

Personality and Social Psychology Bulletin

<http://psp.sagepub.com/>

Cultural Bases for Self-Evaluation: Seeing Oneself Positively in Different Cultural Contexts

Maja Becker, Vivian L. Vignoles, Ellinor Owe, Matthew J. Easterbrook, Rupert Brown, Peter B. Smith, Michael Harris Bond, Camillo Regalia, Claudia Manzi, Maria Brambilla, Said Aldhafri, Roberto González, Diego Carrasco, Maria Paz Cadena, Siugmin Lay, Inge Schweiger Gallo, Ana Torres, Leoncio Camino, Emre Özgen, Ulkü E. Güner, Nil Yamakoglu, Flávia Cristina Silveira Lemos, Elvia Vargas Trujillo, Paola Balanta, Ma. Elizabeth J. Macapagal, M. Cristina Ferreira, Ginette Herman, Isabelle de Sauvage, David Bourguignon, Qian Wang, Márta Fülöp, Charles Harb, Aneta Chybicka, Kassahun Habtamu Mekonnen, Mariana Martin, George Nizharadze, Alin Gavreliuc, Johanna Buitendach, Aune Valk and Silvia H. Koller

Pers Soc Psychol Bull 2014 40: 657 originally published online 12 February 2014
DOI: 10.1177/0146167214522836

The online version of this article can be found at:
<http://psp.sagepub.com/content/40/5/657>

Published by:



<http://www.sagepublications.com>

On behalf of:



[Society for Personality and Social Psychology](#)

Additional services and information for *Personality and Social Psychology Bulletin* can be found at:

Email Alerts: <http://psp.sagepub.com/cgi/alerts>

Subscriptions: <http://psp.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

>> [Version of Record](#) - Apr 10, 2014

[OnlineFirst Version of Record](#) - Feb 12, 2014

[OnlineFirst Version of Record](#) - Feb 12, 2014

[What is This?](#)

Cultural Bases for Self-Evaluation: Seeing Oneself Positively in Different Cultural Contexts

Personality and Social Psychology Bulletin
2014, Vol. 40(5) 657–675
© 2014 by the Society for Personality and Social Psychology, Inc
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0146167214522836
pspb.sagepub.com



Maja Becker¹, Vivian L. Vignoles¹, Ellinor Owe¹, Matthew J. Easterbrook¹, Rupert Brown¹, Peter B. Smith¹, Michael Harris Bond², Camillo Regalia³, Claudia Manzi³, Maria Brambilla³, Said Aldhafri⁴, Roberto González⁵, Diego Carrasco⁵, Maria Paz Cadena⁵, Siugmin Lay⁵, Inge Schweiger Gallo⁶, Ana Torres⁷, Leoncio Camino⁷, Emre Özgen⁸, Ülkü E. Güner⁹, Nil Yamakoğlu⁹, Flávia Cristina Silveira Lemos¹⁰, Elvia Vargas Trujillo¹¹, Paola Balanta¹¹, Ma. Elizabeth J. Macapagal¹², M. Cristina Ferreira¹³, Ginette Herman¹⁴, Isabelle de Sauvage¹⁴, David Bourguignon¹⁵, Qian Wang¹⁶, Márta Fülöp¹⁷, Charles Harb¹⁸, Aneta Chybicka¹⁹, Kassahun Habtamu Mekonnen²⁰, Mariana Martin²¹, George Nizharadze²², Alin Gavreliuc²³, Johanna Buitendach²⁴, Aune Valk²⁵, and Silvia H. Koller²⁶

Abstract

Several theories propose that self-esteem, or positive self-regard, results from fulfilling the value priorities of one's surrounding culture. Yet, surprisingly little evidence exists for this assertion, and theories differ about whether individuals must personally endorse the value priorities involved. We compared the influence of four bases for self-evaluation (controlling one's life, doing one's duty, benefitting others, achieving social status) among 4,852 adolescents across 20 cultural samples, using an implicit, within-person measurement technique to avoid cultural response biases. Cross-sectional and longitudinal analyses showed that participants generally derived feelings of self-esteem from all four bases, but especially from those that were most consistent with the value priorities of others in their cultural context. Multilevel analyses confirmed that the bases of positive self-regard are sustained collectively: They are predictably moderated by culturally normative values but show little systematic variation with personally endorsed values.

Keywords

identity, culture, self-esteem, self-evaluation, values

Received May 22, 2013; revision accepted December 27, 2013

According to theories in personality and social psychology, the motivation to see oneself positively is a powerful psychological force (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004; Sedikides & Strube, 1997; Vignoles, 2011). The need for positive self-regard—or “self-esteem”—has been shown to influence identity construction (Vignoles, Regalia, Manzi, Gollidge, & Scabini, 2006), psychological and psychosocial adaptation (Orth, Robins, & Widaman, 2012), and intergroup relations (Allen & Sherman, 2011). Hence, it is important to understand what leads people to see themselves more or less positively.

Several influential groups of researchers have argued recently for a culture-based view of self-esteem, whereby positive self-regard results from living up to values internalized from one's surrounding culture (Pyszczynski et al.,

2004; Sedikides, Gaertner, & Toguchi, 2003). This theoretical claim is intuitively appealing, and is central to recent arguments about the universality of self-esteem strivings (Sedikides et al., 2003). Yet, surprisingly, it has not been systematically tested until now.

We examined the potential roles of personal and normative value priorities (Schwartz, 1992, 2007) in moderating the dimensions on which people in different parts of the world evaluate themselves, using longitudinal, multilevel data from members of 20 cultural groups spanning Western and Eastern Europe, South America, Western and Eastern Asia, and Sub-Saharan Africa. To foreshadow, our results showed that normative value priorities moderate the importance of different bases for self-evaluation, but these effects were largely independent of individuals' personal endorsement of the same values.

Self-Evaluation in Cultural Context

The view that bases of self-esteem vary across cultures has gained increasing currency over recent years. The self-concept enhancing tactician model (SCENT; Sedikides & Strube, 1997) posits that people internalize culturally valued roles and evaluate themselves based on the extent to which they successfully enact these roles. Terror management theory (TMT) defines self-esteem as “a sense of personal value that is obtained by believing (a) in the validity of one’s cultural worldview and (b) that one is living up to the standards that are part of that worldview” (Pyszczynski et al., 2004, pp. 436–437). Even critics of the self-enhancement literature seem to share a similar view: Notably, Heine (2005) proposed that the “desire to be a good self,” defined as “striving to be the kind of person viewed as appropriate, good, and significant in one’s culture . . . can be described as universal,” even if the typical mechanisms by which people fulfill this striving vary greatly across cultures (p. 531).

Notwithstanding their differences,¹ these perspectives converge to imply the existence of a universal long-term process of self-evaluation, whereby *over time individuals will come to derive positive self-regard from those aspects of their identities that are most consistent with the value priorities of their surrounding culture*. Yet, this crucial postulate of a culturally contextualized view of self-esteem has not been clearly substantiated.

In fact, early studies failed to support predictions that individual differences in self-esteem level would correlate more closely with independent self-construal among North American participants and with interdependent self-construal among East Asian participants (e.g., Singelis, Bond, Sharkey, & Lai, 1999). Later studies showed that members of different cultural groups tended to rate themselves more positively than others especially on value dimensions that were culturally relevant, when asked to evaluate themselves (e.g., Brown & Kobayashi, 2002; Sedikides et al., 2003); however, the researchers did not test whether they actually derived feelings of self-esteem from doing so (Heine & Hamamura, 2007).

Three recent articles have begun to provide firmer evidence: Among students from eight cultural groups, Goodwin et al. (2012) found that self-esteem was correlated with “self-perceived mate-value characteristics” (e.g., caring, sociability, passion), but there were some interpretable group differences regarding which characteristics were most strongly linked to self-esteem. Analyzing data from online daters in 11 European nations, Gebauer, Wagner, Sedikides, and Neberich (2013) found that self-esteem was correlated more strongly with self-perceived agency in those countries where people on average rated themselves as more agentic, and with self-perceived communion in those countries where people on average rated themselves as higher in communion. Cai et al. (2011) found experimental evidence that Chinese

¹University of Sussex, UK

²Polytechnic University of Hong Kong, China

³Catholic University of Milan, Italy

⁴Sultan Qaboos University, Oman

⁵Pontificia Universidad Católica de Chile, Santiago, Chile

⁶Universidad Complutense de Madrid, Spain

⁷Federal University of Paraíba, Brazil

⁸Yasar University, Turkey

⁹Bilkent University, Turkey

¹⁰Federal University of Pará, Brazil

¹¹Universidad de Los Andes, Colombia

¹²Ateneo de Manila University, Philippines

¹³Salgado de Oliveira University, Brazil

¹⁴Université Catholique de Louvain, Belgium

¹⁵Université de Lorraine, France

¹⁶Chinese University of Hong Kong, China

¹⁷Hungarian Academy of Sciences, Hungary

¹⁸American University of Beirut, Lebanon

¹⁹University of Gdansk, Poland

²⁰University of Addis Ababa, Ethiopia

²¹University of Namibia, Windhoek, Namibia

²²Free University of Tbilisi, Georgia

²³West University of Timisoara, Romania

²⁴University of KwaZulu Natal, South Africa

²⁵University of Tartu, Estonia

²⁶Federal University of Rio Grande do Sul, Brazil

Corresponding Authors:

Maja Becker, Centre National de la Recherche Scientifique (CLLE-LTC, UMR 5263) and Université de Toulouse, Maison de la recherche, 5, allées A Machado, 31058 Toulouse Cedex 9, France.

Email: mbecker@univ-tlse2.fr, and Vivian L. Vignoles, School of Psychology, University of Sussex, Falmer, Brighton, East Sussex BN1 9QH, United Kingdom. E-mail: v.l.vignoles@sussex.ac.uk

(but not American) participants derived implicit self-esteem from portraying themselves in a modest light, supporting a causal role of modesty as a source of self-esteem in Chinese culture. However, they focused on just one value dimension, modesty, and their experiment provided evidence for short-term processes only. Crucially, none of these researchers directly measured their participants' personal or cultural value priorities.

Is Personal Endorsement of Cultural Values Necessary?

According to both the SCENT model and TMT, individuals are motivated to embody values that they have *internalized* from their cultural environment. Starting in infancy, people internalize ideas of good and bad from their parents, peers, and wider society; an individual feels valuable when she fulfills what she has internalized as good—her personalized version of the cultural worldview (Greenberg & Arndt, 2012). Hence, bases of self-esteem should vary as an indirect function of normative value priorities—but most proximally as a function of personal value priorities. Thus, it is often thought that values must be personally endorsed to have an impact on self-evaluation. However, theoretical arguments and suggestive evidence against this view can also be found.

Sociometer theory (Leary, 2005) posits that self-evaluation processes are actually expressions of a more fundamental human need to belong: People seek to increase their social value and acceptance, and self-esteem is a person's implicit assessment of how well he or she is doing in this respect—a monitor of relational value in the eyes of others. Leary (2005) suggested that the criteria for being relationally valued—and thus the bases on which people might establish feelings of self-esteem—vary across cultures. However, self-evaluation is thought to be based on perceptions of what will make *others* accept (or reject) one, rather than on one's *own* values. Hence, individuals would still base their self-esteem on value dimensions that are prioritized in their cultural environment, but these values would not need to be personally endorsed—instead, bases of self-esteem should vary as a direct function of culturally normative values, regardless of personal endorsement.

