updated individualism index; three cultural dimensions from the Schwartz Values Survey (Schwartz, 2008), and a measure of open society attitudes derived from the World Values Survey (Krys et al., 2019). On all six measures, both Latin American and Confucian-influenced countries averaged significantly more collectivist (or less individualist) values than North-Western European heritage countries (all $p \leq .002$; all $d > 1.63$; average $d = 3.26$; see Figure 5 in main article).

S5: Conceptualizing and Measuring Collectivism

The ambiguity of “collectivism” can be seen through the diverse ways it has been measured. In Hofstede’s (2001) classic study of work-related values, *personal time, freedom, and challenge* measured individualism, whereas *use of skills, physical conditions, and training* constituted the opposite pole. As Bond (2002) commented: “The first three work goals bear obvious relations to individualism as that multifaceted construct has been discussed in the literature of the social sciences. How the last three work goals described anything resembling collectivism was, however, a mystery to many” (p. 74). In Schwartz’s (2006) model of culture-level value priorities, embeddedness, which serves as a proxy of collectivism, was measured with such varied values as *respect for tradition, forgiving, reciprocation of favors, protecting public image, family and national security*, but also *self-discipline, wisdom, and even being clean*. These three latter values seem to be loosely connected to conceptualisations of collectivism. Minkov et al. (2017) operationalised collectivism with statements about conflict avoidance (e.g., *I usually try to avoid conflicts*), conformism (e.g., *If I could, I would make all people in our society follow all our laws and rules very strictly*), desire for social ascendancy (e.g., *I like to tell people what to do and be their boss.*), but also exclusionism (*I can do big and expensive favors for my friends just to see them happy and I arrive exactly on time for meetings or other events. I am hardly ever late.*).

Other researchers have proposed to distinguish a confusing variety of forms or facets of collectivism. Kim (1994) proposed *undifferentiated, relational and coexistence* modes of collectivism. Singelis, Triandis, Bhawuk, and Gelfand (1995) distinguished *vertical* and *horizontal* forms of collectivism. However, they measured these constructs as individual differences in collectivistic *mindset*, rather than as properties of culture. Attempts to measure these dimensions at a cultural level of analysis had limited success (Schimmack, Oishi, & Diener, 2005). Realo, Allik, and Vadi (1997) distinguished subtypes of collectivism focused on different collectives—family, peers and nation—also measuring these as individual-level

rather than cultural dimensions. In their review and meta-analysis, Oyserman and colleagues (2002) identified eight components of collectivism: *relational self*, *belonging*, *duty*, *harmony*, *seeking advice*, *contextual variability*, *hierarchy*, and *group work*. Brewer and Chen (2007) proposed distinguishing relational from group-based collectivism, each of which could be decomposed into values, beliefs and self-representations, resulting in six theorised facets of collectivism, as well as three facets of individualism. In a recent meta-analysis, Taras et al. (2014) found that individualism and collectivism may be “opposite ends of the same stick” at the cultural level, but not at the individual level, although their findings were confounded by equating independence-interdependence with individualism-collectivism.

S6: Where are Individualism and Collectivism Studied?

We studied where specialised research, i.e., cross-cultural psychology, investigates individualism and collectivism. We examined all 129 articles mentioning collectivism or individualism in their titles or abstracts published in the *Journal of Cross-Cultural Psychology* (JCCP) between 1970 and 2017. We present a summary of our comparisons for all regions in Table S7 and further details in Table S8.

Similar to Henrich et al. (2010), we found a predominance of North-Western European heritage countries ($N_{\text{North-Western European heritage}} = 132$), but we also confirmed that research on Confucian cultures dominated studies in collectivistic cultural contexts ($N_{\text{Confucian countries}} = 71$; $N_{\text{other Asian countries}} = 29$; $N_{\text{Latin America}} = 16$; $N_{\text{Middle East North Africa}} = 13$; $N_{\text{sub-Saharan Africa}} = 10$; see below Tables S7 and S8). The five most often studied countries were the USA ($N_{\text{USA}} = 66$), China ($N_{\text{China}} = 34$), Japan ($N_{\text{Japan}} = 24$), Australia ($N_{\text{Australia}} = 20$), and Canada ($N_{\text{Canada}} = 11$). To illustrate this discrepancy from a different angle: 85% of papers studied a North-Western European heritage country, every second paper studied a Confucian country, and only one in nine papers studied a Latin American country.

