Emotion without a Word: Shame and Guilt among Rarámuri Indians and Rural Javanese

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Emotion Without a Word: Shame and Guilt Among Rarámuri Indians and Rural Javanese

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The Rarámuri Indians in Mexico use 1 word for guilt and shame. In this article, the authors show that the Rarámuri nevertheless differentiate between shame and guilt characteristics, similar to cultural populations that use 2 words for these emotions. Emotion-eliciting situations were collected among the Rarámuri and among rural Javanese and were rated on shame and guilt by Dutch and Indonesian students. These ratings were used to select 18 shame-eliciting and guilt-eliciting situations as stimuli. The Rarámuri ($N = 229$) and the Javanese ($N = 213$) rated the situations on 29 emotion characteristics that previously had been found to differentiate shame from guilt in an international student sample. For most characteristics, a pattern of differentiation similar to that found among the students was found for both the Javanese and the Rarámuri.

Keywords: emotion, shame, guilt, cross-cultural, culture

When people think or talk about emotion experiences, they often use different words to distinguish one experience from another. However, when communicating with people from other cultures, they may discover that emotion terms do not translate directly across languages (for a review, see Russell, 1991). People report experiencing emotions that do not translate well into English, like the Ifaluk emotions of *fago* and *song* (Lutz, 1988), or the Javanese emotion *sungkan* (Geertz, 1959), or use a single emotion term for two emotions that are distinct in the English language (e.g., *vergüenza* for both shame and embarrassment in Spanish (Iglesias, 1996). A recurring question in cross-cultural research is to what extent such differences in emotion words indicate differences in emotion experiences. This question is the focus of the present article.

The relationship between emotion words and emotion processes is important for both methodological and theoretical reasons. First, almost all culture-comparative studies use emotion words, either as independent or dependent variables (for exceptions, see Ekman & Friesen, 1971; Mesquita, 2001). As a consequence, differences in the emotion lexicon limit the reach of such studies to only those emotions that can be readily translated. Second, theoretical debates about the extent of cultural variation in emotions are still far from settled. Although most scholars agree that cultures differ in aspects of the emotion process, there is much disagreement on the pervasiveness of these differences.

A major reason for disagreement is the prevalence of a dichotomy in emotion psychology between the theoretical positions of universalism and relativism (e.g., Manstead & Fischer, 2002; Matsumoto, 2001). Universalism sees emotions as products of phylogenetic development that have arisen as specialized, adaptive programs in the human species (Ekman, 1992; Tooby & Cosmides, 1990). Relativism sees emotions as social and cultural constructions that are anything but natural (Lutz, 1988; Kitayama & Markus, 1994). Although most researchers take an intermediate position, the dichotomy still has a strong impact on the interpretation of cross-cultural data. Researchers tend to emphasize either similarities as evidence that emotions are universal or observed differences as evidence that emotions are culturally constructed (Ellsworth, 1994), even though empirical studies consistently point to the existence of both similarities and differences (see Mesquita & Frijda, 1992; Mesquita, Frijda, & Scherer, 1997; Scherer & Wallbott, 1994). Discussions are often also about the appropriate methodology to study emotions across cultures (see Breugelmans et al., 2005; Philippot & Rimé, 1997; Scherer, Wallbott, & Summerfield, 1986). The status of cultural differences in the emotion lexicon as an indicator of differences in emotional experiences is an important issue in such discussions (Bedford & Hwang, 2003).

Scholars with a relativist orientation (e.g., Lutz, 1988; Shweder & Haidt, 2000; Wierzbicka, 1998) tend to ascribe more importance to cross-cultural differences in the emotion lexicon than do those with a universalist orientation. Few researchers contend that each emotion word necessarily refers to a distinct emotion process (see Sabini & Silver, 2005), but the categorization of emotions is often assumed to influence emotional experience. For example, Barrett (2006) recently proposed a categorization view of emotions, stating that "there is cultural variation in the experience of emotion that is intrinsically driven by cultural differences in emotion categories and concepts" (p. 39). In a similar vein, Wierzbicka (1999) stated that "whether or not two feelings are interpreted as two different instances of, essentially, 'the same emotion' or as instances of 'two different emotions' depends largely on the language through the prism of which these feelings are interpreted; and that prism depends on culture" (p. 26).

Scholars with a universalist orientation tend to assume that emotion processes are cross-culturally similar even if lexicons differ (e.g., Ekman, 1994; Scherer & Wallbott, 1994). However, in order to test this assumption, one should measure emotions by indicators other than emotion words. Facial expressions can only be used for a limited set of basic emotions (Ekman, 1992), leaving most of the social emotions, such as shame and guilt, outside the scope of comparative research. Another approach is to measure emotions not by a single indicator but by a range of characteristics on various emotion components, such as cognitive appraisals (Roseman, Antoniou, & Jose, 1996; Scherer, 1997), body sensations (Breugelmans et al., 2005; Scherer & Wallbott, 1994), and action tendencies (Frijda, Kuipers, & ter Schure, 1989). An approach in which multiple indicators are used to study emotions across cultures has the additional advantage of being less vulnerable to cultural item bias than single-item measurements (Fontaine, Poortinga, Setiadi, & Markam, 2002). Thus, a componential approach should allow for the cross-cultural comparison of emotion processes even if the emotion lexicon differs (Frijda, Markam, Sato, & Wiers, 1995).