Findings from single-culture studies have also questioned the importance of personal values in moderating the bases of global self-esteem (Marsh, 2008). Following James's (1890) original theorizing about self-esteem, researchers have tested the role of individuals' ratings of domain importance (i.e., values) in moderating relationships between domain-specific self-evaluations and global self-esteem (e.g., Hardy & Moriarty, 2006; Marsh, 1995, 2008; Pelham, 1995). Analyses have typically shown that global self-esteem is tied more strongly to self-evaluations in domains that are normatively regarded as important; however, weighting the domains by individual differences in importance adds little or no variance to predictions of global self-esteem. Although there is

some debate about how to interpret these findings (see Hardy & Leone, 2008; Marsh, 2008), they suggest that bases of self-esteem are not necessarily tied to individuals' *personal* value priorities.

Cross-cultural studies of self-enhancement have yet to untangle the respective roles of personal and normative value priorities in explaining the differences observed. Studies have either (a) not tested their assumptions about which value dimensions are most important for different cultural samples (e.g., Heine & Lehman, 1995), (b) validated the relevance of values at the group level (e.g., Kobayashi & Brown, 2003), or (c) measured the importance of attributes individually to examine within-participant correlations between the personal importance of the attributes and the extent of self-enhancement on each attribute (e.g., Tam et al., 2012). Only this last category of studies directly considers participants' personal value priorities, but these studies have still not distinguished personal from group-level importance (see Marsh, 1995). Moreover, expected effects were not found in all cultural groups or on all types of measures.

Thus, despite its prevalence within the literature, the view that bases of self-esteem depend on values that individuals have personally adopted from their cultural surroundings has not yet been effectively tested. An adequate test of this theoretical proposition requires distinguishing the effects of personally endorsing a particular cultural orientation from the effects of living in a particular cultural context. A multilevel approach—modeling individual-level and cultural-level effects simultaneously across many cultural groups—is needed to establish whether it is the “climate” of values that prevails in a given context or a cultural member's personal endorsement of those values that matters more directly (see Becker et al., 2012).

Cultural and Individual Values: Implications for Self-Esteem

Previous cross-cultural studies of self-processes have often predicted (or assumed) participants' value priorities based on conventional thinking about East–West differences in cultural individualism–collectivism. However, focusing on a single bipolar contrast provides a limited portrayal of cultural differences. We wanted to base our predictions on a broader, theoretically based approach to representing cultural variation in value priorities. Hence, we grounded our predictions in Schwartz's (1992, 2007) values theory, which has been extensively validated across cultures. We now introduce this model and describe the specific predictions we generated regarding individual and cross-cultural variation in bases for self-evaluation.

Schwartz (1992) examined 10 value types that vary in their compatibility or incompatibility with each other. He found that individual differences in value priorities are organized in a circumplex structure, which can be represented using two bipolar dimensions: *openness to change versus*

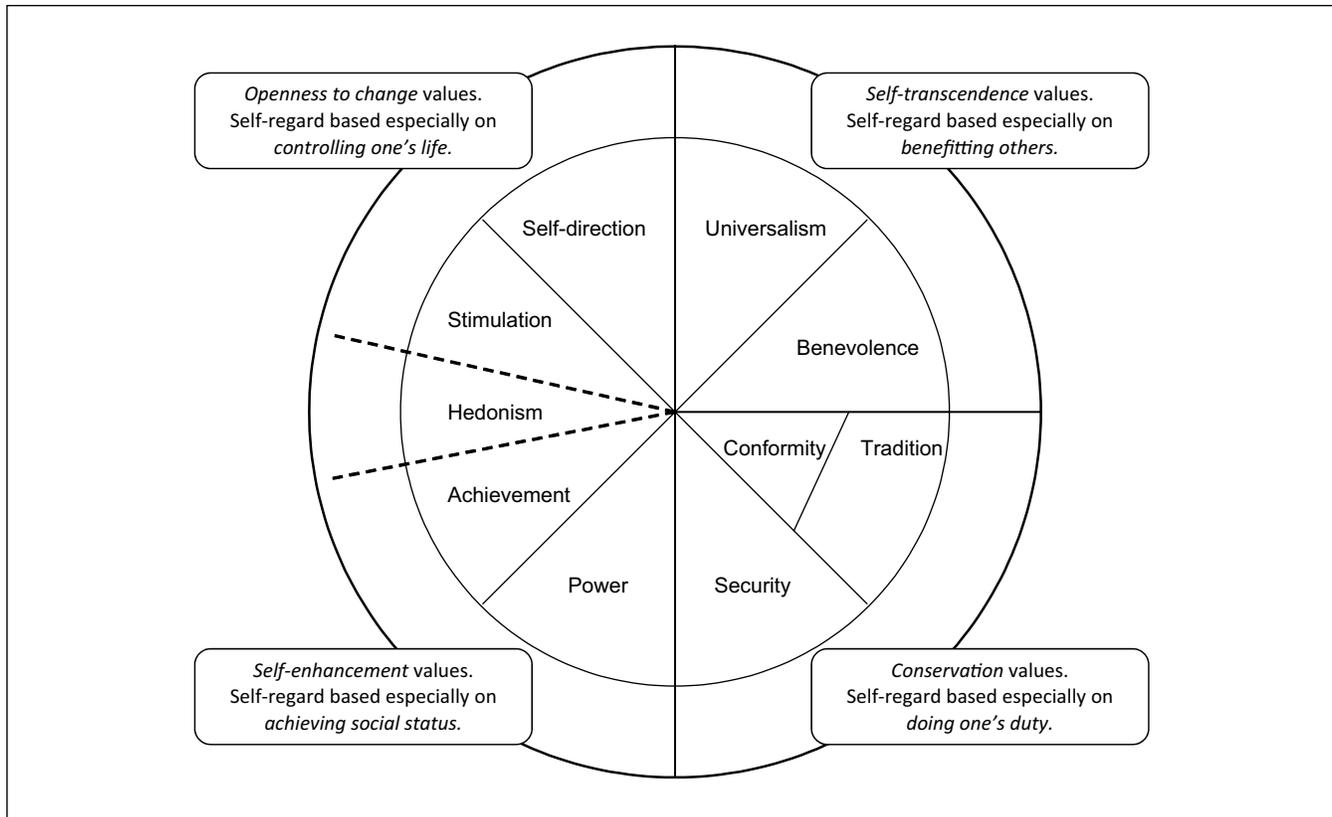


Figure 1. Relations among the 10 value types of Schwartz's model of human values (adapted from Schwartz, 1992). The two bipolar value dimensions used in the present study, as well as their four corresponding bases of self-esteem that we hypothesized, are indicated in the boxes.

conservation and *self-transcendence versus self-enhancement* (see Figure 1). This structure has now been identified in more than 75 nations, and several studies have found a broadly similar, but not identical, two-dimensional structure in culture-level analyses (e.g., Fischer, 2012; Fischer, Vaclair, Fontaine, & Schwartz, 2010; Schwartz, 2009).² The distinction between openness and conservation contrasts values of self-direction and stimulation—which tend to be higher in individualistic cultures—with those of tradition, security, and conformity—which tend to be higher in collectivistic cultures (Gheorghiu, Vignoles, & Smith, 2009; Owe et al., 2013). The distinction between self-transcendence and self-enhancement contrasts values of universalism and benevolence with those of achievement and power.

Although self-esteem may be based on numerous factors (e.g., physical attractiveness, competence at work, positive relationships), we decided to focus on a small number of possible bases for self-evaluation that we expected to be differentially linked with these two dimensions of values. Thus, our theorizing led us to focus on four potential sources of self-esteem: *controlling one's life*, *doing one's duty*, *benefiting others*, and *achieving social status*. Below we describe how we linked these constructs to the dimensions of Schwartz's (1992) values model (see Figure 1).

Underlying the dimension of *openness versus conservation* is a motivational conflict between self-directedness and freedom on one hand, and preserving the social order through obedience and conformity on the other. To be self-directed and free means controlling one's own life, but too much focus on individual control and freedom may be detrimental to social stability and cohesion. In contrast, preserving the social order involves doing one's duty, but focusing too much on obedience to others is incompatible with self-directedness. This motivational conflict between controlling one's own life and doing one's duty features in theoretical descriptions of individualism–collectivism (e.g., Hofstede, 1980; Triandis, 1995). However, these constructs have not previously been studied as alternative bases for self-evaluation across cultures.

We formulated parallel hypotheses to test the role of personal and normative value priorities. Thus, we predicted that individuals who prioritize openness over conservation (or members of cultures where people on average prioritize openness over conservation) would base their self-esteem to a greater extent on *controlling one's life*, whereas this would be a weaker basis for self-evaluation among individuals who (or members of cultures that) prioritize conservation over openness; the latter, in contrast, would base their self-esteem to a greater extent on *doing*

their duty, whereas this would be a weaker basis for self-evaluation among individuals who (or members of cultures that) prioritize openness over conservation.

Underlying the dimension of individual-level *self-transcendence versus self-enhancement* is a motivational conflict between prioritizing others' welfare and prioritizing one's own interests. Thus, concern for others' welfare is a key distinguishing feature of this second dimension. We theorized that individuals who (or members of cultures that) prioritize self-transcendence over self-enhancement would base their self-esteem especially on the extent to which they saw themselves as *benefitting others*; this would be a weaker basis for self-evaluation among those who (or members of cultures that) prioritize self-enhancement over self-transcendence. Values of power and achievement emphasized in self-enhancement suggest viewing others in instrumental terms or as social comparison targets. Hence, we theorized that individuals who (or members of cultures that) prioritize self-enhancement over self-transcendence would base their self-esteem to a greater extent on *achieving social status*, whereas this would be a weaker basis for self-evaluation among individuals who (or members of cultures that) prioritize self-transcendence over self-enhancement.

Summary of Aims and Hypotheses

We aimed to conduct the most systematic test to date of a culturally contextualized model of self-esteem—the first study to examine whether bases for self-evaluation vary predictably with cultural and individual differences in value priorities, using Schwartz's (1992) model to provide an adequate characterization of value priorities, and recruiting participants from a larger and more diverse range of cultural groups than previous studies. As described above, self-esteem may be based on any number of factors, but we focused here on four potential bases—*controlling one's life*, *doing one's duty*, *benefitting others*, and *achieving social status*—chosen for their specific relevance to the dimensions of Schwartz's values model.

We modeled self-evaluation as an intrapersonal process that might be moderated by individual and/or cultural differences in value priorities. Thus, we used a within-person methodology to measure the strength of each hypothesized basis for self-evaluation (illustrated in Figure 2). Each participant listed freely several aspects of his or her identity (e.g., "woman," "musician," "ambitious"), then rated each identity aspect (a) for its association with feelings of self-esteem and (b) for its association with each of the four bases for self-evaluation—for example, how much it increased his or her social status. The latter ratings were used to predict *within-person variation* in the former ratings. Thus, rather than ask people directly what they based their self-esteem on (cf. Crocker & Wolfe, 2001), we measured their bases for self-evaluation indirectly through statistical patterns in their data.

This technique has several notable advantages. By focusing on within-person variance, the results are insulated from several common sources of methodological bias in cross-cultural research, including the reference-group effect (Heine, Lehman, Peng, & Greenholtz, 2002) and acquiescent response styles (Smith, 2004). Our approach also avoids the need for participants to report directly on their levels of personal self-esteem, which may be subject to culturally variable self-presentational influences. For example, when research participants in China report relatively critical self-views, this may be to conform with social norms of modesty (Cai et al., 2011). Hence, it is preferable to study cultural differences in self-evaluation using more indirect techniques (Kobayashi & Greenwald, 2003; Yamaguchi et al., 2007).