Supplementary References

- Bond, M. H. (2002). Reclaiming the individual from Hofstede's ecological analysis--A 20-year odyssey: Comment on Oyserman et al. (2002). *Psychological Bulletin*, *128*, 73–77. <https://doi.org/10.1037/0033-2909.128.1.73>
- Brewer, M. B., & Chen, Y.-R. (2007). Where (who) are collectives in collectivism? Toward conceptual clarification of individualism and collectivism. *Psychological Review*, *114*, 133–151. <https://doi.org/10.1037/0033-295X.114.1.133>
- Church, A., Katigbak, M., Locke, K., Zhang, H., Shen, J., de Jesús Vargas-Flores, J., ... Mastor, K. (2013). Need satisfaction and well-being: Testing self-determination theory in eight cultures. *Journal of Cross-Cultural Psychology*, *44*, 507-534. <https://doi.org/10.1177/0022022112466590>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.) Hillsdale, NJ: Erlbaum.
- Food and Agriculture Organization of the United Nations (2020). Data. Retrieved from <http://www.fao.org/faostat/en/#data>
- Fernandez, I., Paez, D., & González, J. (2005). Independent and Interdependent Self-construals and socio-cultural factors in 29 nations. *Revue Internationale De Psychologie Sociale*, *18*, 35-63.
- Gelfand, M., Raver, J., Nishii, L., Leslie, L., Lun, J., Lim, B., ... Aycan, Z. (2011). Differences between tight and loose cultures: A 33-nation study. *Science*, *332*, 1100-1104. <https://doi.org/10.1126/science.1197754>
- Georgas, J., Berry, J. W., van de Vijver, F. J. R., Kağitçibaşı, Ç., & Poortinga, Y. H. (Eds.). (2006). *Families across cultures: A 30-nation psychological study*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511489822>
- Hardin, E. (2006). Convergent evidence for the multidimensionality of self-construal. *Journal of Cross-Cultural Psychology*, *37*, 516-521.

<https://doi.org/10.1177/0022022106290475>

Henrich, J., Heine, S., & Norenzayan, A. (2010). The weirdest people in the world?.

Behavioral and Brain Sciences, 33, 61-83.

<https://doi.org/10.1017/S0140525X0999152X>

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. New York, NY: Sage publications.

Hofstede, G. (2017, August 18). *Dimension Data Matrix*. Retrieved from:

<https://geerthofstede.com/research-and-vsm/dimension-data-matrix/>

Hornsey, M., Bain, P., Harris, E., Lebedeva, N., Kashima, E., Guan, Y., ... Blumen, S.

(2018). How much is enough in a perfect world? Cultural variation in ideal levels of happiness, pleasure, freedom, health, self-esteem, longevity, and intelligence.

Psychological Science, 29, 1393–1404. <https://doi.org/10.1177/0956797618768058>

Hornsey, M., Greenaway, K., Harris, E., & Bain, P. (2019). Exploring cultural differences in the extent to which people perceive and desire control. *Personality and Social Psychology Bulletin*, 45, 81–92. <https://doi.org/10.1177/0146167218780692>

Psychology Bulletin, 45, 81–92. <https://doi.org/10.1177/0146167218780692>

Johnson, B., & Eagly, A. (2000). Quantitative synthesis of social psychological research. In H. Reis & C. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 496-528). London, UK: Cambridge University Press.

Kim, U. (1994). Individualism and collectivism: Conceptual clarification and elaboration. In U. Kim, H. C. Triandis, Ç. Kâğıtçibasi, S. C. Choi & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp. 19-40). Thousand Oaks, CA: Sage.

Krys, K., Yeung, J.Ch., Capaldi, C.A., Lun, V.M.-Ch., Torres, C., van Tilburg, W., ...

Vignoles, V.L. (2021). Societal emotional environments and cross-cultural differences in life satisfaction: A forty-nine country study. *The Journal of Positive Psychology*, Advance online publication. <http://dx.doi.org/10.1080/17439760.2020.1858332>

- Krys, K., Zelenski, J. M., Capaldi, C.A., Park, J., van Tilburg, W., van Osch, Y., ... Uchida, Y. (2019) Putting the 'we' into well-being: Using collectivism-themed measures of well-being attenuates well-being's association with individualism. *Asian Journal of Social Psychology*, 22, 256-267. <https://doi.org/10.1111/ajsp.12364>.
- Kuppens, P., Realo, A., & Diener, E. (2008). The role of positive and negative emotions in life satisfaction judgment across nations. *Journal of Personality and Social Psychology*, 95, 66-75. <https://doi.org/10.1037/0022-3514.95.1.66>
- Levine, T. R., Bresnahan, M. J., Park, H. S., Lapinski, M. K., Lee, T. S., & Lee, D. W. (2003). The (in)validity of self-construal scales revisited. *Human Communication Research*, 29, 291–308. <https://doi.org/10.1111/j.1468-2958.2003.tb00840.x>
- Matsumoto, D., Yoo, S., Nakagawa, S., & 37 Members of the Multinational Study of Cultural Display Rules (2008). Culture, emotion regulation, and adjustment. *Journal of Personality and Social Psychology*, 94, 925-937. <https://doi.org/10.1037/0022-3514.94.6.925>
- Minkov, M. (2018). A revision of Hofstede's model of national culture: old evidence and new data from 56 countries. *Cross Cultural & Strategic Management*, 25, 231-256. <https://doi.org/10.1108/CCSM-03-2017-0033>
- Minkov, M., Dutt, P., Schachner, M., Morales, O., Sanchez, C., Jandosova, J., ... & Mudd, B. (2017). A revision of Hofstede's individualism-collectivism dimension: A new national index from a 56-country study. *Cross Cultural & Strategic Management*, 24, 386-404. <https://doi.org/10.1108/CCSM-11-2016-0197>
- Murray, D. R., & Schaller, M. (2010). Historical prevalence of infectious diseases within 230 geopolitical regions: A tool for investigating origins of culture. *Journal of Cross-Cultural Psychology*, 41(1), 99-108.
- Oyserman, D., Coon, H., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychological*

