

Journal of Cross-Cultural Psychology

<http://jcc.sagepub.com>

Individual and Cultural Differences On Status Differentiation: The Status Differentiation Scale

David Matsumoto

Journal of Cross-Cultural Psychology 2007; 38; 413

DOI: 10.1177/0022022107302311

The online version of this article can be found at:
<http://jcc.sagepub.com/cgi/content/abstract/38/4/413>

Published by:

 SAGE Publications

<http://www.sagepublications.com>

On behalf of:



International Association for Cross-Cultural Psychology

Additional services and information for *Journal of Cross-Cultural Psychology* can be found at:

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

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

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

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

Citations (this article cites 23 articles hosted on the SAGE Journals Online and HighWire Press platforms):
<http://jcc.sagepub.com/cgi/content/abstract/38/4/413#BIBL>

INDIVIDUAL AND CULTURAL DIFFERENCES ON STATUS DIFFERENTIATION The Status Differentiation Scale

DAVID MATSUMOTO
San Francisco State University

The concept of status differentiation is introduced along with a description of the development and initial validation of an individual-difference measure called the Status Differentiation Scale (SDS). This is followed by reports of cross-cultural differences on the SDS in three countries. Study 1 used American participants and established the scoring procedure for the SDS, its internal reliability and structural relationships, and construct validity. Study 2 used American and Japanese participants and demonstrated its internal reliability, structural relationships, and construct validity with a measure of allocentrism in both countries and predictable country differences that could not be accounted for by collectivism. Study 3 used American and South Korean participants and documented its internal reliability, structural relationships, and construct validity with a measure of values in both countries and predictable country differences that could not be accounted for by values. The concept of status differentiation, and the availability of the SDS, can have important theoretical and empirical ramifications for future studies of culture.

Keywords: status; power; status differentiation; power distance; egalitarian versus hierarchical self

Humans are social animals, and people of all cultures live, work, and play in groups. Groups are dependent on key characteristics for their efficiency, productivity, and survival, including in-group loyalty, cooperation, identification, sanctions for noncooperation, and the like. Because individuals are members of multiple social groups, and because human social networks can be large and complex, these characteristics are especially important to human social life.

One characteristic of most groups is the existence of hierarchies. Hierarchies are important because the stratification of leaders and followers is essential for group efficiency. Groups with too many leaders and too few followers, or vice versa, are not as efficient as groups with identified leaders and followers and clear lines of authority. All groups, human and nonhuman, in fact, spend much time and energy on establishing these lines of authority—dominance in a hierarchy—to clarify these social roles. The existence of a hierarchy and differential behaviors of members in the group according to the hierarchy are universal aspects of human life and of all social animals.

AUTHOR'S NOTE: I thank the members of the Culture and Research Emotion Laboratory who have aided in the development and testing of the Status Differentiation Scale through the years: Kyoko Seki, Kristie Kookan, Nathan Yrizarry, Yasuko Sato, Jeffery A. LeRoux, Jungwook Choi, and Theodora Consolacion. I thank Susumu Yamaguchi and Akihiro Domae for their aid in collecting the Japanese data reported in Study 2 and Seung Hee Yoo and Jeeyoung Chae for their aid in collecting the Korean data reported in Study 3. I also thank Sanae Nakagawa, Andres Olide, and Akiko Terao for their assistance in my general laboratory program. Correspondence concerning this article should be addressed to David Matsumoto, Department of Psychology, San Francisco State University, 1600 Holloway Ave., San Francisco, CA 94132; e-mail: dm@sfsu.edu.

JOURNAL OF CROSS-CULTURAL PSYCHOLOGY, Vol. 38 No. 4, July 2007 413-431
DOI: 10.1177/0022022107302311
© 2007 Sage Publications

One of the functions of hierarchies is to identify and confer status and power to individuals. The distinction between these constructs, unfortunately, is often blurred. In this article, *status* refers to the social position afforded to a person, whereas *power* refers to the ability to influence others' behaviors. These constructs are often, but not always, related to each other; individuals with higher status often have more power.

Despite the fact that hierarchies are universal aspects of human social groups, there is no individual-difference measure that assesses how people differentiate their behaviors or attribute power to others according to perceived status differences. In this article, this process is called *status differentiation*. One of the goals of the studies presented here is to report on the development of such a measure (the Status Differentiation Scale [SDS]) and to present preliminary findings concerning its psychometric reliability and validity.

CULTURE AND STATUS DIFFERENTIATION

Different national groups are associated with different cultures, and cultural differences presumably originate because of differences in the ecological contexts in which they exist (Georgas, van de Vijver, & Berry, 2004). *Culture* can be defined as a unique meaning and information system that ensures survival, enables the pursuit of well-being, and is transmitted from one generation to the next (Matsumoto & Juang, in press). For instance, living in a rugged terrain in extreme climates that are not amenable to growing much food will produce different ways of living—a different culture—than living in a flourishing, arable land with moderate climates and an abundance of food.

One way of differentiating national cultures is in terms of their aggregate, country-level values. Although many cultural value-related dimensions have been generated through the years, those most related to status differentiation are Hofstede's (1980, 2001) power distance and Schwartz's (2004) hierarchy and egalitarianism. Hofstede's framework was based partly on the work by Mulder (1976, 1977), who defined *power distance* as the difference in power between two individuals. Hofstede's large-scale study of work-related values produced a wide range of cultural differences on this dimension, with countries low on power distance minimizing power and status inequalities and countries high on it maximizing them.

Schwartz's work focuses on general values, which are desirable goals that serve as guiding principles in people's lives (Rokeach, 1973; Schwartz, 1992, 1994b). Cultures high on hierarchy (and low on egalitarianism) tend to emphasize power and status differences among interactants; cultures low on hierarchy (and high on egalitarianism) tend to minimize such differences and distribute resources more equally. As would be expected, power distance is positively correlated with hierarchy and negatively correlated with egalitarianism on the country level (Schwartz, 2004).

Cultural differences on power distance, hierarchy, and egalitarianism may influence the process of status differentiation among its members in many ways. For example, different cultures may apply different criteria to afford status. Hierarchical, high power-distance cultures may tend to use fixed attributes of individuals, such as age, seniority, or sex, as criteria to afford status. In egalitarian, low power-distance cultures, educational degrees, performance, or ability may be used as such criteria.

Cultures may also differ in the degree of differentiation in behaviors according to status. Hierarchical, high power-distance cultures should foster a greater differentiation according to status, whereas egalitarian, low power-distance cultures should foster less.

Until now, these ideas could not be tested directly because of the lack of an individual-difference measure of status differentiation. Another goal of the studies presented here,

therefore, is to test some of these ideas by comparing a relatively egalitarian, low power-distance culture (the United States) with two cultures that are more hierarchical and higher in power distance (Japan and South Korea).