Shame and Guilt Among the Rarámuri and the Javanese

In a previous study (Breugelmans et al., 2005), we found no adequate translation for the English emotion term *guilt* in the language of the Rarámuri Indians from northern Mexico, whereas for other emotions (anger, disgust, fear, joy, sadness, shame), corresponding terms could be identified. Shame (*riwérama*) was the emotion word typically reported by various Rarámuri informants in response to guilt-eliciting situations of varying intensity. This finding was corroborated in consultations with Rarámuri bilinguals, anthropologists (Escuela Nacional de Antropología e Historia, Chihuahua, Mexico) and psychologists (Escuela Libre de Psicología, Chihuahua, Mexico) with extensive experience in working with the Rarámuri.[1] We also examined the ethnographic literature on the Rarámuri and found some descriptions of events (e.g., confessing a theft; Bennett & Zingg, 1935/1976) and concerns (e.g., "doing right," not stealing, harming others; Heras Quezada, 2000; Merrill, 1988) related to guilt in a Western context. However, no references to feelings of guilt were found.

The absence of a word for the emotion of guilt among the Rarámuri allowed us to test the expectations of universalism and relativism with regard to the effects of emotion lexicon on emo-

tional experiences. In addition, it allowed us to examine the generalizability of emotion processes to a rural, non-Western population. Because the Rarámuri tend to use a word for shame (*riwérama*) in situations in which we would expect to elicit guilt, we contrasted the experience of these two emotions. Given the accumulating body of evidence that shame and guilt represent distinct emotional experiences in Western societies (e.g., Keltner & Buswell, 1996; Tangney & Dearing, 2002; Tangney, Miller, Flicker, & Barlow, 1996), the absence of a word for guilt among the Rarámuri allowed for a rather strong test of the possibility that guilt should be indistinguishable from shame.

Previous studies suggest that there can be differences in the intensity and frequency of shame and guilt experiences (e.g., Ha, 1995), their distinctness (e.g., Marsella, Murray, & Golden, 1974; Wallbott & Scherer, 1995), and the type of situations in which they occur (e.g., Bedford & Hwang, 2003; Stipek, 1998). However, other studies suggest that the phenomenological characteristics of shame and guilt are rather similar across cultures (e.g., De Rivera, 1989; Fontaine et al., 2006; Hong & Chiu, 1992; Scherer & Wallbott, 1994). It should be noted that all previous studies were conducted in cultures in which local words for shame and guilt were available, providing only a weak test of the possibility that these emotions are indistinct in some cultures.

To narrow the gap between universalist and relativist positions, researchers should specify more precisely the extent to which emotions should be the same across cultures and the extent to which differences are to be anticipated (Berry, Poortinga, Segall, & Dasen, 2002; Poortinga & Soudijn, 2002). Differences can be described at various levels of cross-cultural equivalence (see Fontaine, 2004). Currently the most cited are those described by Van de Vijver and Leung (1997), who have distinguished three levels of equivalence. The most basic level, that of construct equivalence, implies that the same psychological construct is measured across cultures, although not necessarily on the same quantitative scale. Construct equivalence is generally investigated using structural analyses (e.g., factor analysis, multidimensional scaling). In cases in which data satisfy higher levels of equivalence (i.e., metric equivalence and full-score equivalence), quantitative comparisons can be made, such as comparisons of mean levels of intensity (using analysis techniques such as analysis of variance [ANOVA]). For the present article, we treated the possibility that the Rarámuri do not distinguish guilt from shame as a question of

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[1] We would like to thank Benito Martínez, Jesús Vaca-Cortéz, Francoise Brouzes, William Merrill, and Margot Heras-Quezada for their kind help on this issue. A Spanish–Rarámuri dictionary (Brambila, 1983) did provide two possible translations of guilt: *iyiri* and *chokira*. However, neither of these concepts refers to a feeling of guilt. *Iyiri* refers to guilt only in the legal sense of being responsible, not of feeling responsible. The meaning of *chokira* is more complex; it refers to the initial cause or the origin of objects (e.g., the root of a tree) or social events (e.g., the cause of a conflict). A preliminary field study with 30 Rarámuri in the Guachochi area revealed that most did not see these words as emotion words. *Iyiri* was generally used to describe "objective" states of being responsible, such as burning food or making mistakes. When asked about the emotion that they experienced in such situations, most respondents (>75%) answered *riwérama* (or a related term; see Footnote 2), which can be translated as shame (Breugelmans et al., 2005). Other emotions that were mentioned were sadness and fear.

construct equivalence. This means that we expected the Rarámuri to distinguish characteristics of guilt from those of shame if both emotions are present in their culture.

Three methodological issues had to be dealt with to test this expectation. First, reviews (Russell, 1994) and meta-analyses (Van Hemert, Poortinga, & Van de Vijver, 2005) have suggested that more cross-cultural differences are found when non-Western, non-student samples are studied. This finding means that failure to replicate the distinction between guilt and shame with the Rarámuri could be due to the absence of an emotion word but also to Western bias in the emotion components. Thus, we included a second non-Western population in the study, namely rural Javanese, who were culturally distant from both Western student samples and the Rarámuri. Javanese culture puts a strong emphasis on shame in the regulation of interpersonal relations, and words for both shame (*isin*) and guilt (*salah*) are readily available (Geertz, 1959; Keeler, 1987; Magnis-Suseno, 1997). The inclusion of Javanese could help us to disentangle cross-cultural differences resulting from Western biases and from the Rarámuri's lack of a word for guilt.

The second issue was the selection of indicators for both emotions. A substantial body of literature describes characteristics from various emotion components that should distinguish experiences of shame from experiences of guilt (e.g., Barrett, 1995; Frijda, 1993; Frijda et al., 1989; Gilbert, Pehl, & Allan, 1994; Lewis, 1971; Manstead & Tetlock, 1989; Roseman et al., 1996; Roseman, Wiest, & Swartz, 1994; Scherer & Wallbott, 1994; Tangney et al., 1996; Wicker, Payne, & Morgan, 1983). However, most studies have been conducted with Western samples. Recently, Fontaine et al. (2006) reported strong evidence for construct equivalence with a large set of guilt and shame characteristics among samples in Belgium, Hungary, and Peru. They found that characteristics could be adequately represented in a two-dimensional structure, defined by a primary guilt–shame dimension and a secondary intrapersonal–interpersonal dimension. This finding was replicated by Breugelmans et al. (2006) among samples in Belgium, Indonesia, Mexico, and the Netherlands. The characteristics in these studies have proven to be applicable across a range of cultures, so they should also apply to the Rarámuri if a distinction between guilt and shame exists with this group.

