

# Variations of Emotional Display Rules Within and Across Cultures: A Comparison Between Canada, USA, and Japan

Saba Safdar  
University of Guelph

Wolfgang Friedlmeier  
Grand Valley State University

David Matsumoto  
San Francisco State University

Seung Hee Yoo  
Yale University

Catherine T. Kwantes  
University of Windsor

Hisako Kakai  
Aoyama Gakuin University

Eri Shigemasu  
Yamanashi Gakuin University

This study investigates emotional display rules for seven basic emotions. The main goal was to compare emotional display rules of Canadians, US Americans, and Japanese across as well as within cultures regarding the specific emotion, the type of interaction partner, and gender. A total of 835 university students participated in the study. The results indicate that Japanese display rules permit the expression of powerful (anger, contempt, and disgust) significantly less than those of the two North American samples. Japanese also think that they should express positive emotions (happiness, surprise) significantly less than the Canadian sample. Furthermore, Japanese varied the display rules for different interaction partners more than the two North American samples did only for powerful emotions. Gender differences were similar across all three cultural groups. Men expressed powerful emotions more than women and women expressed powerless emotions (sadness, fear) and happiness more than men. Depending on the type of emotion and interaction partner some shared display rules occurred across culture and gender. The implications of these findings are discussed in relation to cultural dimensions and other cultural characteristics.

*Keywords:* emotional display rules, norms of emotions, cross-cultural comparison, ingroup/outgroup

The notion of cultural display rules was first introduced by Ekman and Friesen (1969) as a hypothetical construct to explain the observed differences in a study comparing Japanese and American students, since when it has been a central concept in the study

of culture and emotion. Cultural display rules are seen as important parts of any culture; they can be defined as culturally prescribed rules, which are learnt early in life through socialization. These rules influence the emotional expression of people from any culture depending on what that particular culture has characterised as an acceptable or unacceptable expression of emotion (Matsumoto, Kasri, & Kookan, 1999). These culturally shared norms dictate how, when, and to whom people should express their emotional experiences.

---

Saba Safdar, Department of Psychology, University of Guelph; Wolfgang Friedlmeier, Department of Psychology, Grand Valley State University; David Matsumoto, San Francisco State University; Seung Hee Yoo, Yale University; Catherine T. Kwantes, Department of Psychology, University of Windsor; Hisako Kakai, Graduate School of International Politics, Economics and Communication, Aoyama Gakuin University; Eri Shigemasu, Department of Politics and Public Administration, Yamanashi Gakuin University.

The first author would like to thank Dr. J. Rees Lewis for his valuable feedback and editorial comments on earlier versions of this article. The second author would like to thank Prof. Hideo Kojima, Prof. Masahiko Tsuchiya, and Dr. Shoei Tsai for their strong support in carrying out the study in Nagoya, Kyoto, and Nara; as well as to acknowledge the financial support from the Faculty Research and Development Center at GVSU. The authors would also like to thank the reviewers for their constructive comments on earlier versions of the manuscript.

Correspondence concerning this article should be addressed to should be directed to Saba Safdar, Psychology Department, University of Guelph, Guelph, Ontario, N1G 2W1. E-mail: ssafdar@uoguelph.ca

Despite the popularity of this concept, few studies have tried to investigate display rules in a direct way. The cross-cultural project organised by Matsumoto, Yoo, Fontaine, Anguas-Wong, Arriola, Ataca, et al. (2008) tries to fill this gap. Using the Display Rule Assessment Inventory (DRAI), display rules are assessed as cognitive representations that guide individuals' expressive behaviour. As part of this multinational study, the present article focuses on a specific comparison between three cultural groups, namely Japan, Canada, and the United States, regarding emotional display rules. Because all three nations are wealthy, industrialised, and modern democratic countries, they are similar in economic and political terms but differ in cultural factors (such as norms, values, and behavioural rules) that are important in describing and explaining differences in individual functioning across cultures (e.g., Heine,

2006; Matsumoto & Juang, 2008). Therefore, we assume that differences in emotional display rules across these three cultures can be mainly explained by referring to distinct norms, values, and beliefs. Despite globalization and modernization, Japanese culture continues to be shaped by Confucian and Buddhist thought, with its strong emphasis on harmony and individual commitment to the social group. Canada and the United States, in contrast, are cultures embedded in the tradition of Christian thought that places great value on individual fulfillment (Hofstede, 2001). We recognise that cultures are subject to constant reconstruction, that these cultures are not homogeneous, and that some societies (e.g., Canada and the U.S.) are more heterogeneous than others (e.g., Japan). Nevertheless, it is valid to speak of generalised norms in different cultures (Markus & Kitayama, 1991). In Hofstede's (2001) analysis, the United States ranked 1 on the individualism dimension, and Canada ranked 4, out of the 53 countries studied, making them two of the most individualistic countries. In contrast, Japan ranked 22, an indication of a relatively collectivistic society. On the Masculinity Index (MAS), which focuses on the degree the society reinforces gender differentiation, Japan ranked 1, the United States ranked 15, and Canada ranked 24, indicating that the Japanese endorse the highest masculinity norms of the 53 countries studied. Although the United States and Canada scored above the median on this dimension, the ranking of the United States is considerably lower than Japan, and Canada is the lowest ranking of the three.

We do not use these constructs as simple dimensions but rather conceive of them as representing distillations of many sociopsychological phenomena (including societal norms, values, beliefs, personality and behavioural characteristics; see Hofstede, 2001) that are related to ways in which person-environment relations are evaluated (see Greenfield, Keller, Fuligni, & Maynard, 2003; Rothbaum, Pott, Azuma, Miyake, & Weisz, 2000). Although cultural groups operationalised in terms of nation state are quite heterogeneous, research has indicated systematic differences at the national (rather than individual) level with respect to basic value orientations (Hofstede, 2001; Schwartz, 2006). These cultural values may include guidelines for display rules as they encourage or discourage emotional expression, and guide the manner in which emotion is or is not expressed. Differences can occur at a general level or according to the specific emotion, the specific interaction partner, and gender roles. The comparison between three cultural groups allows a more reliable judgement of the relation between cultural values and display rules.

## Cultural Norms About Emotion and Emotional Expression

### *General Norms of Emotion*

Individualistic cultures view the individual as the most important social unit. They value and promote uniqueness, separateness, and autonomy (Markus & Kitayama, 1991). Therefore, emotions are seen as important personal experiences, and their expression is the individual's right. In these cultures, people tend to think about emotions as inner states that are vented spontaneously. Individualistic cultures may prescribe rules encouraging outward displays of emotion that exaggerate the strength of the feeling, as such exaggerated expressions of emotion are reinforced in some individualistic cultures (such as American) as expressions of individuality (Matsumoto, Takeuchi, Andayani, Kouznetsova, & Krupp, 1998).