Moreover, for the first time in cross-cultural research into the bases of self-esteem, we used a longitudinal methodology to examine the ongoing, long-term process of self-evaluation. Participants re-rated their identity aspects for associations with self-esteem around 5 months later, allowing us to model our predicted effects both contemporaneously and over a time-lag of several months. Thus, we could test directly the temporal precedence of the four bases as prospective predictors of the long-term process by which participants reevaluated their identity aspects over time.

Crucially, our study was designed to test whether personal and/or normative value priorities would moderate the degree to which individuals based their self-esteem on controlling their life, doing their duty, benefitting others, or achieving social status. Using multilevel analyses, we were able to evaluate to what extent it is personal endorsement of value priorities (i.e., personal values) or living in a specific cultural climate (i.e., normative values) that matters more. As described above, conflicting theoretical claims have been made regarding whether one or the other should exert the more proximal influence on bases of self-esteem. Thus, across cultures, we expected that the strength of these bases for self-evaluation would vary depending on personal and/or normative value priorities, and we tested in parallel for moderation effects at both levels of analysis:

Hypothesis 1 (H1): On average, participants would derive self-esteem from aspects of their identity that gave them a sense of *controlling their life* (H1a). This tendency would be stronger among individuals personally prioritizing openness (vs. conservation) values (H1b) and/or members of cultural groups normatively prioritizing openness (vs. conservation) values (H1c).

Hypothesis 2 (H2): On average, participants would derive self-esteem from aspects of their identity that involved *doing their duty* (H2a). This tendency would be stronger among individuals personally prioritizing conservation (vs. openness) values (H2b) and/or members of cultural groups normatively prioritizing conservation (vs. openness) values (H2c).

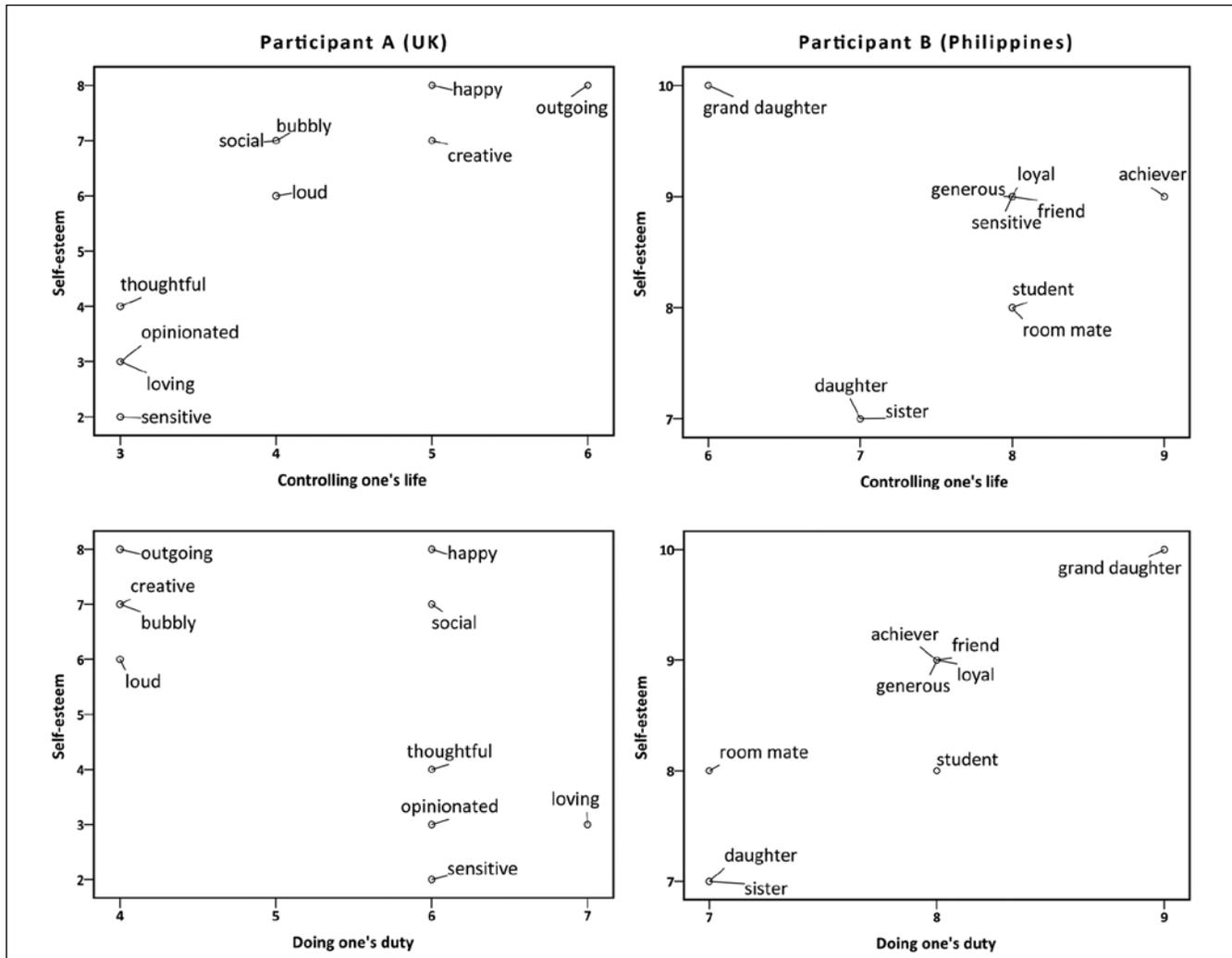


Figure 2. Illustrative examples of identity aspects and their ratings from one British and one Filipino participant in our study. Note. Here, Participant A (left) shows a positive correlation between the extent to which an aspect of identity makes her feel in control of her life (top) and the feeling of self-esteem provided by that aspect. A negative correlation appears between the extent to which her identity aspects involve doing her duty toward others (bottom) and the feeling of self-esteem. This indicates that the self-esteem of Participant A is based more on controlling her life, and not on doing her duty. Participant B (right) shows a very different profile and seems to base her self-esteem more on doing her duty, and less on controlling her life.

Hypothesis 3 (H3): On average, participants would derive self-esteem from aspects of their identity that they saw as *benefitting others* (H3a). This tendency would be stronger among individuals personally prioritizing self-transcendence (vs. self-enhancement) values (H3b) and/or members of cultural groups normatively prioritizing self-transcendence (vs. self-enhancement) values (H3c).

Hypothesis 4 (H4): On average, participants would derive self-esteem from aspects of their identity that contributed to them *achieving social status* (H4a). This tendency would be stronger among individuals personally prioritizing self-enhancement (vs. self-transcendence) values (H4b) and/or members of cultural groups normatively

prioritizing self-enhancement (vs. self-transcendence) values (H4c).

Method

Participants and Procedure

Participants were 5,254 late adolescents in 20 cultural groups, of whom 4,852 (92%) were included in our analyses. Ninety-six (2%) were excluded because they had lived less than 10 years in the country or were aged 25 or above; 306 (6%) were excluded because of missing data. All were students in high schools or equivalent, except in the Philippines, where we sampled students in tertiary education (at technical

Table 1. Descriptives of Each Cultural Sample.

Sample	<i>n</i> (T1)	<i>n</i> (T2)	Female (%)	<i>M</i> age	Village/rural (%)	Mean socioeconomic status ^a	Normative openness to change (vs. conservation)	Normative self-transcendence (vs. self-enhancement)	GNI per capita	Questionnaire language
Belgium	246	205	68	17.33	19	4.05	1.20	1.22	41,110	French
Coastal and Amazonian Brazil (Belem, Rio de Janeiro, João Pessoa, Porto Alegre)	610	451	63	16.78	1	3.88	1.23	1.02	5,860	Portuguese
Central Brazil (Goiânia)	123	93	49	14.85	3	3.65	.68	.40	5,860	Portuguese
Chile	394	340	47	16.21	1	4.65	.97	1.26	8,190	Spanish
China	227	—	48	15.88	0	3.58	.46	.60	2,370	Chinese
Colombia	203	123	43	15.84	11	4.40	1.27	.45	4,100	Spanish
Estonia	234	189	59	16.86	31	4.35	1.23	.85	12,830	Estonian
Ethiopia	249	236	45	17.57	0	3.62	.17	.47	220	Amharic
Georgia	246	174	58	16.11	2	4.27	.67	.92	2,120	Georgian
Hungary	238	177	52	16.49	15	4.45	1.23	.35	11,680	Hungarian
Italy	318	182	52	17.75	89	4.24	.49	.85	33,490	Italian
Lebanon	295	208	46	17.07	2	4.55	.67	.34	5,800	Arabic
Namibia	96	—	64	17.30	4	3.45	.14	1.09	3,450	English
Oman	248	178	49	16.51	13	4.83	.07	.62	12,860	Arabic
Philippines	296	217	66	17.38	16	4.23	.14	.59	1,620	English
Poland	249	122	57	17.24	5	4.54	.98	.37	9,850	Polish
Romania	220	179	49	17.08	14	4.79	.74	.37	6,390	Romanian
Spain	223	175	53	16.44	36	4.59	1.19	1.22	29,290	Spanish
Turkey	197	—	50	16.52	2	4.10	.19	.85	8,030	Turkish
United Kingdom	246	215	76	16.66	20	4.20	1.24	.69	40,660	English
Total	5,158	3,464								

Note. Descriptives are for all participants who met our inclusion criteria at Time 1. Sample sizes in our analyses differ slightly because of missing data. GNI = gross national income in USD.

^aMean scores of answers to the question: "Compared to other people in [nation], how would you describe your family's level of financial wealth?"; response scale ranging from 1 = very poor to 7 = very rich.

colleges and universities) to match the ages of participants from other nations. Most samples were recruited from mainly urban areas. Participants in most samples typically rated their families as of approximately average wealth. Further descriptive data can be found in Table 1.

Most cultural samples were from different nations. However, samples from five Brazilian regions were initially included. Based on preliminary analyses, we distinguished two cultural profiles within the Brazilian data: A more open and self-transcendent profile was found among participants from Coastal and Amazonian regions, whereas participants from Central Brazil showed a somewhat greater emphasis on conservation and self-enhancement values (see Figure 3). Hence, we created two Brazilian cultural groupings for use in subsequent analyses.

Participants were recruited voluntarily at their schools and were not compensated. They were told that the questionnaire formed part of a university project on beliefs, thoughts, and feelings; however, they remained uninformed about the specific purpose of the research and about its cross-cultural character.

Around 5 months later (ranging from 3 to 8 months), participants in 17 cultural groups (see Table 1) were given

personalized follow-up questionnaires; 3,519 participants completed the second questionnaire, representing 33% total attrition (median attrition rate 26% in those samples that were recontacted). Attrition analyses in each sample revealed only minor demographic differences between those who did or did not complete Time 2 (T2), and no differences on any of our substantive measures. At T2, 55 (<2%) participants were excluded from analyses because they had reported having lived less than 10 years in the country or being aged 25 or more; 286 (8%) were excluded because of missing data. Thus, at T2, 3,178 participants were included in our analyses.

Time 1 (T1) Questionnaire

Measures were included in a larger questionnaire concerning identity construction and cultural orientation (Becker et al., 2012; Owe et al., 2013; Vignoles & Brown, 2011). The questionnaire was translated from English into the main language of each country (see Table 1). Independent back-translations were made by bilinguals unfamiliar with the research topic and hypotheses. Ambiguities and inconsistencies were identified and resolved by discussion, and the translations adjusted.

