Subjective and Objective Hierarchies and Their Relations to Psychological Well-Being: A U.S./Japan Comparison

Social Psychological and Personality Science I-10 © The Author(s) 2014 Reprints and permission: sagepub.com/journalsPermissions.nav DOI: 10.1177/1948550614538461 spps.sagepub.com

(\$)SAGE

Katherine B. Curhan¹, Cynthia S. Levine¹, Hazel Rose Markus¹, Shinobu Kitayama², Jiyoung Park², Mayumi Karasawa³, Norito Kawakami⁴, Gayle D. Love⁵, Christopher L. Coe⁵, Yuri Miyamoto⁵, and Carol D. Ryff⁵

Abstract

Hierarchy can be conceptualized as objective social status (e.g., education level) or subjective social status (i.e., one's own judgment of one's status). Both forms predict well-being. This is the first investigation of the relative strength of these hierarchy—well-being relationships in the U.S. and Japan, cultural contexts with different normative ideas about how social status is understood and conferred. In probability samples of Japanese (N = 1,027) and U.S. (N = 1,805) adults, subjective social status more strongly predicted life satisfaction, positive affect, sense of purpose, and self-acceptance in the United States than in Japan. In contrast, objective social status more strongly predicted life satisfaction, positive relations with others, and self-acceptance in Japan than in the United States. These differences reflect divergent cultural models of self. The emphasis on independence characteristic of the United States affords credence to one's own judgment (subjective status), and the interdependence characteristic of Japan gives weight to what others can observe (objective status).

Keywords

culture/ethnicity, culture and self, emotion, interdependence, social status, well-being, hierarchy

People high in psychological well-being have better job performance, motivation, relationships, and health (Deci & Ryan, 2001; Harter, Schmidt, & Keyes, 2003; Ryff, Singer, & Love, 2004; Segrin & Taylor, 2007). Here, we examine a powerful predictor of psychological well-being—social hierarchy, or rank in society—and investigate for the first time how cultural context influences this link. Specifically, we show that subjective social status, or people's own views of where they stand in the social hierarchy, more strongly predicts well-being in the United States than in Japan. In contrast, objective social status (e.g., level of educational attainment) plays a relatively stronger role for well-being in Japan than in the United States.

Indices of social rank as diverse as occupational status, income, educational attainment, and self-rated position within the social hierarchy are all linked to well-being (Adler, Epel, Castillazzo, & Ickovics, 2000; Anderson, Kraus, Galinsky, & Keltner, 2012; Lorant et al., 2003). Those at the top of the social hierarchy are more optimistic, experience more positive and fewer negative emotions, and feel less threatened and anxious (Keltner, Gruenfeld, & Anderson, 2003). In contrast, people lower in social rank experience more adversity (Almeida, Neupert, Banks, & Serido, 2005) and are subject to negative stereotypes about their abilities (Croizet & Claire, 1998; Fiske,

Cuddy, Glick, & Xu, 2002). Given the pattern in these findings, understanding and assessing where people fit in their relevant social hierarchies is likely to be crucial in fostering psychological health and mitigating psychological dysfunction.

One's social status or position in the hierarchy is multifaceted and can be captured in multiple ways. Indices include objective factors, such as educational attainment, income, and occupation, and also subjective factors, such as one's self-rated position in the relevant hierarchy. We suggest that both the objective and subjective forms of status are important for well-being, but that their relative power differs across cultures. We hypothesize that subjective social status carries greater

Corresponding Author:

Cynthia S. Levine, Northwestern University, Swift Hall, 2029 Sheridan Rd., Evanston, IL 60208, USA.

Email: cynthia.levine@northwestern.edu

¹ Stanford University, Stanford, CA, USA

² University of Michigan, Ann Arbor, MI, USA

³ Tokyo Woman's Christian University, Tokyo, Japan

⁴University of Tokyo, Tokyo, Japan

⁵ University of Wisconsin, Madison, WI, USA

weight in independent cultural contexts such as the United States, which place greater emphasis on one's own internal thoughts and feelings, than in interdependent cultural contexts such as Japan, where the self is construed as fundamentally connected to others and thus others' views are crucial for well-being (Diener & Suh, 2000; Kitayama, Karasawa, Curhan, Ryff, & Markus, 2010). Because objective social status reflects markers of status that are visible to others and are agreed upon by social consensus, we hypothesize that objective status is a more powerful predictor in interdependent than independent cultural contexts.

Status and Well-being

In Western contexts, people with higher objective social status have better psychological well-being (Adler et al., 2000; Lorant et al., 2003; Marmot, Ryff, Bumpass, Shipley, & Marks, 1997). They typically control more resources and encounter fewer financial, social, and psychological stressors (Berkman, Glass, Brissette & Seeman, 2000; Matthews, Gallo, & Taylor, 2010). In addition, higher rank offers greater opportunities for selfrealization and self-development (Dowd, 1990). More limited but consistent evidence exists for a similar objective social status-well-being link in Japan (Fukuda & Hiyoshi, 2012; Honjo et al., 2006). In Eastern contexts, objective hierarchies have even more legitimacy and positive resonance than they do in the West and are used to organize a wide array of everyday activities (Tu, 1991). People are well aware of their place in these hierarchies and are more comfortable with hierarchical social relations than Europeans and European Americas (e.g., Brockner et al., 2001; Ho, 1995). Japan is a context with particularly strong norms about the importance of objective hierarchies in creating and maintaining the social order (Gelfand et al., 2011).