Collectivistic cultures value groups over individuals, and promote harmony and cooperation within the group rather than individual assertion (Noon & Lewis, 1992). Emotions are seen as interactive experiences and reflect the social context rather than the inner self. Expression of emotion is also controlled, as it is grounded in assessment of the relationship between the self and others (Mesquita, 2000). This implies that emotions are perceived as situation-specific cues about relationships between human beings. By and large, collectivistic cultures emphasise the maintenance of cohesion within the group and therefore, control of emotion has high priority (Potter, 1988).

*Norms about different types of emotions.* The expression of an emotion depends upon its specific use and meaning in a culture. In individualistic cultures, norms for positive emotions are more restrictive. There is considerable pressure to be happy and to express happiness. People look for happy situations, and such situations are positively evaluated. Deviations have significant consequences: unhappiness is seen as failure and, in the extreme, its expression may be seen to warrant psychotherapy (Eid & Diener, 2001). Surprise may show a similar quality to happiness. Collectivistic cultures seem to be less restrictive regarding positive emotions and such emotions can be evaluated as undesirable. For example, the study by Eid and Diener (2001) showed that Chinese displayed the lowest frequency and intensity for all positive emotions including happiness (joy) compared to Australia and United States.

Anger, contempt, and disgust, which are categorized as powerful emotions (Timmers, Fischer, & Manstead, 1998), may also show different norms of expression in individualistic and collectivistic cultures. In individualistic cultures, anger is considered functional and is tolerated in the interest of self-assertion and protecting individual rights and freedom, as long as it is expressed in socially appropriate ways (Eid & Diener, 2001; Stearns & Stearns, 1986). In fact, the expression of anger may be seen as appropriate if it helps to clarify a situation (Eid & Diener, 2001). The expression of anger is less acceptable in collectivistic cultures because it threatens authority and harmony within relationships (Miyake & Yamazaki, 1995). Because contempt and disgust are less ego-focused but have the similar functional quality of threatening harmony, they might also be tolerated less in collectivistic cultures.

In contrast, sadness and fear can be seen as relatively powerless emotions (Timmers et al., 1998) that lead to withdrawal from, rather than disruption of, the group. As they are less threatening to the harmony of the group compared to powerful emotions, they may be more acceptable in collectivistic cultures than in individualistic cultures. This line of reasoning is supported by findings reported by Matsumoto et al. (1998). In an American sample, participants exerted more control over displays of fear and sadness but less control over anger, contempt, and disgust than participants from more collectivistic countries.

It was hypothesized, therefore (Hypothesis 1), that Canadians and Americans would endorse the expression of powerful (i.e., anger, contempt, and disgust) and positive (i.e., happiness and surprise) emotions more than Japanese, and that the Canadians, Americans, and Japanese do not differ in endorsement of the expression of powerless emotions (i.e., sadness and fear).

### Norms for Emotional Display Rules Related to Different Interaction Partners

The display of emotions may also depend on the specific interaction partner. A cultural variation can be expected due to the culture-specific conception of in- and outgroup members within one's social network (Triandis, 1994). People in individualistic cultures feel less attachment to any one group and therefore do not differentiate as markedly between in- and outgroup members. In contrast, in collectivistic cultures, this differentiation is greater because of the high degree of conformity required to maintain harmony within groups. More expression of negative emotions to outgroup members might be indicative of the differences that are stressed between groups in this culture and the relative lack of concern for harmony with outgroup members. Matsumoto (1990) asked Japanese and American students to rate emotional facial expressions to determine how appropriate the expression of the specific emotion was for different target persons. The social situations were varied for friends, family members and acquaintances as well as for persons with higher and lower social status. American students evaluated the expression of sadness toward friends and family members as more appropriate than did the Japanese; Japanese students evaluated the expression of anger toward persons outside of extended family (including close friends) as more appropriate than American students did. Based on this study it can be assumed that Japanese would be less inclined to express powerful emotions to ingroup than outgroup members.

Furthermore, as persons in individualistic cultures see themselves as independent, authenticity is seen as an ideal goal. One should behave in a highly consistent way across social situations and interaction partners to maintain the integrity of one's identity (Noon & Lewis, 1992). In contrast, for Japanese as representatives of a collectivistic culture, the appropriate adaptation to one's counteractant in the current social context is the ideal, rather than the maintenance of a high degree of consistency across contexts. This different emphasis may lead to a general significant cultural difference in display rules.

It is also important to note that the definition of in- and outgroup members and the perceived closeness toward them vary across cultures (Triandis, 1994). For example, Triandis, McCusker, and Hui (1990) found that Chinese students reported being closer to their ingroup members, including father, mother, and spouse than did Americans. The Chinese, however, reported being more distant from their outgroup members, including roommates and friends, than did the Americans (Triandis et al., 1990). Here, we aim to differentiate equivalent in- and outgroups of interactants based on the perceived closeness toward them.

In general, we assume that that emotional display rules for Japanese differ more between in- and outgroup members than for North Americans (Hypothesis 2).

### Gender Differences in Emotional Display Rules

Within Western cultures, many studies demonstrate gender differences in emotional expressivity (Brody, 1999; Fischer, & Manstead, 2000). Early differentiation of gendered cultures (Maccoby, 1988) encourages women and men to engage in different paths of emotion expressivity (Brody, 1999). Men are less inclined than women to express powerless emotions like fear or sadness; expressing

sadness makes one look vulnerable (Labott, Martin, Eason, & Berkey, 1991) and a man will receive less positive feedback if he expresses these emotions (Brody, 1999). Women are more hesitant about expressing powerful emotions such as anger and contempt than men (see also Fischer, 1993).

Furthermore, cultures that are characterised by high MAS tend to show greater differentiation between gender roles than low MAS cultures (Hofstede, 2001). In high MAS cultures like Japan, men and women exhibit different roles within the family context and in society at large. Gender appropriate behaviours are recognised and anticipated, whereas gender inappropriate behaviours are discouraged and rejected: fathers and mothers have distinctive roles in the family, with the father being tough and the mother being submissive. Such distinctions are less marked in countries with lower MAS indexes, such as Canada and the U.S.

It was predicted (Hypothesis 3a) that men would report that they should express powerful emotions (anger, contempt, and disgust) more than women, whereas women would think that they should express powerless emotions (fear and sadness) more than men. No prediction was made in terms of positive emotions. Along with the cultural differences in MAS larger gender differences are expected in Japan than in U.S. and Canada (Hypothesis 3b).

### Hypotheses

*Hypothesis 1:* Canadians and Americans will endorse the expression of powerful (i.e., anger, contempt, and disgust) and positive (i.e., happiness and surprise) emotions more than Japanese, and Canadians, Americans, and Japanese do not differ in endorsement of the expression of powerless emotions (i.e., sadness and fear).