- Bulletin*, 128, 3-72. <https://doi.org/10.1037//0033-2909.128.1.3>
- Putterman, L., & Weil, D. (2010). Post-1500 population flows and the long-run determinants of economic growth and inequality. *The Quarterly Journal of Economics*, 125, 1627–1682. <http://dx.doi.org/10.1162/qjec.2010.125.4.1627>
- Realo, A., Allik, J., & Vadi, M. (1997). The hierarchical structure of collectivism. *Journal of Research in Personality*, 31, 93–116. <https://doi.org/10.1006/jrpe.1997.2170>
- Schimmack, U., Oishi, S., & Diener, E. (2005). Individualism: A valid and important dimension of cultural differences between nations. *Personality and Social Psychology Review*, 9, 17-31. https://doi.org/10.1207/s15327957pspr0901_2
- Schwartz, S. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology*, 5, 137-182. <https://doi.org/10.1163/156913306778667357>
- Singelis, T. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, 20, 580-591.
<https://doi.org/10.1177/0146167294205014>
- Singelis, T., Triandis, H., Bhawuk, D., & Gelfand, M. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research*, 29, 240-275.
- Smith, P. (2004). Acquiescent response bias as an aspect of cultural communication style. *Journal of Cross-Cultural Psychology*, 35, 50-61.
<https://doi.org/10.1177/0022022103260380>
- Taras, V., Sarala, R., Muchinsky, P., Kemmelmeier, M., Singelis, T., Avsec, A., ... Sinclair, C. (2014). Opposite ends of the same stick? Multi-method test of the dimensionality of individualism and collectivism. *Journal of Cross-Cultural Psychology*, 45, 213-245.
<https://doi.org/10.1177/0022022113509132>
- Thomson, R., Yuki, M., Talhelm, T., Schug, J., Kito, M., Ayanian, A.H., ... Ferreira, C. (2018). Relational mobility predicts social behaviors in 39 countries and is tied to

historical farming and threat. *Proceedings of the National Academy of Sciences*, 115, 7521-7526. <https://doi.org/10.1073/pnas.1713191115>

United Nations Development Programme (2019). *Human Development Report 2019. Beyond income, beyond averages, beyond today: Inequalities in human development in the 21st century*. New York: Author. Retrieved from <http://hdr.undp.org/en/content/human-development-report-2019>

Vignoles, V., Owe, E., Becker, M., Smith, P., Easterbrook, M., Brown, ... Lay, S. (2016).

Beyond the 'East–West' dichotomy: Global variation in cultural models of selfhood. *Journal of Experimental Psychology: General*, 145, 966-1000.

<https://doi.org/10.1037/xge0000175>

Welkenhuysen-Gybels, J., Billiet, B., Cambré, B. (2003). Adjustment for acquiescence in the assessment of the construct equivalence of Likert-type score items. *Journal of Cross-Cultural Psychology*, 34, 702-722. <https://doi.org/10.1177/0022022103257070>

Welzel, C. (2013). *Freedom Rising: Human Empowerment and the Quest for Emancipation*. Cambridge, UK: Cambridge University Press.

Supplementary Tables

Table S1

Macro-Cultural Regions in Focus of Studies on Self-Construals (on the Example of All Abstracts and Titles Containing the Term “Self-construal” Identified in the EBSCO Database, and on the Example of the Journal of Cross-Cultural Psychology [JCCP] Only – Journal Aimed Directly at Cross-Cultural Comparisons)

Macro-Cultural Region in Focus	Whole EBSCO		JCCP only	
	N_{mentions}	N_{articles}	N_{mentions}	N_{articles}
I. North-Western European heritage countries (template individualistic countries)	363	345	65	61
II. other European countries plus Israel (mixed evidence on individualism and collectivism)	35	35	4	4
III. collectivistic countries (in total)	460	393	86	52
from:				
Confucian Asia	338	301	46	38
other parts of Asia	53	50	15	11
Latin America	24	20	12	10
Middle East & North Africa (excl. Israel)	35	31	12	7
Sub-Saharan Africa	10	7	1	1
sum (for mentions) / total (for articles):	858	558	155	71

Note. First, we identified all articles listed in the EBSCO database that mentioned the term “self-construal” and a name of any country in their title or abstract – we found 558 such articles in total, and 71 in JCCP only. Next, we calculated which countries appear in these titles or abstracts (for frequencies of individual countries see Tables S2 and S3). N_{mentions} refers to the total number of times that a country from a given macro-cultural region was mentioned. N_{articles} refers to the number of articles mentioning at least one country from a given macro-cultural region. N_{mentions} can be larger than N_{articles} , because in some titles and abstracts more than one country was listed.

