

Emotional Expressivity between the United States and Brazil

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Abstract

Emotional expression differs according to culture and gender. Understanding such differences is important for cross-cultural communication. Brazilians are stereotyped as more emotionally expressive than other cultures. Kring, Smith, and Neale developed an emotional expressivity scale (EES) that has not been used in Brazil. The EES does not differentiate between positive and negative emotions or the emotional expression source, so questions related to six emotions and parental emotional expressivity were added to the survey. Analysis of variance for EES ratings indicated no significant country differences, but did indicate significant gender differences with both U.S. and Brazil women reporting higher ratings than men. For specific emotions, Brazilians reported significantly more comfort for expressing nervousness and anger. Except for anger, women reported higher emotional expression than men. Only U.S. women's EES ratings were significantly correlated with perceived parental expressivity level. EES ratings significantly correlated with all emotions except for anger in both Brazil and the United States. The findings further validate the EES by demonstrating correlation between EES ratings and specific emotions. Additionally, results partially refute stereotypes about Brazilian emotional expression.

Introduction

Kring, Smith, and Neale (1994, 934) defined emotional expressivity as “the outward display of emotions, regardless of valence . . . or channel.” Emotional expression differs according to culture and gender display rules. Understanding these differences is important for cross-cultural communication. According to popular press sources, Brazilians are stereotyped as more emotionally expressive than other cultures (Poelzl 2009, 5; Branco and Williams 2008, 116). The authors of *Culture Smart Brazil* state, “[Brazilian] people express their emotions freely” (Branco and Williams 2008, 116). In another popular press book, *Culture Shock Brazil*, the author attests, “Brazilians are outgoing and extroverted” (Poelzl 2009, 5). Based on casual observation, this emotional expression stereotype may or may not be accurate, and the authors do not present rigorous scientific information to support their claims. One empirical study (Carew et al. 2004, 2) found that Brazilian students consistently reported higher levels of typical expression across all emotions and all social contexts than U.S. students. Although this study had a small sample size and used an un-validated scale, its findings suggest that Brazilian students may be more emotionally expressive than U.S. students.

Kring, Smith, and Neale (1994, 934) designed and validated the 17-item EES to measure the extent to which people outwardly express their emotions. According to a Psycinfo search, this scale has not been used in Brazil, and it may be useful in identifying country differences in emotional expression. However, the scale does not differentiate between positive and negative emotions or the emotional expression source.

Hofstede (2001) measured levels of individualism and collectivism of several countries, finding that the United States is the highest-level country on individualism with an index score of 91 and Brazil is considerably lower with an index score of 38. This measurement suggests that Brazil is considered a collectivistic country.

Matsumoto and Juang (2004, 234) argued that collectivistic cultures express more positive and fewer negative emotions toward those in their own social group because harmony is more important to them, but that they express more negative emotions toward other social groups to distinguish the difference between groups and to strengthen their own group unity. They further argued that individualistic cultures express more negative emotions and fewer positive emotions toward those in their own social group because harmony and cohesion are less important to them, and that they express more positive and fewer negative emotions toward other social groups because there is less distinction between the two groups. This suggests that each country expresses positive and negative emotions differently depending on the social context.

Vikan, Dias, and Roazzi (2009, 77) compared display ratings for anger and sadness and ratings for hiding anger and anxiety between Norwegians, an individualistic culture, and Brazilians, a collectivistic culture. Norwegians showed higher display ratings for anger and sadness in relation to close persons than Brazilians. However, Norwegians also showed higher ratings for hiding anger and anxiety in relation to other persons. Women in both countries showed higher display ratings and lower ratings for hiding emotions. Women also did not differ as much as men in how they displayed or hid emotions in relation to close persons or other persons. We expected that the United States would yield similar results to Norway when compared to Brazil.

Durik et al. (2006, 429) conducted three studies to identify gender stereotypes of emotion within three ethnic groups in the United States. European Americans were compared with African Americans in Study 1, with Hispanic Americans in Study 2, and with Asian Americans in Study 3. Results indicated that gender stereotypes of emotion were present within all ethnic groups, and that the European Americans showed the most difference by gender. Results of the study imply that there are widespread gender

stereotypes of emotion within the United States overall, and that gender and ethnicity are important variables to consider in researching emotions.

Fischer et al. (2004, 87) produced a secondary analysis on a cross-cultural dataset on gender differences in six emotions among 37 countries, including Brazil and the United States. Results indicated that men display more powerful emotions such as anger, and that women display more powerless emotions such as sadness and fear.