*Hypothesis 2:* Emotional display rules for Japanese participants will differ more between in- and outgroup members than they will for American or Canadian participants.

*Hypothesis 3a:* Men will report that they should express powerful emotions (anger, contempt, and disgust) more than women, whereas women would think that they should express powerless emotions (fear and sadness) more than men.

*Hypothesis 3b:* Larger gender differences on the MAS are expected amongst Japanese participants than amongst American or Canadian participants.

### Method

#### Participants

A total of 1,033 individuals participated in this study. To increase the homogeneity of each sample, only those participants who were born or raised in each of the respective countries were included in the sample. Additionally, those participants who were above 30 years old or were not students were deleted from the sample. The final sample size was 835. One hundred and 99 Canadians (105 females and 93 males;  $M = 19.94$  years,  $SD = 1.96$ ), 380 Japanese (181 females and 199 males,  $M = 19.90$  years,  $SD = 1.53$ ), and 256 Americans (181 females and 75 males,  $M = 22.15$  years,  $SD = 2.42$ ) participated in the study. All the participants were university students. In Canada, participants were

recruited from a university in the city of Guelph (~ 200,000 inhabitants), in the United States, the university was located in San Francisco (~ 780,000), and in Japan participants were recruited from universities in Tokyo (~12 millions), Nagoya, Kyoto (each ~ 1.5 million), Nara (~ 370,000), and Ichikawa (~ 500,000).

The three cultural groups differed in the number of male and female participants,  $\chi^2 = 11.99$ ,  $p < .001$ . The proportion of female students was significantly higher in the American sample (71%) than the Canadian (53%) and the Japanese (53%) samples. The three groups also differed in age,  $F(2, 814) = 115.13$ ,  $p < .001$ ,  $\eta^2 = 0.22$ . The US American students were significantly older ( $M = 22.15$ ) than the Canadian ( $M = 19.94$ ) and Japanese ( $M = 19.90$ ) students. Age was entered as covariate in the subsequent analysis. Furthermore, in all three countries, the majority of participants (over 80%) identified their economic background as “middle income.”

In America, although all participants were born in the U.S., five ethnic groups were identifiable amongst the participants: White (32%), Asians (25%), Latinos (12.5%), African American (6%), and others/missing (25%). Preliminary analyses only showed one significant main effect for ethnic groups in the American sample in respect to happiness. African Americans think they should express happiness significantly less than Whites. Ethnicity was not further taken into account in the main analyses.

## Materials

*Display Rule Assessment Inventory (DRAI)*. This instrument assesses display rules by asking participants to judge the appropriateness of displaying certain emotions in different situations. Participants are given scenarios that vary with regard to 21 target persons, 2 locations, and 7 emotions. They are instructed to, “think of a specific person in your life for each of the situations and tell us what you think you should do by selecting one of the seven possible responses that are listed on top of the page.” The 21 target persons are oneself, 6 family members (father, mother, older brother/sister, younger brother/sister), 4 friends and acquaintances (a close friend who is male/female, an acquaintance who is male/female), 6 classmates of the same university (a male/female student of a higher class year, a male/female classmate of the same class year, and male/female student of a lower class year), and 4 professors (a male/female professor in her/his 50s or 60s and a male/female professor in his or her 30s or 40s). For each of the interactions, the location was in a public setting such as a cafeteria or restaurant, then again in a private setting, such as an office or home.<sup>1</sup> The seven emotions were happiness, surprise, fear, sadness, anger, disgust, and contempt.

For each scenario, seven possible behavioural responses were offered to participants: to *amplify* the emotion by expressing more than is actually felt, to *deamplify* the emotion by expressing less than is actually felt, to *neutralise* the emotional expression by showing nothing, to *masque* the emotion by displaying some emotion other than what is truly felt, to *qualify* the emotion by displaying the emotion actually felt blended with another emotion, or to choose not to modify the expression at all and *express* exactly what is felt. The response *other* was added to incorporate any other behavioural response not listed. This latter response was infrequently chosen (less than 1%) and is not taken into account for further analyses.

The instrument was back-translated from English into Japanese, and internal and temporal reliability as well as some forms of validity were demonstrated for this inventory in earlier studies (Matsumoto, Yoo, Hirayama, & Petrova, 2005).

## Scoring the DRAI

According to the Homogeneity Analysis via Alternating Least Squares (HOMALS), the different display rules were identified as unidimensional (Matsumoto et al., 2008). Based on this analysis, the nominal expressive mode responses were recoded into scalar values in the following way: Amplify → .5651, Express → .3842, Qualify → .1218, Deamplify → -.1545, Masque → -.3828, Neutralise → -.5338, and the values represent the extent of emotional expression compared to the subjective feeling: Values higher than .38 mean that the emotion should be expressed more than it is felt and values below .38 mean that it should be expressed less than it is felt. Qualification represents a smaller discrepancy between feeling and expression, than deamplification and masking. Neutralization represents the greatest discrepancy between expression and feeling.

*Closeness to the interaction partners*. Beside the question “How often do you interact with person x?,” three further questions were asked: “How close are you to person x?,” “How well do you know person x?,” and “How committed are you to meeting and spending time with person x in the future?” Each of these three items was rated on a 5-point scale from 0 – not at all to 4 – very much/likely. For determining an index of perceived closeness of each specific interaction person, the participants’ response was averaged across these three ratings. Translation of the scale from English to Japanese was conducted using back translation.

## Procedures

Instructions and an example of how to respond to the items were given on the front page of the questionnaire. On the second page, the seven emotion terms and their definitions from a standard dictionary were listed; the same definitions were used in every country. All definitions were accompanied by an example to make sure that all participants had a similar understanding of the respective emotions. After they described how they think that they SHOULD express each specific emotion to all the target persons, the remaining questions gathered sociodemographic information and asked about the closeness of their relationships with the targets.

In Canada and the U.S., the participants were tested in groups of 5 to 15 people in a room at their respective universities. They completed the questionnaires with the experimenter present. In Japan, the questionnaires were handed out to the students in different classes. Some students completed them in the classroom and others at home. The latter were asked to return them within a week. The average length for completing the questionnaires was about 60 minutes.

To control for order effects within the DRAI, eight different versions with varying sequences of interaction targets were pro-

<sup>1</sup> No specific hypotheses about public versus private context were made and therefore, the analyses were conducted without including context as a factor.

duced and randomly distributed to the subjects. The order effect was tested by Multivariate Analysis of Variance (MANOVA) with culture (3) and gender (2) as independent factors and three groups of interaction partners (see the results section for description) as a within-subject factor. The results indicated a main effect for order of presentation,  $F(7, 778) = 5.68, p < .001$ , but no interaction between order of presentation with country or with gender. Furthermore, there appeared to be no interaction effects with the seven emotions. Additionally, we checked the distribution of the eight versions across the three countries and found no differences,  $\chi^2 = 7.79, p = .50$ . Therefore, the order of presentation was not included as a factor in subsequent analyses.

