BRIEF REPORTS

Gender and Culture Differences in Emotion

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In this article, the authors report a secondary analysis on a cross-cultural dataset on gender differences in 6 emotions, collected in 37 countries all over the world. The aim was to test the universality of the gender-specific pattern found in studies with Western respondents, namely that men report more powerful emotions (e.g., anger), whereas women report more powerless emotions (e.g., sadness, fear). The authors expected the strength of these gender differences to depend on women’s status and roles in their respective countries, as operationalized by the Gender Empowerment Measure (GEM; United Nations Development Programme Human Development Report 2002). Overall, the gender-specific pattern of women reporting to experience and express more powerless emotions and men more powerful emotions was replicated, and only some interactions with the GEM were found.

Do men and women live different emotional lives, and do they experience and express their emotions in different ways, or with different frequency or intensity? To date, many studies on gender differences in emotion have been conducted to answer this question, and several reviews of this research have been undertaken (e.g., Brody & Hall, 1993; Fischer, 1993, 2000; Manstead, 1992; Shields, 1991, 2000). The authors of these reviews generally have concluded that there are many inconsistencies in the findings resulting from methodological problems (e.g., Feldman Barrett, 1997; LaFrance & Banaji, 1992; Robinson, Johnson, & Shields, 1998; Shields, 2000); yet, a gender-specific pattern in emotional responding can be found. Women generally report more sadness, fear, shame, and guilt, whereas men report experiencing and expressing more anger and other hostile emotions, although this latter finding shows less consistent evidence. This gender-specific pattern is more evident with respect to reports on emotion expressions (e.g., LaFrance & Banaji, 1992).

How have these gender differences been explained? Gender differences in emotion have generally been accounted for in terms of the social and cultural context, especially as a result of gender-stereotypic socialization (cf. Brody & Hall, 1993; Jansz, 2000; Shields, 2002). Emotions can be considered part of the socialization into roles that men and women commonly occupy (cf. Alexander & Wood, 2000; Brody & Hall, 1993; Eagly, 1987; Eagly & Wood, 1991; Grossman & Wood, 1993). Traditionally, in Western industrial societies women are more likely than men to have domestic and nurturing roles, in which taking emotional care of others is their main task. Men, however, are more likely than women to provide the material resources and assume a role in the paid economy. Moreover, these roles suggest differences in power and status, with female roles providing less...
power and status than male roles. To perform these social roles successfully, distinct emotions and emotion expressions are required. In the present article, we distinguish between powerful emotions that display one’s power and assertiveness, such as anger and contempt, and powerless emotions that imply internal blame, vulnerability, and one’s inability to cope with negative events, such as sadness, fear, shame, and guilt. A high-status male role aimed at competition, autonomy, and power would reinforce powerful emotions, but discourage powerless emotions, whereas the female role would discourage powerful emotions and encourage powerless emotions, because the latter serve to maintain harmony in social relations with a minimum of overt hostility.

As in other areas of social behavior, alternative explanations have been proposed to account for some of these gender differences in emotion, based on the biological differences between men and women. For example, hormonal influences would explain the more frequent crying behavior of women (e.g., Frey, 1985; Vingerhoets, Cornelius, Van Heck, & Becht, 2000). Social and biological explanations of gender differences need not be mutually exclusive, however. Recently, Wood and Eagly (2002) have proposed a biosocial approach to gender differences in social behavior, emphasizing the importance of social roles in explaining gender differences in social behavior, but also acknowledging the fact that gender-typed physical attributes may place constraints on the social behavior that accompanies these social roles. Indeed, their cross-cultural analysis supports the idea that gender differences stem from an interaction between physical attributes and social arrangements in society.

Applying this perspective to gender differences in emotion, emotions should vary as a result of the cross-cultural variability in gender roles, if they are primarily determined by the social roles men and women occupy. However, if emotional reactions (e.g., crying) are primarily determined by biological influences, a more uniform pattern across countries would emerge.