Jung et al. (2006, 6) found that men thought they should express anger, contempt, and disgust significantly more than women, and fear and sadness significantly less than women. These findings are consistent with other studies on gender differences in expressing emotions, and we expected to see a similar gender difference in both the United States and Brazil.

The EES does not examine the developmental source of emotional expression. Salisch (2001, 310) conducted a literature review of theoretical formulations and empirical findings related to how children's emotional development is shaped by relationships with parents, peers, and friends. Salisch stated that parents influence their children's emotional development by being models of emotional attachment, and teaching them how to identify, value, express, and regulate emotions according to cultural and subcultural rules. Peers also influence children's emotional development by dampening emotions in many situations, especially vulnerability and anger. Close friendships, however, permit more disclosure of private emotional experiences and teach children how to manage those emotions. We expected that cultural rules of emotional experience would be modeled by parents, and that children would be more comfortable expressing private emotions in close relationships as would be expected in a collectivistic culture.

The purpose of this study was to identify similarities or differences between the United States and Brazil in emotional expressivity, to test whether negative as well as positive emotions are related to the EES, and to discover the correlation between parental expression of emotions and participants' level of emotional expression. The results of the study may further validate the EES in measuring general emotional expression.

Hypotheses

Hypotheses were based on the findings of previous research on the topic of emotional expressivity and on discussion between U.S. and Brazilian research partners.

Hypothesis 1: Brazil will have a significantly higher rating on the EES than the United States. This was based on the claims that Brazil is considered a collectivistic country (Hofstede 2001), that Brazilians are emotional and outgoing (Poelzl 2009; Branco and Williams 2008), and that Brazilians had higher levels of expression across all emotions and situations, studied by Carew et al. (2004).

Hypothesis 2: Overall women will have a significantly higher rating on the EES than men. This was based on the findings of Vikan et al. (2009) that women overall had a higher level of display and a lower level of concealment of anger and sadness than men.

Hypothesis 3: Gender differences will not differ between the United States and Brazil. This was based on Vikan et al. (2009), which found that women displayed emotions similarly between Brazil and Norway.

Hypothesis 4: For both countries, the perception of how the parents express emotions will be correlated with the father for male participants and the mother for female participants. This is based on the literature review done by Salisch (2001) which states that parents influence their children's emotional development and the notion that children look to the parent of their respective gender as a role model for appropriate emotional behavior within that gender role.

Hypothesis 5: Brazilian and U.S. student ratings on the EES will be positively correlated with both negative and positive emotions. No social context is specified in either the EES or the specific emotions, so participants are expected to imagine similar contexts and respond accordingly.

Method
Participants

U.S. students from the University of Wisconsin Oshkosh and Brazilian students from UNIFACS Universidade Salvador and Universidade Federal da Bahia volunteered to participate and were sent a link to access the survey via e-mail. Student e-mails were obtained with the consent of each university. Participation was limited to university students. Participant treatment was consistent with the American Psychological Association (American Psychological Association 1992) and Brazilian ethical standards for treatment of participants (National Commission for Research Ethics 2000). Table 1 summarizes the number and demographic characteristics of the sample.

Table 1. Participants in the emotional expressivity study

Source	USA	Brazil
Total	98	115
Gender	27 Men 71 Women	33 Men 82 Women
Average Age	22.53	24.07

Survey

The EES (Kring, Smith, and Neale 1994, 936–37) consists of 17 questions regarding general emotional expression (e.g., “I think of myself as emotionally expressive”). Responses ranged from 1–6 with higher numbers indicating more emotionality. The EES was found to be highly reliable with a Cronbach’s alpha of .91. Six questions were added about expressing specific emotions to test whether there is a correlation between positive or negative emotions and level of expressivity in the two countries, and another two questions were added about emotional expressivity of parents (e.g., “I express my emotions when I’m happy” or “My mother (father) is an emotionally expressive person”). The six emotions measured were nervousness, sadness, fear, excitement, anger, and happiness.

Procedure

We used a method called TRAPD, which is a team approach to translation from the European Social Survey Association (DeLeeuw, Hox, and Dillman 2008). The steps of the TRAPD method are translation, review, adjudication, pretesting, and documentation. Each survey was divided into parts and bilingual students individually translated their portion to Portuguese. Bilingual students switched portions and back translated the survey to English. All students reviewed each item in both English and Portuguese and discussed the meaning. Items were accepted, modified, adjudicated, or eliminated. An additional bilingual speaker then reviewed the survey.

Additional questions including demographics were added after the original 17 questions so that the additional questions would not affect the EES survey response. Participants accessed the survey using an online program called Qualtrics (www.qualtrics.com).