## Results

### Identification of Homogeneous Groups of Interactants

To construct equivalent groups of interaction partners across the three cultures, we examined the means of closeness for each target person across and within the three cultures (see Table 1). The means were lowest for the four professors in all three countries (distal group). All family members and the two close friends showed highest means in all three cultures (close group). The acquaintances and classmates were in between (medium group). The only exception was older brother in Japan who was not different from the medium group but still was higher than the other targets within the medium group. Consequently, we used three groups, designated *close*, *medium*, and *distal* (see Table 1). These three groups consisted of the same combinations of persons across all three cultures and were also equivalent regarding the subjects' perceived closeness to each group. A MANOVA showed that the

main effect "closeness" is very strong,  $F(2, 738) = 3345.13, p < .001, \eta^2 = 0.90$ . The means were significantly different for all three groups with the highest means for close group and the lowest means for distal group in each culture (Japan:  $F(2, 326) = 1098.20, p < .001, \eta^2 = 0.87$ ; Canada:  $F(2, 188) = 1254.29, p < .001, \eta^2 = 0.93$ ; U.S.:  $F(2, 222) = 1009.43, p < .001, \eta^2 = 0.90$ ). The internal consistency of the nine coefficients was high: Cronbach's alpha ranged between .89 and .96 with a mean Cronbach's alpha = .92.

The degree of closeness varied across cultures,  $F(4, 1476) = 51.30, p < .001, \eta^2 = 0.12$ . Japanese reported being significantly closer to the distal group than Americans, they also reported being closer to the medium group than Canadians and Americans, and less close to the close group than the Canadians and the Americans. Since the between-groups differences are substantial within each culture,  $\eta^2 = 0.90$ , and each interaction group consists of the same persons, we decided to use these three groups for further analyses as equivalent groups across the three cultures.

### General Effects on Emotional Display Rules

A four-way MANCOVA was computed with country (3) and gender (2) as between-subjects factors and emotion (7) as well as group of interaction partners (3) as within-subject factors; age was entered as a covariate. Given the significant main as well as 2- and 3-way interaction effects for emotion, we separated the analysis for each emotion and conducted seven three-way MANCOVAs. To avoid Type I errors we applied a Bonferroni correction (.05/7) and set  $\alpha = .007$ . The main findings are presented below.

### Culture Effect (Hypothesis 1)

There was a significant effect for culture in the expression of each of the three powerful emotions (anger, contempt, and disgust; see Table 2). There was also a significant culture effect in the expression of positive emotions (happiness and surprise; see Table 2). No effect for culture was found for negative/ powerless emotions (fear and sadness; see Table 2).

Pairwise comparisons by using the Least Significant Difference (LSD) indicated that the Japanese participants have significantly lower means in the expression of powerful emotions (anger,  $M = -.18$ ; disgust,  $M = -.26$ ; and contempt,  $M = -.28$ ) than both the Canadians (anger,  $M = -.09$ ; disgust,  $M = -.16$ ; and contempt,  $M = -.15$ ) and the Americans (anger,  $M = -.07$ ; disgust,  $M = -.14$ ; and contempt,  $M = -.09$ ; see Figure 1). The mean scores for the Japanese in the expression of positive emotions (happiness,  $M = .21$ , surprise,  $M = .14$ , respectively) were significantly lower than for the Canadians ( $M = .29, M = .22$ , respectively) but not the Americans ( $M = .24, M = .17$ , respectively; see Figure 1). Furthermore, Canadians and Americans also differed in the display rules for contempt. The Canadians thought they should express contempt less than the Americans (see Figure 1).

In summary, Hypothesis 1 was supported. The Japanese reported that it was appropriate to express powerful emotions less than the Canadians and the Americans. They also reported that they should express positive emotions less than the Canadians but not the Americans. As expected, there were no differences in the

Table 1  
Mean and Standard Deviations (SD) on Closeness to 20 Target Persons for the Three Samples

	Canada	U.S.A.	Japan
Female professor 50s	.74 (.85)	.67 (.80)	.84 (.72)
Male professor 50s	.80 (.80)	.76 (.81)	.96 (.73)
Female professor 30s	.92 (.89)	.77 (.88)	1.00 (.72)
Male professor 30s	1.04 (.95)	.77 (.94)	1.01 (.80)
<b>Distal group/ outgroup</b>	<b>.86 (.68)</b>	<b>.79 (.76)</b>	<b>.98 (.63)</b>
Male acquaintances	1.36 (.83)	1.27 (.97)	1.47 (.82)
Female acquaintances	1.36 (.83)	1.44 (1.07)	1.47 (.82)
Male subordinate	1.52 (1.02)	1.50 (1.12)	1.58 (.83)
Male higher class	1.55 (1.02)	1.59 (1.09)	1.63 (.79)
Female subordinate	1.66 (1.02)	1.62 (.96)	1.69 (.80)
Female higher class	1.78 (1.05)	1.62 (.96)	1.83 (.86)
Male colleague	2.03 (1.11)	1.69 (1.14)	2.21 (.90)
Female colleague	2.33 (1.10)	1.95 (1.23)	2.32 (.98)
<b>Medium group</b>	<b>1.56 (.74)</b>	<b>1.70 (.69)</b>	<b>1.81 (.63)</b>
Older brother	3.15 (.94)	2.91 (.99)	2.38 (.97)
Father	3.23 (.90)	3.03 (1.01)	2.52 (.91)
Younger brother	3.29 (.86)	3.23 (.94)	2.69 (.90)
Older sister	3.33 (.76)	3.33 (.75)	2.73 (.93)
Younger sister	3.39 (.70)	3.34 (.79)	2.79 (.95)
Male friend	3.42 (.67)	3.37 (.67)	2.95 (.70)
Female friend	3.55 (.60)	3.47 (.74)	2.97 (.78)
Mother	3.58 (.68)	3.52 (.67)	3.01 (.75)
<b>Close group</b>	<b>3.32 (.62)</b>	<b>3.44 (.48)</b>	<b>2.82 (.62)</b>

Note. Values range between 0 and 4. Values in bold represent the means for the respective target group.