Table S2.

Countries in the Focus of Papers on Self-Construals Available in the Whole EBSCO Database

Country	Frequency of Appearance	Region
South Africa	3	Africa
Nigeria	2	Africa
Zambia	2	Africa
Cameroon	1	Africa
Ethiopia	1	Africa
Zimbabwe	1	Africa
China	184	Confucian Asia
Japan	93	Confucian Asia
Taiwan	29	Confucian Asia
South Korea	17	Confucian Asia
Singapore	15	Confucian Asia
Israel	1	Israel
Brazil	11	Latin America
Mexico	9	Latin America
Argentina	2	Latin America
Chile	1	Latin America
Costa Rica	1	Latin America
Turkey	24	MENA
Lebanon	2	MENA
Morocco	2	MENA
Pakistan	2	MENA
Iran	1	MENA
Jordan	1	MENA
Saudi Arabia	1	MENA
Syria	1	MENA
United Arab Emirates	1	MENA
United States	238	North Western European heritage
Germany	33	North Western European heritage
Canada	31	North Western European heritage
Australia	18	North Western European heritage
United Kingdom	9	North Western European heritage
Netherlands	7	North Western European heritage
New Zealand	6	North Western European heritage
Belgium	5	North Western European heritage
France	5	North Western European heritage
Denmark	4	North Western European heritage
Norway	3	North Western European heritage
Switzerland	2	North Western European heritage
Austria	1	North Western European heritage
Sweden	1	North Western European heritage

Country	Frequency of Appearance	Region
India	26	other Asia
Thailand	7	other Asia
Indonesia	5	other Asia
Vietnam	5	other Asia
Malaysia	3	other Asia
Philippines	3	other Asia
Nepal	2	other Asia
Bangladesh	1	other Asia
Mongolia	1	other Asia
Tonga	1	other Asia
Poland	8	other European
Spain	7	other European
Italy	4	other European
Greece	3	other European
Romania	3	other European
Russia	3	other European
Slovakia	2	other European
Albania	1	other European
Czech Republic	1	other European
Portugal	1	other European

Table S3.

Countries in the Focus of Papers on Self-Construals Published in the Journal of Cross-Cultural Psychology

Country	Frequency of Appearance	Region
Cameroon	1	Africa
China	24	Confucian Asia
Japan	15	Confucian Asia
Singapore	4	Confucian Asia
Taiwan	3	Confucian Asia
Mexico	7	Latin America
Chile	2	Latin America
Venezuela	2	Latin America
Ecuador	1	Latin America
Turkey	5	MENA
Jordan	2	MENA
Lebanon	2	MENA
Syria	2	MENA
Morocco	1	MENA
United States	42	North Western European heritage
Canada	7	North Western European heritage
Australia	6	North Western European heritage
United Kingdom	4	North Western European heritage
Germany	3	North Western European heritage
Norway	2	North Western European heritage
Denmark	1	North Western European heritage
Malaysia	4	other Asia
Philippines	4	other Asia
Thailand	4	other Asia
India	3	other Asia
Greece	2	other European
Poland	1	other European
Spain	1	other European

Table S4.

Countries in Macro-Cultural Regions

Country	Macro-Cultural Region
Argentina	Latin America
Bolivia	Latin America
Brazil	Latin America
Chile	Latin America
Colombia	Latin America
Costa Rica	Latin America
Cuba	Latin America
Dominica Republic	Latin America
Ecuador	Latin America
El Salvador	Latin America
Guatemala	Latin America
Honduras	Latin America
Mexico	Latin America
Nicaragua	Latin America
Panama	Latin America
Paraguay	Latin America
Peru	Latin America
Puerto Rico	Latin America
Uruguay	Latin America
Venezuela	Latin America
China	Confucian Asia
Hong Kong	Confucian Asia
Japan	Confucian Asia
Singapore	Confucian Asia
North Korea	Confucian Asia
South Korea	Confucian Asia
Taiwan	Confucian Asia
Australia	North-Western European heritage
Austria	North-Western European heritage
Belgium *	North-Western European heritage
Canada	North-Western European heritage
Denmark	North-Western European heritage
Finland	North-Western European heritage
France *	North-Western European heritage
Germany	North-Western European heritage
Iceland	North-Western European heritage
Ireland	North-Western European heritage
Luxembourg	North-Western European heritage
Netherlands	North-Western European heritage
New Zealand	North-Western European heritage
Norway	North-Western European heritage
Sweden	North-Western European heritage
Switzerland *	North-Western European heritage
United Kingdom	North-Western European heritage
United States of America	North-Western European heritage

Note: * Francophones; in Supplement S3, in the footnote #3, we discuss pattern of results with these countries excluded from the North-Western European heritage grouping.