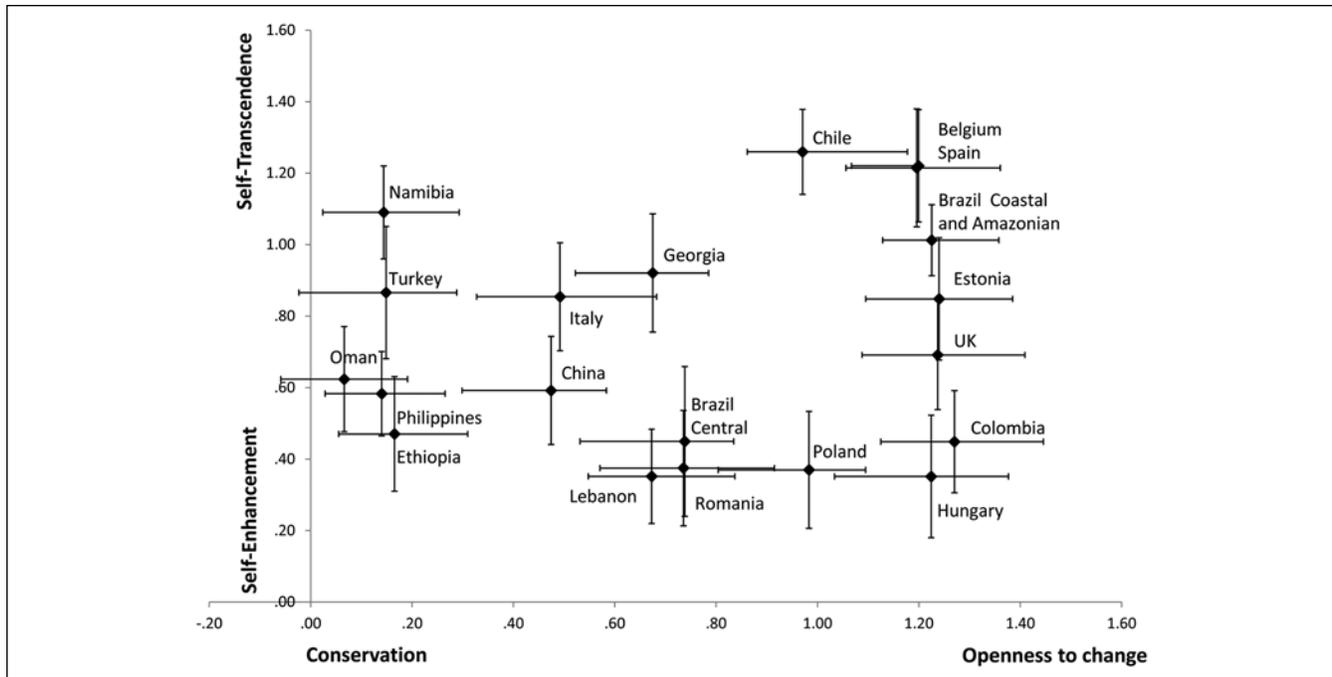


Figure 3. Scores for 20 cultural groups on normative openness (vs. conservation) and normative self-transcendence (vs. self-enhancement) values.

Note. Lines around each point illustrate 95% confidence intervals.

Within-person measurement of the self-evaluation process. First, participants were asked to generate freely 10 answers to the question “Who are you?” (hereafter, *identity aspects*), using an adapted version of the Twenty Statements Test (TST; Kuhn & McPartland, 1954). This task was at the beginning, so that responses would be constrained as little as possible by theoretical expectations or demand characteristics. It was printed on a page that folded out to the side of the questionnaire, so that participants could see their identity aspects when rating them subsequently.

The TST has sometimes been criticized for priming an individualized, decontextualized, introspective “self,” arguably closer to Western than to other cultural conceptions of selfhood (see Smith, Fischer, Vignoles, & Bond, 2013). Based on discussions with our international collaborators, we produced a culturally de-centered version of this task, rewording the original question “Who am I?” into “Who are you?” and developing a revised set of instructions (reported in Becker et al., 2012). Common answers included individual characteristics (e.g., “intelligent,” “shy”), social roles and interpersonal relationships (e.g., “friend,” “pupil”), and social categories (e.g., “girl,” “Hungarian”).

Participants subsequently rated each of their identity aspects on various dimensions. Each dimension was presented as a question at the top of a new page, with a block of 11-point scales (0 = *not at all*; 10 = *extremely*) positioned underneath to line up with the identity aspects. One question

measured the association of each identity aspect with feelings of *self-esteem* (“How much does each of these things make you see yourself positively?”).

Later on, we included items reflecting the four hypothesized *bases of self-esteem*: controlling one’s life (“How much does each of these things make you feel that you are in control of your own life?”), doing one’s duty (“How much does each of these things involve doing your duty toward others?”), benefitting others (“How much do you feel that other people benefit from you being each of these things?”), and achieving social status (“How much does each of these things increase your social status?”). To avoid carryover effects, these four items were separated from the self-esteem item by several pages of intervening measures and were interspersed among many other rating questions, related to other identity motives (e.g., distinctiveness and continuity).

Personal and normative value priorities. Participants also completed the short-form Portrait Values Questionnaire (Schwartz, 2007). Participants read 21 vignettes describing a person of their gender portraying different value priorities, and indicated how similar each was to themselves. The 6-point scale ranges from 1 (*very much like me*) to 6 (*not like me at all*); however, we reverse coded all items so that higher scores would reflect greater endorsement of each value portrayed. As recommended by Schwartz, we then ipsatized the responses by centering each participant’s item ratings around

his or her mean across all items, to eliminate individual differences in response style.

We used the ipsatized ratings to create individual-level scores for two bipolar value dimensions. The first was *personal openness versus conservation values* (12 items: overall $\alpha = .69$, median $\alpha = .67$). Sample items are as follows: “He/she looks for adventures and likes to take risks. He/she wants to have an exciting life,” and “It is important to him/her to always behave properly. He/she wants to avoid doing anything people would say is wrong” (reversed). We then calculated cultural group means of these scores to measure *normative openness versus conservation values* ($\alpha = .84$). Consistent with viewing this dimension as related to individualism–collectivism, *normative openness versus conservation values* correlated negatively with House, Hanges, Javidan, Dorfman, and Gupta (2004) national scores of ingroup collectivism practices ($r = -.51$), and correlated as expected with Schwartz’s (2009) culture-level scores for autonomy (affective: $r = .71$; intellectual: $r = .55$) versus embeddedness ($r = -.68$) values.³

The second individual-level dimension was *personal self-transcendence versus self-enhancement values* (nine items: overall $\alpha = .63$, median $\alpha = .63$). Sample items for this dimension were as follows: “He/she thinks it is important that every person in the world should be treated equally. He/she believes everyone should have equal opportunities in life,” and “Being very successful is important to him/her. He/she hopes people will recognize his/her achievements” (reversed). Again, we computed cultural group means for these individual scores to estimate *normative self-transcendence versus self-enhancement values* ($\alpha = .69$). As expected, culture-level scores on this dimension were uncorrelated with House and collaborators’ (2004) national scores of ingroup collectivism practices ($r = .02$). However, these scores correlated as expected with Schwartz’s (2009) culture-level scores for egalitarianism ($r = .69$); correlations with harmony ($r = .40$), mastery ($r = -.17$), and hierarchy ($r = -.28$) were in the expected directions, although not significant.³

Figure 3 depicts the positions of each cultural group on the two normative value dimensions. The general tendency across groups to prioritize openness over conservation and self-transcendence over self-enhancement is consistent with previous research showing a pan-cultural tendency to rate benevolence and universalism (comprising self-transcendence) and self-direction (contributing to openness) as the three most important values, and that younger people tend to value self-direction even more strongly than adult samples (Schwartz & Bardi, 2001).

Demographic information. Participants indicated their gender, date of birth, nationality, country of birth, and several other demographic characteristics. To control for national differences in economic development, we included data on gross national income (GNI) per capita, retrieved from the World Bank (2010) report.

T2 Questionnaire

Participants’ identity aspects from the T1 questionnaire were copied and attached to the T2 questionnaire. Thus, every participant received a personalized T2 questionnaire. First, participants were asked to indicate whether their responses were still true, needed revising, or were no longer true in any way; they were asked to replace any responses that were no longer true and to update any that needed revising. Of 34,034 initial identity aspects, 846 (2.5%) were marked as no longer true, and were therefore excluded from analyses (this led to the exclusion of one participant, who had replaced all of her identity aspects). Updated responses ($n = 2,069$, 7.0%) were retained in our analyses, because participants still regarded them as adequate descriptions of who they were (e.g., they might add precision, by revising “can be shy in groups” into “can be shy in new groups”). Participants rated their identity aspects for self-esteem using the same item used at T1.

Analytical Approach

Given the nested data structure, we tested predictions of within-person variance in feelings of self-esteem using multilevel regression analysis (Hox, 2002). Level 1 units were identity aspects (n T1 = 46,332; n T2 = 29,061), with individuals as Level 2 units (n T1 = 4,852; n T2 = 3,178), and cultures as Level 3 units (n T1 = 20; n T2 = 17). At Level 1, regression coefficients were modeled for within-person predictors of the self-esteem ratings (controlling one’s life, doing one’s duty, benefitting others, achieving social status). These predictors were centered around participant means, so that the within-person effects we were interested in were not confounded with between-person covariance (Hofmann & Gavin, 1998). At Level 2, regression coefficients were modeled for individual difference variables (personal value priorities and gender). Gender was included to control for differences in the gender composition of our samples, but we had no theoretical basis for predicting gender differences. At Level 3, regression coefficients were modeled for culture-level variables (normative value priorities and GNI). Continuous variables at Levels 2 and 3 were centered around their grand means, and a contrast code was used for gender (female = -1 , male = 1). We used grand mean centering rather than group-mean centering at Level 2 to control for the potential confounding influence of aggregated individual-level moderations when testing culture-level moderations at Level 3 (Firebaugh, 1980; Hofmann & Gavin, 1998). Analyses were conducted in HLM 6 (Raudenbush, Bryk, & Congdon, 2007), using full maximum likelihood estimation with convergence criterion of .000001.

Results

We conducted two parallel sets of analyses: Cross-sectional analyses predicted T1 self-esteem ratings, and longitudinal

analyses predicted T2 self-esteem ratings while controlling for T1 self-esteem ratings.

Cross-Sectional Models

We computed a series of multilevel regression models predicting T1 self-esteem ratings using the four hypothesized sources of self-esteem: controlling one's life, doing one's duty, benefitting others, and achieving social status. Parameters are shown in Table 2. Model 1 included just these four ratings as Level 1 predictors. Supporting H1a to H4a, all four sources of self-esteem were significant predictors of the self-esteem ratings (B s from .14 to .25), indicating that, on average, participants tended to derive greater feelings of self-esteem from those of their identity aspects that they associated with controlling their lives, doing their duty, benefitting others, and achieving social status. This model accounted for an estimated 44.63% of within-person variance in self-esteem.

We then added cross-level interaction effects to see whether the weight of self-esteem on each of the four bases was significantly moderated by personal and/or normative values. Thus, we entered scores of personal openness (vs. conservation) and personal self-transcendence (vs. self-enhancement) as Level 2 moderators, and normative openness (vs. conservation) and normative self-transcendence (vs. self-enhancement) as Level 3 moderators, of the Level 1 regression weights on the four bases of self-esteem (Model 2). Following Aiken and West (1991), we included the underlying main effects alongside these theoretically important interaction effects. Compared with Model 1, this model provided a significant improvement in fit, $\chi^2(20) = 232.39$, $p < .001$.