Table 2  
Effects of Culture, Group of Target Persons, and Gender on Powerful, Powerless, and Positive Emotions

Effects	Powerful emotions						Powerless emotions				Positive emotions			
	Anger		Contempt		Disgust		Fear		Sadness		Happiness		Surprise	
	<i>F</i> values	$\eta^2$	<i>F</i> values	$\eta^2$	<i>F</i> values	$\eta^2$	<i>F</i> values	$\eta^2$	<i>F</i> values	$\eta^2$	<i>F</i> values	$\eta^2$	<i>F</i> values	$\eta^2$
Culture (C)	<b>32.24**</b>	<b>.074</b>	<b>58.74**</b>	<b>.127</b>	<b>35.87**</b>	<b>.082</b>	2.13	.005	1.35	.003	<b>13.51**</b>	<b>.032</b>	<b>9.08**</b>	<b>.022</b>
Target (T)	<b>5.33*</b>	<b>.007</b>	4.11	.005	<b>6.54*</b>	<b>.008</b>	1.24	.002	.84	.001	<b>5.35*</b>	<b>.007</b>	3.21	.004
T * C	<b>8.46**</b>	<b>.021</b>	<b>4.84*</b>	<b>.012</b>	<b>6.01**</b>	<b>.015</b>	1.52	.004	2.67	.007	3.11	.008	2.13	.005
Gender (G)	<b>9.31*</b>	<b>.011</b>	<b>15.34**</b>	<b>.019</b>	<b>10.55*</b>	<b>.013</b>	<b>26.98**</b>	<b>.033</b>	<b>7.53*</b>	<b>.009</b>	<b>10.95*</b>	<b>.013</b>	.42	.001
G * C	.36	.001	2.33	.098	1.83	.005	1.31	.003	.40	.001	1.56	.004	2.10	.005
T * G	<b>18.10*</b>	<b>.022</b>	<b>23.76**</b>	<b>.029</b>	<b>20.39**</b>	<b>.025</b>	<b>26.76**</b>	<b>.032</b>	<b>19.29**</b>	<b>.020</b>	2.53	.003	<b>15.45**</b>	<b>.019</b>
T * C * G	3.54	.009	3.43	.008	1.99	.005	.32	.001	1.97	.005	.41	.001	.52	.001

Note. Significant values are shown in bold.

\*  $p < .007$ . \*\*  $p < .001$ .

expression of sadness and fear between the Japanese and the two North American samples (see Figure 1).

### Culture by Target Interaction (Hypothesis 2)

First, significant main effects for target groups in the reported appropriateness of the expression occurred for two of the powerful emotions (anger and disgust) and happiness but not for powerless emotions and surprise (see Table 2). Across all three cultural groups the mean scores regarding the expression of these three emotions (anger, contempt, and happiness) to members of the close group were significantly higher than to members of the medium group and significantly higher scores for the medium group than the distal group (see Table 3).

The significant main effects of culture and of target groups were further qualified by significant "target  $\times$  culture" interactions for the three powerful emotions (see Table 2): anger,  $F(2, 801) = 8.46$ ,  $p < .001$ ,  $\eta^2 = 0.21$ ; contempt,  $F(2, 803) = 4.84$ ,  $p < .01$ ,  $\eta^2 = 0.12$ ; disgust,  $F(2, 802) = 6.01$ ,  $p < .001$ ,  $\eta^2 = 0.15$ . No interaction effect was found for powerless or positive emotions (see Table 2).

Tests of within-subject contrasts showed that the Japanese differentiated significantly more between the target groups in terms of expressing powerful emotions than the Americans and Canadians (see Table 3 and 4). For anger, they differentiated more markedly between close and medium groups ( $M(diff) = .27$ ; Canadians:  $M(diff) = .18$ ; Americans:  $M(diff) = .17$ ) as well as between close and distal groups ( $M(diff) = .36$ ; Canadians:  $M(diff) = .28$ ; Americans:  $M(diff) = .29$ ). Differences between display rules for medium and distal groups were similar across all three national samples. For contempt, only one difference occurred, namely that Japanese showed a greater differentiation between members of the close group and members of the medium group ( $M(diff) = .20$ ) than did the Canadians ( $M(diff) = .14$ ) and the Americans ( $M(diff) = .15$ ). For disgust, the Japanese differentiated more markedly between the close and the medium groups ( $M(diff) = .21$ ; Canadians:  $M(diff) = .19$ ; Americans:  $M(diff) = .15$ ) but Canadians and Americans differentiated more between the medium and the distal group (Canadians:  $M(diff) = .13$ ; Americans:  $M(diff) = .16$ ) than the Japanese ( $M(diff) = .06$ ; see Table 3 and 4).

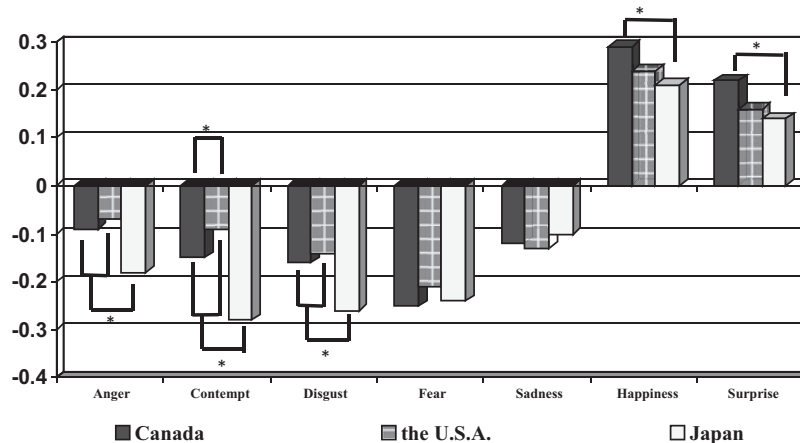


Figure 1. Means of the expression of seven emotions in the three cultural samples (values on y-axis are intensity of emotion expression).

Table 3  
Means of Seven Emotions for Each of the Three Target Groups of the Three Samples

Emotions	Canada			The United States			Japan		
	Close	Medium	Distal	Close	Medium	Distal	Close	Medium	Distal
Anger	.06	-.12	-.22	.09	-.08	-.20	.03	-.24	-.33
Contempt	-.02	-.16	-.28	.02	-.11	-.21	-.12	-.33	-.40
Disgust	-.02	-.17	-.30	.01	-.14	-.30	-.10	-.31	-.37
Fear	-.15	-.28	-.32	-.08	-.25	-.29	-.12	-.27	-.34
Sadness	.01	-.17	-.19	.00	-.18	-.21	.02	-.12	-.19
Happiness	.34	.28	.24	.32	.23	.19	.28	.22	.14
Surprise	.30	.21	.15	.27	.14	.07	.22	.15	.06

In summary, these results support Hypothesis 2 only in respect of powerful emotions. The Japanese sample showed greater differences in display rules between the close group (family members and friends) and the two more distant groups.

### Gender Effects (Hypothesis 3)

There was a significant gender effect in the display rules for six of the seven emotions (see Table 2). No gender effect was found in the expression of surprise,  $F(1, 805) = .42, ns$  (see Table 2).