Table S5

Latin America and Confucian Asia Compared on Measures of Independent and Interdependent Self-Constraint. For Illustrative Purposes Countries of North-Western European Heritage Are Also Included

Dataset			Latin America			Confucian Asia			North-Western European heritage			Comparison: Latin America vs Confucian Asia			
Source	Scale	N_{tot}	M	(SD)	N	M	(SD)	N	M	(SD)	N	t	p	[95% CI]	Cohen’s d
<i>Independent self from studies construing independent and interdependent self-construals as orthogonal: (quantified with Singelis scale)</i>															
Fernandez et al. (2005)	1-4	29	3.07 _a	(.13)	11	2.89 _b	(.10)	3	2.88 _b	(.12)	5	2.17	.051	[.00, .36]	1.54
Krys et al. (2019)	1-7	12	5.60 _a	(.35)	2	4.47 _b	(.02)	3	4.96 _c	(.22)	4	6.11	.009	[.54, 1.72]	6.14
Church et al. (2012)	1-6	8	4.80 _a	(.04)	2	3.84 _b	(.03)	2	4.33 _c	(.14)	2	29.83	.001	[.82, 1.09]	30.01
<i>Pooled independent selfhoods^a:</i>															
standardized	z	49	.68 _a	(.82)	11	-.90 _b	(.62)	5	-.41 _b	(.68)	9	3.83	.002	[.70, 2.48]	2.21
rescaled	1-7	49	5.18 _a	(.27)	11	4.61 _b	(.23)	5	4.83 _c	(.22)	9	4.04	.001	[.27, .88]	2.26

Dataset			Latin America			Confucian Asia			North-Western European heritage			Comparison: Latin America vs Confucian Asia			
Source	Scale	N_{tot}	M	(SD)	N	M	(SD)	N	M	(SD)	N	t	p	[95% CI]	Cohen's d
<i>Interdependent self from studies construing independent and interdependent self-construals as orthogonal: (quantified with Singelis scale)</i>															
Fernandez et al. (2005)	1-4	29	3.01 _a	(.14)	11	2.94 _a	(.12)	3	2.92 _a	(.03)	5	.68	.51	[-.13, .26]	.46
Krys et al. (2019)	1-7	12	3.50 _a	(.50)	2	3.98 _{ab}	(.09)	3	4.19 _b	(.17)	4	1.77	.17	[-1.34, .38]	-1.63
<i>(quantified with other than Singelis scale)^b</i>															
Church et al. (2012): relational self	1-6	8	4.43 _a	(.16)	2	4.29 _a	(.24)	2	4.45 _a	(.14)	2	.66	.58	[-.75, 1.02]	.67
Church et al. (2012): collective self	1-6	8	4.35 _a	(.29)	2	4.15 _a	(.40)	2	4.13 _a	(.16)	2	.56	.63	[-1.30, 1.69]	.57
<i>Pooled interdependent selfhoods^a:</i>															
standardized scores	z	49	.40 _a	(1.04)	11	-.25 _a	(.77)	5	-.15 _a	(.44)	9	1.26	.23	[-.47, 1.78]	.72
rescaled	1-7	49	4.96 _a	(.39)	11	4.55 _b	(.49)	5	4.59 _b	(.35)	9	1.79	.095	[-.08, .90]	.93

Dataset		Latin America			Confucian Asia			North-Western European heritage			Comparison: Latin America vs Confucian Asia				
Source	Scale	N_{tot}	M	(SD)	N	M	(SD)	N	M	(SD)	N	t	p	[95% CI]	Cohen’s d
Difference vs. Similarity		55	.38 _a	(.38)	9	-.18 _b	(.44)	5	.36 _a	(.21)	10	2.47	.029	[.07, 1.05]	1.35
Self-containment vs. Connection		55	.08 _a	(.28)	9	.08 _a	(.38)	5	.12 _a	(.24)	10	.00	.99	[-.39,.39]	0.00
Self-direction vs. Receptivity		55	-.04 _a	(.19)	9	.08 _{ab}	(.25)	5	.17 _b	(.13)	10	1.01	.33	[-.37, .13]	-.54
Self-reliance vs. Dependence		55	.03 _a	(.07)	9	-.12 _b	(.15)	5	-.05 _{ab}	(.11)	10	2.53	.026	[.02, .26]	1.33
Consistency vs. Variability		55	.31 _a	(.30)	9	-.57 _b	(.40)	5	-.14 _c	(.27)	10	4.66	<.001	[.47, 1.28]	2.50
Self-expression vs. Harmony		55	.29 _a	(.35)	9	-.22 _b	(.25)	5	.25 _a	(.22)	10	2.83	.015	[.12, .90]	1.69
Self-interest vs. Commitment		55	.25 _a	(.26)	9	-.11 _b	(.26)	5	-.44 _c	(.21)	10	2.48	.029	[.04, .68]	1.39