To date, there is hardly any cross-cultural research on emotion that has addressed this issue. One exception forms a recent cross-cultural analysis by Lucas and Gohm (2000), using the World Values Survey II and the International College Student Data (Diener & Suh, 1998). These data show that women report more frequent negative emotions (especially fear and sadness and, to a lesser extent, anger), and also more positive emotions, except for pride. However, no consistent effects across samples were found for various cultural predictors, one being the status of women in the country. One explanation for this lack of effect may be that only measures relating to the experience of emotion (intensity, frequency) were included, whereas gender differences are generally more prevalent in emotion expression.

The aim of the present article was to examine the cross-cultural variability of gender differences in emotion by analyzing these differences in countries with different gender roles. We did this by performing a secondary analysis on an existing cross-cultural dataset, including respondents from 37 countries all over the world. As an operationalization of gender roles in a country, we added a measure of the visible and tangible roles played by men and women in a particular society. The United Nations Development Programme has developed an index, the Gender Empowerment Measure (GEM; United Nations Development Programme Human Development Report 2002), that reflects the extent to which women actively participate in economic and political life. The GEM is computed on the basis of the following measures: percentage of seats in parliament held by women, percentage of administrators and managers who are women, percentage of professional and technical workers who are women, and women’s share of earned income in the country in question. The higher the GEM, the more status and power women have in a specific society. GEM scores are relatively low in most African, Asian, and South American countries, which are characterized by a traditional division of labor between the sexes. In countries with high GEM scores, that is, most Western European and English-speaking countries, women actively participate in public life.

The analyses are conducted on three different aspects of two sets of negative emotions: the intensity, expression, and control of powerful (anger and disgust) and powerless (fear, sadness, shame, and guilt) emotions. We excluded happiness from the present study because it is more a positive emotion that is not clearly related to gender roles. A second set of negative emotions, the subjective and objective forms of distress, is also examined.

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analysis because it does not clearly fit with the powerful–powerless distinction. Respondents were asked to report an incident of each of the six emotions and to rate their reactions on various measures of the respective emotions. The answers with respect to the four powerless and the two powerful emotions were combined.

We tested the following hypotheses:

**Hypothesis 1:** We expect women to report less intense powerful emotions (anger and contempt) and more intense powerless emotions (fear, sadness, shame, and guilt) than men. These gender differences are expected to be larger in countries with low GEM scores.

**Hypothesis 2:** We expect women to report less antagonism than men, especially in countries with low GEM scores.

**Hypothesis 3:** We expect women to report more incidents of crying, irrespective of GEM scores.

The Present Dataset

We analyzed data from an extensive cross-cultural study initiated by Scherer, Wallbott, and colleagues. Descriptions of the methodology used in this research can be found in Scherer (1988, 1997), Scherer and Wallbott (1994), and Scherer, Wallbott, Matsumoto, and Kudoh (1988). These articles provide information on issues such as the development of the questionnaire, the choice of the emotions, countries included in the sample, and details of participants’ characteristics. Below, we limit ourselves to a description of the respondents and parts of the questionnaire that are relevant for the present analysis.

**Method**

**Respondents**

We analyzed data from an extensive cross-cultural study (the International Study of Emotional Antecedents and Reactions [ISEAR] database), initiated by students recruited from universities in 37 countries on five continents. A GEM score was added for each country (see Fischer & Manstead, 2000, for a full list of GEM scores per country). No GEM score was available for four countries, and respondents from these countries were therefore excluded from the analyses reported below.

**Questionnaire**

Respondents were administered a questionnaire for each of the following six emotions: fear, sadness, anger, disgust, shame, and guilt. Respondents first had to freely describe an incident in which they had most recently experienced the emotion in question. Next, they answered a number of closed questions. The dependent measures that are analyzed below are (a) intensity of the reported emotions (scale ranges from 1 to 4); and (b) two emotional expressions, namely crying and antagonism that were reported in each of the six emotional situations (responses were scored as either 0 [behavior not present] or 1 [behavior present] in each situation, and these scores were summed across the six emotions).