As a last issue, we adopted two design features to avoid imposition of Western conceptions of shame and guilt on the two rural samples. First, we only used locally gathered situational descriptions as emically derived (Berry et al., 2002) stimuli. Thus, our stimuli should have represented ecologically valid situations. Second, the feasibility of a componential approach depends on whether emotion characteristics can be formulated in a nonethnocentric manner (see Goddard, 1997; Wierzbicka, 1995). Therefore, we adapted a research method used by Fontaine et al. (2002, 2006), in which the structure of emotion characteristics is first examined within cultures and only thereafter compared across cultures. Thus, we first examined the relations among characteristics within both rural samples and then compared this structure with an international student sample derived from Breugelmans et al. (2006). We expected that guilt characteristics would form a distinct cluster from shame characteristics in both rural samples, in a similar manner as was found with the international student sample if both emotions are generalizable across cultures.

To summarize, we analyzed ratings of emotion characteristics indicative of guilt and shame by the Rarámuri and the Javanese in response to locally derived situations, using the ratings of the same characteristics by an international student sample as a comparison standard. We expected to find construct equivalence of students and Javanese and of students and Rarámuri for the various characteristics, even in the absence of an emotion word for guilt among the latter group.

Preparatory Studies

Selection of the Stimuli

In two preparatory field studies, 170 situation descriptions were solicited among Javanese and Rarámuri. In both groups, descriptions were collected in open-ended interviews by local interviewers. They asked participants to describe a situation in which they had experienced shame (both Rarámuri and Javanese) or guilt (Javanese only).

Rarámuri. From 54 Rarámuri (20 women, 34 men), 68 situations involving *riwérama*[2] (shame) were collected by three experienced interviewers who spoke Spanish as well as Rarámuri. They recorded verbatim descriptions of the situations. The situations were translated into Spanish by the interviewers and translated into English by two independent Mexican translators.

Javanese. From 63 Javanese (31 women, 32 men), 55 situations of *isin/lingsem* (shame), 39 situations of *salah/lepat*[3] (guilt), and 8 situations in which the participants reported a mixture of both shame and guilt were collected. The data were gathered by four Javanese interviewers who spoke Javanese as their native language and who studied English at Sanata Dharma University in Yogyakarta, Java, Indonesia. Interviewers translated the descriptions directly into English. In the translations, emphasis was placed on rendering the events (i.e., what happened) in the situations as accurately as possible. Specific thoughts and feelings that the participants reported were recorded separately but were not included in the situation descriptions because thoughts and feelings were also the dependent variables in the main studies (Studies 1 and 2). In addition, descriptions were culturally decentered (Van de Vijver & Leung, 1997); names of places or specific animals were replaced by generic terms, and any sentences containing a reference to shame, guilt, or closely related terms were deleted or, if deletion would have disturbed the coherence of the description, were replaced by a neutral substitute (e.g., *upset*).

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[2] Several translation variants can be given because Rarámuri is not a written language, and no consensual orthography exists. Words may be pronounced slightly differently in the various Rarámuri variants. Hence, the translations given in the text are only examples of several variants that were recorded, all with a similar root (e.g., *riwe* or *rigue* in shame). In the field, interviewers adapted the emotion words to the variant of Rarámuri spoken by the interviewee.

[3] Javanese language has different forms, depending on the relative social status of the speakers (Keeler, 1987). The polite equivalent of *isin* is *lingsem*, which is used in cases in which the relative status of the speaker is lower than that of the person addressed. According to Koentjaraningrat (1985), both terms signal a position of inferiority in social relationships, but *lingsem* is a slightly stronger marker of inferiority. The polite equivalent of *salah* is *lepat*.

Eighty Dutch students (61 women, 18 men, 1 person for whom gender information is missing) from Tilburg University and 74 Indonesian students (52 women, 22 men) from Sanata Dharma University in Yogyakarta rated the decentered situations on the extent to which they would elicit anger, shame, sadness, guilt, and fear, using a 6-point rating scale ranging from 0 (*I would not experience this emotion at all*) to 5 (*I would experience this emotion very strongly*). The nontarget emotion terms (anger, sadness, and fear) were included so that situations with a different emotional focus could be identified as such.

Procrustes rotation of the unifactorial factor solutions for the ratings of shame and of guilt showed structural equivalence (Tucker's phi > .90; Van de Vijver & Leung, 1997) between Indonesian and Dutch raters. Five Javanese situations and two Rarámuri situations (4.18% in total) showed differences between the two sets of raters and were excluded from further analyses. In both groups of raters, difference scores (*diff*)[4] were calculated such that each situation had a single score, indicating a higher shame rating if positive and a higher guilt rating if negative. Intraclass correlation (absolute agreement) of difference scores was very high (ICC = .88) between Indonesian and Dutch raters, so the average *diff* across groups was used. The distribution of *diff* had a median of 0.19 and ranged from −2.05 to 3.14 (absolute values of 0.20 indicate small effects, 0.50 medium effects, and 0.80 large effects; Cohen, 1988).