Note. N_{tot} = total number of samples in a given study; ^a For pooled measures: If a country was covered by more than one study then mean of its scores was pooled; ^b Church et al. (2012) did not administer the Singelis interdependence subscale, but instead relational self-construal (Cross et al., 2000), and collective self-construal (Kashima & Hardie, 2000; Yamaguchi, 1994); pooled independent/interdependent selfhoods: means from Fernandez et al., Kryszewski et al., and Church et al. (in the latter case, for interdependent selfhood, we use the mean of relational and collective self-construals). Means that do not share a subscript differ with $p < .05$ (with exceptions for comparison between North-Western European heritage and Confucian for pooled rescaled independent selfhoods [$p = .10$], and for comparison of Latin America and Confucian for pooled rescaled interdependent selfhoods [$p = .095$]). Latin America: all countries in Americas where Spanish and Portuguese are dominating languages (see supplementary file S2 for their list). Confucian Asia: China, Hong Kong, Japan, Korea, Singapore, and Taiwan. North-Western Europe heritage: North and Western Europe countries, without post-communist countries, and without Southern Europe (i.e., without Greece, Italy, Portugal, Spain, Turkey) but with Australia, Canada, New Zealand and the USA. Significant Cohen’s d s are bolded. For source database please see supplementary data file [here](https://osf.io/p674z/?viewonly=8cff07507a274d529b2da387c9): <https://osf.io/p674z/?viewonly=8cff07507a274d529b2da387c9>.

Table S6

Latin America and Confucian Asia Compared on Socioecological and Historical Characteristics, Modes of Societal Organization, Dimensions of Psychological Culture, and on Cultural Values. For Illustrative Purposes Countries of North-Western European Heritage Are Also Included

Source	Dataset		Latin America			Confucian Asia			North-Western European heritage			Comparison: Latin America vs Confucian Asia			
	min/max scores	N_{tot}	M	(SD)	N	M	(SD)	N	M	(SD)	N	t	p	[95% CI]	Cohen's d
<i>Socioecological and historical characteristics:</i>															
Meadows and pastures - % of agricultural land in 2020 (FAO, 2020)	1 / 100	198	69 _a	(17)	20	20 _b	(31)	5	49 _c	(29)	18	4.88	<.001	[28, 70]	2.05
Rice paddies - % of land used for cereal production in 2020 (FAO, 2020)	0 / 100	119	27 _a	(28)	20	69 _b	(28)	5	1 _a	(1)	3	3.01	.006	[-71, -13]	-1.51
Cultural heterogeneity (Putterman & Weil, 2010)	1 / 83	165	26 _a	(8)	20	3 _b	(3)	7	20 _a	(23)	17	7.77	<.001	[17, 29]	4.29
Christianity (WVS, 2018)	0 / 99	97	78 _a	(11)	13	14 _b	(12)	6	65 _c	(16)	12	11.26	<.001	[.52, .76]	5.47
Buddhism (WVS, 2018)	0 / 97	97	.4 _a	(.7)	13	21 _b	(12)	6	.4 _a	(.4)	12	6.59	<.001	[-.28, -.14]	-3.34
Historical pathogen security (Murray & Schaller, 2010; after Welzel, 2013)	.10 / .89	179	.40 _a	(.11)	19	.42 _a	(.15)	6	.76 _b	(.10)	17	.48	.63	[-.14, .08]	-2.0
Environmental threats (re-calculated after Thomson et al., 2018)	-1.23 / 2.28	218	.09 _a	(.37)	20	.70 _b	(.85)	7	-.87 _c	(.21)	18	2.66	.014	[.14, 1.09]	-1.00
Human Development Index (UNDP, 2015)	.35 / .95	188	.74 _a	(.06)	19	.88 _b	(.08)	5	.92 _c	(.02)	18	4.27	<.001	[-.21, -.07]	-2.00