THE SDS

As a first step in developing this scale, the literature for theories, research, and previously developed scales on or about the differentiation of one's behavior in social interactions with people of different status was reviewed. On the basis of this literature, different teams of research assistants generated items assessing attitudes, values, and behaviors that occur when one interacts with others of varying status. To assess status differentiation across different contexts, we considered interactions with people of higher, same, and lower status than oneself and how status differentiation may occur in different contexts (e.g., school, work, family, etc.). We conducted multiple pilot tests involving various combinations of items, status levels, and contexts and made numerous changes to the instrument on the basis of the feedback received. The final version of the SDS contained 31 items assessing behavioral responses when interacting with higher-, same-, and lower-status individuals in two contexts: work and school. (That is, the same individual rated each of the items toward higher-, same-, and lower-status others, producing upward, lateral, and downward data.) For the work context, individuals responded in relation to their interactions with superiors, colleagues, and subordinates; for school, individuals responded in relation to interactions with teachers, classmates, and students whom they themselves teach. Each behavior was rated for appropriateness using a 7-point scale from 0 = *not appropriate at all* to 6 = *very appropriate*.

Status differentiation as measured by the SDS should be related to, but is conceptually distinct from, Schwartz's (Schwartz, Melech, Lehmann, Harris, & Owens, 2001; Schwartz & Sagiv, 1995) Power scale. The degree to which an individual values social power, wealth, authority, or the preservation of one's public image, which are the items loading on the Power value scale, may indeed reflect the degree to which individuals use this value as a guiding principle in their lives. But the degree to which individuals value power may be conceptually distinct from the degree to which individuals differentiate their behaviors according to others' status differences. A person who values power highly in his or her life may also be high or low on status differentiation.

The SDS is also conceptually distinct from Pratto, Sidanius, Stallworth, & Malle's (1994) measure of social dominance orientation, which refers to an individual's preference for group-based inequality (Pratto et al., 2000) and not the degree to which individuals differentiate their behaviors according to that inequality. Similar differences exist between the SDS and the Dominance subscale of the California Psychological Inventory (Gough, 1986) and the Conscientiousness dimension in the five-factor model of personality (Costa & McCrae, 1992; McCrae & Costa, 1999). The SDS is also conceptually distinct from measures of upward or downward influence (Fu & Yukl, 2000; Yukl, Fu, & McDonald, 2003), because there is no assumption about how status-differentiating behaviors are used to influence others of different status.

OVERVIEW OF THE STUDIES REPORTED AND HYPOTHESES

This article reports three studies. The purpose of Study 1 was to establish the scoring procedure for the SDS and examine its internal reliability and construct validity through correlations with validated measures of allocentrism and personality. *Allocentrism* refers to collectivism on the individual level (Triandis, Bontempo, Betancourt, & Bond, 1986),

and this construct was chosen because theoretically allocentrism and status differentiation should be related to each other: Individuals who differentiate their behaviors more according to status hierarchies within a group should also endorse more values, attitudes, and behaviors that promote the uniqueness, cohesion, and functioning of an in-group. These relationships exist on the country level: Hofstede's (2001) power distance is negatively correlated with individualism; Schwartz's (2004) hierarchy is positively correlated with embeddedness and egalitarianism is positively correlated with autonomy. We thus hypothesized that allocentrism would be positively correlated with status differentiation.

With regard to personality, we opted to use a broad measure of personality traits, the Adjective Check List (ACL; Gough, 1965), because some traits are directly or indirectly related to power, status, and dominance. We thus hypothesized that status differentiation would be correlated with those ACL scales related to these constructs.

STUDY 1

METHOD

Participants. The participants included 354 students recruited from psychology classes at San Francisco State University (242 females, 112 males; mean age = 23). Of these, 136 reported their ethnicity as Caucasian; 25 as African American; 82 as Asian American, including individuals of Filipino descent; and 36 as Hispanic or Latino American; the remaining 73 were Other classifications. All completed the SDS; 94 (76 females, 16 males) also completed the Individualism–Collectivism Interpersonal Assessment Inventory (ICIAI; Matsumoto, Weissman, Preston, Brown, & Kupperbusch, 1997), and 87 (70 females, 17 males) completed the ACL.

MEASURES

The ICIAI. The ICIAI is a 25-item test measuring individual differences in allocentric values and attitudes related to social interaction in four social relationships, two of which are typically in-groups (family, close friends) and two of which are out-groups (colleagues and strangers). Although the original ICIAI includes ratings of both values and behaviors, only the values section was used. Participants were given definitions of each of the groups and rated the importance of the items using a 7-point scale from *not at all important* (0) to *very important* (6). They were instructed to treat each relationship as a general category. Four scale scores were created by averaging items within each relationship (α s = .82, .78, .84, and .83 for family, friends, colleagues, and strangers, respectively). Higher scores on the two in-groups reflected greater allocentrism. Lower scores toward the two out-groups also reflected greater allocentrism, because allocentrism refers to behaviors, attitudes, and values that enable in-group cooperation, harmony, and cohesion. Higher scores on these items toward out-groups—acquaintances and strangers—reflect less in-group-specific values and thus less allocentrism.

The ACL. The ACL is a list of 300 adjectives describing an aspect of personality. Participants checked all adjectives that best described their personality. Scores were computed by counting the adjectives that loaded on the following personality traits: total number of favorable adjectives checked, self-confidence, self-control, lability, personal adjustment, achievement, dominance, endurance, order, intraception, nurturance, affiliation,

heterosexuality, exhibition, autonomy, aggression, change, succorance, abasement, deference, male counseling readiness, and female counseling readiness (α s = .76 to .97).

Procedures. The SDS was distributed to the participants, who either were given class time to complete the measure or took the measure home and returned it the next class session. After the administration of the SDS, the ICIAI and ACL were administered individually in 2-week intervals. For each of the subsequent measures collected, participants also were given class time to complete the measure or took the measure home and returned it the next class session.

RESULTS

Determination of scoring procedure, internal reliabilities, and structural relationships. To determine first how the items differentiated status, a one-way, repeated-measures ANOVA comparing high versus same and same versus low was computed on each item, separately for the work and school domains. All F s were significant (table of means and F s available from the author). Cohen's d was also computed for each comparison. The analyses produced two different sets of items, one in which higher-status individuals were rated significantly higher than lower-status individuals (mean $d = 0.37$) and one with differences in the opposite direction (mean $d = -0.53$). The former set included items that reflected compliance, the monitoring of one's emotions, and formal address; this set of items was called self-regulation. The latter included items that reflected assertiveness, aggression, or the breaking of social convention; this set of items was called assertiveness (see appendix for listing of items).