People's subjective sense of their position in the social hierarchy is also a powerful predictor of well-being. Adler and colleagues' pioneering studies reveal that individuals' self-reported judgments of their position relative to others predicts psychological well-being as well or better than objective social status (Adler et al., 2000; Anderson et al., 2012; Demakakos, Nazroo, Breeze, & Marmot, 2008; Kraus, Adler, & Chen, 2013; Singh-Manoux, Adler, & Marmot, 2003). Two studies investigating these relationships in Japan found similar patterns (Honjo, Kawakami, Tsuchiya, & Sakurai, 2013; Sakurai, Kawakami, Yamaoka, Ishikawa, & Hashimoto, 2010).

No study has directly compared the strength of the relationships between either type of social status and well-being in the United States relative to Japan. As Inaba and colleagues (2005) note, the well-being-status relationships found in the West may not apply in other contexts such as Japan. In particular, because of cultural variation in the importance of objective and subjective social status in the United States and Japan, the well-being-status relationships are unlikely to be equally powerful in each context. In Japan, as in the United States, subjective social status offers the advantage of simultaneously indexing multiple status-relevant factors and capturing whatever status markers are most relevant in a particular context (Adler &

Stewart, 2007; Leu, Yen, Gansky, Walton, Adler, & Takeuchi, 2008). Yet, we suggest that the benefit of measures capturing individuals' personal views of their status is likely more limited in Japan because of the powerful role of publically inscribed, or objective, hierarchy (e.g., educational attainment, status of company, etc.) in shaping most aspects of everyday life (Rai & Fiske, 2011).

Cultural Differences in Sources of Well-Being

Well-being and its sources differ across cultural contexts. In Japan, well-being centers more around well-managed relationships with others, while in the United States, it depends more on individuals' personal feelings and emotions (Kitayama & Markus, 2000; Mesquita & Leu, 2007; Uchida, Townsend, Markus, & Bergsieker, 2009). These differences reflect the different models of self pervasive in these contexts (Markus & Kitayama, 2003). These models are inscribed in individual attitudes and values and are also built into the institutions, practices, and artifacts that organize everyday life (Markus & Conner, 2013). According to the independent model of self, normative in mainstream U.S. contexts, people are understood as fundamentally independent from others. Consequently, individuals' own perceptions and subjective reactions are the primary determinants of thoughts, feelings, and actions, and their own internal psychological states are attended to and emphasized (Markus & Kitayama, 2010). As in all contexts, others' judgments influence thought and behavior, but one's own views are the most accessible referent for self-evaluation and accomplishment. Such a context affords self-rated (i.e., subjective) social status a particularly important role in well-being.

In contrast, according to the *interdependent* model of self that is normative in Japan, people are understood as fundamentally interconnected with important others. Self-assessment in Japan, therefore, is less about "what do I think or feel?" and more about "how am I viewed by others?" (Lebra, 2008). Accordingly, the effects of social approval or the "eyes of others" on individuals' behavior are amplified (Kim, Cohen, & Au, 2010; Kitayama & Imada, 2008). Indeed, in interdependent cultures, public and institutionalized benchmarks of success that signal the community's respect are primary referents for self-evaluation (Leung and Cohen, 2011; Wirtz & Scollon, 2012). Objective benchmarks are powerful because they reflect the relevant in-groups' shared and normative understandings made real in the world. Such a context affords objective social status, which is observable to others and reflects social consensus about the definition of success, a larger role in well-being than does an independent context.

Study Overview

The present research aimed to be the first study to (1) compare the strength of the relationship between objective social status and well-being in the United States and Japan and (2) to compare the strength of the relationship between subjective social status and well-being in the United States and Japan.

Table 1. Descriptive Statistics and Mean Comparisons for the Japanese (N = 1,027) and U.S. (N = 1,805) Sample.

	United States		Japan		Mean Comparisons	
Variable	М	SD	М	SD	t	Significance
Age	56.9	12.6	54.4	14.1	4.69	***
Gender	0.55	0.50	0.51	0.50	n/a	*
Married	0.67	0.47	0.69	0.46	n/a	ns
Objective social status (educational attainment)	4.58	1.66	4.24	1.69	5.25	***
Subjective social status (ladder)	6.50	1.86	6.03	2.11	5.87	***
Life satisfaction	7.84	1.55	6.13	2.06	23.13	***
Positive affect	3.51	0.69	3.21	0.76	10.67	***
Autonomy	5.33	1.00	4.38	0.76	28.66	***
Environmental mastery	5.40	1.06	4.53	0.78	25.15	***
Personal growth	5.45	1.01	4.82	0.81	18.01	***
Positive relations	5.72	1.01	4.79	0.82	26.84	***
Purpose in life	5.44	1.02	4.54	0.72	27.39	***
Self-acceptance	5.41	1.18	4.40	0.81	26.6	***

Note. Japanese (N=1,027) and Americans (N=1,805). Two-tailed independent sample t-tests were used for mean comparisons. χ^2 tests were used to determine mean group differences, and the phi coefficient was used as a measure of association for gender ($\chi^2=3.91$, p=.05; $\phi=.04$) and marital status ($\chi^2=1.08$, p=.30; $\phi=.02$).

Furthermore, as our outcome, we used multiple well-validated measures of well-being (Deci & Ryan, 2001; Ryff, 1989). These included measures that captured hedonic well-being (i.e., happiness, feeling good) and eudaimonic well-being (i.e., meaning, purpose, and fulfillment). We predicted that subjective social status would be more strongly linked with well-being in the United States than in Japan, whereas objective social status would be more strongly linked with well-being in Japan than in the United States. To test our hypothesis, we drew on representative survey data from the two nations.

Method

Samples

The U.S. data came from the second wave of the Midlife in the United States (MIDUS) national study conducted in 2004–2005 (75% longitudinal retention rate, adjusted for mortality). We used 1,805 adults (aged 34–84) from the random-digit-dialing sample (Radler & Ryff, 2010). This sample included noninstitutionalized, English-speaking adults randomly selected from working telephone banks in the 48 contiguous states. The Japanese sample Midlife in Japan (MIDJA) included 1,027 adults (aged 30–79) randomly selected from the Tokyo metropolitan area (23 wards) in 2008–2010 (response rate = 56.2%). Respondents completed self-administered questionnaires; the Japanese version was back-translated and adjusted multiple times by native speakers to generate analogous meaning. The samples were comparable in terms of age, gender, and marital status (see Table 1).