Of the Rarámuri situations, 66% had a positive *diff* (higher shame than guilt) and 34% had a negative *diff* (higher guilt than shame). This suggested that situations eliciting Rarámuri *riwérama* encompassed experiences of what would be labeled in English as emotions of guilt as well as shame. In contrast, 82% of the situations that were collected from the Javanese as eliciting shame (*isin/lingsem*) were also rated higher on this emotion (positive *diff*), and 74% of the guilt-eliciting (*salah/lepat*) situations were rated higher on guilt (negative *diff*). The presence of strong shame-eliciting and strong guilt-eliciting situations in both cultures made it possible to use a sample of these situations as emically derived (see Berry et al., 2002) stimuli in the main studies. A set of 18 situations was selected as typically eliciting shame (*n* = 6; *diff* > 0.80), eliciting guilt (*n* = 6; *diff* < −0.80), or eliciting both shame and guilt (*n* = 6; |*diff*| < .20). In this way, we tried to best represent the range of situations that may elicit shame or guilt. Examples of shame situations were stumbling and falling while carrying a bucket of water (Rarámuri) and mispronouncing words during a public speech (Javanese). Examples of shame and guilt situations were inadvertently hitting a visitor with a stone (Rarámuri) and arriving late at a communal task (Javanese). Examples of guilt situations were losing someone else's cattle because of negligence (Rarámuri) and offending a friend in a discussion (Javanese). All selected situations had average ratings of 3.0 or greater on the target emotions and 2.5 or less on all other emotions. Half the situations in each category originated from the Rarámuri, the other half from the Javanese.

Student Reference Standard

Data obtained from Indonesian, Mexican, and combined Flemish–Belgian/Dutch student samples reported in an article by Breugelmans et al. (2006) were reanalyzed for the purpose of creating a reference standard. The original data set contained ratings of the intensity with which respondents would experience each of 47 emotion characteristics (among which were the respective emotion words for shame and guilt: *schaamte* and *schuld* in Belgium and the Netherlands; *malu* and *bersalah* in Indonesia; *vergüenza* and *culpa* in Mexico) in response to various situations, using a 6-point rating scale ranging from 0 (*not at all*) to 5 (*very strongly*). Preliminary probing suggested that this number was causing loss of concentration with participants in the two rural samples. Therefore, we conducted a second analysis of the ratings of 27 items (plus the ratings for shame and guilt) that we selected for the studies with the Rarámuri and Javanese.

In each sample, a Situations (*N* = 15) × Items (*N* = 29) matrix was created, with each cell representing the mean rating of an item in a situation. In each matrix, bivariate correlations were calculated between all items. The ensuing correlation matrices were represented in a two-dimensional space with multidimensional scaling (MDS; Borg & Groenen, 1997) using PROXSCAL in SPSS Version 11.5 (SPSS, Chicago). In each sample, a two-dimensional representation could account for almost all of the dispersion (normalized raw stress = .01, Tucker's coefficient of congruence > .97). These three representations were compared using generalized Procrustes analysis (GPA; Commandeur, 1991, 1996), which can be considered the MDS equivalent of Procrustes rotation for factor solutions (see Van de Vijver & Leung, 1997). GPA yielded a centroid configuration with a good fit (>90% of the squared distances explained). The results replicated those of Fontaine et al. (2006), with a first guilt–shame dimension and a second intrapersonal–interpersonal dimension. This centroid was used as a reference standard for the two main studies with the Rarámuri and the Javanese.

Characteristics associated with shame were (a) appraisals of being at the center of attention; (b) experiences of the self as confused, powerless and small, and angry with others; (c) bodily sensations of blushing, feeling weak in the limbs, feeling warm, trembling, heart beating faster, and sweating; (d) action tendencies of avoiding the gaze of others, hiding oneself from others, and smiling about what happened; and (e) trying to forget about what happened. Associated with guilt were (a) appraisals of having done damage to someone, being responsible for what happened, experiencing the disapproval of others because of what one has done, harming one's reputation, having violated a social or moral norm, and deserving to be punished; (b) experiences of oneself as a bad person and anger at oneself; (c) action tendencies of apologizing, changing future behavior, explaining what happened to others, and punishing oneself; and (d) ruminating about what happened.

Study 1: The Javanese

Method

Participants. The sample consisted of 213 Javanese (107 women, 106 men) with a mean age of 42.14 years (*SD* = 15.30). Participants were sampled from several small villages in the central south region of Java, located approximately 40 km from Yogyakarta. In these traditional communities, agriculture is the main source of income. Most participants had had some education in local schools. Participants were arbitrarily divided

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[4] The equation is $diff = (M_{shame} - M_{guilt})/\sqrt{(\sigma^2_{shame} + \sigma^2_{guilt} - 2* r_{(shame, guilt)}*\sigma_{shame}*\sigma_{guilt})}$, where σ = SD of the rating of the emotion.

into six groups for administration of the six versions of the instrument. The number of participants tested per version ranged from 32 to 40.

Instrument. The 18 situations were divided over six versions of the instrument, each including one shame-eliciting, one guilt-eliciting, and one shame-plus-guilt-eliciting situation. Three versions were composed of Rarámuri situations, and three were composed of Javanese situations. Each situation description was followed by a list of 29 items (6 appraisals, 6 self-experiences, 7 action tendencies, 6 body sensations, and 2 rumination items, plus the emotion words *isin/lingsem* [shame] and *salah/lepat* [guilt]). In interviews, participants were asked to indicate the intensity with which they would experience each of the components for each situation, using a 6-point rating scale that ranged from 0 (*not at all*) to 5 (*very strongly*). The scale was visually illustrated by a sheet showing a series of circles of increasing size, representing the different intensities of the responses. A committee of four professional translators who were native speakers of Javanese translated the situations from English into Javanese (see Van de Vijver & Leung, 1997). Translations were made both in formal Javanese and in colloquial Javanese, so that interviewers could adapt their word usage to the form appropriate for an interview.

Procedure. Approval of local community leaders was sought prior to data collection. Interviewers asked participants whether they would be willing to cooperate in a study on thoughts and feelings that people could have in various situations. Participants were told that they were going to be presented with some situations that other people had experienced and asked to imagine how they themselves would have felt in each of these situations. The interviewer explained the response scale with the aid of the illustration sheet and several examples. Generally, participants understood the task without problems (<2% of the interviews were terminated because of lack of understanding).