Crucially, significant cross-level interaction effects involving normative value priorities (H1c-H4c) showed a pattern supporting our predictions (Table 2): Controlling one's life was a stronger predictor of self-esteem in cultures where people on average endorsed more openness values (H1c: $B = .09$, $p < .001$), whereas doing one's duty was a stronger predictor in cultures where people endorsed more conservation values (H2c: $B = -.08$, $p < .001$). Unexpectedly, doing one's duty was also more important in cultures where people endorsed more self-transcendence values ($B = .05$, $p = .001$). As predicted, benefitting others was more important in cultures where people endorsed more self-transcendence values (H3c: $B = .07$, $p < .001$), whereas achieving social status was more important in cultures where people endorsed more self-enhancement values (H4c: $B = -.06$, $p = .001$).

As discussed by McClelland and Judd (1993), it is notoriously difficult to detect moderation effects in correlational studies, and even substantively important interactions may account for seemingly trivial amounts of variance. To help readers evaluate the substantive importance of the effects that we found, we have estimated the magnitude of the Level 1 effects at upper- and lower-bound values of each value

dimension. We estimated simple slopes for the regression of self-esteem on each of the four bases at minimum (0.07) and maximum (1.27) values of normative openness (vs. conservation), and at minimum (0.34) and maximum (1.26) values of normative self-transcendence (vs. self-enhancement). As shown in Figure 4, the effect of controlling one's life was considerably stronger in cultures with the most open values ($B = .27$, $p < .001$), compared with those where conservation values were most prevalent ($B = .17$, $p < .001$). In contrast, the effect of doing one's duty was considerably weaker in cultures with the most open values ($B = .10$, $p < .001$), compared with those where conservation values were most prevalent ($B = .20$, $p < .001$). Effects of benefitting others and of doing one's duty were considerably stronger in cultures with the most self-transcendent values ($B = .28$, $p < .001$ and $B = .17$, $p < .001$, respectively), compared with those with the most self-enhancing values ($B = .21$, $p < .001$ and $B = .12$, $p < .001$, respectively). The effect of achieving social status was somewhat weaker in cultures with the most self-transcendent values ($B = .21$, $p < .001$), than in those with the most self-enhancing values ($B = .27$, $p < .001$).

Individual-level moderations also appeared (Table 2), but these were smaller in magnitude, and the overall pattern was not consistent with H1b to H4b. Contrary to H1b, the effect of controlling one's life was slightly stronger among participants endorsing more conservation values ($B = -.01$, $p = .003$),⁴ and also among participants with more self-transcendence values ($B = .02$, $p < .001$). Supporting H4b, the effect of achieving social status was slightly stronger among participants with more self-enhancement values ($B = -.01$, $p < .001$). We estimated the simple slopes of bases of self-esteem at extreme values (2 SD below and above the mean) of personal openness (vs. conservation; -1.70 , 3.30) and personal self-transcendence (vs. self-enhancement; -1.76 , 3.28). As shown in Figure 5, the effect of achieving social status was somewhat stronger among participants with more self-enhancement values ($B = .28$, $p < .001$), compared with those with more self-transcendence values ($B = .21$, $p < .001$).

Overall, the results of our cross-sectional analyses were consistent with H1c to H4c (positing effects of living in a particular cultural environment). Among H1b to H4b (positing effects of holding particular value priorities oneself), only H4b was supported.⁵

Longitudinal Models

To provide a prospective test of our predictions, we computed a parallel series of models predicting T2 self-esteem ratings, while controlling for T1 self-esteem ratings. We allowed the effect of T1 self-esteem to vary randomly at both Levels 2 and 3, to account for individual- and group-level variation in the stability of self-esteem ratings over time. Model parameters are shown in Table 3. First, we included just the four bases of self-esteem along with T1 self-esteem as Level 1 predictors (Model 3).

Table 2. Estimated Parameters of Multilevel Regression Predicting Self-Esteem Ratings at Time 1.

	Model 1			Model 2		
	B	SE	p	B	SE	p
Within-participants main effects (Level 1: $n = 46,332$ identity aspects)						
Controlling one's life (H1a)	.234	.005	<.001	.226	.005	<.001
Doing one's duty (H2a)	.141	.004	<.001	.145	.005	<.001
Benefitting others (H3a)	.248	.004	<.001	.243	.005	<.001
Achieving social status (H4a)	.244	.005	<.001	.244	.005	<.001
Individual-level main effects (Level 2: $n = 4,852$ individuals)						
Personal openness (vs. conservation)				.041	.018	.026
Personal self-transcendence (vs. self-enhancement)				.066	.018	<.001
Culture-level main effects (Level 3: $n = 20$ cultural groups)						
Normative openness (vs. conservation)				-.598	.174	.003
Normative self-transcendence (vs. self-enhancement)				-.217	.241	.381
Individual-level moderators of within-participants slopes						
Personal openness (vs. conservation)				-.011	.004	.003
× Controlling one's life (Hy1b)						
Personal openness (vs. conservation)				.001	.004	.813
× Doing one's duty (H2b)						
Personal openness (vs. conservation)				.003	.003	.435
× Benefitting others						
Personal openness (vs. conservation)				.004	.004	.312
× Achieving social status						
Personal self-transcendence (vs. self-enhancement)				.019	.004	<.001
× Controlling one's life						
Personal self-transcendence (vs. self-enhancement)				.001	.003	.661
× Doing one's duty						
Personal self-transcendence (vs. self-enhancement)				-.003	.003	.357
× Benefitting others (H3b)						
Personal self-transcendence (vs. self-enhancement)				-.015	.004	<.001
× Achieving social status (H4b)						
Culture-level moderators of within-participants slopes						
Normative openness (vs. conservation)				.088	.012	<.001
× Controlling one's life (H1c)						
Normative openness (vs. conservation)				-.082	.012	<.001
× Doing one's duty (H2c)						
Normative openness (vs. conservation)				-.008	.012	.468
× Benefitting others						
Normative openness (vs. conservation)				.021	.013	.094
× Achieving social status						
Normative self-transcendence (vs. self-enhancement) × Controlling one's life				.004	.016	.807
Normative self-transcendence (vs. self-enhancement) × Doing one's duty				.053	.015	.001
Normative self-transcendence (vs. self-enhancement) × Benefitting others (H3c)				.075	.015	<.001
Normative self-transcendence (vs. self-enhancement) × Achieving social status (H4c)				-.060	.016	.001
Residual variance						
Within-participant level (σ^2)		3.75			3.73	
Individual level (τ_{π})		1.86	<.001		1.86	<.001
Culture level (τ_{β})		.16	<.001		.10	<.001
Deviance		201,256			201,023	

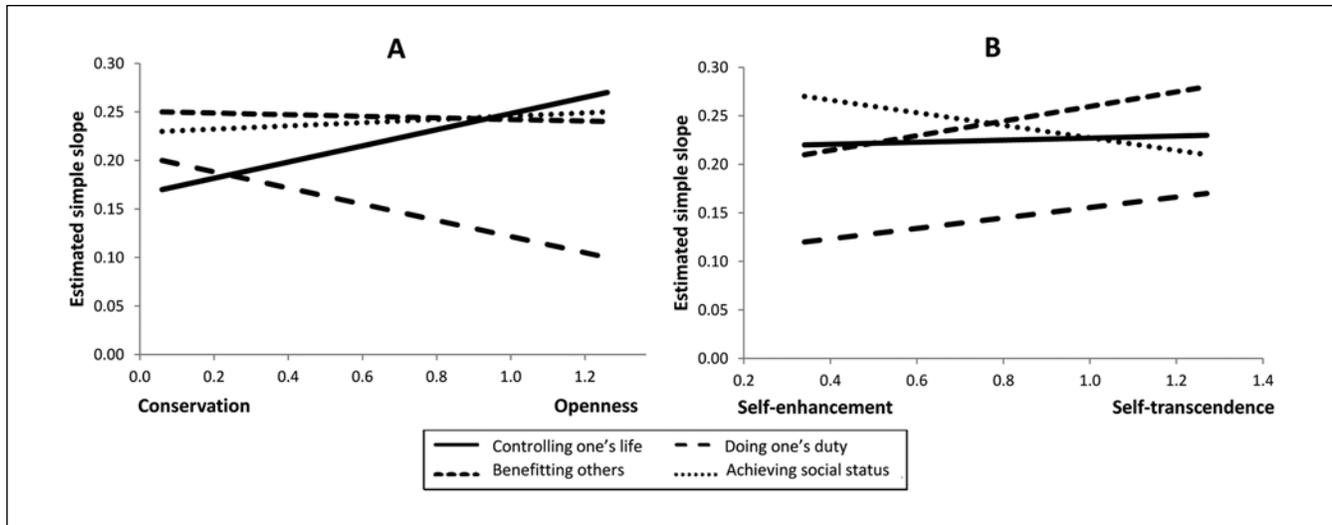


Figure 4. Controlling one's life, doing one's duty, benefitting others, and achieving social status as predictors of self-esteem at Time 1, depending on *normative values in participants' cultural environment*: Normative openness (vs. conservation) values (Panel A) and normative self-transcendence (vs. self-enhancement) values (Panel B).

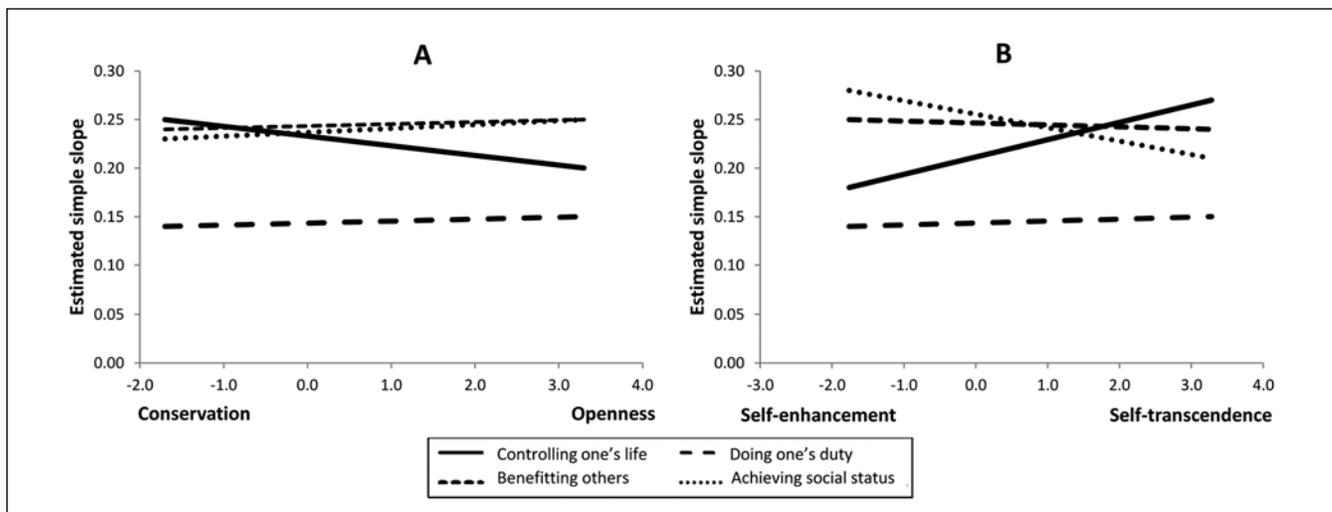


Figure 5. Controlling one's life, doing one's duty, benefitting others, and achieving social status as predictors of self-esteem at Time 1, depending on *personal endorsement of values*: Personal openness (vs. conservation) values (Panel A) and personal self-transcendence (vs. self-enhancement) values (Panel B).