Results

Separate 2 X 2 (Country X Gender) analyses of variance were used for overall EES mean scores between countries, for EES mean scores between genders, and for each emotion between countries and genders. Analysis of variance indicated no significant difference between countries with both countries' scores being slightly above the average of 3.5 on the 1–6 scale, $F(1,209) = .14, p = .71$ (see fig. 1).

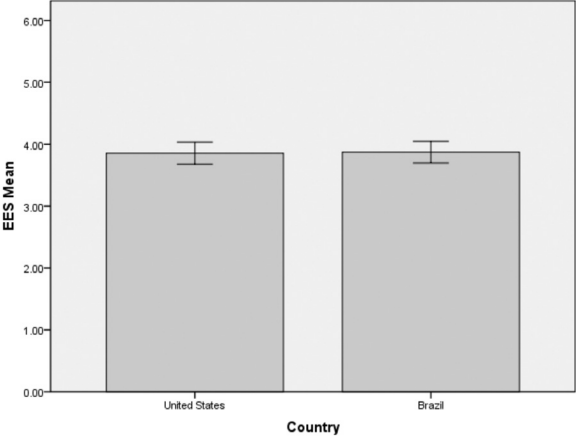


Figure 1. EES mean rating by country.
Note: Lines on the bars indicate +/- 1 SE.

Analysis of variance also indicated a significant effect for gender with women reporting more emotional expressiveness, $F(1,209) = 13.70, p < .01$ (see fig. 2). No interaction between country and gender resulted, $F(1,209) = .22, p = .64$.

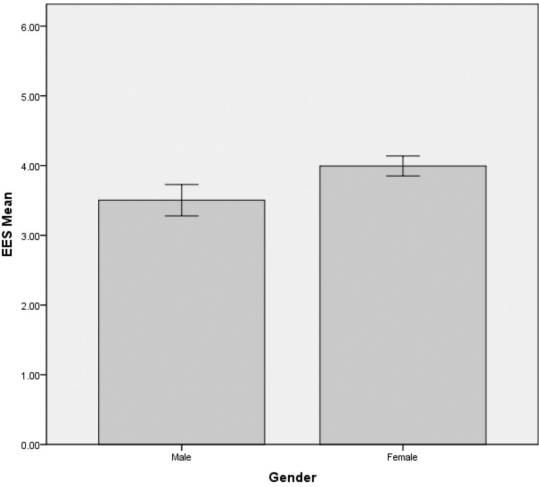


Figure 2. EES mean rating by gender.
Note: Lines on the bars indicate +/- 1 SE.

Significant differences were found between countries for the emotions of nervousness ($p < .001$) and of anger ($p < .05$) with Brazilians rating themselves as more emotionally expressive (see tables 2 and 3). Significant differences were found between genders for all emotions ($p < .05$) except for anger, with women more willing to express their emotions (see tables 2 and 4).

Table 2. 2 X 2 (Country X Gender) analyses of variance for expression of separate emotions

Emotion	Source			
	Country	Gender	C X G	Error
Nervous				
<i>MS</i>	65.55	9.46	1.14	1.31
<i>F</i>	46.91 ***	7.21 **	.87	
Sad				
<i>MS</i>	2.05	19.13	.35	1.71
<i>F</i>	1.20	11.19**	.20	
Afraid				
<i>MS</i>	.38	26.33	.12	1.63
<i>F</i>	.24	16.15***	.07	
Excited				
<i>MS</i>	.00	4.88	.76	.96
<i>F</i>	.00	5.09*	.79	
Angry				
<i>MS</i>	7.28	4.38	.49	1.76
<i>F</i>	4.14 *	2.49	.28	
Happy				
<i>MS</i>	2.91	7.43	.61	.97
<i>F</i>	3.01	7.67**	.63	

$df = 1, 209$
* $p < .05$, ** $p < .01$, *** $p < .001$

Table 3. Specific emotions with country differences

Emotion	Source	
	Brazil Mean (<i>SD</i>)	USA Mean (<i>SD</i>)
Nervous	4.58, (.20)	3.46, (1.11)
Angry	4.43, (1.34)	3.97, (1.35)

Table 4. Specific emotions by gender

Emotion	Source	
	Male Mean, (<i>SD</i>)	Female Mean, (<i>SD</i>)
Nervous	3.75, (1.34)	4.19, (1.25)
Sad	3.47, (1.37)	4.13, (1.28)
Afraid	2.93, (1.35)	3.71, (1.24)
Excited	4.52, (1.02)	4.84, (.96)
Angry	3.98, (1.47)	4.31, (1.29)
Happy	4.62, (1.12)	5.02, (.93)

Pearson correlations were used to find relationships between EES scores and mother/father rated expressiveness and between EES scores and specific emotions for both countries. U.S. women’s self-reported emotional expression was significantly correlated with mother and father estimated emotional expression (see table 5).