Women were interviewed by female interviewers and men by male interviewers. Four female and two male Javanese conducted the interviews. They had had previous experience with interviewing and had received specific training for this study. During data collection, interviewers were not aware of the research questions, including the focus of the study on shame and guilt. Interviews typically took between 30 and 50 min to complete.

Results

The six versions of the questionnaire were combined in a Situations ($N = 18$) × Items ($N = 29$) matrix, with each cell representing the mean rating of an item in a situation, calculated across participants. Bivariate correlations were calculated between all 29 items across the 18 situations. The resulting correlation matrix was analyzed with MDS (PROXSCAL in SPSS Version 11.5). A representation in one dimension accounted for .92 of the dispersion (normalized raw stress = .08, Tucker's coefficient of congruence = .96), and a two-dimensional representation for .98 (normalized raw stress = .02, Tucker's coefficient of congruence = .99). We used GPA (Commandeur, 1996) to compare the Javanese representation with the student reference. The resulting centroid configuration could account for 71% of the squared distances (structure fit < .90) between Javanese and students. Inspection of fit at the item level showed that in the case of 7 items, the centroid configuration could account for less than 50% of squared distances. GPA on the remaining 22 items accounted for 83% of the squared distances (structure fit > .90) in the Javanese and student representations. Figure 1 shows the positions of these 22 items in the two-dimensional centroid configuration. For all items, exact positions and percentage of squared distances that were accounted for can be found in Table A1 in the Appendix.

The position of the 7 poorly fitting items within this configuration could be determined on the basis of their distances from the 22 centroid items. Exact positions and absolute distances are given in Table A2 in the Appendix. Four of these items mainly differed on the shame–guilt dimension. For example, the item "changing future behavior" was related more to guilt in the students (−0.15) but more to shame in the Javanese (0.07). The items "feeling confused," "feeling powerless and small," and "deserving punishment" were related more to shame in the students but somewhat more to guilt in the Javanese. Other items showed relatively small
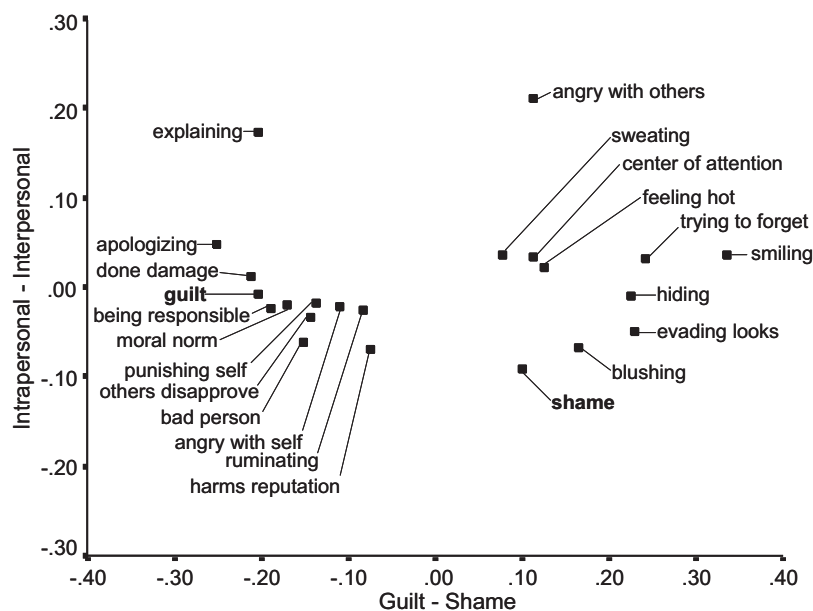

Figure 1. Centroid configuration of 22 emotion components for the Javanese and the students.

differences (<.10) on this dimension and mainly differed on the interpersonal–intrapersonal dimension.

Discussion

We expected that emotion characteristics associated with shame and guilt in the student reference group would be similarly associated with the two emotions in the Javanese. For a substantial number of items, this expectation was confirmed, suggesting that characteristics of shame and guilt with student samples generalize to an important extent to the non-Western, rural Javanese sample. However, 7 (24%) of the 29 items did not meet criteria for construct equivalence. This lack of equivalence could have several reasons. It may have been caused by bias (e.g., poor translation into Javanese, social desirability, or interviewer effects) but also by culture specificity in reactions. On the basis of the present study, no definite conclusions can be drawn regarding the nature of these differences.

For 3 of the 7 items, differences were mainly found on the intrapersonal–interpersonal dimension. However, this dimension contributed relatively little to the total dispersion in the Javanese sample. The other 4 items (i.e., "changing future behavior," "feeling confused," "feeling powerless and small," and "deserving punishment") were potentially more interesting because they may reflect characteristics for which the association with shame or guilt is not universally present. Hence, these items would merit further attention in a study of culture-specific aspects of shame and guilt on Java.

The findings among the Javanese gave an indication of the results that could be expected with the Rarámuri. Given that 24% of the items were found to function differently between the rural Javanese and the students, we expected a similar percentage to differ between the Rarámuri and the students (Study 2), unless the absence of a word for guilt has a clear bearing on how emotional situations are experienced.

Study 2: The Rarámuri

Method

Participants. Two hundred and twenty-nine Rarámuri (121 women, 108 men) with a mean age of 40.68 years ($SD = 15.33$) participated in this study. The Rarámuri resided in small communities located within 30 km of the town of Guachochi in the Mexican state of Chihuahua. Traditionally, separate families live dispersed over the available land, practicing small-scale agriculture of crops such as maize and beans. Contact with Spanish-speaking Mexicans is generally very limited as is access to the Western media. Participants were arbitrarily divided into six groups for administration of the six versions of the instrument. The number of participants per version ranged from 36 to 41.