Pairwise comparisons examining the mean scores for the appropriateness of expressing powerful emotions indicated that men had significantly higher means than women (anger:  $M$  (males) =  $-.09$  vs.  $M$  (females) =  $-.13$ , contempt:  $M$  =  $-.15$  vs.  $M$  =  $-.21$ ; disgust:  $M$  =  $-.17$  vs.  $M$  =  $-.21$ ). The mean scores for the powerless emotions were significantly lower for men than for women (fear:  $M$  =  $-.27$  vs.  $M$  =  $-.19$ ; sadness:  $M$  =  $-.14$  vs.  $M$  =  $-.09$ ). Additionally, men had significantly lower mean scores for the appropriateness of expressing happiness ( $M$  =  $.23$ ) than women ( $M$  =  $.27$ ). These results confirm Hypothesis 3a.

These gender differences were further qualified by significant “gender  $\times$  target” interaction effects for powerful emotions, powerless emotions, and surprise. Tests of within-subject contrasts yielded the following results (see Tables 5 and 6). For powerful emotions, the genders did not differ in their rules for close target persons (anger:  $M$  (females) =  $.06$  vs.  $M$  (males) =  $.04$ ; contempt:  $M$  =  $-.04$  vs.  $M$  =  $-.07$ ; disgust:  $M$  =  $-.03$  vs.  $M$  =  $-.06$ ; see Table 5) but females thought they should express powerful emotions significantly less toward the medium targets (anger:  $M(diff)$  =  $.24$ ; contempt:  $M(diff)$  =  $.20$ ;

disgust:  $M(diff)$  =  $.21$ ) than men (anger:  $M(diff)$  =  $.18$ ; contempt:  $M(diff)$  =  $.14$ ; disgust:  $M(diff)$  =  $.16$ ) as well as to distal persons (anger:  $M(diff)$  =  $.35$ ; contempt:  $M(diff)$  =  $.31$ ; disgust:  $M(diff)$  =  $.33$ ) than did men (anger:  $M(diff)$  =  $.28$ ; contempt:  $M(diff)$  =  $.22$ ; disgust:  $M(diff)$  =  $.24$ ; see Table 6). For fear and sadness, both genders showed similar display rules toward distal persons (fear:  $M$  (females) =  $-.31$  vs.  $M$  (males) =  $-.33$ ; sadness:  $M$  =  $-.20$  vs.  $M$  =  $-.20$ ; see Table 5). Females, however, had higher means for the appropriateness of expressing fear to the medium targets ( $M(diff)$  =  $.08$ ) and to close targets ( $M(diff)$  =  $.27$ ) than males (medium,  $M(diff)$  =  $.03$ , close,  $M(diff)$  =  $.15$ ; see Table 6). Females also showed a significantly stronger difference in the appropriateness of expressing sadness to members of the medium and close groups ( $M(diff)$  =  $.19$ ) compared to males ( $M(diff)$  =  $.13$ ; see Table 5 and 6). Regarding surprise, both genders expressed similar display rules toward medium and distal targets. Females, however, had higher means for the appropriateness of expressing surprise to members of close groups ( $M(diff)$  =  $.22$  respective  $.13$ ) than males ( $M(diff)$  =  $.12$  respective  $.06$ ; see Table 5 and 6). There was no “gender  $\times$  target” effect for happiness. The interaction of culture and gender was not significant for any of the seven emotions (see Table 2) so that Hypothesis 3b has to be rejected.

### Discussion

The present study examined emotional display rules and their functional meaning in relation to the specific emotion, interaction partner, gender, and culture. General differences in emotional

Table 4  
Tests of Within-Subjects Contrasts for the Interaction Effect Culture  $\times$  Target

Person	Comparisons	Anger		Contempt		Disgust	
		Close	Medium	Close	Medium	Close	Medium
Medium group	Japan-USA	.10*		.08*		.08*	
	Japan-Canada	.08*		.07*		.06*	
	Canada-USA	.02		-.01		-.01	
Distal group	Japan-USA	-.07*	.04	-.03	.03	.02	.09*
	Japan-Canada	-.08*	.01	-.03	.04	.01	.07*
	Canada-USA	.01	.03	-.01	-.01	.01	.02

Note. Values represent the mean differences of the comparisons of the difference between two cultures in two respective target groups.  
\*  $p < .007$ .

Table 5  
Gender-Specific Means of Seven Emotions for Each of the Three Target Groups

Emotions	Females			Males		
	Close	Medium	Distal	Close	Medium	Distal
Anger	.06	-.18	-.29	.04	-.14	-.24
Contempt	-.04	-.24	-.35	-.07	-.21	-.29
Disgust	-.03	-.24	-.36	-.06	-.22	-.30
Fear	-.04	-.23	-.31	-.18	-.30	-.33
Sadness	.06	-.13	-.20	-.03	-.16	-.20
Happiness	.34	.25	.20	.27	.22	.16
Surprise	.29	.16	.07	.22	.16	.10

display rules between Canadians, Americans, and Japanese, as well as within-culture variations because of the specific quality of emotion, the interaction partners, and gender were expected. A general main effect for the appropriateness of expressing emotions across cultures was found. There is general agreement that positive emotions are expressed much as they are felt, whereas expression of negative emotions is more controlled (Matsumoto et al., 2008). This is also consistent with results of other studies indicating that anger, contempt, and disgust are the most potentially disruptive to social relationships and therefore, more controlled (Gottman & Levenson, 2000).

Furthermore, significant interactions between culture, target groups, and gender pointed to the fact that there are variations of display rules within culture. The three hypotheses referred to (a) general cultural effects along negative powerful emotions as well as positive emotions, (b) variation of display rules within and across cultures according to the closeness of the interaction person (in- and outgroup members), and (c) gender differences in emotional display rules. The hypotheses were partially confirmed and will be discussed below.

Supporting Hypothesis 1, Japanese norms seem to sanction less expression of powerful emotions than Canadian and American norms. The Japanese also reported that positive emotions should be expressed less than the Canadians but not the Americans. There was no difference between the Japanese and the North American samples in the expression of powerless emotions. The differences between the Japanese and the two North American samples are consistent with the general norms of expression in collectivistic and individualistic cultures (Eid & Diener, 2001). There is a tendency to avoid open expression of emotions in collectivistic culture as it is considered inappropriate. This tendency is particularly marked for powerful emotions and less clear-cut for positive and powerless emotions. It is likely that open expressions of anger, disgust, and contempt are considered inappropriate as they threaten interpersonal harmony in the collectivistic Japanese society (Miyake & Yamazaki, 1995) while the same emotions are considered to be an expression of self-assertion in individualistic societies (i.e., Canadian and American) and, therefore, are tolerated. Furthermore, positive and powerless emotions are not threatening to intragroup or interpersonal harmony, and therefore the lack of consistent differences between the Japanese sample and the North American samples is in line with the prediction that the differences between the Japanese and the other samples would be most marked in relation to powerful emotions.