Dataset			Latin America			Confucian Asia			North-Western European heritage			Comparison: Latin America vs Confucian Asia			
Source	min/max scores	N_{tot}	M	(SD)	N	M	(SD)	N	M	(SD)	N	t	p	[95% CI]	Cohen's d
<i>Modes of societal organisation:</i>															
Relational mobility (Thomson et al., 2018)	-41 / .36	39	.23 _a	(.09)	6	-.24 _b	(.16)	5	.13 _c	(.08)	9	6.11	<.001	[.30, .65]	3.74
Tight cultures (vs loose cultures) (Gelfand et al., 2011)	1.6 / 12.3	33	4.80 _a	(2.08)	3	8.64 _b	(1.66)	5	5.93 _a	(1.74)	11	2.91	.027	[-7.07, -.61]	-2.06
<i>Dimensions of psychological culture:</i>															
Flexibility (vs monumentalism) (Minkov et al., 2017)	-207 / 234	54	-136 _a	(52)	8	168 _b	(43)	6	38 _c	(28)	16	10.89	<.001	[-364, -242]	-5.90
Indulgence (vs restraint) (Hofstede, 2017)	0 / 100	92	73 _a	(19)	11	34 _b	(13)	6	63 _c	(10)	18	4.33	<.001	[20, 57]	2.38
Frequency of expression of positive emotions (Krys, Yeung, et al., 2021)	4.23 / 6.27	49	5.55	(.24)	7	4.63	(.35)	5	4.81	(.35)	13	5.33	<.001	[.53, 1.29]	3.06
Frequency of expression of negative emotions (Krys, Yeung, et al., 2020)	2.81/5.73	49	3.90	(.31)	7	3.60	(.35)	5	3.32	(.36)	13	1.58	.15	[-.12, .73]	.91

Dataset			Latin America			Confucian Asia			North-Western European heritage			Comparison: Latin America vs Confucian Asia			
Source	min/max scores	N_{tot}	M	(SD)	N	M	(SD)	N	M	(SD)	N	t	p	[95% CI]	Cohen’s d
<i>Dimensions of psychological culture (continued):</i>															
Emotional suppression (Matsumoto et al., 2008)	3.05 / 4.72	23	3.57 _{ab}	(.40)	2	4.08 _a	(.43)	4	3.32 _b	(.23)	7	1.40	.23	[-1.54, .51]	-1.23
Frequency of positive emotions (Kuppens et al., 2008)	4.43 / 6.70	46	6.30 _a	(.25)	5	4.86 _b	(.34)	4	5.54 _c	(.26)	8	7.40	<.001	[.98, 1.90]	4.92
Frequency of negative emotions (Kuppens et al., 2008)	2.92 / 4.74	46	3.72 _a	(.14)	5	3.87 _a	(.39)	4	3.32 _b	(.29)	8	.81	.45	[-.59, .29]	-.57
Desired control (Hornsey et al., 2019)	4.49 / 5.76	27	5.54 _a	(.15)	5	4.79 _b	(.19)	5	5.00 _c	(.15)	9	6.96	<.001	[.50, 1.00]	4.43
Perceived control (Hornsey et al., 2019)	5.83 / 8.43	38	7.81 _a	(.41)	7	6.48 _b	(.57)	3	7.51 _a	(.41)	6	4.23	.003	[.31, .60]	2.71
Maximization principle – self (Hornsey et al., 2018)	64 / 84	27	79 _a	(4)	5	71 _b	(3)	5	78 _a	(3)	9	2.63	.030	[.99, 14.91]	1.67
Maximization principle – society (Hornsey et al., 2018)	61 / 82	27	68 _a	(4)	5	69 _a	(6)	5	75 _b	(4)	9	.43	.68	[-8.71, 5.96]	-.28

Dataset		Latin America			Confucian Asia			North-Western European heritage			Comparison: Latin America vs Confucian Asia					
Source	min/max scores	N_{tot}	M	(SD)	N	M	(SD)	N	M	(SD)	N	t	p	[95% CI]	Cohen’s d	
<i>Indicators of cultural individualism-collectivism:</i>																
Individualism vs collectivism (Hofstede, 2017)	6 / 91	70	21 _a	(13)	13	24 _a	(11)	6	74 _b	(10)	17	.55	.59	[-16, 9]	-0.28	
Individualism vs collectivism (Minkov et al., 2018)	-291 / 182	56	-56 _a	(38)	9	-7 _b	(34)	6	96 _c	(38)	16	2.54	.024	[-91, -7]	-1.36	
Intellectual autonomy (Schwartz, 2008)	3.58 / 5.32	75	4.34 _a	(.05)	9	4.28 _a	(.30)	6	4.76 _b	(.29)	16	.58	.57	[-.16, .27]	.33	
Affective autonomy (Schwartz, 2008)	2.06 / 4.39	75	3.24 _a	(.37)	9	3.38 _a	(.20)	6	4.12 _b	(.20)	16	.85	.41	[-.50, .22]	-.59	
Embeddedness (Schwartz, 2008)	3.04 / 4.65	75	3.75 _a	(.20)	9	3.75 _a	(.17)	6	3.29 _b	(.18)	16	.03	.98	[-.20, .21]	.02	
Open society (Krys et al., 2019)	-1.65 / 2.83	92	.21 _a	(.39)	12	.15 _a	(.61)	6	1.94 _b	(.51)	12	.28	.78	[-.43, .56]	.13	