Scores for status differentiation were then computed by first calculating the difference between ratings of higher and same (higher-same) and same and lower (lower-same) status, separately for each item, and then averaging across items separately for assertiveness and self-regulation and collapsing across the work and school domains. The former set of items was called upward assertiveness and upward self-regulation; the other was called downward assertiveness and downward self-regulation. Cronbach's α for these four scores were high (Table 1; α = .74 to .88).

Intercorrelations indicated that the two assertiveness scores were positively correlated with each other, the two self-regulation scores were positively correlated with each other, and the assertiveness scores were negatively correlated with the self-regulation scores (Table 1); individuals who regulated themselves more toward either higher- or lower-status others were also less assertive. Based on this pattern of intercorrelations, a total differentiation score was computed by summing the two self-regulation scores and subtracting the two assertiveness scores (α = .91). Higher scores on total differentiation reflected higher status differentiation.

Construct validity. To assess the construct validity of the SDS, its scores were correlated with the ICIAI and ACL, controlling for age and sex. Table 2 presents all correlations; for parsimony, we focus the report here in text on total differentiation. As predicted, higher degrees of allocentrism were correlated with greater status differentiation. The positive correlation between total differentiation and ICIAI family and close friends scores indicated that individuals who were more status differentiating had higher allocentrism scores toward their families and friends. The fact that the correlations for ICIAI acquaintances and strangers scores were in the opposite direction made sense, given that higher ICIAI scores for these groups reflect lower allocentrism, as mentioned above in the Methods.

TABLE 1
Descriptive Statistics, Alphas (diagonal), and Intercorrelations Among the Status Differentiation Scale (SDS) Subscales

Sample Country	Subscale	Study	M	SD	Upward Assertiveness	Downward Assertiveness	SDS Subscales			Total Differentiation
							Upward Self-Regulation	Downward Self-Regulation	Total	
United States	Upward assertiveness	1	-.67	.49	.88	.38**	-.60**	-.30**	-.82**	
		2	-.89	.62	.84	.22**	-.56**	-.17*	-.72**	
		3	-.96	.73	.89	.26**	-.58**	-.38**	-.80**	
	Downward assertiveness	1	-.06	.33	.79	.79	-.19**	-.30**	-.59**	
		2	-.13	.36	.73	.73	-.28**	-.26**	-.50**	
		3	-.07	.44	.75	.75	-.21**	-.42**	-.55**	
	Upward self-regulation	1	.60	.44	.80	.80	.53**	.47**	.82**	
		2	1.10	.83	.81	.81	.47**	.51**	.88**	
		3	.95	.74	.76	.76	.69**	.74	.83**	
Downward self-regulation	1	.18	.34	.74	.74	.78	.78	.68**		
	2	.19	.61	.75	.75	.91	.91	.75**		
	3	.23	.57	.90	.90	.95	.95	.91		
Total differentiation	1	1.51	1.20	.81	.64**	-.67**	.41**	-.82**		
	2	2.31	1.78	.81	.81	-.61**	.50**	-.76**		
	3	2.20	1.87	.81	.81	.73	-.32**	.90**		
Japan	Upward assertiveness	2	-.84	.77	.81	.64**	-.67**	.41**	-.82**	
	Downward assertiveness		.30	.76		.81	-.61**	.50**	-.76**	
	Upward self-regulation		.58	1.17			.73	-.32**	.90**	
	Downward self-regulation		.48	.69			.78	.78	-.18**	
Total differentiation		1.61	2.15					.92		
South Korea	Upward assertiveness	3	-1.44	.82	.91	.39**	-.33**	-.11+	-.78**	
	Downward assertiveness		-.08	.40		.78	-.03	-.20**	-.51**	
	Upward self-regulation		.92	.76			.69	.43**	.75**	
	Downward self-regulation		.12	.44				.56	.57**	
Total differentiation		2.57	1.66					.94		

+p < .10. **p < .01.

The standard deviation among the ICIAI scores across the four social relationships was also computed. This variability score can be interpreted as another index of allocentrism, because one aspect of allocentrism is the differentiation of one's in-groups from out-groups. Larger variability among the ICIAI scores, therefore, reflects greater differences in allocentric values across contexts. This variability in allocentrism was positively correlated with total differentiation, indicating that individuals with greater context-related variance in allocentric values tended to be more status differentiating.

There were a number of significant and interpretable correlations with the ACL. Total differentiation was positively correlated with the number of favorable adjectives checked, self-confidence, intraception, nurturance, personal adjustment, and affiliation, and marginally positively correlated with self-control, lability, achievement, endurance, order, and heterosexuality. Total differentiation was also marginally negatively correlated with aggression. This pattern of correlations suggested that individuals with a high degree of status differentiation were more positively socialized and well adjusted into mainstream culture.

Additional analyses. One-sample *t* tests were also computed on each of the SDS scores, examining whether their means were significantly different from zero. This analysis was important because given the scoring procedures, a mean of zero would indicate no differentiation as a function of status. All *t* tests were significant, $t(354) = -25.90, p < .001$; $t(354) = 3.63, p < .05$; $t(354) = 25.02, p < .001$; $t(354) = -10.06, p < .001$; and $t(354) = 23.68, p < .001$, for upward assertiveness, downward assertiveness, upward self-regulation, downward self-regulation, and total differentiation, respectively. Cohen's *d*s associated with these findings indicated very large effects for upward assertiveness, upward self-regulation, and total differentiation, $d = 1.38, 1.33, \text{ and } 1.26$, respectively; large effects for downward self-regulation, $d = .54$; and small effects for downward assertiveness, $d = .19$. In general, Americans rated assertiveness in both directions as not appropriate and self-regulation in both directions as appropriate.

A three-way ANOVA using scale (assertiveness vs. self-regulation), direction (upward vs. downward), and gender produced no significant effects of gender. There was also no gender difference on the total differentiation score.

DISCUSSION

The findings from Study 1 indicate the existence of different dimensions of the construct of status differentiation. One referred to what was being differentiated, allowing for an identification of behaviors related to assertiveness and self-regulation. The former referred to behaviors related to dominating a conversation, challenging the other, or raising one's voice. The latter referred to behaviors related to displaying a pleasant attitude, hiding negative feelings, and being careful of one's emotions. The other concerned the direction of the differentiation. This delineation is important theoretically because individuals should be able to differentiate their behaviors differently according to whether they interact with higher- or lower-status others. Moreover, drawing a distinction between upward and downward differentiation allowed an examination of where differentiation occurred and whether they occurred to the same degree for higher- and lower-status interactions.