Social Status

Objective social status. Objective social status was indexed by educational attainment level $(1 = 8th \ grade/junior \ high; 2 =$

some high school; 3 = high school graduate/GED; 4 = one of more years of college, no degree; 5 = two-year college degree/vocational school; 6 = four-/five-year college bachelor's degree; 7 = at least some graduate school). Educational attainment is the most frequently used index of socioeconomic status, as it is a precursor to occupation and income and is easily measured at the individual level (e.g., as opposed to total household income; Fiske & Markus, 2012; Lareau & Conley, 2008). Moreover, among the three most commonly used indicators of social class status (education, income, and occupation), education is the best predictor of a wide range of values and beliefs and is also the most closely associated with lifestyle, behavior, and psychological functioning (e.g., Attewell & Newman, 2010; Reardon, 2011; Snibbe & Markus, 2005).

Subjective social status. Subjective social status was measured using the community ladder (Adler & Stewart, 2007), a drawing of a 10-rung ladder with the instructions:

Think of this ladder as representing where people stand in their communities. People define community in different ways; please define it in whatever way is most meaningful to you. At the top of the ladder are the people who have the highest standing in their community. At the bottom are the people who have the lowest standing in their community. Where would you place yourself on this ladder? Please check the box next to the rung on the ladder where you think you stand at this time in your life, relative to other people in the community with which you most identify.

To ensure that the ladder assessed a similar construct in the two contexts, multiple rounds of translation and back-translation with native English and Japanese speakers made sure the word "community" was comparable in both nations. Further, we examined how subjective social status ratings correlated with

^{.100. &}gt; q***

other measures in the MIDJA and MIDUS surveys. Across domains, the correlations in both nations were similar. The highest correlations (all ps < .01) for both nations were with the generativity scale (e.g., Many people come to you for advice; Japan r = .44, United States r = .41), the self-esteem scale (Japan r = .42, United States r = .43), and a rating of satisfaction with one's current financial situation (Japan r = .40; United States r = .30).

Well-Being

We indexed eight scales covering distinct forms of both hedonic well-being (i.e., life satisfaction and positive affect) and eudaimonic well-being (i.e., the six psychological well-being subscales; Deci & Ryan, 2001). Life satisfaction was a 1-item rating of current life satisfaction ($0 = worst\ possible$, $10 = best\ possible$). The positive affect measure was based on the widely used positive and negative affect schedule (PANAS; Watson, Clark, & Carey, 1988), which also has been validated in Japan (Sato & Yasuda, 2001). Respondents rated the frequency ($1 = none\ of\ the\ time$, $5 = all\ of\ the\ time$) of experiencing each of the following states during the previous 2 weeks: cheerful, in good spirits, extremely happy, calm and peaceful, satisfied, full of life, enthusiastic, attentive, proud, confident, active, full of life, close to others, and like you belong (Japan $\alpha = .94$; United States $\alpha = .94$).

The six psychological well-being subscales (Ryff, 1989) each represented the respective 7-item mean of responses to a 7-point Likert-type scale: autonomy (e.g., My decisions are not usually influenced by what everyone else is doing; Japan $\alpha = .70$, United States $\alpha = .71$), environmental mastery (e.g., In general, I feel I am in charge of the situation in which I live; Japan $\alpha = .73$, United States $\alpha = .78$), personal growth (e.g., For me, life has been a continuous process of learning, changing, and growth; Japan $\alpha = .74$, United States $\alpha = .75$), positive relations with others (e.g., I know that I can trust my friends, and they know they can trust me; Japan $\alpha = .76$, United States $\alpha = .78$), purpose in life (e.g., Some people wander aimlessly through life, but I am not one of them; Japan $\alpha = .56$, United States $\alpha = .70$), and self-acceptance (e.g., When I look at the story of my life, I am pleased with how things have turned out; Japan $\alpha = .78$, United States $\alpha = .84$). Finally, we created a composite well-being measure by averaging each participant's within-culture standardized scores on the eight well-being measures listed previously.

Control Variables

Our analyses controlled for demographic variables (age, gender, and marital status) shown to predict well-being (e.g., Cleary, Zaborski, & Ayanian, 2004; Inaba et al., 2005). For all variables, higher numbers indicated more of a given construct. In addition, gender was coded as male = 0 and female = 1, and marital status as 0 = not married and 1 = married. Missing data were limited (<5% for each variable), so no further adjustments were made.

Results

Two-tailed independent samples t-tests indicated that U.S. respondents scored higher than Japanese respondents on both status measures and on well-being measures (see Table 1). Bivariate correlations between status and well-being measures were nearly all significant. For the United States, objective social status correlated with all well-being variables except positive relations (range: .06-.25), and subjective social status correlated with all well-being variables (range: .32-.47), ps < .05. For Japan, objective social status correlated with all well-being variables except positive affect (range: .07-.24), and subjective social status correlated with all well-being variables (range: .26-.39), ps < .05. The results of the hierarchical regression analyses run separately within each culture are presented in Table 2.

To test our hypotheses, we used hierarchical linear regressions to explore cultural differences in the relative influence of objective and subjective social status in predicting well-being. Age, gender, and marital status were entered into the model in Step 1, followed by objective social status in Step 2, then subjective social status in Step 3 (following past precedent [e.g., Adler et al., 2000] to ensure its predictive influence was independent of objective social status), then culture (dummy-coded) and its interactions with both objective and subjective social status in Steps 4 and 5, respectively. To reduce multicollinearity, mean-centered objective and subjective social status scores were used to compute the two interaction terms (Cohen & Cohen, 1983; Cronbach, 1987). Separate regressions were conducted to predict the eight well-being outcomes (also standardized within-nation).