Table 5. Correlation between EES and mother/father estimated emotional expressiveness

Parent	Source			
	U.S. Men	U.S. Women	Brazil Men	Brazil Women
Mother	.01	.31**	.19	-.21
Father	.30	.36**	.30	<.01

** *p* < .01 level (2-tailed)

The U.S. EES significantly correlated with all emotions except for anger (see table 6). The Brazil EES significantly correlated with all emotions at .01 level except for anger at .05 (see table 6). For both countries, the highest correlation was for sadness and EES scores (*r* = .56 for Brazil, and *r* = .68 for the United States).

Table 6. Correlation between EES rating and emotions

Country	Emotion					
	Nervous	Sad	Afraid	Excited	Angry	Happy
Brazil	.28**	.56**	.48**	.29**	.23*	.45**
USA	.43**	.68**	.51**	.52**	.08	.43**

** *p* < .01 (2-tailed).

* *p* < .05 (2-tailed).

Discussion

Hypothesis 1 was not supported. There was no significant difference between Brazil and the United States for the EES ratings. This finding was inconsistent with Poelzl (2009), Branco and Williams (2008), and Carew et al. (2004), who reported Brazil more emotionally expressive than the United States.

Hypothesis 2 was supported. We found that women had a significantly higher rating on the EES overall. This finding was consistent with Vikan et al. (2009) in that women had a higher level of emotional expressivity overall.

Hypothesis 3 was supported. Gender differences were not significant between countries. This was also consistent with the findings of Vikan et al. (2009) that women in both countries were similarly comfortable expressing their emotions.

Hypothesis 4 was only partially supported. Men's EES ratings in both countries and Brazil women's EES ratings were not significantly correlated with perceived level of emotional expressivity in either parent. U.S. women's EES ratings were significantly correlated with both parents. The finding for U.S. women is consistent with the literature review on emotional development in children done by Salisch (2001), but the finding for men and Brazil women is contrary to the review.

Hypothesis 5 was partially supported. Both Brazil's and the United States' EES ratings were significantly positively correlated with all emotions except for anger. The high correlations for sadness and EES ratings are most likely due to a single question on the EES that deals with a specific emotion: "I am able to cry in front of other people." The EES does not address other specific emotions.

Conclusion

Brazil and the United States do not significantly differ in self-reported emotional expressivity according to the EES. However, when individual emotions were investigated, Brazilians did report higher emotional expression for nervousness and anger. According to Matsumoto and Juang (2004, 234), this might mean that social context had a role in how the Brazilian participants answered the survey questions. Findings for nervousness and anger are consistent with the findings of Carew et al. (2004) that Brazilians report higher levels of typical expression across all emotions and all social contexts than U.S. students.

Women were more comfortable expressing emotions than men. Gender differences appeared relatively similar between countries. Both findings are consistent with previous research on gender and emotional expression. There was no clear correlation between emotional expression in children and their parents except for women in the United States. This finding was largely inconsistent with literature on how parents influence the emotional development of their children.

There were significant correlations between emotional expression and specific emotions, further validating the EES. However, future assessment of cross-cultural emotional expression should include questions about individual emotions, as use of the EES alone may be limited when comparing cultures or countries. Lack of correlation for anger and EES ratings in the United States and lower correlation in Brazil suggests that expression of this emotion may be more dependent on social context and culture.

Critical Evaluation

College students participating in the surveys may have been culturally similar across countries, and may not have represented their country's overall population. This would mean that the participants in the study were not as individualistic or collectivistic as would be assumed from previous research on the countries. Because participants took the survey online, they may not have correctly interpreted all

questions, especially those that were slightly different in meaning. Additionally, participants may have responded with the more socially acceptable answers, which would explain why both the United States' and Brazil's EES mean scores were only slightly above the scale mean of 3.

Future Research

Paper surveys could be distributed with the incentive of extra credit in the class instead of a voluntary online survey to increase the likelihood of participation. Surveys could also be distributed to a larger and more diverse population to represent more people. This would likely require an online survey and access to a larger sample of university students. The survey could include more specific positive and negative emotions as well as the context of the emotions to better understand the correlation between gender and specific emotions and to test Matsumoto and Juang's claim about differing patterns of emotional expression between individualistic and collectivistic countries.

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