Instrument. The instrument was identical to Study 1 on Java, with the exception that an emotion word for guilt was not included, leaving 28 items. Situations were translated from English into Spanish and were checked by two independent Mexican translators. Translations from Spanish to Rarámuri were done independently by two Rarámuri bilinguals, and any differences were subsequently discussed (see Van de Vijver & Leung, 1997). Variations in words were provided to cover (minor) variations in the Rarámuri language (see also Footnote 3).

Procedure. The procedure followed was similar to Study 1. Three Rarámuri women and four Rarámuri men conducted the interviews. Five of the interviewers had had previous experience in interviewing Rarámuri people for governmental organizations, and all had received training for this study. Interviewers were not aware of the research questions at the time of the study.

Results

The six versions of the questionnaire were combined in a Situation ($N = 18$) $\times$ Item ($N = 28$) matrix, with each cell representing the mean rating of an item in a situation, calculated across participants. Bivariate correlations were calculated between the 28 emotion components across the 18 situations. The resulting correlation matrix was analyzed with MDS (PROXSCAL in SPSS Version 11.5). A representation using one dimension accounted for .81 of the dispersion (normalized raw stress = .19, Tucker's coefficient of congruence = .90), and a two-dimensional representation accounted for .95 of the dispersion (normalized raw stress = .05, Tucker's coefficient of congruence = .98).

We compared the Rarámuri representation with the student reference using GPA (Commandeur, 1996). The initial centroid configuration accounted for 61% of the squared distances (structure fit < .90) between the Rarámuri and the students. Inspection of fit at the item level showed that in the case of 10 items, the centroid configuration could account for less than 50% of squared distances.

Subsequent GPA on the 18 well-fitting items accounted for 86% of the squared distances (structure fit > .90) in the Rarámuri and student representations. Figure 2 shows the positions of these items within the two-dimensional centroid configuration. Again, the same two dimensions, guilt–shame and interpersonal–intrapersonal, were identified in the joint configuration. The position of the item guilt as determined in the student reference group ("student guilt") has been included in Figure 2. For all 18 items, exact positions and the percentage of squared distances that were accounted for can be found in Table A3 in the Appendix. Of the 10 items with a poorer fit, 5 had a distance of less than .10 on the shame–guilt dimension (i.e., "feeling powerless and small," "blushing," "changing future behavior," "evading looks," "trying to forget"). Exact positions and absolute distances can be found in Table A4 in the Appendix.

Because different outcomes were possible for the Javanese and the Rarámuri, these samples were compared separately with the student reference standard. However, a comparison of all three samples did not notably alter the results. Comparisons between the Rarámuri and Javanese, as well as among the Rarámuri, Javanese, and students, resulted in cross-culturally equivalent configurations (fit > .90) for 18 items.

Discussion

We expected similar patterns of interrelationships among items in the case of both the Rarámuri and the students, not only for shame but also for guilt. These expectations were confirmed for most emotion components (64%). Figure 2 illustrates the distinction between shame characteristics and guilt characteristics that was found irrespective of cultural differences in the emotion lexicon.

Of the 28 emotion components, 10 (35%) differed between the students and the Rarámuri, which was more than between the students and the Javanese. Six of these items showed mainly a difference on the intrapersonal–interpersonal dimension; four of
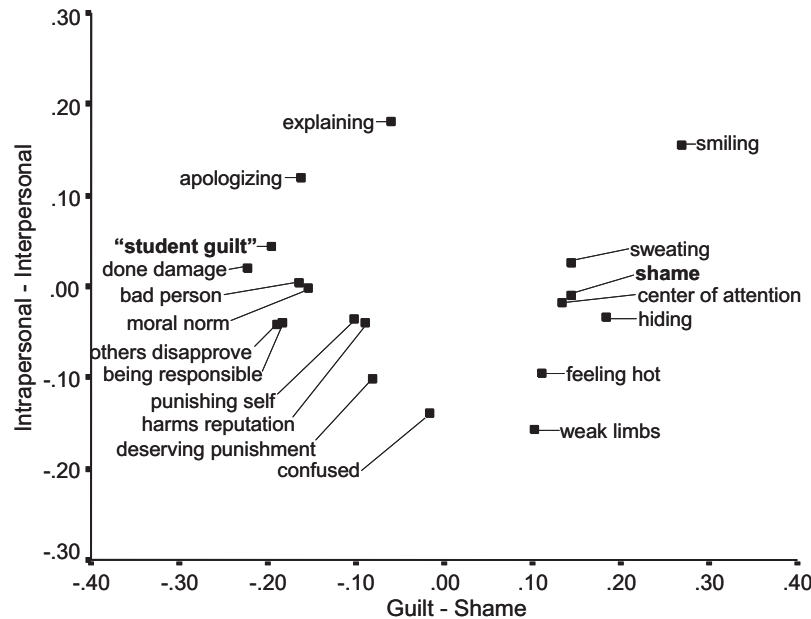
Figure 2. Centroid configuration of 18 emotion components for the Rarámuri and the students (plus "student guilt").

these had very similar positions on the guilt–shame dimension. The five items that differed more than .10 on the guilt–shame dimension hold the most promise for further analysis of culture-specificity in shame and guilt characteristics. It may be noted that two items (i.e., feeling powerless and small, and changing future behavior) showed corresponding differences for the Rarámuri and the Javanese, making it less likely that these results can be ascribed to some source of bias. Another noteworthy difference is the association of blushing with guilt components by the Rarámuri because this finding is in line with those of other studies, suggesting that the association of this characteristic with shame may not be universally shared (e.g., Casimir & Schnegg, 2002; Drummond & Lim, 2000).