Together, these findings indicate that status differentiation is a multifaceted construct and that differentiating one's behavior in relation to interactions with higher-status others may be different than differentiating one's behavior with lower-status others. For the Americans in Study 1, upward and downward assertiveness were positively correlated,

indicating that those who endorsed assertive behaviors toward higher-status others also endorsed them toward lower-status others. Likewise, upward self-regulation was positively correlated with downward self-regulation, indicating that individuals who regulated themselves when interacting with higher-status others also did so when interacting with lower-status others.

The consistent pattern of correlations among these four scores allowed for the computation of a total differentiation score, which reflected the overall degree to which an individual endorsed differentiated behaviors according to the status differential of the interactants. Internal reliability statistics for all scores were high, and the structural relationships among the scores provided evidence for their convergent validity. Correlations with both allocentrism and a number of personality traits measured by the ACL were consistent with the hypotheses and provided further evidence of the construct validity of the SDS. To be sure, the findings were not perfect; for example, there was no correlation between the SDS and ACL abasement scores, and only one SDS scale was correlated with ACL dominance scores. Nevertheless, the overall pattern of findings was fairly supportive of the predicted relationships and provided support for the construct validity of the SDS in the American sample.

Some of the strongest correlations, in fact, were obtained not with the scale scores used as criterion variables but instead with the variability (standard deviation) of the four ICIAI scores. This variability reflects some degree of cross-context differences in response, and it is notable that the SDS, as a measure of how individuals differentiate their behaviors as a function of context (status) differences, was highly correlated with the variance in allocentrism. The concept of status differentiation developed and operationalized here focuses on the importance of context and the differentiation of one's behavior according to context, and the recognition of contextual differences is a necessary component of status differentiation. In this vein, it is probably related to Hall's (1966, 1973) notion of high-versus low-context cultures. High-context cultures are those that foster the differentiation of one's behavior in different contexts, whereas low-context cultures are those that minimize cross-context differences. That all SDS scores were correlated with the variability among the ICIAI scores across its four social relationships (family, friends, colleagues, and strangers) suggests that it is tapping this cross-context aspect of culture and individual behavior. Examinations of intracultural variation of psychological processes can serve to highlight important cultural differences heretofore unexamined (Au, 1999, 2000), and the findings of this study can certainly encourage others to do so in the future.

STUDY 2

The purpose of Study 2 was to cross-validate the SDS with a different sample of Americans and extend the validity test to a sample from a different country, Japan. Japan is considered a more status-differentiating and hierarchically oriented culture than the United States (Hofstede, 2001; Nakane, 1970). We hypothesized that we would replicate the psychometric properties of the SDS in Japan and, by using the same measure of allocentrism as that used in Study 1, replicate the relationships between allocentrism and status differentiation. Additionally, we sought to test the hypothesis discussed in the introduction that a relatively hierarchical, high power-distance culture such as Japan would have higher mean scores on status differentiation than a culture relatively more egalitarian and low power distance such as the United States.

METHOD

The data for this study were merged from two other studies (Matsumoto, Choi, Hirayama, Domae, & Yamaguchi, 2003; Matsumoto et al., 2002). Although the specific instruments used in each differed, the two common measures were the SDS and ICIAI. The analyses and findings presented in this article are new and do not overlap with previous publications.

Participants. The participants were 196 Americans (128 females, 68 males; mean age = 24.91) and 224 Japanese (116 females, 108 males; mean age = 21.00) recruited from psychology classes in San Francisco and Tokyo. All participated voluntarily and were born and raised in their respective countries, with English and Japanese their primary languages.

Measures. All participants completed an abbreviated, 20-item version of the SDS and an abbreviated, 19-item version of the ICIAI (values only), which has been used reliably and validly in Japan (Matsumoto et al., 1997). The items on the SDS were those that had the highest item-total correlations on both subscales in Study 1 (asterisked items in the appendix). The version of the ICIAI used in this study asked respondents to rate 19 items in four social relationships: family, close friends, colleagues, and strangers (six items were dropped from the original ICIAI because of low item-total correlations). Scores for each relationship were computed by averaging across all items within each (α for the United States = 0.91; for Japan = 0.93).

Procedures. All measures were translated into Japanese, and the semantic equivalence of the translation was verified using back translation, which occurred with no problems. The experiments consisted of a laboratory portion involving judgments of facial expressions and the completion of paper-and-pencil instruments. The judgment tasks and questionnaires were counterbalanced, and the instructions for the SDS and ICIAI were exactly the same as in Study 1.

RESULTS

Internal reliabilities and structural relationships across cultures. Cronbach's α s were computed on all five SDS subscales, separately for the United States and Japan (Table 1). All were high: $\alpha = .73$ to $.90$ for the United States; $\alpha = .73$ to $.92$ for Japan. Intercorrelations for the United States produced exactly the same pattern as that found in Study 1. For Japan, however, some interesting differences emerged concerning downward self-regulation, which was positively correlated with both Assertiveness scales and negatively with upward self-regulation. This finding suggested differential function of self-regulation in Japan toward higher- and lower-status others; those who regulated more toward lower-status others also were more assertive toward both higher- and lower-status others. (As in Study 1, one-way ANOVAs on each of the items were also computed across the three status levels, separately for Americans and Japanese, as well as Cohen's d s associated with the high vs. low comparison on each item. The findings were the same between the Americans and Japanese, indicating equivalent functioning on the item level in both countries. The same findings occurred with the American and South Korean data in Study 3, as well.)

Construct validities across cultures. Correlations were computed between the SDS and ICIAI, separately for Americans and Japanese, controlling for age and sex (Table 2). The American data replicated those from Study 1; total differentiation was positively correlated

TABLE 2
Significant Correlations Between Status Differentiation Scale Subscales and Individualism–Collectivism Interpersonal Assessment Inventory (ICIAI) and Adjective Checklist (ACL), Study 1; ICIAI, Study 2; and the Selected Subscales of the Schwartz Value Survey (SVS), Study 3

Scale	Subscale	Sample	Study	n	Status Differentiation Scale Subscales					Total Differentiation
					Upward Assertiveness	Downward Assertiveness	Upward Self-Regulation	Downward Self-Regulation	Total	
ICIAI	Family	United States	1	83	-.43**	-.24*	.33**	.20*	.41***	
		United States	2	196	.05	.03	-.11	.22**	.15*	
	Close friends	Japan	2	224	-.24**	-.19**	.27**	.00	.30**	
		United States	1	83	-.23*	-.19*	.08	.14	.21*	
	Japan	United States	2	196	.02	-.11	-.12*	-.16*	-.10	
		Japan	2	224	-.30**	-.27**	.28**	-.06	.34**	
	Colleagues	United States	1	83	.06	.11	-.13	-.14	-.14	
		United States	2	196	.13*	-.02	-.23**	-.19**	-.22**	
	Japan	United States	2	224	.01	.09	-.04	-.20**	.01	
		Japan	2	224	.34**	.07	-.31**	.00	-.27**	
	Strangers	United States	1	83	.22**	.02	-.29**	-.13*	-.26**	
		United States	2	196	.41**	.43**	-.43**	-.45**	-.39**	
Variability in individualism–collectivism scores	United States	United States	1	83	-.51**	-.19*	.44**	.09	.44***	
		United States	2	196	-.17**	-.09	.21**	-.00	.18**	
	Japan	2	224	-.40**	-.35**	.40**	.32**	.39**		