Across the sample as a whole, all four bases of self-esteem were significant prospective predictors of the T2 self-esteem ratings (B s from .04 to .10). This supports H1a to H4a, providing evidence that doing one's duty, controlling one's life, benefitting others, and achieving social status are temporal antecedents of feelings of self-esteem: Over time, participants came to derive greater feelings of self-esteem from those of their identity aspects that they had associated at T1 with each of these four hypothesized bases of self-esteem. This model accounted for an estimated 6.77% of the residual

within-person variance in T2 self-esteem after accounting for the effect of T1 self-esteem (i.e., residual change).

We then added cross-level interaction effects to see whether the regression weights of self-esteem on each of the four bases were significantly moderated by personal and/or normative values (Model 4). Compared with Model 3, this model provided a significant improvement in fit, $\chi^2(20) = 267.98$, $p < .001$. Again, cross-level interaction effects largely supported our culture-level predictions: Controlling one's life was a stronger prospective predictor of self-esteem

Table 3. Estimated Parameters of Multilevel Regression Predicting Self-Esteem Ratings at Time 2.

	Model 3			Model 4		
	B	SE	p	B	SE	p
Within-participants main effects (Level 1: $n = 29,061$ identity aspects)						
Self-esteem (Time 1)	.381	.038	<.001	.379	.037	<.001
Controlling one's life (H1a)	.097	.006	<.001	.091	.006	<.001
Doing one's duty (H2a)	.043	.005	<.001	.044	.005	<.001
Benefitting others (H3a)	.100	.005	<.001	.099	.005	<.001
Achieving social status (H4a)	.095	.006	<.001	.095	.006	<.001
Individual-level main effects (Level 2: $n = 3,178$ individuals)						
Personal openness (vs. conservation)				.053	.024	.029
Personal self-transcendence (vs. self-enhancement)				.059	.023	.012
Culture-level main effects (Level 3: $n = 17$ cultural groups)						
Normative openness (vs. conservation)				-.611	.259	.033
Normative self-transcendence (vs. self-enhancement)				-.220	.331	.517
Individual-level moderators of within-participants slopes						
Personal openness (vs. conservation) × Controlling one's life (H1b)				.001	.004	.773
Personal openness (vs. conservation) × Doing one's duty (H2b)				-.004	.004	.317
Personal openness (vs. conservation) × Benefitting others				-.003	.004	.479
Personal openness (vs. conservation) × Achieving social status				.003	.005	.559
Personal self-transcendence (vs. self-enhancement) × Controlling one's life				.008	.004	.052
Personal self-transcendence (vs. self-enhancement) × Doing one's duty				.001	.004	.868
Personal self-transcendence (vs. self-enhancement) × Benefitting others (H3b)				.002	.004	.544
Personal self-transcendence (vs. self-enhancement) × Achieving social status (H4b)				.001	.005	.908
Culture-level moderators of within-participants slopes						
Normative openness (vs. conservation) × Controlling one's life (H1c)				.062	.015	<.001
Normative openness (vs. conservation) × Doing one's duty (H2c)				-.036	.014	.013
Normative openness (vs. conservation) × Benefitting others				-.039	.015	.009
Normative openness (vs. conservation) × Achieving social status				.007	.016	.672
Normative self-transcendence (vs. self-enhancement) × Controlling one's life				.010	.019	.599
Normative self-transcendence (vs. self-enhancement) × Doing one's duty				.036	.018	.040
Normative self-transcendence (vs. self-enhancement) × Benefitting others (H3c)				.064	.018	.001
Normative self-transcendence (vs. self-enhancement) × Achieving social status (H4c)				.006	.019	.748
Residual variance						
Within-participant level (σ^2)		2.54			2.53	
Individual-level intercept variance ($\tau_{\pi 0}$)		2.29	<.001		2.28	<.001
Individual-level slope variance for T1 self-esteem ($\tau_{\pi 1}$)		.09	<.001		.09	<.001
Culture level ($\tau_{\beta 0}$)		.28	<.001		.18	<.001
Culture-level slope variance for T1 self-esteem ($\tau_{\beta 1}$)		.02	<.001		.02	<.001
Deviance		119,505			119,413	

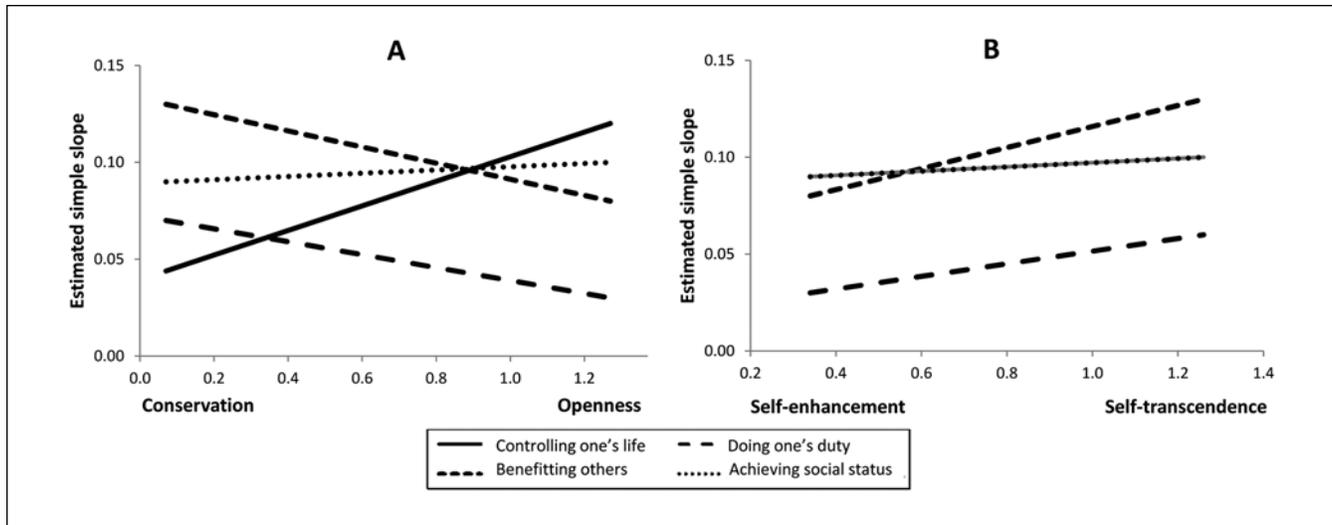


Figure 6. Controlling one's life, doing one's duty, achieving social status, and benefitting others as predictors of self-esteem at Time 2, depending on normative values in participants' cultural environment: Normative openness (vs. conservation) values (Panel A) and normative self-transcendence (vs. self-enhancement) values (Panel B).

in cultures where people on average endorsed more openness (H1c: $B = .06$, $p < .001$), whereas doing one's duty was a stronger predictor in cultures where people endorsed more conservation values (H2c: $B = -.04$, $p = .013$), as well as more self-transcendence values ($B = .04$, $p = .040$). Benefitting others was more important in cultures where people on average endorsed more self-transcendence (H3c: $B = .06$, $p = .001$), and also where people endorsed more conservation values ($B = -.04$, $p = .009$). We did not find the expected moderation of the importance of achieving social status by normative self-transcendence (vs. self-enhancement) values (H4c: $B = .01$, $p = .748$).

Simple slopes were used to probe the significant interactions between normative values and bases of self-esteem, estimating effects at minimum and maximum observed normative values. As shown in Figure 6, the effect of controlling one's life was almost 3 times as strong in cultures with the most open values ($B = .12$, $p < .001$), compared with cultures where conservation values were most prevalent ($B = .04$, $p = .001$). The effect of doing one's duty showed the opposite pattern; it was twice as strong where conservation values were most prevalent ($B = .07$, $p < .001$) than in cultures with the most open values ($B = .03$, $p = .001$), and it was also twice as strong in the most self-transcendent cultures ($B = .06$, $p < .001$), than in the most self-enhancing cultures ($B = .03$, $p = .001$). Finally, the effect of benefitting others was somewhat stronger in cultures with the most self-transcendent values ($B = .13$, $p < .001$), compared with cultures with the most self-enhancing values ($B = .08$, $p < .001$), and also somewhat stronger where conservation values were most prevalent ($B = .13$, $p < .001$), than in cultures with the most open values ($B = .08$, $p < .001$).

No significant individual-level moderations were found. Thus, the longitudinal analysis clearly supported H1c to H3c (but not H4c)—where we had posited effects of living in a cultural environment with particular normative value priorities—whereas they did not support H1b to H4b—where we had posited effects of holding particular personal value priorities.⁶

Discussion

Supporting a culture-based view of self-esteem, cultural values moderated how positive self-regard was constructed. Bases for self-evaluation varied predictably with normative value priorities (but less so with personal values, as we discuss below). As hypothesized, self-esteem was derived more from controlling one's life in cultural contexts where openness values were more prevalent, more from doing one's duty where conservation values were more prevalent, more from benefitting others where self-transcendence values were more prevalent, and more from achieving social status where self-enhancement values were more prevalent. With one exception, these results were found in longitudinal as well as cross-sectional analyses. The extent to which each aspect of identity satisfied culturally relevant bases of self-esteem at T1 prospectively predicted how those aspects of identity were evaluated at T2. This finding confirms our view of these constructs as antecedents of self-esteem that vary in strength across cultures.⁷

Our prediction that the effect of achieving social status would be stronger in cultures valuing self-enhancement (H4c) was supported only cross-sectionally. Speculatively, this might be attributed to the more stable social structures in

more self-enhancing (i.e., more hierarchical) societies. Where social status is fixed, perhaps its effects on self-evaluation are established at an earlier age, and there would be less scope for judgments of social status to influence self-esteem during adolescence—thus canceling out the moderating role of values in our longitudinal analysis.

In addition, we found two unpredicted effects. First, doing one's duty was a stronger basis for self-evaluation in cultures where self-transcendence prevails. Although not predicted, it makes sense that doing one's duty would be valued not only as a sign of conformity—hence its importance where conservation values were more prevalent—but also as a sign of concern for others, which would make it important in more self-transcendent cultures. Second, the prospective effect of benefitting others was stronger in cultures where conservation values were more prevalent. We speculate that caring for others, particularly family and close community members, is a central aspect of many cultural traditions, making benefitting others a more important basis for self-evaluation in these more traditional cultures. Together, these findings indicate that the moderators of doing one's duty and of benefitting others are less distinct than we had expected.

Disentangling Effects of Normative and Personal Values

Our predicted pattern of moderation effects was supported mainly at the cultural level of analysis. Corresponding moderation effects of personal values showed a weaker and inconsistent pattern in cross-sectional analyses, and none reached significance in longitudinal analyses. TMT and the SCENT model suggest that culture affects self-esteem through internalization or personal adoption of cultural values, but we found that the normative values of each cultural group significantly predicted how self-esteem was constructed by the group members, *irrespective of the individuals' personal values*. These differences in the bases for self-evaluation cannot be attributed to individuals' personal adoption of cultural values—instead, they appeared to be effects of living in a particular cultural context where certain values are prevalent.