**Results**

Our data are hierarchically structured because individuals are nested within countries. Because individuals in the same country share common influences, the assumption of independence, required for ordinary regression analysis, would be violated. For such data structures, multilevel statistical techniques help to distinguish between effects at the individual level (in this case, the gender effect) and those at the group level (effect of country). Moreover, a multilevel analysis can determine whether the explanatory variable at the group level (in this case, the GEM scores) serves as a moderator of individual-level relationships (Hox, 2000).

We performed data analysis using MLwiN (Rasbach et al., 2000). We tested our hypotheses with the following steps: First, we compared two models, one with the coefficient of \( \chi_0 \) (the intercept), specified as random at the individual level (Model 1a), and one with this coefficient specified as random at both the individual level and the country level (Model 1b). With this approach, we can estimate the proportion of the variance explained by the country level. Second, we defined a random intercept model, including gender as the independent variable, with a fixed parameter (Model 2a). Additionally, we estimated a random slope model allowing countries to vary in slope (Model 2b). Third, we tested a main contextual effect by adding countries’ GEM scores to the regression equation (Model 3). Finally, we estimated a potential interaction effect by including the interaction of gender and GEM scores (Model 4). We used iterative generalized least squares to make comparisons between the different models. The results are shown in Table 1.
We first analyzed whether men and women reported different levels of intensity for the powerful and powerless emotions. With regard to powerful emotions, countries differed ($/H9267H11505/, $p < .01$), but there were no significant differences in slopes across countries. Also, no significant main and interaction effects were found for this variable (see $/H9252, 1, /H9252, 2,$ and $/H9252, 3$ for this variable in Table 1). In other words, men and women reported the same intensity of powerful emotions, that is, anger and disgust, and this did not vary across countries. With regard to the intensity of powerless emotions (fear, sadness, shame, and guilt), the country level could explain $9\%$ of the variance, but countries did not differ in slopes. We found a significant main effect for gender, showing that women rated the intensity of these emotions as significantly higher than men (women: $M = 2.90$, $SD = 0.55$; men: $M = 2.82$, $SD = 2.90$). Moreover, the final model (Model 4) showed significant effects of GEM scores and the interaction of gender and GEM scores. Overall, respondents in countries with high GEM scores rated their powerless emotions as less intense than did respondents in countries with low GEM scores. Women’s ratings were independent of their country’s GEM score, but men from countries with high GEM scores rated the intensity of their powerless emotions as less intense than men from countries with low GEM scores.

### Intensity of Emotion

We first analyzed whether men and women reported different levels of intensity for the powerful and powerless emotions. With regard to powerful emotions, countries differed ($p = .05$, $p < .01$), but there were no significant differences in slopes across countries. Also, no significant main and interaction effects were found for this variable (see $\beta_1$, $\beta_2$, and $\beta_3$ for this variable in Table 1). In other words, men and women reported the same intensity of powerful emotions, that is, anger and disgust, and this did not vary across countries. With regard to the intensity of powerless emotions (fear, sadness, shame, and guilt), the country level could explain $9\%$ of the variance, but countries did not differ in slopes. We found a significant main effect for gender, showing that women rated the intensity of these emotions as significantly higher than men (women: $M = 2.90$, $SD = 0.55$; men: $M = 2.82$, $SD = 2.90$). Moreover, the final model (Model 4) showed significant effects of GEM scores and the interaction of gender and GEM scores. Overall, respondents in countries with high GEM scores rated their powerless emotions as less intense than did respondents in countries with low GEM scores. Women’s ratings were independent of their country’s GEM score, but men from countries with high GEM scores rated the intensity of their powerless emotions as less intense than men from countries with low GEM scores.

### Antagonism

With respect to antagonism, we expected women to report less antagonism than men, especially in countries with low GEM scores. Model 1b of our regression analyses shows an intraclass coefficient of .11, indicating that $11\%$ of the variance was explained by the country level. Inspection of the parameter estimates of Models 2a and 2b shows that gender was
significantly related to antagonism but that the slopes varied across countries. We found no direct effect for GEM scores, but the interaction of GEM scores and gender was significantly related to antagonism (see parameter estimates of Model 4). Results showed that on average, men reported antagonism more frequently than did women (women: $M = 0.59, SD = 0.88$; men: $M = 0.67, SD = 0.88$), but men did not differ across countries with different GEM scores, whereas women did. In countries with low GEM scores, women reported less frequent antagonism than men, whereas in countries with high GEM scores, women and men had similar scores.