ACL	No. of favorable adjectives checked	United States	1	87	-05	-15+	-08	-14+	.21*	.30**	.25**
	Self-confidence	United States	1	87	-05	-15+	-08	-14+	.11	.29**	.19*
	Self-control	United States	1	87	-17+	-06	-14	.05	.22*	.14+	.17+
	Liberty	United States	1	87	-06	-11	-08	-18+	.13	.14+	.15+
	Personal adjustment	United States	1	87	-11	-08	-14	-01	.20*	.20*	.18*
	Achievement	United States	1	87	-08	-01	-06	-08	.09	.26**	.16+
	Dominance	United States	1	87	-01	-06	-07	-14	.03	.19*	.10
	Endurance	United States	1	87	-06	-07	-16+	-08	.13	.22*	.15+
	Order	United States	1	87	-07	-22*	-18*	.01	.19*	.21*	.15+
	Intrapection	United States	1	87	-16+	-18*	-20*	-05	.26**	.28**	.25**
	Nurturance	United States	1	87	-22*	-13	-02	-15+	.18*	.22*	.24*
	Affiliation	United States	1	87	-18*	-07	-13	-13	.19*	.26**	.24*
	Heterosexuality	United States	1	87	-07	.13		-20*	.05	.19*	.14+
	Aggression	United States	1	87	.13			-02	-.21*	-.14+	-.17+
SVS	Power	United States	3	315	-.24**			-14*	.15*	.08	.22**
		Korea	3	156	-.13*			.15*	.08	.02	.07
	Security	United States	3	315	-.02			-10	.05	.09	.08
		Korea	3	156	.12+			-08	.06	.04	-01
	Tradition	United States	3	315	.13*			.09	-.18**	-.13*	-.19**
		Korea	3	156	.05			-13	-.17*	-.05	-.08
	Conformity	United States	3	315	.11			.11*	-.11*	-.10	-.15*
		Korea	3	156	-.07			-.03	.11	.07	.11

+*p* < .10. **p* < .05. ***p* < .01.

with allocentrism toward ICIAI family and ICIAI variability and negatively with ICIAI colleagues and strangers. A similar pattern of data was found for the Japanese, where total differentiation was positively correlated with ICIAI family, close friends, and variability and negatively correlated with ICIAI strangers. This pattern of findings indicates that greater status differentiation was associated with greater allocentrism in both countries, as predicted.

Country differences. A four-factor mixed ANOVA was computed using country, gender, scale, and direction as factors. The Country \times Scale \times Direction interaction was significant, $F(1, 405) = 12.50, p < .01$, partial $\eta^2 = .03$. Simple effects analyses indicated that Americans had higher scores than the Japanese on upward self-regulation, $F(1, 407) = 26.19, p < .01$, partial $\eta^2 = .06$, contrary to prediction. The Japanese, however, had higher scores than the Americans on downward self-regulation and downward assertiveness, $F(1, 407) = 20.84, p < .01$, partial $\eta^2 = .05$; $F(1, 407) = 51.47, p < .01$, partial $\eta^2 = .11$, respectively, consistent with prediction.

Because the SDS scales were correlated with the ICIAI scales, it is possible that the above country differences were confounded by country differences on ICIAI. I thus recomputed the above overall ANOVA using the ICIAI scores as covariates. The Country \times Scale \times Direction interaction was still significant, $F(1, 404) = 12.34, p < .01$, partial $\eta^2 = .03$. Simple effects produced exactly the same findings as those reported immediately above, indicating that differences on allocentrism did not confound the country differences on status differentiation.

Additional analyses. As in Study 1, we examined whether each of the SDS scale scores deviated from zero. The findings for the Americans replicated those of Study 1 exactly, $t(189) = -19.73, p < .01, d = 1.44$; $t(189) = 4.95, p < .01, d = .36$; $t(189) = 18.22, p < .01, d = 1.33$; $t(189) = -4.19, p < .01, d = .29$, for upward assertiveness, downward assertiveness, upward self-regulation, and downward self-regulation, respectively. Like the Americans, the Japanese rated upward assertiveness as not appropriate, $t(219) = 16.19, p < .01, d = 1.09$, and upward and downward self-regulation as appropriate, $t(219) = 7.34, p < .01, d = .49$ and $t(219) = 10.42, p < .01, d = .70$, respectively. Unlike the Americans, however, the Japanese rated downward assertiveness as more appropriate, $t(219) = 5.92, p < .01, d = .40$.

DISCUSSION

Study 2 provided a cross-validation of the SDS with a different sample of Americans, indicating its internal reliability, structural relationships, and correlations with allocentrism. The Japanese sample replicated the psychometric properties of the SDS, suggesting its cross-cultural equivalence. The mean differences also provided some insight as to how status differentiation differs in Japan and the United States. Specifically, the Japanese endorsed downward self-regulation and downward assertiveness more than did the Americans. The findings on downward assertiveness suggest that the Japanese may use this approach to reinforce status and power hierarchies more than do Americans.

The findings, however, were not perfect. Although the correlations between SDS total differentiation and the ICIAI generally confirmed hypotheses, correlations with specific ICIAI scales were not always consistent with predictions. I have no post hoc interpretations of why this may be, other than sampling error. Perhaps the correlations obtained with total differentiation were aided because this score is more reliable than the other SDS scale scores. The

findings also indicated that the Americans were more upwardly self-regulating, contrary to hypothesis. Future studies will need to examine if this finding can be replicated.

STUDY 3

The goal of Study 3 was to extend the validity data of the SDS to a different country, South Korea, which theoretically is a more hierarchical, high power-distance country relative to the United States. Also, Study 3 examined the relationship between the SDS and specific values theoretically related to status differentiation as measured by the Schwartz Value Survey (Schwartz, 1992, 1994a; Schwartz, Sagiv, & Boehnke, 2000).

METHOD

Participants. The participants were 315 Americans (226 females, 89 males; mean age = 24.22) and 156 South Koreans (67 females, 89 males; mean age = 21.26) recruited from psychology classes at large universities in San Francisco and Seoul. All participated voluntarily and were born and raised in their respective countries, with English and Korean their primary languages.