Previous researchers have speculated that personal values may play a greater role in moderating the importance of bases of self-esteem that are not consensually valued (but see Scalas, Morin, Marsh, & Nagengast, in press). Perhaps this might explain our cross-sectional finding that social status was a stronger basis for self-esteem among individuals with more self-enhancing personal values (H4b)—considering that the pursuit of social status may not be a consensually valued or likeable characteristic (Easterbrook, Dittmar, Wright, & Banerjee, 2013). Nonetheless, we reiterate that this effect should be interpreted with caution because it was relatively small and it was not found in our longitudinal analysis.

Although previous single-culture studies have provided suggestive evidence that normative rather than personal values may drive the contributions of different domains to global self-esteem (see Marsh, 2008), no previous study has provided firm evidence for the role of normative values by comparing predictions of global self-esteem across multiple groups with differing value priorities. Thus, our results strengthen arguments against the common view (often attributed to James, 1890) that individuals' self-evaluations are largely guided by their personal values. Perhaps the intuitive appeal of this view stems from its compatibility with Western, individualistic cultural assumptions. However, our results indicate a need to reconceptualize self-evaluation as a truly *social-psychological* process, influenced by socially normative rather than personal value priorities.

Possible Underlying Processes

Our multilevel analyses confirm the need for a contextual level of explanation, raising interesting questions about the underlying processes. How might normative value priorities come to influence self-evaluation?

According to sociometer theory (Leary, 2005), self-esteem is based on people's beliefs about what makes others accept (or reject) them—or *perceived relational value*. Thus, intersubjective perceptions of the value priorities of peers, family, and others from whom the individual seeks acceptance, will be the more proximal mechanism by which culturally normative value priorities come to influence self-evaluation. Similarly, the intersubjective culture perspective (Chiu, Gelfand, Yamagishi, Shteynberg, & Wan, 2010) focuses on individuals' perceptions of normative values in their cultural context. According to this perspective, perceived cultural norms have an important psychological impact over and above individuals' personal values, because consensual ideas are interpreted as correct and natural, because social identification with one's cultural group will lead individuals to embrace the group's norms, and because of social accountability to others. Thus, the influence of culture on the self-evaluation process could be carried by individuals' perceptions of widespread cultural values, as well as the local norms emphasized in sociometer theory.

However, explicit awareness of others' value priorities may not be necessary. We did not measure participants' perceptions of others' values, but such perceptions often do not correspond with actual variation in others' values (Chiu et al., 2010; Fischer, 2006)—which provided the moderation effects in the current study. Moreover, Tam et al. (2012) recently used perceptions of cultural trait importance to predict self-enhancement among Chinese and American participants. American participants' self-enhancement was unrelated to perceived cultural importance of the traits; Chinese participants self-enhanced more on traits that they perceived as *less* important to fellow cultural members. These findings suggest that perceptions of others' values are

unlikely to account for the effects of normative values observed here.

If intersubjective perceptions cannot explain our findings, then automatic processes might (Cohen, 1997; Hofer & Bond, 2008). Leary (2005) predicted that the sociometer may be at least partly automatic: People automatically detect threats to relational value (e.g., frowns) in the environment, and they may only subsequently reflect consciously upon the situation. If relational value is detected at an implicit level, then the value priorities of others in one's local environment might convey the effects of culture on identity construction, without needing to be recognized explicitly by the individual concerned.

Conceptions of culture from anthropology, cultural psychology, and social constructionism often emphasize that which is "taken-for-granted" in a given community, rather than individuals' explicit, declarative beliefs and values, and view cultures as emergent properties of social systems, rather than targets of individual perceptions (see Faulkner, Baldwin, Lindsley, & Hecht, 2006; Gergen, 1985; Kitayama, Park, Sevincer, Karasawa, & Uskul, 2009). The *niche construction* approach to culture (Yamagishi, 2010) suggests we could understand the bases of self-esteem observed here as aspects of *social institutions* or *niches*—self-sustaining systems of shared beliefs, incentives, and social practices. For example, in social systems where people's values are focused on self-transcendence, an individual's everyday life and the incentives surrounding their actions will be strongly organized around the extent to which they benefit others—whether they are aware of this or not—and thus individuals may develop a tendency to derive self-esteem particularly from aspects of their identities that benefit others.

Notably, our approach to measuring bases of self-esteem did not require explicit awareness of the processes we were examining (see Cai et al., 2011). Instead of asking participants to report directly on what sort of characteristics they believed would make them feel more or less positive about themselves, we studied the self-evaluation process using an indirect technique. As our analyses were based on complex patterns of multivariate within-person associations among measures embedded in much larger questionnaires, and measures for our longitudinal analyses were collected several months apart, it seems unlikely that participants would have been aware of the statistical patterns underlying our findings (Becker et al., 2012). Thus, our method would be attuned to detecting bases of self-esteem that were implicit or taken-for-granted by our participants, not just the dimensions on which they consciously decided to evaluate themselves.

Limitations and Future Directions

Our participants were mostly high school students, and the results may not generalize to other groups. Although high school students are potentially more diverse in terms of socioeconomic status and ethnic diversity than university students,

they are still a selective group, especially in poorer nations. One might also expect sources of self-esteem to change over the life span (Erikson, 1980), and thus we should be cautious about generalizing the present results to other age groups.

In the present research, we tested two broad value dimensions as cultural and individual moderators of bases of self-esteem. However, it could be that personal rather than normative values play a stronger role when more specific dimensions are examined. Investigating this would require the use of more fine-grained value measures (e.g., Schwartz et al., 2012).

Future research should measure intersubjective perceptions of cultural values, in addition to participants' own values, to establish whether the contextual moderation effects that we observed here are mediated by individuals' explicit beliefs about cultural norms, as suggested by the intersubjective culture approach, or by more subtle processes, as we have proposed above. By sampling participants from multiple locations within each nation, researchers could also compare the importance of actual and perceived contextual norms at local and wider cultural levels.

Conclusion

We have presented the first study to test systematically whether the construction of self-esteem is moderated by cultural and individual differences in value priorities, using Schwartz's (1992) model to provide an adequate characterization of value priorities, and recruiting participants from a larger and more diverse range of cultural groups than previous studies. Our multilevel analyses showed that bases for self-evaluation are defined collectively, reflecting culturally normative values, rather than personally endorsed values. Within any given cultural context, individuals evaluate themselves in culturally appropriate ways, deriving feelings of self-esteem particularly from those identity aspects that fulfill values prioritized by others in their cultural surroundings.

Authors' Note

Maja Becker is now at Centre National de la Recherche Scientifique (CLLE-LTC, UMR 5263) and Université de Toulouse, France.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

This research was funded by an Economic and Social Research Council (UK) grant to Vivian L. Vignoles and Rupert Brown, grant number RES-062-23-1300. Data and questionnaires have been deposited with the UK Data Archive under the following reference:

Vignoles, V. & Brown, R. (2008-2011). Motivated Identity Construction in Cultural Context [computer file]. Colchester, Essex: UK Data Archive [distributor], October 2011. SN: 6877, <http://dx.doi.org/10.5255/UKDA-SN-6877-1>.

Notes

1. We do not aim here to resolve the long-running disagreement between Heine (2005) and Sedikides, Gaertner, and Toguchi (2003) about the cross-cultural prevalence of particular self-enhancement mechanisms. Instead, we focus on an important, but often neglected, area of common ground between their perspectives (see Smith, Fischer, Vignoles, & Bond, 2013).
2. Schwartz (1992, 2009) recommended partitioning and labeling the individual- and culture-level values spaces differently. Nonetheless, one implication of the circumplex structure at each level is that researchers may legitimately partition these circles according to their research goals (Schwartz et al., 2012). Here, as we do not assume that our samples were comparably representative of each national context, we operationalized normative values by averaging personal value priorities within each cultural group, rather than creating separate culture-level measures. In relation to Schwartz's (2009) culture-level dimensions, we expected that normative openness versus conservation values would be linked to cultural autonomy versus embeddedness; normative self-transcendence versus self-enhancement might reflect a combination of cultural harmony versus mastery and egalitarianism versus hierarchy.
3. The Brazilian samples were collapsed into a single group for these analyses.
4. Further analysis revealed that this effect was only significant when controlling for the opposing culture-level moderation, whereas the predicted culture-level moderation effect was found irrespective of whether we controlled for the individual-level effect. Moreover, the individual-level moderation did not reappear in longitudinal analyses.
5. The same pattern was found when controlling for gross national income (GNI; in hundreds of dollars) and gender (dummy coded: female = -1, male = 1). This model showed additionally that controlling one's life was more important in richer nations ($B = .01, p = .027$), whereas doing one's duty was more important in poorer nations ($B = -.02, p < .001$); benefitting others ($B = -.03, p < .001$) and achieving social status ($B = -.02, p = .003$) were more important among women, and doing one's duty among men ($B = .01, p = .013$).
6. The same pattern was found when controlling for GNI and gender. We found no significant moderation effects of GNI, but effects were moderated by gender: Benefitting others ($B = -.03, p < .001$), controlling one's life ($B = -.01, p = .026$), and doing one's duty ($B = -.01, p = .026$) were more important among women than among men.
7. Results of the longitudinal analyses strengthen the case for causal paths from the four bases to self-esteem but do not weaken the case for possible additional links among these variables. Possibly participants also came to interpret those identity aspects they associated with the most self-esteem as providing a sense of controlling one's life, benefitting others, achieving social status, and fulfillment of duties. We did not test here for "reverse-direction" effects, but their existence would not undermine our central argument.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: SAGE.

- Allen, T. J., & Sherman, J. W. (2011). Ego threat and intergroup bias: A test of motivated-activation versus self-regulatory accounts. *Psychological Science, 22*, 331-333. doi:10.1177/0956797611399291
- Becker, M., Vignoles, V. L., Owe, E., Brown, R., Smith, P. B., Easterbrook, M., . . . Yamakoglu, N. (2012). Culture and the distinctiveness motive: Constructing identity in individualistic and collectivistic contexts. *Journal of Personality and Social Psychology, 102*, 833-855. doi:10.1037/a0026853
- Brown, J. D., & Kobayashi, C. (2002). Self-enhancement in Japan and America. *Asian Journal of Social Psychology, 5*, 145-168. doi: 10.1111/1467-839X.00101.
- Cai, H., Sedikides, C., Gaertner, L., Wang, C., Carvallo, M., Xu, Y., . . . Jackson, L. E. (2011). Tactical self-enhancement in China: Is modesty at the service of self-enhancement in East Asian culture? *Social Psychological and Personality Science, 2*, 59-64. doi:10.1177/1948550610376599
- Chiu, C.-Y., Gelfand, M. J., Yamagishi, T., Shteynberg, G., & Wan, C. (2010). Intersubjective culture: The role of intersubjective perceptions in cross-cultural research. *Perspectives on Psychological Science, 5*, 482-493. doi:10.1177/1745691610375562
- Cohen, D. (1997). Ifs and thens in cultural psychology. In R. S. Wyer (Ed.), *The automaticity of everyday life: Advances in social cognition* (pp. 121-179). Mahwah, NJ: Lawrence Erlbaum.
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review, 108*, 593-623. doi:10.1037//0033-295X.108.3.593
- Easterbrook, M., Dittmar, H. E., Wright, M., & Banerjee, R. A. (2013, June). *What happens to children who want to be too rich and too beautiful over time? Longitudinal research on the impact of consumer culture values on children's well-being*. Paper presented at the 5th International Conference on Self-Determination Theory, Rochester, NY.
- Erikson, E. H. (1980). *Identity and the life cycle*. New York, NY: W. W. Norton.
- Faulkner, S., Baldwin, J., Lindsley, S., & Hecht, M. (2006). Layers of meaning: An analysis of definitions of culture. In J. Baldwin, S. Faulkner, M. Hecht, & S. Lindsley (Eds.), *Redefining culture: Perspectives across the disciplines* (pp. 27-51). Mahwah, NJ: Lawrence Erlbaum.
- Firebaugh, G. (1980). Groups as contexts and frogponds. In K. H. Roberts & L. Burstein (Eds.), *Issues in aggregation* (pp. 43-52). San Francisco, CA: Jossey-Bass.
- Fischer, R. (2006). Congruence and functions of personal and cultural values: Do my values reflect my culture's values? *Personality and Social Psychology Bulletin, 32*, 1419-1431. doi:10.1177/0146167206291425
- Fischer, R. (2012). Value isomorphism in the European social survey: Exploration of meaning shifts in values across levels. *Journal of Cross-Cultural Psychology, 43*, 883-898. doi:10.1177/0022022111413276
- Fischer, R., Vauclair, C.-M., Fontaine, J. R. J., & Schwartz, S. H. (2010). Are individual-level and country-level value structures different? Testing Hofstede's legacy with the Schwartz value survey. *Journal of Cross-Cultural Psychology, 41*, 135-151. doi:10.1177/0022022109354377
- Gebauer, J. E., Wagner, J., Sedikides, C., & Neberich, W. (2013). Agency-communion and self-esteem relations are moderated by culture, religiosity, age, and sex: Evidence for the "self-centrality

