

Incorporating Culture Into the Study of Affect and Health

Sarah D. Pressman¹, Matthew W. Gallagher^{2,3}, Shane J. Lopez⁴, and Belinda Campos⁵

¹Department of Psychology and Social Behavior, University of California, Irvine; ²National Center for PTSD, VA Boston Healthcare System, Jamaica Plain, Massachusetts; ³School of Medicine, Boston University;

⁴Gallup/Clifton Strengths Institute, Omaha, Nebraska; and ⁵Department of Chicano/Latino Studies, University of California, Irvine

Received 8/5/14; Revision accepted 8/13/14

Curhan and colleagues (2014) have correctly pointed out that culture is likely to play a critical role in understanding affect-health associations. Despite wide recognition of cross-cultural variation in experienced affect, affect ideals, and other emotion-related cognitions (e.g., Markus & Kitayama, 1991; Mesquita, 2001; Tsai, 2007; Williamson et al., 2012), affect-health research rarely includes cultural variables. We take this point to heart and agree that health-related science should pay more attention to the role that this distinction may play. While we agree with this greater point, the intent of our work (Pressman, Gallagher, & Lopez, 2013) was not to suggest that there is *no* cultural variation in affect-health connections. Rather, the goal was to highlight that emotion matters for physical well-being despite the many known differences across the 142 countries in our sample. Indeed, across all countries assessed, positive and negative affect (PA and NA, respectively) were both associated with physical health. While the relative strength of the associations of PA and NA with health was not tested in our study, we agree that it may to some extent reflect the values that specific societies place on different emotions.

We took the opportunity raised by the response article to revisit our sample and examine whether the pattern observed by Curhan et al. (2014) would be replicated in Gallup World Poll data. That is, we tested whether NA was less connected to poor health in East Asian countries, as would be expected given the greater acceptance of negative feelings in East Asian societies (Tsai & Levenson, 1997; Williamson et al., 2012). Interestingly, the pattern of results for Japan compared with the United States was not replicated. Among the 142 countries in our sample, Japan had the second *strongest* correlation between NA and health ($r = -.54$),¹ and this association was larger than that of the United States ($r = -.32$). However, consistent with Curhan et al.'s hypotheses, three of the five weakest NA-health associations were found in Myanmar, Singapore, and South

Korea (r s of $-.23$ to $-.28$), countries whose populations may share views of NA comparable to those of previously studied East Asian samples.

We were disappointed that Curhan et al. (2014) did not include PA-health analyses in their study. After all, NA and PA have been shown to be conceptually independent (Diener & Emmons, 1984) and differentially predictive of health (Pressman & Cohen, 2005). The experience of PA, like that of NA, is also surrounded by different norms cross-culturally (e.g., Joshanloo & Weijers, 2013; Lyubomirsky, 2000; Uchida & Kitayama, 2009). Curhan and colleagues noted that they did not analyze PA because their measure of PA oversampled high-arousal feelings, which created an issue because East Asian samples place a low value on these states (Tsai, Knutson, & Fung, 2006). However, this high-arousal-PA measure would have provided a strong test of whether nonidealized affects are less relevant to health. Analyses of PA (high arousal or general) in cultures that restrain PA (e.g., to promote relationships) would also shed light on whether cultural devaluation weakens the effects of PA on health.

We tested this by selecting two countries known to deemphasize PA and emphasize NA (Japan and Russia; Chentsova-Dutton & Tsai, 2009; Curhan et al., 2014; Lyubomirsky, 2000) and two that prioritize positive emotional experiences and expression (Mexico and Brazil; Levine, Norenzayan, & Philbrick, 2001; Ruby, Falk, Heine, Villa, & Silberstein, 2012; Sanchez-Burks, 2002). We also retained the United States as a reference point. Interestingly, Russia ($r = .43$) and Japan ($r = .38$) both had

Corresponding Author:

Sarah D. Pressman, Department of Psychology and Social Behavior, 4201 Social and Behavioral Sciences Gateway, University of California, Irvine, CA 92617
E-mail: pressman@uci.edu

Psychological Science
2014, Vol. 25(12) 2281–2283
© The Author(s) 2014
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0956797614551573
pss.sagepub.com
SAGE

moderate PA-health associations that were comparable to or higher than those observed for Mexico ($r = .36$), Brazil ($r = .35$), and the United States ($r = .29$). We find it remarkable that these associations were so similar across societies that vary in the extent to which the experience and expression of positive emotion is valued. These theoretically meaningful comparisons suggest that the effect sizes observed for the association of PA with health are stable despite known differences in affect valuations among these countries.

Why did we fail to replicate the finding of a weaker NA-health association in Japan as compared to the United States? There are many differences between the Gallup and MIDUS/MIDJA data—for example, the sample compositions (e.g., age range, location), items assessing affect and health, response styles, and methodologies used to recruit participants (see, e.g., Gallup, 2014; Inter-university Consortium for Political and Social Research, n.d.) are all different. Clearly, further cross-cultural work in the affect-health literature will be needed to disentangle the nature of these relations and the differences between studies.

Notably, NA was associated with worse health across the three studies discussed here (the present study; Curhan et al., 2014; and Pressman et al., 2013), with only minor variation in the strengths of the correlations across countries with dissimilar values for NA views. Similarly, PA was related consistently to better self-reported health, without the variation that would be expected on the basis of countries' affect-related beliefs and goals. In our view, this pattern suggests that despite variation in emotional ideals across cultures, the physiological properties of emotions and their subsequent effects on wellness (e.g., Kiecolt-Glaser, McGuire, Robles, & Glaser, 2002; Pressman & Cohen, 2005) still matter. In addition, it is also important to consider that self-reports of experienced affect may be limited in their ability to capture the effects of cultural norms governing the expression and suppression of emotion. Further research exploring multiple aspects of emotion response systems is warranted to disentangle these possibilities.