As hypothesized, subjective social status showed a robust pattern of stronger effects on well-being in the United States than Japan, while, in contrast, objective social status showed a robust pattern of stronger effects on well-being in Japan than in the United States. Specifically, the associations between subjective social status and the well-being outcomes that were stronger in the United States were those that predicted life satisfaction, b = -.08, t(2,708) = -4.35, p < .001; positive affect, b = -.09, t(2,716) = -4.94, p < .001; purpose in life, b = -.07, t(2,721) = -3.99, p < .001; and self-acceptance, b = -.08, t(2,722) = -4.35, p < .001. Notably, on two additional measures the Subjective Social Status × Culture interaction resulted in marginal statistical significance in the same direction: autonomy, b = -.03, t(2,722) = -1.65, p < .10, and personal growth, b = -.03, t(2,722) = -1.74, p < .09. Finally, the association between subjective social status and the well-being composite was significantly stronger in the United States than in Japan, b = -.09, t(2,733) = -4.02, p < .001 (see Figure 1).

In contrast, the results of the objective social status analyses tended to show the opposite cultural pattern. The associations between objective social status and the well-being outcomes were significantly stronger in Japan than in the United States for life satisfaction, b = .09, t(2,708) = 3.91, p < .001; positive relations, b = .09, t(2,722) = 4.30,

Table 2. Subjective Social Status Predicts Well-Being Beyond the Effects of Objective SES in the United States (N = 1,805, Panel A) and Japan (N = 1,027, Panel B).

Panel A. United States							
		Objective Social	Status	Subjective Social Status			
	Ь	t	Significance	ь	t	Significance	
Life satisfaction	0.01	0.89		0.19	15.92	***	
Positive affect	0.02	1.10		0.20	16.47	***	
Autonomy	0.01	0.92		0.16	17.89	***	
Environmental mastery	0.05	4.06	***	0.20	16.98	***	
Personal growth	0.11	8.37	*olok	0.19	15.45	***	
Positive relations w/ others	0.00	-0.15		0.20	16.78	***	
Purpose in life	0.07	4.84	*olok	0.19	15.71	***	
Self-acceptance	0.24	17.60	*olok	0.19	15.71	***	
Well-being composite	0.08	3.85	***	0.47	21.55	*olok	

Panel B. Japan

		Objective Social Status			Subjective Social Status		
	Ь	t	Significance	Ь	t	Significance	
Life satisfaction	0.10	5.44	***	0.11	8.07	***	
Positive affect	0.02	0.93		0.11	7.74	***	
Autonomy	0.02	1.61		0.13	12.42	***	
Environmental mastery	0.08	4.30	*olok	0.17	12.49	*olok	
Personal growth	0.10	5.65	*olok	0.15	10.97	*olok	
Positive relations w/others	0.09	5.15	*olok	0.17	12.31	*olok	
Purpose in life	0.09	4.68	*olok	0.12	8.33	*olok	
Self-acceptance	0.31	16.75	*olok	0.12	8.05	*olok	
Well-being composite	0.18	5.95	***	0.41	14.45	***	

Note. Unstandardized regression coefficients are presented. All analyses controlled for age, gender, and marital status. Degrees of freedom (df) were 2,722 except for life satisfaction (2,708), positive affect (2,716), and purpose in life (2,721).

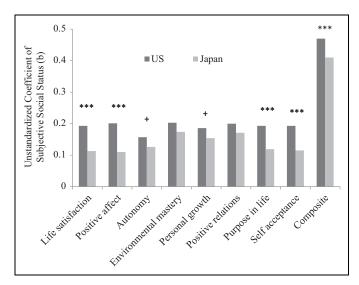


Figure 1. Subjective social status shows a robust pattern of stronger effects on psychological well-being in the United States (n=1,805) than Japan (n=1,027). Unstandardized coefficients are presented, controlling for age, gender, and marital status. +p < .10, ****p < .001.

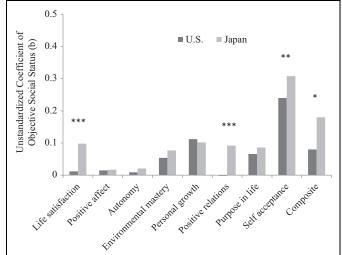


Figure 2. Objective social status shows a robust pattern of stronger effects on psychological well-being in Japan (n=1,027) than in the United States (n=1,805). Unstandardized coefficients are presented, controlling for age, gender, and marital status. *p < .05, **p < .01, ****p < .001.

p < .001; and self-acceptance, b = .07, t(2,722) = 3.16, p < .01. In addition, the association between objective social status and the well-being composite was significantly stronger in Japan than in the United States, b = .05, t(2,733) = 2.34, p < .05. For both objective social status and subjective social status, the nonsignificant culture interactions nearly always followed the hypothesized direction of effects (see Figure 2).

Discussion

We show that hierarchy matters for well-being in both the United States and Japan and break new ground by demonstrating that the strength of associations between different forms of hierarchy and well-being varies systematically by cultural context. While subjective social status significantly predicted both hedonic and eudaimonic outcomes in Japan and the United States, the strength of these associations was relatively stronger in the United States—significantly so for life satisfaction, positive affect, purpose in life, and self-acceptance. The reverse was true for objective social status, which predicted life satisfaction, positive relations with others, and self-acceptance significantly more strongly in Japan than in the United States.