**Crying**

The intraclass coefficient ($\rho$) for crying frequency is .06 and significant, indicating that 6% of the variance was explained by the country level. However, slopes did not differ across countries (see Models 2a and 2b), and we found an overall significant main effect for gender. As expected, women reported more frequent crying as compared with men (women: $M = 0.59, SD = 0.88$; men: $M = 0.67, SD = 0.88$), but men did not differ across countries with different GEM scores, whereas women did. In countries with low GEM scores, women reported less frequent antagonism than men, whereas in countries with high GEM scores, women and men had similar scores.

**Content Analysis of Anger Events**

Because we found a significant interaction between gender and the GEM (United Nations Development Programme Human Development Report 2002) for antagonism, we performed an explorative analysis of the anger descriptions provided by the respondents to obtain clues as to what made men and women in countries with low or high GEM scores angry. We translated into English a subset of the situation descriptions (1,028) provided by respondents and included them in the ISEAR dataset.3

We developed a coding scheme on the basis of an initial reading of the situation descriptions. The descriptions are typically quite brief, and it was therefore not possible to code the events on the basis of a detailed scheme. For each situation description, we coded two variables that occurred most: target (toward whom the anger was directed; intimates, strangers, or no specific targets), and the reasons for one’s anger (relational; attack on one’s status; personal or general injustice; or minor frustrations). Where no or only ambiguous information was available, we coded the variable in question as missing. The descriptions were coded by a student, and 10% of the descriptions were also coded by Agneta H. Fischer. An interrater reliability score of .89 was obtained. We added the scores to the main dataset. Because the situation descriptions composed only a small part of the respondents, namely those for whom we had situation descriptions that were translated into English, we performed an exploratory analysis by using a series of chi-squares with gender and the GEM (United Nations Development Programme Human Development Report 2002; using a median split by dividing the countries at the median GEM score [48] to create a group of low-GEM and high-GEM countries).

The percentages of men or women in the respective countries who referred to a specific aspect of the situation can be found in Table 2. The results showed that women in high-GEM countries were more likely to report intimates as targets of their anger, compared with their male counterparts in high-GEM countries, $\chi^2(2) = 23.33, p < .0001$, and their female counterparts in low-GEM countries, $\chi^2(2) = 12.81, p < .01$ (see Table 2 for the percentages). With respect to the reasons for their anger, women in high-GEM countries were more likely than their male counterparts, $\chi^2(4) = 11.62, p < .05$, to cite reasons that concerned problems or conflicts in intimate relationships, whereas this difference did not emerge in low-GEM countries. However, men and women in low-GEM countries were more likely than their counterparts in high-GEM countries to cite an attack on their status as reason for their anger, $\chi^2(4) = 14.85, p < .01$. There was no significant difference between women in the two types of countries.

**Discussion**

We embarked on the reanalysis of this cross-national dataset on emotions to establish whether the gender-specific pattern of women reporting more powerless emotions and men reporting more powerful emotions would vary with the cross-cultural variability in gender roles, as reflected by the GEM (United Nations Development Programme Human Development Report 2002).

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3 These were situation descriptions from the following countries: Australia, Austria, Brazil, Bulgaria, China (mainland), Finland, Honduras, India, Malawi, the Netherlands, New Zealand, Norway, Spain, Sweden, the United States, and Zambia. The selection of these countries, for which an English translation was provided, was based on the availability of a native speaker who was able to translate the stories into English.
Overall, this gender-specific emotion pattern appears to be rather universal, but a few interactions with the GEM (United Nations Development Programme Human Development Report 2002) were revealed. With respect to the reported intensity of emotions, no gender differences for powerful emotions were found, which replicates the findings by Lucas and Gohm (2000). However, in the case of the powerless emotions, men’s scores, but not those of women, significantly interacted with the GEM. Men from high-GEM countries rated their powerless emotions as less intense than did men from low-GEM countries. This finding suggests that powerlessness and vulnerability correspond less with the male role in many Western countries than with the male role in non-Western countries, supporting the idea that the male pattern of restrictive emotionality is a typical Western phenomenon (e.g., Jansz, 2000). Moreover, it implies that greater gender equality generally implies that women more often move into male roles rather than that men move into female roles (e.g., Diekman & Eagly, 2000). The content analysis of anger antecedents, showing that women in high-GEM countries display their anger more toward intimates and for relational reasons, may point to the costs of this female-exclusive move for personal relationships.