Measures. The participants completed the same 20-item SDS as in Study 2. In addition, they completed an abbreviated, 20-item version of the Schwartz Value Survey that included the items loading on the following scales: power (4 items), conformity (4 items), tradition (5 items), and security (5 items); two items not loading on these scales were used as fillers, but they did correspond to the country-level values of hierarchy. These scales, especially power, were selected for use in this study because they are theoretically related to status differentiation. Scores were computed for each scale by calculating the mean of the items loading on it; in addition, a total individual mean of items was calculated and used to control for individual response tendencies. The participants also completed a battery of other tests not germane to this project.

Procedures. All measures were translated into Korean, and accuracy of the translation was verified by back-translation procedures. In the United States, students took home a packet including all the instruments and returned it the next week for extra credit in a psychology class. In Korea, participants were recruited from psychology classes as part of class work or through friends and completed the questionnaires either in class or at home. In both countries, the order of the instruments within the packets was randomized.

RESULTS

Internal reliabilities and structural relationships across cultures. Cronbach's α s on all SDS subscales were computed, separately for the United States and Korea. All were high for the United States: $\alpha = .75$ to $.95$; for Korea, all but one were acceptable: $\alpha = .56$ to $.94$ (Table 1). The pattern of intercorrelations for the United States was exactly the same as that found in Studies 1 and 2. For Korea, all but one correlation were the same as those obtained for the United States. These data suggest that the SDS scores were structurally organized equivalently in this country.

Construct validities. Correlations between the SDS scales and the four Schwartz Value Survey scales were computed (Table 2). The same results were obtained regardless of whether the overall scores on the Schwartz scale were partialled. In the United States, total differentiation was positively correlated with power, as predicted, but negatively correlated with tradition and conformity. For Korea, none of the correlations involving total differentiation was significant, but inspection of the scale scores indicated that this might be because of differential functioning of the separate dimensions of status differentiation. For example, there was a negative correlation between upward assertiveness and power, but a positive correlation between downward assertiveness and power, suggesting that Koreans who valued power endorsed assertiveness toward higher-status others less but toward lower-status others more. On the whole, the findings provided modest support for the construct validity of the SDS in both countries.

Country differences. A four-factor mixed ANOVA was computed using country, gender, scale, and direction as factors. The Country \times Scale \times Direction interaction was significant, $F(1, 389) = 5.90, p < .05$, partial $\eta^2 = .02$. Simple effects analyses indicated that Koreans rated upward assertiveness and downward self-regulation as less appropriate than did Americans, $F(1, 395) = 36.43, p < .01$, partial $\eta^2 = .08$; $F(1, 393) = 3.87, p < .05$, partial $\eta^2 = .01$, providing support for the hypothesis that South Korea had higher status differentiation than the United States. As a manipulation check, we also computed the country-level scores on hierarchy using the Schwartz Value Survey. As expected, the mean for South Korea (4.26) was higher than the mean for the United States (3.70).

These same analyses were recomputed using the Schwartz Value Survey scores as covariates. The Country \times Scale \times Direction interaction was still marginally significant, $F(1, 378) = 2.82, p < .10$, partial $\eta^2 = .01$. Simple effects analyses produced exactly the same findings as those reported immediately above, indicating that differences on values did not confound the country differences on status differentiation reported earlier.

Additional analyses. As in Studies 1 and 2, t tests were computed to examine whether each of the SDS scale scores deviated from zero. The findings were the same for both the Americans and Koreans, replicating Studies 1 and 2. Both rated upward assertiveness, $t(242) = -20.47, p < .01, d = 1.31$ and $t(152) = 21.97, p < .01, d = 1.78$, for Americans and Koreans, respectively, and downward assertiveness as not appropriate, $t(242) = 2.42, p < .05, d = .16$ and $t(152) = 2.41, p < .05, d = .20$. Both rated upward self-regulation, $t(242) = 20.01, p < .01, d = 1.28$ and $t(152) = 14.92, p < .01, d = 1.20$, and downward self-regulation as appropriate, $t(242) = -6.22, p < .01, d = .40$ and $t(152) = -3.34, p < .01, d = .27$.

DISCUSSION

Study 3 provided another cross-validation of the SDS with a different sample of Americans, indicating its internal reliability, structural relationships, and correlations with allocentrism. The Korean sample replicated the psychometric properties of the SDS, suggesting its cross-cultural equivalence. The mean differences observed were expected, as Koreans were more status differentiating than the Americans, and these differences could not be accounted for by values. The pattern of findings with the Schwartz Value Survey provided a modest degree of support for the construct validity of the SDS in both countries and, more important, suggested differential functioning of status differentiation in both.

Because the pattern of correlations was not easily interpreted, future studies will need to explore further the nature of these relationships and their replicability.

GENERAL DISCUSSION

The findings from all three studies provided support for the existence of the four subscales of status differentiation and preliminary evidence for their reliability and validity. To be sure, these studies were not conducted without limitations. Caution should be exercised when a measure is developed in one cultural context (the United States) and then validated in others (Japan, Korea). Indigenous efforts may produce different measurement systems, and the exporting of a measure from one context to another may impose a cultural framework that does not make sense in the importing countries. Moreover, the SDS is based on a theoretical framework that posits differences between the definitions of status and power, how cultures are likely to attribute power to different statuses, and how individuals are likely to differentiate their behaviors according to the status inequalities that exist between them. A different conceptual framework would lead to a different measure of status differentiation, and the field should welcome such approaches. The SDS was cross-validated in only two cultures, and as a measure of cultural variability, it should tap into reliable cultural differences across a broader range of cultures; future research should welcome such tests. Finally, because participants are instructed to give their ratings to general categories of high or low status, it is possible that they envisioned different specific individuals in those categories, and these differences may have confounded the cross-cultural results. The results reported in this article should be interpreted with these caveats.

The explication of different facets of status differentiation—assertiveness and self-regulation—and different directions—upward and downward—suggest the complexity of this construct. Future research should investigate the existence of other facets, as well. Albeit on the country level, Hofstede's (2001) power distance, for instance, refers to the degree to which less powerful individuals accept power and status differentials. Future efforts may be directed to the development of measures of this acceptance on the individual level. Schwartz's (2004) hierarchy and egalitarian dimensions, also on the country level, refer to responsible cooperation to achieve societal tasks. Future efforts may be directed to the development of measures of this aspect of status differentiation on the individual level, as well.

One issue that was not addressed in the studies above, but was mentioned in the introduction, is the degree to which different cultures will ascribe status to different social roles and use different criteria by which that ascription occurs. Who is of higher or lower status, and why, across cultures is an interesting and important question that contemporary studies have not yet explored.