The only difference between the Canadian and the American samples was in display rules of contempt. Canadians believe that contempt should be expressed less than the Americans. One post hoc explanation can be referred to the study by Terracciano and McCrae (2007). They reported that Canadians perceive the personality of a typical member of their own society as agreeable and Americans as assertive. Because it is more important to appear agreeable for Canadians than for Americans, they might restrict the expression of contempt more than the Americans.

Greater differences in the display rules between in- and outgroup members were expected for Japanese than Canadians and Americans (Hypothesis 2). It was one goal of this study to construct homogenous subsets of in- and outgroup members based on the person's perceived closeness to them. Three groups—close, medium, and distal interaction partners—could be reliably differentiated within each culture. The hypothesis was only confirmed for powerful emotions (anger, contempt, disgust): Japanese participants showed more differentiation between close, medium, and distal group than Americans and Canadians.

These results are only partly in line with Matsumoto (1990). He reported that Japanese students evaluated the expression of anger toward persons outside their extended family (including close friends) as being more appropriate than did American students. According to the findings in this research, the Japanese have similar display rules for negative powerful and positive emotions, namely to express them less to members of the distal than of the medium group and less to members of the medium than of the close group. The difference in findings across these studies could be caused by methodology. In Matsumoto's (1990) study, the subjects were presented pictures of facial emotion expressions and were asked to judge the appropriateness of the emotion. In this study, the focus was on display rules (how respondents thought they should react and how strong the expression of each emotion should be, whether it should be de-amplified, qualified, masked,

Table 6  
Tests of Within-Subjects Contrasts for the Interaction Effect Gender  $\times$  Target

Person	Emotion	Male-female comparisons	
		Close group	Medium group
Medium group	Anger	.06**	
	Contempt	.06**	
	Disgust	.06**	
	Fear	.07**	
	Sadness	.06**	
	Happiness	.04	
	Surprise	.07**	
Distal group	Anger	.07**	.01
	Contempt	.09**	.03
	Disgust	.06**	.05**
	Fear	.12**	.05**
	Sadness	.06**	.03
	Happiness	.03	.01
	Surprise	.10**	.03

Note. Values represent the mean differences of the comparisons of the difference between genders in two respective target groups in regard to display rules.

\*\*  $p < .001$ .



etc.). It seems that the emotion appropriateness is only one aspect of display rules. This appropriateness is further qualified by a behavioural response that leads to different presentations of the appropriate expression—and this was not assessed by Matsumoto (1990) but is included in this study.

A similar distinction for expressing happiness toward different interaction partners occurred for all three cultures and no significant differentiation between interaction partners occurred for fear, sadness, and surprise.

Hypothesis 3 predicted that gender differences would occur (3a) and that those differences might be greater in Japan (3b). Hypothesis 3a, that men believe that they should express powerful emotions more and powerless emotions less than women, was supported. These results may reflect existing gender stereotypes. A gender gap has been particularly large when participants are asked to report on the expression of empathy or anger in interpersonal relationships (Eisenberg & Lennon, 1983). Whether such gender differences actually occur behaviourally is an open question. However, the present research focused on assessing the participants' display rules, namely how they think they should express their emotions.

It is important to note that gender differences were also dependent of the specific target groups. For example, both gender apply the same display rules for powerful emotions toward ingroup members (close target persons) and powerless emotions toward outgroup members (distal target persons). The results of this research suggest that existing gender stereotypes have a strong impact on men's and women's display rules but should be differentiated regarding the specific context (interaction partners).

Greater gender differences were not found in Japan than in the U.S. and Canada, and hypothesis 3b was therefore rejected. To the contrary, the largest gender effect was found in Canada where women reported that they should express powerful emotions less and powerless emotions more than men, and the smallest differences occurred between Japanese men and women in expression of emotions. The smaller difference between genders in Japan might be explained by the fact that the norms of politeness in Japan discourage emotional display in general, attenuating any potential gender effect. In respect of these data, therefore, the fact that Japan is, in Hofstede's terminology, a "high masculinity" society does not seem to have any impact on gender differences in display rules.

### Limitations

The assessment of six different display rules was intended to analyse different display rules that were qualitatively different. However, the analysis of the relations between the display rules by using HOMALS ended up with a one-dimensional solution. As a result, differentiation can only occur along one dimension, namely the extent of expression. It remains a future task to test alternative models. The use of self-reports is always subject to possible social desirability bias and therefore, the results of the study should be interpreted with this limitation in mind. In particular, a culture-specific response bias would limit the validity of this study. However, it is not very likely that these data are biased because (a) this research aimed precisely to investigate the rules, that is, beliefs about what is socially desirable, rather than actual behaviour and (b) as the self-report refers to rules rather than to an evaluation of others' behaviour.

The fact that the participants in the study were all university students limits the generalizability of the findings to other populations and the study should be replicated with nonstudent samples. Nevertheless, it is important to note that, to maintain demographic equivalence amongst multiple samples, several researchers have adopted the practise of obtaining university students in cross-cultural studies (e.g., Bond et al., 2004; Safdar, Lewis, & Daneshpour, 2006).

### Conclusions and Future Perspectives

To date, display rules have usually been inferred and have, therefore, had the status of general hypothetical assumptions. An important contribution of this study is the fact that the outcomes of this study can be used as empirically based knowledge from which specific hypotheses can be derived for observed differences in emotional expression in other studies. It would be desirable to develop a shorter measure of display rules in the future, in particular to consider participants' idiosyncratic as well as culturally normative display rules, which would strengthen the validity of cross-cultural studies in this area.

One main contribution of this study was the direct assessment of emotional display rules in relation to a variety of targets and emotions. It is argued in the literature that people in western cultures strive more for consistency across situations to maintain their authenticity whereas in collectivistic societies, adaptation to the interaction partner is highly valued and such adaptation may enhance one's identity. Based on these arguments and former studies about emotion expression and cultural norms of emotion strong differences of display rules between Japanese and the North American countries were expected. Despite some general cultural differences, this study clearly demonstrates that cultural differences of display rules are further qualified by the quality of emotion, the target person, and gender of the actor. In relation to the specific emotion and especially in relation to specific target persons, all three cultural groups share similar display rules under certain conditions. For example, all three cultures shared the same display rule for anger toward close interaction partners but differed clearly in regard to other partners. The same is valid for gender differences. This differentiated picture disqualifies general statements about cultural and gender differences of display rules.

This research gives insight into cultural variations and commonalities that go beyond stereotypes by showing that Americans and Canadians also vary their display rules despite the idea of situational consistency and Japanese do not differentiate consistently despite the priority to group adaptation. Replication studies of display rules across cultures are needed to strengthen the validity of the findings as well as studies how strongly these display rules are applied in concrete behavioural contexts. Although it is just a starting point, any future study about emotion expression can refer to these context-specific display rules to derive more valid hypotheses, especially when researchers are interested to take a gender or cross-cultural perspective into account.