Note. N_{tot} = total number of samples in a given study; Means that do not share a subscript differ with $p < .05$ (with exceptions: for comparisons between North-Western European heritage and Confucian for heterogeneity [$p = .066$] and meadows and pastures [$p = .070$], and for comparison between North-Western European heritage and Latin America for indulgence [$p = .088$]). Latin America: all countries in Americas where Spanish and Portuguese are dominating languages (see Supplement S2 for list). Confucian Asia: China, Hong Kong, Japan, Korea, Singapore, and Taiwan. North-Western Europe heritage: North and Western Europe countries, without post-communist countries, and without Southern Europe (i.e., without Greece, Italy, Portugal, Spain, Turkey) but with Australia, Canada, New Zealand and the USA. Christianity and Buddhism – percentage of WVS study participants in a given country declaring belonging to a given denomination (for Christianity we grouped declarations about belonging to Protestant, Evangelical, Lutheran, Presbyterian, Anglican, Orthodox, “Christian” WVS category, “other Christian” WVS category denominations). Environmental threats: Thomson et al. (2018) provide data for 39 countries of their interest, thus, we re-calculated this variable for as many countries as possible. Despite some problems in re-calculation (for details please see [this link](#)), the resultant variable serves as a good enough proxy of Thomson’s original. Significant Cohen’s d s are bolded. For source database please see supplementary file [here](https://osf.io/p674z/?viewonly=8cff07507a274d529b2da387c9): <https://osf.io/p674z/?viewonly=8cff07507a274d529b2da387c9>.

Table S7.

Macro-Cultural Regions in Focus of Cross Cultural Studies on Individualism-Collectivism (on the Example of the Journal of Cross-Cultural Psychology)

Macro-Cultural Region in Focus	N_{mentions}	N_{articles}
I. North-Western European heritage countries (template individualistic countries)	132	110
II. other European countries (plus Israel and Jamaica) (mixed evidence on individualism and collectivism)	30	27
III. collectivistic countries (in total)	139	100
from:		
Confucian Asia	71	64
other parts of Asia	29	23
Latin America	16	15
Middle East & North Africa (excl. Israel)	13 ^a	13
Sub-Saharan Africa	10	9
sum (for mentions) / total (for articles):	301	129

Note. First, we identified all articles published in the Journal of Cross-Cultural Psychology (from 1970 till 2017) that mentioned individualism or collectivism in their title or abstract – we found 129 such articles. Next, we calculated which countries appear in these titles or abstracts (for frequencies of countries see supplementary file S3). N_{mentions} refers to the total number of times that a country from a given macro-cultural region was mentioned. N_{mentions} can be larger than 129, because in many titles and abstracts more than one country was listed. N_{articles} refers to the number of articles mentioning at least one country from a given macro-cultural region.

^a Ten out of thirteen papers on Middle East & North Africa were focused on Turkey.

Table S8.

Countries in the Focus of Papers on Individualism-Collectivism Published in the Journal of Cross-Cultural Psychology in the Years 1970-2017

Country	Frequency of Appearance	Region
Congo	3	Africa
Cameroon	1	Africa
Ethiopia	1	Africa
Ghana	1	Africa
Mozambique	1	Africa
Niger	1	Africa
Nigeria	1	Africa
South Africa	1	Africa
China	34	Confucian Asia
Japan	24	Confucian Asia
Singapore	5	Confucian Asia
Taiwan	5	Confucian Asia
South Korea	3	Confucian Asia
Israel	5	Israel
Mexico	6	Latin America
Brazil	5	Latin America
Chile	1	Latin America
Costa Rica	1	Latin America
Cuba	1	Latin America
El Salvador	1	Latin America
Venezuela	1	Latin America
Turkey	10	MENA
Egypt	2	MENA
Morocco	1	MENA
United States	66	North-Western European heritage
Australia	20	North-Western European heritage
Canada	11	North-Western European heritage
Germany	7	North-Western European heritage
France	6	North-Western European heritage
United Kingdom	5	North-Western European heritage
Netherlands	4	North-Western European heritage
New Zealand	4	North-Western European heritage
Denmark	2	North-Western European heritage
Finland	2	North-Western European heritage
Belgium	1	North-Western European heritage
Norway	1	North-Western European heritage
Sweden	1	North-Western European heritage
Switzerland	1	North-Western European heritage

Country	Frequency of Appearance	Region
Philippines	8	other Asia
India	7	other Asia
Malaysia	5	other Asia
Indonesia	3	other Asia
Nepal	2	other Asia
Sri Lanka	2	other Asia
Iran	1	other Asia
Thailand	1	other Asia
Greece	5	other Europe
Poland	3	other Europe
Russia	3	other Europe
Bulgaria	2	other Europe
Cyprus	2	other Europe
Czech Republic	2	other Europe
Estonia	2	other Europe
Italy	2	other Europe
Portugal	1	other Europe
Spain	1	other Europe
Ukraine	1	other Europe
Jamaica	1	other in Americas