Our findings are consistent with previous research suggesting that the beliefs and practices of U.S. culture sanction an independent model of the self in which one's own subjective judgments—rather than others' judgments—are the primary referent for the evaluation of self-worth and accomplishment (Markus & Kitayama, 2010). Eleanor Roosevelt's claim, "Nobody can make you feel inferior without your consent," succinctly expresses this widespread American sentiment.

The comparatively stronger role of objective social status in Japan relative to the United States supports past research indicating that the beliefs and practices of East Asian cultures, including Japan, foster an interdependent model of the self in which the socially consensual, publically accorded aspects of the self (i.e., objective factors such as one's degree or position in a company, etc.) are the primary referent for self-assessment and are salient in everyday social interactions (e.g., Leung and Cohen, 2011; Rai & Fiske, 2011). Relative to the United States, in Japan, one's own personal, possibly idiosyncratic, criteria for where the self stands in relation to others are relatively less central in self-evaluation.

Other recent evidence also suggests a differential emphasis on objective, externally observable factors in East Asia versus more subjective factors in the West (e.g., Kim et al., 2010; Wirtz & Scollon, 2012). For example, Park and colleagues (in press) found that anger expression is predicted by objective status in Japan, but by subjective status in the United States. The present study, paired with this past research, may help explain the relatively greater importance assigned to indices of position in various social hierarchies such as grades or admission to prestigious universities among people from Asian and Asian American contexts compared to those in matched northern American contexts (Chao & Tseng, 2002; Chua, 2011). In Asian and Asian American contexts, such objective status indicators are more tightly linked to well-being.

Local Versus Global Status

Our measures of social status, the ladder and level of educational attainment, differ on multiple dimensions. We have focused on the distinction between objective and subjective markers of status. However, another notable characteristic of the ladder measure included here is that it captures local as opposed to global status (Anderson et al., 2012). Specifically, it asks people about their position within their local community rather than about their position compared to people in their country overall or to people in general. Questions about status relative to an important reference group are powerful predictors of well-being in East Asian as well as Western cultural contexts (Oshio, Nozaki, & Kobayashi, 2011). Although subjective markers of status are relatively more powerful in the United States, status within the local context tends to be relatively more important in Japan, where the boundary between in-group and out-group is a strong and significant division. Interdependence thus refers not to interdependence with people in general but specifically to interdependence with others in close relationships and important groups (Markus & Kitayama, 1991). The importance of the local community may explain why our ladder measure, which uses community as a referent, is a stronger predictor of well-being than education in Japan (as it is in the United States, as well). The fact that this measure captures local rather than global status may help it to predict well-being in both cultural contexts. Our data only included one ladder measure, but future research might compare the predictive power of global and local objective and subjective markers of status for well-being. Objective indices of local status should predict well-being more strongly than objective indices of global status or subjective indices of local status in Japan.

Well-Being in Japan

The finding that objective social status predicted well-being more strongly in Japan than in the United States emerged most robustly on three well-being indices—positive relations with others, self-acceptance, and life satisfaction—that might be especially relevant in interdependent cultural contexts in which connection to others is a primary social goal (Oishi & Diener, 2001; Uchida, Norasakkunkit, & Kitayama, 2005). Positive relations explicitly implicate others, and self-acceptance is likely to rely heavily on others in interdependent cultural contexts in which cues from others are a primary referent for self-esteem and self-regard (e.g., Heine, Lehman, Markus, & Kitayama, 1999). Finally, Japanese ratings of life satisfaction, a broad construct that allows respondents to bring to mind whatever components of well-being are most relevant in their cultural contexts, are also likely to invoke social relationships.

Limitations and Future Directions

Although laboratory experiments offer some evidence to support our implicit claim that social status affects well-being in the United States (e.g., Anderson et al., 2012; Mendelson,

Thurston, & Kubzansky, 2008), additional experimental work in Japan as well as longitudinal research in both cultures would further illuminate cultural differences (or similarities) in the causal direction and mechanisms underlying these findings. Future work might also include measures that would allow a more fine-grained measure of objective status (e.g., university attended) and explore the relationship between hierarchy and other types of well-being using other measures besides those available in the samples used here. These include varieties of well-being that are more prevalent in Japan, such as sympathy with others (Kitayama & Markus, 2000) or minimalist happiness (Kan, Karasawa, & Kitayama, 2009), as well as measures of mental illness.

Implications and Conclusion

This study has important implications for efforts to improve psychological well-being. For example, in the United States, many popular methods in mental health counseling focus on teaching people to cognitively restructure or reappraise how they feel and think about themselves and their behavior. However, in contexts such as Japan where interdependent models of self are normative, mature people are expected to be aware of and behave in accordance with their place in various objective hierarchies. Changing how they view themselves without attending to the views of others may be decidedly less effective in improving mental health. Well-being interventions might focus instead on helping people raise their objective status through effort and concrete achievements or else on accepting and adjusting to their position in the social order (e.g., Weisz, Rothbaum, & Blackburn, 1984).

In summary, we conclude that both U.S. Americans and Japanese make social comparisons that affect their well-being, but the criteria for such comparisons tend to be more external in Japan and more internal in the United States. While hierarchies may be a universal feature of human life, our findings suggest that how they are determined and maintained and how they relate to well-being is culturally contingent.

Authors' Notes

The data from the United States (MIDUS II) and Japan (MIDJA) are available from the Inter-University Consortium for Political and Social Research (ICPSR; http://www.icpsr.umich.edu/). The first two authors contributed equally to the research. Cynthia S. Levine is now at Northwestern University, and Jiyoung Park is now at the University of California, San Francisco.

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

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by a grant from the National Institute on Aging (5R37AG027343) to conduct a study of Midlife in Japan (MIDJA) for comparative analysis with MIDUS (Midlife in the United States, P01-AG020166).