The data we did obtain provided interesting ideas about how status differentiation occurs differently in different cultural contexts. In the United States and South Korea, for example, assertiveness was negatively correlated with self-regulation. Also, both Americans and South Koreans rated assertiveness more inappropriate with higher- and lower-status others, and self-regulation more appropriate with higher- and lower-status others. Thus for Americans and South Koreans, the specific direction of status differentiation did not matter; they appeared to be equally deferential to high- and low-status others (albeit there were country differences in the mean levels of several of the scales). This reflects an egalitarian type of status differentiation. For the Japanese, however, those who rated self-regulation toward lower-status others as appropriate also rated assertiveness toward higher- and

lower-status others appropriate. Moreover, the Japanese rated assertiveness toward lower-status others appropriate even though they rated assertiveness inappropriate toward higher-status others. For the Japanese, therefore, the direction of status differentiation mattered, and they were more deferential to the higher-status person regardless of the relationship. This reflects a hierarchical type of status differentiation. Future studies will need to explore the nature of egalitarian versus hierarchical types of status differentiation more fully.

The SDS provides researchers interested not only in power and status but specifically in the differentiation of behaviors across status, and cultural differences in such differentiation, a tool not heretofore available to pursue interesting questions. Future research can, for instance, examine how status differentiation is related to other cross-context consistencies and differences and its relationships with other psychological processes. Research on cultural transmission can investigate how the notion of status differentiation is handed down from one generation to the next, how it develops and emerges in individuals, and whether its developmental trajectory is different in different cultures. Future studies will need to examine the degree to which the SDS can predict differences in actual behaviors of individuals in different contexts interacting with people of different status. That the Japanese participants in Ekman's (1972) classic study of facial expressions of emotion masked their negative feelings in the presence of a higher-status experimenter although they displayed the same expressions as did Americans when alone is suggestive of such differential behaviors according to context and is commensurate with the findings reported in Study 2.

The availability of a measure of status differentiation aids future research in testing the degree to which individual differences on this dimension can mediate cross-cultural differences on psychological variables. Although the mediation of individual-level measures of individualism versus collectivism and its related construct, independent versus interdependent self-construals (Gudykunst, Matsumoto, & Ting-Toomey, 1996; Singelis, 1994), have been successfully documented to some degree (Lam & Zane, 2004; Singelis, Bond, Sharkey, & Lai, 1999; Uskul, Hynie, & Lalonde, 2004), they certainly do not account for all cultural differences in cognition, emotion, and motivation. This is partly because predicted relationships between countries and independent and interdependent self-construals—especially between the United States and Japan, which serves as a comparison in so many studies—have not always been supported by data (Matsumoto, 1999, 2002; Oyserman, Coon, & Kemmelmeier, 2002; Takano & Osaka, 1999), or they have failed to correlate with the dependent variables (Chang, Arkin, Leong, Chan, & Leung, 2004). Both conditions are necessary for mediation to occur (except the latter is more difficult to document because these studies tend to go unpublished).

Future research testing the contribution of status differentiation to cultural differences, or the relative contribution of both individualism and status differentiation, can certainly improve this situation. Not only should the incorporation of an additional measure of cultural variation account for data better, it should lead to new and different theoretical understandings of the relationship between culture, self, and psychological processes and may account for cultural differences in behaviors in contexts related to status. High- versus low-status-differentiating selves may coexist with independent and interdependent senses of self, and it is entirely plausible that different aspects of self are activated in different contexts (Trafimow, Triandis, & Goto, 1991). The possible contributions of such hierarchical versus egalitarian selves, in addition to independent and interdependent selves, may be an important development in the evolution of thinking in the field. The findings in Studies 2 and 3 that indicate that SDS accounts for variance in country differences unique from collectivism or power values, but not vice versa, speaks strongly to this possibility.

APPENDIX

The Status Differentiation Scale Items

Self-Regulation Items

1. To display a pleasant attitude toward this person when you feel otherwise.*
2. To speak knowledgeably with this person.
3. To comply with requests from this person even if they contradict your values.
4. To let this person know about your personal troubles and ask this person for help.
5. To speak more quietly when interacting with this person than with others.
8. To allow this person to interact with you at a physical distance that feels awkward.
12. To avoid contradicting this person concerning facts or information.
13. To give your undivided attention when interacting with this person.*
19. To address this person formally.*
23. To make eye contact with this person when you speak.
24. To maintain eye contact with this person when you listen.*
27. To hide negative feelings toward this person.*
30. To be careful of your emotions as you interact with this person.*
31. To sit up straight when seated with this person.*

Assertiveness Items

6. To break off a conversation that you are having with this person.*
7. To dominate the conversation with this person.*
9. To give personal advice to this person about their personal life even when not asked.*
10. To be assertive with this person.
11. To give work-related advice to this person even when not asked.
14. To speak commandingly with this person.*
15. To raise your voice to this person when you are angered by their actions.*
16. To behave spontaneously in the presence of this person.*
17. To touch this person when interacting with them.*
18. To initiate conversation with this person.
20. To challenge this person when they contradict your opinions.*
21. To use profanity with this person.*
22. To talk over this person when they are trying to talk.*
25. To casually sit back and relax when interacting with this person.*
26. To initiate scheduling of meeting times with this person.
28. To interrupt a conversation that this person is having with someone else.*
29. To speak casually with this person.*

NOTE: Asterisked items refer to the 20-item measure used in Studies 2 and 3.

REFERENCES

- Au, K. (1999). Intra-cultural variation: Evidence and implications for international business. *Journal of International Business Studies, 30*, 799-812.
- Au, K. (2000). Intra-cultural variation as another construct of international management: A study based on secondary data of 42 countries. *Journal of International Management, 6*, 217-238.
- Chang, L. C., Arkin, R. M., Leong, F. T., Chan, D. K. S., & Leung, K. (2004). Subjective overachievement in American and Chinese college students. *Journal of Cross-Cultural Psychology, 35*, 152-173.
- Costa, P. T., & McCrae, R. R. (1992). *Revised Neo-Personality Inventory (NEO-PI-R) and Neo Five Factor Inventory (NEO-FFI)*. Odessa, FL: Psychological Assessment Resources.
- Ekman, P. (1972). Universal and cultural differences in facial expression of emotion. In J. R. Cole (Ed.), *Nebraska symposium on motivation, 1971* (pp. 207-283). Lincoln: Nebraska University Press.
- Fu, P. P., & Yukl, G. (2000). Perceived effectiveness of influence tactics in the United States and China. *Leadership Quarterly, 11*, 251-266.