With respect to the two emotion expressions, we found a uniform pattern for crying across countries, which supports other findings (see Vingerhoets et al., 2000; Vingerhoets & Scheirs, 2000). This seems to indicate that crying is more strongly determined by biological factors than by social roles. Antagonism, however, seems more affected by social roles (see also Fischer & Rodriguez Mosquera, 2001), as indicated by the fact that women in high-GEM countries report more anger expressions than women in low-GEM countries, whereas the GEM (United Nations Development Programme Human Development Report 2002) does not affect men’s reports on antagonism. This finding suggests that the reported expression of anger by women is an indication of their general position and status in a society. Moreover, this may also be seen as support for the idea that greater gender equality generally implies that women more often move into male roles rather than that men move into female roles (e.g., Diekman & Eagly, 2000). The content analysis of anger antecedents, showing that women in high-GEM countries display their anger more toward intimates and for relational reasons, may point to the costs of this female-exclusive move for personal relationships.

Overall, the biosocial theory of gender difference, as proposed by Wood and Eagly (2002), seems a useful framework to account for the present findings. However, it is also clear that further research is needed to provide more insight into the extent to which gender differences in emotions vary with gender roles. The GEM (United Nations Development Programme Human Development Report 2002) is an interesting measure because it reflects the division of gender into social roles and thereby provides information about the general status of women in a specific country. However, because it is a global and distal reflection of the roles performed by men and women in any given country, it tells us little about the social

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Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low GEM</th>
<th></th>
<th>High GEM</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Target</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimate</td>
<td>39.9%</td>
<td>45.9%</td>
<td>41.4%</td>
<td>62.6%</td>
</tr>
<tr>
<td>Stranger</td>
<td>53.9%</td>
<td>47.5%</td>
<td>45.7%</td>
<td>32.3%</td>
</tr>
<tr>
<td>No target (alone)</td>
<td>6.2%</td>
<td>6.6%</td>
<td>12.9%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Reason</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relational</td>
<td>9.3%</td>
<td>15.3%</td>
<td>14.0%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Attack status</td>
<td>24.8%</td>
<td>28.2%</td>
<td>13.5%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Personal injustice</td>
<td>38.9%</td>
<td>36.1%</td>
<td>34.2%</td>
<td>34.0%</td>
</tr>
<tr>
<td>General injustice</td>
<td>10.6%</td>
<td>7.9%</td>
<td>14.0%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Small frustrations</td>
<td>16.4%</td>
<td>12.5%</td>
<td>24.3%</td>
<td>16.8%</td>
</tr>
</tbody>
</table>

Note. GEM = Gender Empowerment Measure.

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4 A content analysis of sadness events revealed that gender differences in intensity cannot be accounted for by the severity of the events that are reported (e.g., number of incidents in which someone died).
roles of people in the immediate contexts in which emotions are elicited.

Another limitation of this dataset is that the reports are based on respondent-provided, and therefore variable, situation descriptions. If this variation were random, it would have added noise to the dataset and thereby militated against significant differences between groups. If this variation were systematic, there is a possibility that some of the differences that were observed reflect differences in the content of the recalled situations, as opposed to how women and men in different countries experienced and responded to these situations. Future research should control for this situational variation by making use of standard vignettes. However, given that the ISEAR dataset also has many strengths, we think it provides a reasonable reflection of the direction of gender differences in emotional experience and expression in the different countries.

References


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