Notes

- 1. We operationalized objective social status as level of educational attainment (see methods). However, operationalizing it as a composite of level of educational attainment and occupational status (three levels: manual/blue collar/service, non-manual/white collar/clerical, and managerial/professional) yields the same set of significant results, except that objective social status no longer predicts self-acceptance more strongly in Japan than in the United States.
- 2. Our primary interest was in the relative role of subjective and objective status across cultures (i.e., the extent to which subjective social status predicted well-being in the United States relative to Japan and the extent to which objective social status predicted well-being in the United States relative to Japan). However, it should also be noted that across cultures, subjective social status predicted well-being more strongly than objective social status. Specifically, using the well-being composite as an outcome measure, the Subjective Social Status × Objective Social Status interaction is significant, b = .01, t(2,724) = 2.24, p < .05. The Culture × Subjective Social Status × Objective Social Status is not significant, b = -.002, t(2,723) = -.25, p = .81, indicating that the relatively stronger role of subjective social status in predicting well-being is not moderated by culture. Importantly, the critical two-way interactions (i.e., Culture \times Subjective Social Status, Culture × Objective Social Status) remain significant even with when the Subjective Social Status × Objective Social Status interaction is taken into account.

References

- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy white women. *Health Psychology*, 19, 586–592. doi:10.1037/0278-6133.19.6.586
- Adler, N. E., & Stewart, J. (2007). The MacArthur scale of subjective social status. In *MacArthur Research Network on SES & Health*. Retrieved from http://www.macses.ucsf.edu/Research/Psychosocial/subjective.php
- Almeida, D. M., Neupert, S. D., Banks, S. R., & Serido, J. (2005). Do daily stress processes account for socioeconomic health disparities? *Journal of Gerontology: Series B*, 60, S34–S39. doi:10. 1093/geronb/60.Special_Issue_2.S3
- Anderson, C., Kraus, M. W., Galinsky, A. D., & Keltner, D. (2012).
 The local-ladder effect: Social status and subjective well-being.
 Psychological Science, 23, 764–771. doi:10.1177/0956797611
 434537
- Attewell, S., & Newman, K. S. (2010). *Growing gaps: Educational inequality around the world*. New York, NY: Oxford University Press.
- Berkman, L. F., Glass, T., Brisette, I., & Seeman, T. E. (2000). From social integration to health: Durkheim in the new millennium. *Social Science and Medicine*, *51*, 843–857. doi:10.1016/S0277-9536(00)00065-4

- Brockner, J., Ackerman, G., Greenberg, J., Gelfand, M. J., Francesco, A. M., Chen, Z. X., . . . Shapiro, D. (2001). Culture and procedural justice: The influence of power distance on reactions to voice. *Journal of Experimental Social Psychology*, 37, 300–315. doi:10.1006/jesp.2000.1451
- Chao, R., & Tseng, V. (2002). Parenting of Asians. In M. H. Bornstein (Ed.), *Handbook of parenting* (Vol. 4, pp. 59–93). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Chua, A. (2011). Battle hymn of the tiger mother. New York, NY: Penguin.
- Cleary, P. D., Zaborski, L. B., & Ayanian, J. Z. (2004). Sex differences in health over the course of midlife. In O. G. Brim, C. D. Ryff, & R. C. Kessler (Eds.), How healthy are we? A national study of well-being at midlife (pp. 37–63). Chicago, IL: University of Chicago Press.
- Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum
- Croizet, J.-C., & Claire, T. (1998). Extending the concept of stereotype threat to social class: The intellectual underperformance of students from low socioeconomic backgrounds. *Personality and Social Psychology Bulletin*, 24, 588–594. doi:10.1177/0146167298246003
- Cronbach, L. (1987). Statistical tests for moderator variables: Flaws in analysis recently proposed. *Psychological Bulletin*, *102*, 414–417. doi:10.1037/0033-2909.102.3.414
- Deci, E. L., & Ryan, R. M. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. Annual Review of Psychology, 52, 141–166. doi:10.1146/annurev.psych.52.1.141
- Demakakos, P., Nazroo, J., Breeze, E., & Marmot, M. (2008). Socioeconomic status and health: The role of subjective social status. *Social Science and Medicine*, 67, 330–340. doi:10.1016/j.socscimed.2008.03.038
- Diener, E., & Suh, E. M. (Eds.). (2000). Culture and subjective wellbeing. Cambridge, MA: The MIT Press.
- Dowd, J. J. (1990). Ever since Durkheim: The socialization of human development. *Human Development*, 33, 138–159. doi:10.1159/ 000276507
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878–902. doi:10.1037/ 0022-3514.82.6.878
- Fiske, S. T., & Markus, H. R. (Eds). 2012. Facing social class: How societal rank influences social interaction. New York, NY: Russell Sage Foundation.
- Fukuda, Y., & Hiyoshi, A. (2012). Influences of income and employment on psychological distress and depression treatment in Japanese adults. *Environmental Health and Preventative Medicine*, 17, 10–17. doi:10.1007/s12199-011-0212-3
- Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Lim, B. C., ... Yamaguchi, S. (2011). Differences between tight and loose cultures: A 33-nation study. *Science*, 332 (6033), 1100–1104. doi: 10.1126/science.1197754
- Harter, J. K., Schmidt, F. L., & Keyes, C. L. (2003). Well-being in the workplace and its relationship to business outcomes: A review of