---

### Résumé

Cette étude se penche sur les règles de dévoilement de sept émotions fondamentales. L'objectif principal était de comparer les règles de dévoilement émotionnel des Canadiens, des Américains

des États-Unis et des Japonais entre les cultures ainsi qu'à l'intérieur de celles-ci, en fonction de l'émotion spécifique, du type de partenaire d'interaction et du genre. Un total de 835 étudiants universitaires ont participé à l'étude. Les résultats ont démontré que les règles de dévoilement japonaises sont significativement moins permissives envers les émotions fortes (colère, dédain et dégoût) que les deux échantillons nord-américains. Les Japonais croient aussi qu'ils doivent significativement moins exprimer les émotions positives (joie, surprise) que l'échantillon canadien. De plus, les Japonais ont plus tendance à faire varier les règles de dévoilement en fonction du partenaire de l'interaction que les échantillons nord-américains, en ce qui concerne les émotions fortes. Les différences de genre sont similaires dans les trois groupes culturels. Les hommes expriment plus d'émotions fortes que les femmes et celles-ci expriment plus les émotions faibles (tristesse, peur) et la joie que les hommes. Dépendamment du type d'émotion et du partenaire d'interaction, certaines règles de dévoilement sont partagées entre les cultures et les genres. Les implications de ces résultats sont discutées en fonction des dimensions culturelles et autres caractéristiques culturelles.

*Mots-clés* : règles de dévoilement émotionnel, normes des émotions, comparaison cross culturelle, groupe interne/externe

### References

- Bond, M. H., Leung, K., Au, A., Tong, K.-K., De Carrasquel, S. R., Murakami, F., et al. (2004). Culture-level dimensions of social axioms and their correlates across 41 cultures. *Journal of Cross-Cultural Psychology, 35*, 548–570.
- Brody, L. R. (1999). *Gender, emotion, and the family*. Cambridge, MA: Harvard University Press.
- Eid, M., & Diener, E. (2001). Norms for experiencing emotions in different cultures: Inter- and intranational differences. *Journal of Personality and Social Psychology, 81*, 869–885.
- Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities. *Psychological Bulletin, 94*, 100–131.
- Ekman, P., & Friesen, W. (1969). The repertoire of nonverbal behavior: Categories, origins, usage, and coding. *Semiotica, 1*, 49–98.
- Fischer, A. H. (1993). Sex differences in emotionality: Fact or stereotype. *Feminism and Psychology, 3*, 303–318.
- Fischer, A. H., & Manstead, A. S. R. (2000). Gender and emotions in different cultures. In A. H. Fischer (Ed.), *Gender and Emotion: Social psychological perspectives* (pp. 71–94). Cambridge, England: Cambridge University Press.
- Gottman, J. M., & Levenson, R. W. (2000). The timing of divorce: Predicting when a couple will divorce over a 14-year period. *Journal of Marriage & the Family, 62*, 737–745.
- Greenfield, P., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural pathways through universal development. *Annual Review of Psychology, 54*, 461–490.
- Heine, S. J. (2008). *Cultural psychology*. New York: Norton.
- Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.), Thousand Oaks, CA: Sage.
- Labott, S. M., Martin, R. B., Eason, P. S., & Berkey, E. Y. (1991). Social reactions to expression of emotion. *Cognition and Emotion, 5*, 397–419.
- Maccoby, E. E. (1988). Gender as a social category. *Developmental Psychology, 24*, 755–765.
- Markus, H., & Kitayama, S. (1991). Culture and self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*, 224–253.
- Matsumoto, D. (1990). Cultural similarities and differences in display rules. *Motivation and Emotion, 14*, 195–214.
- Matsumoto, D., & Juang, L. (2008). *Culture and psychology* (4th ed.). Belmont, CA: Thomson Wadsworth.
- Matsumoto, D., Kasri, F., & Kooken, K. (1999). American-Japanese cultural differences in judgements of expression intensity and subjective experience. *Cognition and Emotion, 13*, 201–218.
- Matsumoto, D., Takeuchi, S., Andayani, S., Kouznetsova, N., & Krupp, D. (1998). The contribution of individualism-collectivism to cross-national differences in display rules. *Asian Journal of Social Psychology, 1*, 147–165.
- Matsumoto, D., Yoo, S. H., Hirayama, S., & Petrova, G. (2005). Validation of an individual-level measure of display rules: The display rule assessment inventory (DRAI). *Emotion, 5*, 23–40.
- Matsumoto, D., Yoo, S.-H., Fontaine, J., Anguas-Wong, A. M., Arriola, M., Ataca, B., et al. (2008). Mapping expressive differences around the world: The relationship between emotional display rules and individualism vs. collectivism. *Journal of Cross-Cultural Psychology, 39*, 55–74.
- Mesquita, B. (2000). Emotions in collectivist and individualist contexts. *Journal of Personality and Social Psychology, 80*, 68–74.
- Miyake, K., & Yamazaki, K. (1995). Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 488–504). New York: Guilford Press.
- Noon, J. M., & Lewis, J. R. (1992). Therapeutic strategies and outcomes: Perspectives from different cultures. *British Journal of Medical Psychology, 65*, 107–117.
- Potter, S. H. (1988). The cultural construction of emotion in rural Chinese social life. *Ethos, 16*, 181–208.
- Rothbaum, F., Pott, M., Azuma, H., Miyake, K., & Weisz, J. (2000). The development of close relationships in Japan and the United States: Paths of symbiotic harmony and generative tension. *Child Development, 71*, 1121–1142.
- Safdar, S. F., Lewis, R., & Daneshpour, M. (2006). Social Axioms in Iran and Canada: Intercultural contact, coping and adjustment. *Asian Journal of Social Psychology, 9*, 123–131.
- Schwartz, S. H. (2006). Value orientations: Measurement, antecedents and consequences across nations. In R. Jowell, C. Roberts, R. Fitzgerald, & G. Eva (Eds.), *Measuring attitudes cross-nationally: Lessons from the European Social Survey*. London: Sage.
- Stearns, P. N., & Stearns, C. Z. (1986). *Anger: The struggle for emotional control in America's history*. Chicago: University of Chicago Press.
- Terracciano, A., & McCrae, R. R. (2007). Perceptions of Americans and the Iraq invasion implications for understanding national character stereotypes. *Journal of Cross-Cultural Psychology, 38*, 695–710.
- Timmers, M., Fischer, A. H., & Manstead, A. S. R. (1998). Gender differences in motives for regulating emotions. *Personality and Social Psychology Bulletin, 24*, 974–985.
- Triandis, H. C. (1994). *Culture and social behaviour*. New York: McGraw-Hill.
- Triandis, H. C., McCusker, C., & Hui, C. H. (1990). Multimethod probes of individualism and collectivism. *Journal of Personality and Social Psychology, 47*, 1363–1375.

Received May 5, 2008

Revision received May 5, 2008

Accepted October 3, 2008 ■