- Georgas, J., van de Vijver, F. J. R., & Berry, J. W. (2004). The ecocultural framework, ecosocial indices, and psychological variables in cross-cultural research. *Journal of Cross-Cultural Psychology, 35*, 74-86.
- Gough, H. G. (1965). *Adjective Check List manual*. Palo Alto, CA: Consulting Psychologists Press.
- Gough, H. G. (1986). *Manual for the California Psychological Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Gudykunst, W. B., Matsumoto, Y., & Ting-Toomey, S. (1996). The influence of cultural individualism-collectivism, self construals, and individual values on communication styles across cultures. *Human Communication Research, 22*, 510-543.
- Hall, E. T. (1966). *The hidden dimension*. New York: Doubleday.
- Hall, E. T. (1973). *The silent language*. New York: Anchor.
- Hofstede, G. H. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.
- Lam, A. G., & Zane, N. (2004). Ethnic differences in coping with interpersonal stressors: A test of self-construals as cultural mediators. *Journal of Cross-Cultural Psychology, 35*, 446-459.
- Matsumoto, D. (1999). Culture and self: An empirical assessment of Markus and Kitayama's theory of independent and interdependent self-construals. *Asian Journal of Social Psychology, 2*, 289-310.
- Matsumoto, D. (2002). *The new Japan*. Yarmouth, ME: Intercultural Press.
- Matsumoto, D., Choi, J. W., Hirayama, S., Domae, A., & Yamaguchi, S. (2003). *Culture, display rules, emotion regulation, and emotion judgments*. Manuscript submitted for publication.
- Matsumoto, D., Consolacion, T., Yamada, H., Suzuki, R., Franklin, B., Paul, S., et al. (2002). American-Japanese cultural differences in judgments of emotional expressions of different intensities. *Cognition and Emotion, 16*, 721-747.
- Matsumoto, D., & Juang, L. (in press). *Culture and psychology* (4th ed.). Belmont, CA: Wadsworth.
- Matsumoto, D., Weissman, M., Preston, K., Brown, B., & Kupperbusch, C. (1997). Context-specific measurement of individualism-collectivism on the individual level: The IC Interpersonal Assessment Inventory (ICIAI). *Journal of Cross-Cultural Psychology, 28*, 743-767.
- McCrae, R. R., & Costa, P. T. (1999). A five-factor theory of personality. In L. A. Pervin & O. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 139-153). New York: Guilford.
- Mulder, M. (1976). Reduction of power differences in practice: The power distance reduction theory and its application. In G. Hofstede & M. S. Kassem (Eds.), *European contributions to organize theory* (pp. 79-94). Assen, Netherlands: Van Gorcum.
- Mulder, M. (1977). *The daily power game*. Leyden, Netherlands: Martinus.
- Nakane, C. (1970). *Japanese society*. Berkeley, CA: University of California Press.
- Oyserman, D., Coon, H. M., & Kimmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*, 3-72.
- Pratto, F., Liu, J. H., Levin, S., Sidanius, J., Shih, M., Bachrach, H., et al. (2000). Social dominance orientation and the legitimization of inequality across cultures. *Journal of Cross-Cultural Psychology, 31*, 369-409.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741-763.
- Rokeach, M. (1973). *The nature of human values*. New York: Free Press.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1-65). New York: Academic Press.
- Schwartz, S. H. (1994a). Are there universals in the content and structure of values? *Journal of Social Issues, 50*, 19-45.
- Schwartz, S. H. (1994b). Beyond individualism/collectivism: New cultural dimensions of values. In U. E. Kim, H. C. Triandis, et al. (Eds.), *Individualism and collectivism: Theory, method, and applications* (Vol. 18, pp. 85-119). Thousand Oaks, CA: Sage.
- Schwartz, S. H. (2004). Mapping and interpreting cultural differences around the world. In H. Vincken, J. Soeters, & P. Ester (Eds.), *Comparing cultures, dimensions of culture in a comparative perspective* (pp. 43-73). Leiden, Netherlands: Brill.
- Schwartz, S. H., Melech, G., Lehmann, A., Harris, M., & Owens, V. (2001). Extending the cross-cultural validity of the theory of basic human values with a different method of measurement. *Journal of Cross-Cultural Psychology, 32*, 519-542.
- Schwartz, S. H., & Sagiv, L. (1995). Identifying culture specificities in the content and structure of values. *Journal of Cross-Cultural Psychology, 26*, 92-116.

- Schwartz, S. H., Sagiv, L., & Boehnke, K. (2000). Worries and values. *Journal of Personality, 309-346*.
- Singelis, T. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin, 20*, 580-591.
- Singelis, T., Bond, M., Sharkey, W. F., & Lai, C. S. Y. (1999). Unpackaging culture's influence on self-esteem and embarrassability. *Journal of Cross-Cultural Psychology, 30*, 315-341.
- Takano, Y., & Osaka, E. (1999). An unsupported common view: Comparing Japan and the U.S. on individualism/collectivism. *Asian Journal of Social Psychology, 2*, 311-341.
- Trafimow, D., Triandis, H. C., & Goto, S. G. (1991). Some tests of the distinction between the private self and the collective self. *Journal of Personality and Social Psychology, 60*, 649-655.
- Triandis, H. C., Bontempo, R., Betancourt, H., & Bond, M. (1986). The measurement of the etic aspects of individualism and collectivism across cultures. *Australian Journal of Psychology, 38*, 257-267.
- Uskul, A. K., Hynie, M., & Lalonde, R. N. (2004). Interdependence as a mediator between culture and interpersonal closeness for Euro-Canadians and Turks. *Journal of Cross-Cultural Psychology, 35*, 174-191.
- Yukl, G., Fu, P. P., & McDonald, R. (2003). Cross-cultural differences in perceived effectiveness of influence tactics for initiating or resisting change. *Applied Psychology: An International Review, 52*, 68-82.

David Matsumoto is currently a professor of psychology and director of the Culture and Emotion Research Laboratory at San Francisco State University, where he has been since 1989. He has studied culture, emotion, social interaction and communication for 20 years, and has approximately 400 works in these areas. His books include titles such as Culture and Psychology: People Around the World (Wadsworth; translated into Dutch and Japanese), The Intercultural Adjustment Potential of Japanese, The Handbook of Culture and Psychology (Oxford University Press; translated into Russian), and The New Japan (Intercultural Press; translated into Chinese). He is the series editor for Oxford University Press's series Culture, Cognition, and Behavior. He is also an associate editor for the Journal of Cross-Cultural Psychology, the Culture and Gender section editor for the Social and Personality Psychology Compass, and is on the editorial boards of the Asian Journal of Social Psychology, Asian Psychologist, Journal of Nonverbal Behavior, Motivation and Emotion, Cognition and Emotion, and Human Communication.