- the Gallup studies. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 205–224). Washington, DC: American Psychological Association.
- Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review*, 106, 766. doi:10.1037/0033-295X.106.4.766
- Ho, D. Y. F. (1995). Self-hood and identity in Confucianism, Taoism, Buddhism, and Hinduism: Contrasts with the West. *Journal of the Theory of Social Behavior*, 25, 115–139. doi:10.1111/j.1468-5914. 1995.tb00269.x
- Honjo, K., Kawakami, N., Takeshima, T., Tachimori, H., Ono, Y., Uda, H., ... Kikkawa, T. (2006). Social class inequalities in self-rated health and their gender and age group differences in Japan. *Journal of Epidemiology*, *16*, 223–232. doi:10.2188/jea.16.223
- Honjo, K., Kawakami, N., Tsuchiya, M., & Sakurai, K. (2013). Association of subjective and objective socioeconomic status with subjective mental health and mental disorders among Japanese men and women. *International Journal of Behavioral Medicine*. doi: 10.1007/s12529-013-9309-y
- Inaba, A., Thoits, P. A., Uenoc, K., Gove, W. R., Evenson, R. J., & Sloan, M. (2005). Depression in the United States and Japan: Gender, marital status, and objective status patterns. *Social Science & Medicine*, 61, 2280–2292. doi:10.1016/j.socscimed.2005.07.014
- Kan, C., Karasawa, M., & Kitayama, S. (2009). Minimalist in style: Self, identity, and well-being in Japan. Self and Identity, 8, 300–317. doi:10.1080/15298860802505244
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110, 265–284. doi:10.1037/0033-295X.110.2.265
- Kim, Y.-H, Cohen, D., & Au, W.-T. (2010). The jury and abjury of my peers: The self in face and dignity cultures. *Journal of Personality* and Social Psychology, 98, 904–916. doi:10.1037/a0017936
- Kitayama, S., & Imada, T. (2008). Defending cultural self: A dual-process model of agency. In T. Urdan & M. Maehr (Eds.), Advances in motivation and achievement (Vol. 15, pp. 171–207). Amsterdam, the Netherlands: Elsevier.
- Kitayama, S., Karasawa, M., Curhan, K. B., Ryff, C. D., & Markus, H. R. (2010). Independence and interdependence predict heatlh and wellbeing: Divergent patterns in the United States and Japan. *Frontiers in Psychology*, 1, 1–10. doi:10. 3389/fpsyg.2010.00163
- Kitayama, S., & Markus, H. R. (2000). The pursuit of happiness and the realization of sympathy: Cultural patterns of self, social relations, and well-being. In E. Diener & E. M. Suh (Eds.), *Culture and subjective well-being* (pp. 113–161). Cambridge, MA: MIT Press.
- Kraus, M. W., Adler, N., & Chen, T.-W. D. (2013). Is the association of subjective SES and self-rated health confounded by negative mood? An experimental approach. *Health Psychology*, 32, 138–145. doi:10.1037/a0027343
- Lareau, A., & Conley, D. (2008). *Social class*. New York, NY: Russell Sage Foundation.
- Lebra, T. S. (2008). *The Japanese self in cultural logic*. Honolulu, HI: University of Hawaii Press.
- Leu, J., Yen, I. H., Gansky, S. A., Walton, E., Adler, N. E., & Takeuchi, D. T. (2008). The association between subjective status and

- mental health among Asian immigrants: Investigating the influence of age at immigration. *Social Science and Medicine*, 66, 1152–1164. doi:10.1016/j.socscimed.2007.11.028
- Leung, A. K. Y., & Cohen, D. (2011). Within- and between-culture variation: Individual differences and the cultural logics of honor, face, and dignity cultures. *Journal of Personality and Social Psychology*, 100, 507–526. doi:10.1037/a0022151
- Lorant, V., Deliege, D., Eaton, W., Robert, A., Phillippot, P., & Ansseau, M. (2003). Socioeconomic inequalities in depression: A meta-analysis. *American Journal of Epidemiology*, 157, 98–112. doi:10.1093/aje/kwf182
- Markus, H. R., & Conner, A. C. (2013). Clash! Eight cultural conflicts that make us who we are. New York, NY: Penguin (Hudson Street Press).
- 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
- Markus, H. R., & Kitayama, S. (2003). Models of agency: Sociocultural diversity in the construction of action. In V. Murphy-Berman & J. Berman (Eds.), The 49th Annual Nebraska symposium on motivation: Cross-cultural differences in perspectives on self (pp. 1–57). Lincoln: University of Nebraska Press.
- Markus, H. R., & Kitayama, S. (2010). Cultures and selves: A cycle of mutual constitution. *Perspectives on Psychological Science*, 5, 420–430. doi:10.1177/1745691610375557
- Marmot, M., Ryff, C. D., Bumpass, L. L., Shipley, M., & Marks, N. F. (1997). Social inequalities in health: Next questions and converging evidence. *Social Science and Medicine*, 44, 901. doi:10. 1016/S0277-9536(96)00194-3
- Matthews, K. A., Gallo, L. C., & Taylor, S. E. (2010). Are psychosocial factors mediators of socioeconomic status and health connections? *Annals of the New York Academy of Sciences*, 1186, 146–173. doi:10.1111/j.1749-6632.2009.05332.x
- Mendelson, T., Thurston, R. C., & Kubzansky, L. D. (2008). Affective and cardiovascular effects of experimentally-induced social status. *Health Psychology*, 27, 482–489. doi:10.1037/0278-6133.27.4.482
- Mesquita, B., & Leu, J. (2007). The cultural psychology of emotions. In S. Kitayama & D. Cohen (Eds.), *Handbook for cultural psychology* (pp. 734–759). New York, NY: Guilford Press.
- Oishi, S., & Diener, E. (2001). Goals, culture, and subjective well-being. *Personality and Social Psychology Bulletin*, 27, 1674–1682. doi:10.1177/01461672012712010
- Oshio, T., Nozaki, K., & Kobayashi, M. (2011). Relative income and happiness in Asia: Evidence from nationwide surveys in China, Japan, and Korea. *Social Indices Research*, *104*, 351–367.
- Park, J., Kitayama, S., Markus, H. R., Coe, C. L., Miyamoto, Y., Karasawa, M.,...Ryff, C. D. (2013). Social status and anger expression: The cultural moderation hypothesis. *Emotion*, 13, 1122–1131. doi:10.1037/a0034273
- Radler, B. T., & Ryff, C. D. (2010). Who participates? Accounting for longitudinal retention in the MIDUS national study of health and well-being. *Journal of Aging and Health*, 22, 307–331. doi:10. 1177/0898264309358617
- Rai, T. S., & Fiske, A. P. (2011). Moral psychology is relationship regulation: Moral motives for unity, hierarchy, equality, and