In sum, there are both commonalities and variation in affect-health links across countries; we should not perpetuate a “one size fits all” model of how emotion influences physical health. Too often in biomedical work, culture, race, or country of origin are treated as “noise” variables to be statistically controlled. Thus, we agree with Curhan et al. (2014) that there is a strong need for those studying health and health-relevant processes to pay more attention to the role of culture. For this research to benefit worldwide well-being, we must move beyond simple affect-health assumptions to fully understand our commonalities, our differences, and the unique social contexts that determine when different emotions are helpful versus harmful.

Author Contributions

S. D. Pressman, M. W. Gallagher, and B. Campos contributed to the conception and drafting of this manuscript. Analyses were conducted by M. W. Gallagher. All authors reviewed and approved the final version of the manuscript.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Open Practices

All analyses reported in this article are based on publicly available (for a fee) Gallup World Poll data. Information on all aspects of the Gallup World Poll methodology (e.g., scale items, procedures) can be found at <http://www.gallup.com/gallupanalytics.aspx>, as can information on data-access procedures. The complete Open Practices Disclosure for this article can be found at <http://pss.sagepub.com/content/by/supplemental-data>

Note

1. In these analyses of the Gallup World Poll data ($N = 150,048$; approximately $n = 1,000$ per country), higher scores on the health measure indicate better health. All correlations discussed in this article have p values less than .001.

References

- Chentsova-Dutton, Y. E., & Tsai, J. L. (2009). Understanding depression across cultures. In I. H. Gotlib & C. Hammen (Eds.), *Handbook of depression* (2nd ed., pp. 363–385). New York, NY: Guilford Press.
- Curhan, K. B., Sims, T., Markus, H. R., Kitayama, S., Karasawa, M., Kawakami, N., . . . Ryff, C. D. (2014). Just how bad negative affect is for your health depends on culture. *Psychological Science, 25*, 2277–2280.
- Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology, 47*, 1105–1117. doi:10.1037/0022-3514.47.5.1105
- Gallup. (2014). *World Poll methodology*. Retrieved from <http://www.gallup.com/poll/105226/world-poll-methodology.aspx>
- Inter-university Consortium for Political and Social Research. (n.d.). Survey of Midlife Development in Japan (MIDJA), April–September 2008 (ICPSR 30822). Retrieved from <http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/30822#method>
- Joshanloo, M., & Weijers, D. (2013). Aversion to happiness across cultures: A review of where and why people are averse to happiness. *Journal of Happiness Studies, 15*, 717–735. doi:10.1007/s10902-013-9489-9
- Kiecolt-Glaser, J. K., McGuire, L., Robles, T. F., & Glaser, R. (2002). Emotions, morbidity, and mortality: New perspectives from psychoneuroimmunology. *Annual Review of Psychology, 53*, 83–107. doi:10.1146/annurev.psych.53.100901.135217
- Levine, R. V., Norenzayan, A., & Philbrick, K. (2001). Cross-cultural differences in helping strangers. *Journal of Cross-Cultural Psychology, 32*, 543–560. doi:10.1177/0022022101032005002

- Lyubomirsky, S. (2000). On studying positive emotions. *Prevention & Treatment, 3*(1), Article 5. doi:10.1037/1522-3736.3.1.35c
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224–253. doi:10.1037/0033-295X.98.2.224
- Mesquita, B. (2001). Emotions in collectivist and individualist contexts. *Journal of Personality and Social Psychology, 80*, 68–74. doi:10.1037/0022-3514.80.1.68
- Pressman, S. D., & Cohen, S. (2005). Does positive affect influence health? *Psychological Bulletin, 131*, 925–971. doi:10.1037/0033-2909.131.6.925
- Pressman, S. D., Gallagher, M., & Lopez, S. J. (2013). Is the emotion-health connection a “first-world problem”? *Psychological Science, 24*, 544–549. doi:10.1177/0956797612457382
- Ruby, M. B., Falk, C. F., Heine, S. J., Villa, C., & Silberstein, O. (2012). Not all collectivisms are equal: Opposing preferences for ideal affect between East Asians and Mexicans. *Emotion, 12*, 1206–1209. doi:10.1037/a0029118
- Sanchez-Burks, J. (2002). Protestant relational ideology and (in)attention to relational cues in work settings. *Journal of Personality and Social Psychology, 83*, 919–929. doi:10.1037/0022-3514.83.4.919
- Tsai, J. L. (2007). Ideal affect: Cultural causes and behavioral consequences. *Perspectives on Psychological Science, 2*, 242–259. doi:10.1111/j.1745-6916.2007.00043.x
- Tsai, J. L., Knutson, B., & Fung, H. H. (2006). Cultural variation in affect valuation. *Journal of Personality and Social Psychology, 90*, 288–307. doi:10.1037/0022-3514.90.2.288
- Tsai, J. L., & Levenson, R. W. (1997). Cultural influences on emotional responding: Chinese American and European American dating couples during interpersonal conflict. *Journal of Cross-Cultural Psychology, 28*, 600–625. doi:10.1177/0022022197285006
- Uchida, Y., & Kitayama, S. (2009). Happiness and unhappiness in east and west: Themes and variations. *Emotion, 9*, 441–456. doi:10.1037/a0015634
- Williamson, H. C., Ju, X., Bradbury, T. N., Karney, B. R., Fang, X., & Liu, X. (2012). Communication behavior and relationship satisfaction among American and Chinese newlywed couples. *Journal of Family Psychology, 26*, 308–315. doi:10.1037/a0027752