General Discussion

Emotion words are central to most current research of emotion processes, either as stimuli or as dependent variables, but to what extent can differences in emotion processes be inferred from differences in words? We examined this question in a study with the Rarámuri Indians, who do not have a word for the emotion of guilt. In our view, the results in Figure 2 indicate that the Rarámuri did distinguish between two clusters of emotion characteristics of guilt and shame. This finding suggests that differences in the emotion lexicon (see Russell, 1991) cannot be taken as evidence that emotion processes, as identified in terms of associated emotion characteristics, are also different.

Approximately one third (36%) of emotion characteristics did not replicate with the Rarámuri, but it appears unlikely that this is caused by the absence of a word for guilt. Twenty-four percent of emotion characteristics did also not replicate with the rural Javanese, who do have emotion words for both guilt and shame. This finding means that the generalizability of guilt and shame characteristics was less clear with the two rural, nonstudent groups when

compared with the international student sample (Breugelmans et al., 2006). Cross-cultural differences in separate characteristics are difficult to interpret unless there is some patterning because differences could also be caused by item bias (Van de Vijver & Leung, 1997). Of most interest for further study are two items for which similar differences were found in Studies 1 and 2. In the two rural groups, the item of feeling powerless and small was associated more strongly with guilt characteristics, and the item of changing future behavior was associated with shame characteristics. This finding suggests that guilt may be related to negative self-affect and that shame may be related to constructive social behavior in non-Western groups, in contrast to what has been argued for these emotions in a Western context (e.g., Tangney & Dearing, 2002). In addition, blushing was not associated strongly with shame in the Rarámuri, a finding that is in line with other evidence that the association between blushing and shame is not so strong as has been assumed on the basis of Western studies (see Casimir & Schnegg, 2002; Drummond & Lim, 2000).

The evidence for construct equivalence that we found imposes constraints on the extent to which guilt and shame can be conceived of as different emotional experiences across cultures. Strong relativist views that posit fundamental differences in emotions are less plausible in the light of our data. However, our data do not constrain cross-cultural differences in the intensity or salience of guilt and shame experiences (see Creighton, 1990) because we only addressed construct equivalence. The cross-cultural differences that we found with the rural samples also imply that universality of characteristics of guilt and shame cannot be assumed on the basis of student studies alone. Although patterns of emotion characteristics are very likely to generalize across cultural populations, there can be cross-cultural differences in individual characteristics (see Breugelmans et al., 2005; Fontaine et al., 2002; Matsumoto, Nezlek, & Koopmann, in press).

Our findings best fit the notion of modal emotions as described by Mesquita et al. (1997). This theory posits that there are not a fixed number of basic emotions but rather that there may be cross-cultural consistencies in the frequencies with which various emotion characteristics co-occur. In this view, our data are not about whether the Rarámuri do or do not experience a categorical emotion of guilt but rather about whether the emotion characteristics that we associate with a category of guilt co-occur similarly in the Rarámuri, distinct from characteristics of shame. In our view, replication of a guilt–shame distinction with the two rural samples supports a position of psychological universalism with regard to these modal emotions (see Berry et al., 2002; Poortinga & Soudijn, 2002). Psychological universalism posits that basic processes are shared across cultures but that there may be cultural differences in the manifestations of these processes.

We sampled emotion characteristics for which plausible evidence of cross-cultural similarity had been found in two recent studies (i.e., Breugelmans et al., 2006; Fontaine et al., 2006). The results with the Javanese and the Rarámuri (Figures 1 and 2) largely replicate the findings of these studies, with a clear first dimension distinguishing guilt-related from shame-related characteristics and a second dimension distinguishing interpersonal from intrapersonal characteristics. It should be noted that the first dimension, which was the main focus of our studies, explained most of the variance in both studies.

Many characteristics distinguishing shame and guilt in our studies are compatible with previous results found for these emotions (e.g., Frijda et al., 1989; Gilbert et al., 1994; Roseman et al., 1994; Scherer & Wallbott, 1994; Wicker et al., 1983). However, one important exception concerns the theory put forward by Lewis (1971) and Tangney (1996) that distinguishes shame and guilt in terms of a focus on the global self or on specific behavior. Our findings that guilt—not shame—was associated with negative evaluations of the self (e.g., experiences of the self as a bad person) in both rural samples go against this theory. There can be various explanations for these contrasting findings. First, it is possible that the self–behavior distinction is less relevant for distinguishing shame and guilt in rural, non-Western samples. Another explanation may be that the self–behavior distinction is mainly about the type of attributions that give rise to shame or guilt (see Tracy & Robins, 2004), whereas emotional experiences evoked by a particular situation were the focus of our interviews. As Tracy and Robins (in press) showed, feelings of guilt tend to be elicited by internal, unstable, and controllable attributions (in contrast to internal, stable attributions for shame). However, this does not preclude negative evaluations of oneself (e.g., feeling like a bad person and being angry at or disappointed with oneself) during guilt experiences as assessed in our studies. A third explanation may be that the self–behavior distinction is primarily based on differences among people (i.e., proneness to shame or proneness to guilt), whereas our study analyzed differences across situations. Fontaine et al. (2006) have recently shown that analyses across people yield results that are more compatible with the self–behavior distinction. They also argued that an analysis across situations is most appropriate for studying differences among emotion processes, which was the focus of our studies.