- proportionality. *Psychological Review*, 118, 57–75. doi:10.1037/a0021867
- Reardon, S. F. (2011). The widening gap between the rich and the poor: New evidence and possible explanations. In G. J. Duncan & R. J. Murname (Eds.), *Whither opportunity? Rising inequality, schools and children's life chances* (pp. 91–116). New York, NY: Russell Sage Foundation.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality* and Social Psychology, 57, 1069–1081. doi:10.1037/0022-3514. 57.6.1069
- Ryff, C. D., Singer, B. H., & Love, G. D. (2004). Positive health: Connecting well-being with biology. *Philosophical Transactions of the Royal Society of London Series B, Biological Sciences*, 359, 1383–1394. doi:10.1098/rstb.2004.1521
- Sakurai, K., Kawakami, N., Yamaoka, K., Ishikawa, H., & Hashimoto, H. (2010). The impact of subjective and objective status on psychological distress among men and women in Japan. Social Science & Medicine, 70, 1832–1839. doi:10.1016/j.socscimed.2010. 01.019
- Sato, A., & Yasuda, A. (2001). Development of the Japanese version of Positive and Negative Affect Schedule (PANAS) scales. *Japanese Journal of Personality*, 9, 138–139.
- Segrin, C., & Taylor, M. (2007). Positive interpersonal relationships mediate the association between social skills and psychological well-being. *Personality and Individual Differences*, 43, 637–646. doi:10.1016/j.paid.2007.01.017
- Singh-Manoux, A., Adler, N. E., & Marmot, M. G. (2003). Subjective status: Its determinants and its association with measures of illhealth in the Whitehall II study. *Social Science & Medicine*, 56, 1321–1333. doi:10.1016/S0277-9536(02)00131-4
- Snibbe, A., & Markus, H. R. (2005). You can't always get what you want: Educational attainment, agency and choice. *Journal of Per*sonality and Social Psychology, 88, 703–720.
- Tu, W. (1991). Cultural China: The periphery as the center. *Journal of the American Academy of Arts and Science*, 120, 1–32.
- Uchida, Y., Norasakkunkit, V., & Kitayama, S. (2005). Cultural constructions of happiness: Theory and empirical evidence. *Journal of Happiness Studies*, 5, 223–239.
- Uchida, Y., Townsend, S. S. M., Markus, H. R., & Bergsieker, H. (2009). Emotions as within or between people? Cultural variation in lay theories of emotion expression and inference. *Personality and Social Psychology Bulletin*, 35, 1427–1439. doi:10.1177/0146167209347322
- Watson, D., Clark, L. A., & Carey, G. (1988). Positive and negative affectivity and their relation to anxiety and depressive disorders. *Journal of Abnormal Psychology*, 97, 346–353. doi:10.1037/ 0021-843X.97.3.346
- Weisz, J. J., Rothbaum, F. M., & Blackburn, T. C. (1984). Standing out and standing in: The psychology of control in America and Japan. American Psychologist, 39, 955–969. doi:0.1037/0003-066X.39.9.955
- Wirtz, D., & Scollon, C. N. (2012). Culture, visual perspective, and the effect of material success on perceived life quality. *Journal of Cross-Cultural Psychology*, 43, 367–372. doi:10.1177/0022022111432292

Author Biographies

Katherine B. Curhan received her EdD at Harvard University and completed postdoctoral work at the Stanford University. Her research investigates cultural differences in well-being.

Cynthia S. Levine received her PhD at Stanford University and is currently a postdoctoral scholar there as well. Her research examines the relationship between sociocultural factors, inequality, and well-being.

Hazel Rose Markus received her PhD from the University of Michigan and is the Davis-Brack Professor in the Behavioral Sciences at Stanford University. Her research investigates the sociocultural shaping of the mind and self.

Shinobu Kitayama received his PhD from the University of Michigan, where he is currently the Robert B. Zajonc Collegiate Professor of Psychology and the Director of the Center for Culture, Mind, and the Brain. His research focuses on cultural variations in self, cognition, emotion, and motivation.

Jiyoung Park completed her PhD at the University of Michigan and is currently a postdoctoral scholar at the University of California, San Francisco. Her research investigates the psychological and physiological processes that facilitate health, resilience, and well-being and explores how sociocultural environments shape psychological processes and what neural mechanisms underlie these effects.

Mayumi Karasawa is a professor of psychology at the Tokyo Women's Christian University.

Norito Kawakami a professor in the Graduate School of Medicine at the University of Tokyo.

Gayle Love received her PhD from the Texas A&M University. With training in both biology and sociology, she crosses disciplinary boundaries in designing and implementing research that brings an integrative approach to community-based studies of health and aging.

Christopher L. Coe is a professor of psychology at the University of Wisconsin, Madison. His research program focuses on how psychological, environmental, and dietary factors influence health and immunity.

Yuri Miyamoto received her PhD at the University of Michigan and is currently an associate professor at the University of Wisconsin, Madison. Her research focuses on the interplay between cultural contexts and psychological processes.

Carol D. Ryff is a professor of psychology at the University of Wisconsin, Madison. Her research is strongly multidisciplinary and focuses on how various aspects of psychological well-being are contoured by broad social structural influences such as age, gender, socioeconomic status, race/ethnicity, and culture as well as how psychological well-being is linked with biological factors.