- breeds self-enhancement" principle. *Journal of Personality*, 81, 261-275. doi:10.1111/j.1467-6494.2012.00807.x
- Gergen, K. J. (1985). The social constructionist movement in modern psychology. *American Psychologist*, 40, 266-275. doi:10.1037/0003-066X.40.3.266
- Gheorghiu, M. A., Vignoles, V. L., & Smith, P. B. (2009). Beyond the United States and Japan: Testing Yamagishi's emancipation theory of trust across 31 nations. *Social Psychology Quarterly*, 72, 365-383. doi:10.1177/019027250907200408
- Goodwin, R., Marshall, T., Fülöp, M., Adonu, J., Spiwak, S., Neto, F., & Hernandez Plaza, S. (2012). Mate value and self-esteem: Evidence from eight cultural groups. *PLoS ONE*, 7, e36106. doi:10.1371/journal.pone.0036106
- Greenberg, J., & Arndt, J. (2012). Terror management theory. In P. van Lange, A. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 398-415). Los Angeles, CA: SAGE.
- Hardy, L., & Leone, C. (2008). Real evidence for the failure of the Jamesian perspective or more evidence in support of it? *Journal of Personality*, 76, 1123-1136. doi:10.1111/j.1467-6494.2008.00515.x
- Hardy, L., & Moriarty, T. (2006). Shaping self-concept: The elusive importance effect. *Journal of Personality*, 74, 377-402. doi:10.1111/j.1467-6494.2005.00379.x
- Heine, S. J. (2005). Where is the evidence for pancultural self-enhancement? A reply to Sedikides, Gaertner, and Toguchi (2003). *Journal of Personality and Social Psychology*, 89, 531-538. doi:10.1037/0022-3514.89.4.531
- Heine, S. J., & Hamamura, T. (2007). In search of East Asian self-enhancement. *Personality and Social Psychology Review*, 11, 4-27. doi:10.1177/1088868306294587
- Heine, S. J., & Lehman, D. R. (1995). Cultural variation in unrealistic optimism: Does the West feel more vulnerable than the East? *Journal of Personality and Social Psychology*, 68, 595-607. doi:10.1037/0022-3514.68.4.595
- Heine, S. J., Lehman, D. R., Peng, K., & Greenholtz, J. (2002). What's wrong with cross-cultural comparisons of subjective Likert scales? The reference-group effect. *Journal of Personality and Social Psychology*, 82, 903-918. doi:10.1037/0022-3514.82.6.903
- Hofer, J., & Bond, M. H. (2008). Do implicit motives add to our understanding of psychological and behavioral outcomes within and across cultures? In R. M. Sorrentino & S. Yamaguchi (Eds.), *Handbook of motivation and cognition across cultures* (pp. 95-118). Amsterdam, The Netherlands: Elsevier.
- Hofmann, D. A., & Gavin, M. B. (1998). Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management*, 24, 623-641. doi:10.1177/014920639802400504
- Hofstede, G. (1980). *Culture's consequences: International studies of work-related values*. Newbury Park, CA: SAGE.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: SAGE.
- Hox, J. J. (2002). *Multilevel analysis techniques and applications*. Mahwah, NJ: Lawrence Erlbaum.
- James, W. (1890). *The principles of psychology*. New York, NY: Holt.
- Kitayama, S., Park, H., Sevincer, A. T., Karasawa, M., & Uskul, A. K. (2009). A cultural task analysis of implicit independence: Comparing North America, Western Europe, and East Asia. *Journal of Personality and Social Psychology*, 97, 236-255. doi:10.1037/a0015999
- Kobayashi, C., & Brown, J. D. (2003). Self-esteem and self-enhancement in Japan and America. *Journal of Cross-Cultural Psychology*, 34, 567-580. doi:10.1177/0022022103256479
- Kobayashi, C., & Greenwald, A. G. (2003). Implicit-explicit differences in self-enhancement for Americans and Japanese. *Journal of Cross-Cultural Psychology*, 34, 522-541. doi:10.1177/0022022103257855
- Kuhn, M. H., & McPartland, T. S. (1954). An empirical investigation of self-attitudes. *American Sociological Review*, 19, 68-76. doi:10.2307/2088175.
- Leary, M. R. (2005). Sociometer theory and the pursuit of relational value: Getting to the root of self-esteem. *European Review of Social Psychology*, 16, 75-111. doi:10.1080/10463280540000007
- Marsh, H. W. (1995). A Jamesian model of self-investment and self-esteem: Comment on Pelham (1995). *Journal of Personality and Social Psychology*, 69, 1151-1160. doi:10.1037/0022-3514.69.6.1151
- Marsh, H. W. (2008). The elusive importance effect: More failure for the Jamesian perspective on the importance of importance in shaping self-esteem. *Journal of Personality*, 76, 1081-1122. doi:10.1111/j.1467-6494.2008.00514.x
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, 114, 376-390. doi:10.1037/0033-2909.114.2.376
- Orth, U., Robins, R. W., & Widaman, K. F. (2012). Life-span development of self-esteem and its effects on important life outcomes. *Journal of Personality and Social Psychology*, 102, 1271-1288. doi:10.1037/a0025558
- Owe, E., Vignoles, V. L., Becker, M., Brown, R., Smith, P. B., Lee, S. W. S., . . . Jalal, B. (2013). Contextualism as an important facet of individualism-collectivism: Personhood beliefs across 37 national groups. *Journal of Cross-Cultural Psychology*, 44, 24-45. doi:10.1177/0022022111430255
- Pelham, B. W. (1995). Self-investment and self-esteem: Evidence for a Jamesian model of self-worth. *Journal of Personality and Social Psychology*, 69, 1141-1150. doi:10.1037/0022-3514.69.6.1141
- Pyszczynski, T., Greenberg, J., Solomon, S., Arndt, J., & Schimel, J. (2004). Why do people need self-esteem? A theoretical and empirical review. *Psychological Bulletin*, 130, 435-468. doi:10.1037/0033-2909.130.3.435
- Raudenbush, S. W., Bryk, A. S., & Congdon, R. T. (2007). *HLM 6: Hierarchical linear and nonlinear modeling*. Lincolnwood, IL: Scientific Software International.
- Scalas, L. F., Morin, A., Marsh, H., & Nagengast, B. (in press). Importance models of the physical self: Improved methodology supports a normative-cultural importance model but not the individual importance model. *European Journal of Social Psychology*.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1-65. doi:10.1016/S0065-2601(08)60281-6.

- Schwartz, S. H. (2007). Value orientations: Measurement, antecedents and consequences across nations. In R. Jowell, C. Roberts, R. Fitzgerald, & G. Eva (Eds.), *Measuring attitudes cross-nationally: Lessons from the European Social Survey* (pp. 161-193). London, England: SAGE.
- Schwartz, S. H. (2009). Culture matters: National value cultures, sources and consequences. In R. S. Wyer, C.-Y. Chiu, & Y. Y. Hong (Eds.), *Understanding culture: Theory, research and application* (pp. 127-150). New York, NY: Psychology Press.
- Schwartz, S. H., & Bardi, A. (2001). Value hierarchies across cultures: Taking a similarities perspective. *Journal of Cross-Cultural Psychology, 32*, 268-290. doi:10.1177/0022022101032003002
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., . . . Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology, 103*, 663-688. doi:10.1037/a0029393
- Sedikides, C., Gaertner, L., & Toguchi, Y. (2003). Pancultural self-enhancement. *Journal of Personality and Social Psychology, 84*, 60-79. doi:10.1037/0022-3514.84.1.60
- Sedikides, C., & Strube, M. J. (1997). Self-evaluation: To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better. *Advances in Experimental Social Psychology, 29*, 209-269. doi:10.1016/S0065-2601(08)60018-0.
- Singelis, T. M., Bond, M. H., Sharkey, W. F., & Lai, C. S. Y. (1999). Unpackaging culture's influence on self-esteem and embarrassment: The role of self-construals. *Journal of Cross-Cultural Psychology, 30*, 315-341. doi:10.1177/0022022199030003003
- Smith, P. B. (2004). Acquiescent response bias as an aspect of cultural communication style. *Journal of Cross-Cultural Psychology, 35*, 50-61. doi:10.1177/0022022103260380
- Smith, P. B., Fischer, R., Vignoles, V. L., & Bond, M. H. (2013). *Understanding social psychology across cultures: Engaging with others in a changing world*. London, England: SAGE.
- Tam, K.-P., Leung, A. K.-y., Kim, Y.-H., Chiu, C.-Y., Lau, I. Y.-M., & Au, A. K. C. (2012). The better-than-average effect in Hong Kong and the United States: The role of personal trait importance and cultural trait importance. *Journal of Cross-Cultural Psychology, 43*, 915-930. doi:10.1177/0022022112443774
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Vignoles, V. L. (2011). Identity motives. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 403-432). New York, NY: Springer.
- Vignoles, V. L., & Brown, R. (2011). *Motivated identity construction in cultural context* (ESRC End of Award Report, RES-062-23-1300). Swindon, UK: ESRC.
- Vignoles, V. L., Regalia, C., Manzi, C., Gollidge, J., & Scabini, E. (2006). Beyond self-esteem: Influence of multiple motives on identity construction. *Journal of Personality and Social Psychology, 90*, 308-333. doi:10.1037/0022-3514.90.2.308
- World Bank. (2010). *GNI per capita 2007, Atlas method*. Retrieved from <http://data.worldbank.org/indicator/NY.GNP.PCAP.CD>
- Yamagishi, T. (2010). Micro-macro dynamics of the cultural construction of reality: A niche construction approach to culture. In M. J. Gelfand, C.-y. Chiu, & Y.-y. Hong (Eds.), *Advances in culture and psychology* (Vol. 1, pp. 251-308). Oxford, UK: Oxford University Press.
- Yamaguchi, S., Greenwald, A. G., Banaji, M. R., Murakami, F., Chen, D., Shiomura, K., . . . Krendl, A. (2007). Apparent universality of positive implicit self-esteem. *Psychological Science, 18*, 498-500. doi:10.1111/j.1467-9280.2007.01928.x