There are three possible limitations to our studies. First, we cannot totally exclude effects of cultural diffusion with the Rarámuri and the Javanese. Both groups may have had some exposure (firsthand or via the media) to Western notions of shame and guilt. However, it appears very unlikely that transfer of such fairly subtle emotion distinctions could have substantially influenced our results. Further, the Rarámuri do have concepts of guilt in a causal or judicial sense, although these do not refer to a feeling or emotion (see Footnote 1). The absence of culture contacts in our studies was not as strong as in the work by Ekman and Friesen (1971) in Papua New Guinea. However, we contend that the present research provides a stronger test for the cross-cultural validity of a distinction between shame and guilt than previous studies have provided with student samples. A second limitation is that the structure of emotion characteristics (Figures 1 and 2) follows from the choice to focus on shame and guilt. In our view, a comparison of these two emotions was the strongest test for the possibility that the Rarámuri did not experience guilt. If we had contrasted guilt with a more distant emotion such as anger or fear, the clustering of characteristics would probably have been different. However, we would argue that this would not be so only for the Rarámuri but also for the other samples. Finally, some of our emotion characteristics, such as smiling, have been argued to be more characteristic of embarrassment than of shame in an American context (Keltner & Buswell, 1996). None of the populations in our studies made a clear linguistic distinction between embarrassment and shame similar to the distinction made in the English language; this circumstance may have led to some confound of shame and embarrassment characteristics. However, most other characteristics in the shame cluster, like a tendency to hide and to evade the looks of others, are also central to shame in the (Western) emotion literature.

As a final point, there is no reason to assume that the emotion words in the English language are most representative of the emotion domain (Russell, 1991). Because the exact meaning of emotion words is very difficult to translate across languages (e.g., Goddard, 1997; Wierzbicka, 1999), an approach using multiple characteristics from various emotion components, rather than categorical emotion labels, appears to be better suited for studying the ways in which cultures are similar or different in emotion processes (Mesquita et al., 1997). Our studies suggest how this method could be used to research emotions for which there are no words.

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Appendix

Item Positions and Percentage of Distances Accounted for in Centeroid Configurations and Culturally Different Item Positions and Absolute Item Differences Among the Javanese, the Rarámuri, and the Student Reference Group

Table A1

Item Positions and Percentage of Distances Accounted for by the Centroid Configuration for the Students and the Javanese

| | Position | | Distances accounted for (%) |
Item	S–G dimension	A–E dimension	
Apologizing	−0.252	0.048	98
Done damage	−0.212	0.012	98
Explaining	−0.205	0.173	92
Guilt	−0.203	−0.008	98
Being responsible	−0.190	−0.024	98
Moral norm	−0.171	−0.021	99
Bad person	−0.153	−0.061	96
Others disapprove	−0.144	−0.034	89
Punishing self	−0.137	−0.019	99
Angry with self	−0.110	−0.023	98
Ruminating	−0.083	−0.026	61
Harms reputation	−0.075	−0.070	95
Sweating	0.078	0.037	93
Shame	0.101	−0.091	83
Angry with others	0.103	0.210	86
Center of attention	0.112	0.034	71
Feeling hot	0.125	0.022	79
Blushing	0.165	−0.068	81
Hiding	0.225	−0.011	97
Evading looks	0.229	−0.050	94
Trying to forget	0.241	0.033	94
Smiling	0.335	0.035	93

Note. G–S = guilt–shame dimension; A–E = intrapersonal–interpersonal dimension.

Table A2

Positions of Culturally Different Items of the Javanese and the Students and the Absolute Item Differences per Dimension

| | Students | | Javanese | | Absolute difference | |
Item	G–S	A–E	G–S	A–E	G–S	A–E
Change behavior	−0.15	−0.03	0.07	−0.02	0.21	0.01
Confused	0.09	−0.11	−0.08	0.05	0.17	0.16
Powerless and small	0.09	−0.03	−0.05	−0.11	0.14	0.08
Deserving punishment	0.00	−0.08	−0.13	0.02	0.13	0.10
Weak limbs	0.05	−0.08	−0.02	0.12	0.08	0.20
Heart beats faster	0.12	−0.08	0.06	0.15	0.06	0.23
Trembling	0.10	−0.06	0.06	0.16	0.04	0.23

Note. G–S = guilt–shame dimension; A–E = intrapersonal–interpersonal dimension.

(Appendix continues)

Table A3

Item Positions and Percentage of Distances Accounted for by the Centroid Configuration for the Students and the Rarámuri

| | Position | | Distances accounted for (%) |
Item	S–G dimension	A–E dimension	
Done damage	−0.223	0.020	100
Others disapprove	−0.191	−0.042	93
Being responsible	−0.182	−0.039	95
Bad person	−0.166	0.004	98
Apologizing	−0.163	0.118	85
Moral norm	−0.153	−0.002	98
Punishing self	−0.103	−0.035	93
Harms reputation	−0.090	−0.040	95
Deserving punishment	−0.082	−0.102	73
Explaining	−0.061	0.180	75
Confused	−0.017	−0.139	70
Weak limbs	0.101	−0.157	81
Feeling hot	0.110	−0.096	84
Center of attention	0.132	−0.019	78
Sweating	0.144	0.026	70
Shame	0.144	−0.010	88
Hiding	0.184	−0.033	98
Smiling	0.270	0.154	93

Note. G–S = guilt–shame dimension; A–E = intrapersonal–interpersonal dimension.

Table A4

Positions of Culturally Different Items of the Rarámuri and the Students and the Absolute Item Differences per Dimension

| | Students | | Rarámuri | | Absolute difference | |
Item	G–S	A–E	G–S	A–E	G–S	A–E
Powerless and small	0.08	−0.05	−0.21	0.15	0.29	0.19
Blushing	0.21	−0.04	−0.07	−0.27	0.29	0.23
Change behavior	−0.14	−0.02	0.12	−0.04	0.26	0.02
Evading looks	0.18	−0.03	−0.01	−0.10	0.18	0.07
Trying to forget	0.19	−0.04	0.05	0.25	0.14	0.29
Angry at others	0.09	0.10	−0.01	−0.16	0.09	0.26
Trembling	0.09	−0.08	0.12	0.16	0.03	0.23
Angry at self	−0.11	−0.03	−0.08	0.22	0.03	0.24
Ruminating	−0.06	−0.10	−0.09	0.11	0.03	0.21
Heart beats faster	0.10	−0.09	0.11	0.25	0.01	0.34

Note. G–S = guilt–shame dimension; A–E = intrapersonal–interpersonal dimension.