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Cross-cultural variation in gelotophobia within the United States

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Abstract

In the first international study of gelotophobia (the fear of being laughed at), Proyer et al. (2009) administered an established measure of gelotophobia, the GELOPH, to 93 different samples across 73 countries, including six samples from the United States. In the original study, the researchers reported notable response similarities across a core set of GELOPH items, referred to as the GELOPH<15>. The present study takes a closer look at ethnic differences within these original United States samples, focusing specifically on the differences between European and Asian American respondents to two types of items on the GELOPH<15>, which we identified as self-perception and social reaction items. Based on prior research dealing with self-concept and social anxiety, we predicted that individuals with a more interdependent self-construal (Asian Americans) would be more likely than those with an independent self-construal (European Americans) to report greater concern over revealing themselves as foolish or ridiculous in public. However, because of the greater importance for their own self concept to maintain positive social relations, Asian Americans would not be more likely than European Americans to report greater avoidance of or discomfort with social encounters involving laughter. Comparisons of the GELOPH<15> items related to self-perceptions and social reactions supported these expectations, and we discuss how these results highlight how sets of items on the GELOPH<15> may vary in their sensitivity to cultural differences.

Key words: phobias, social anxiety, shame, ethnicity, laughter

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In the first international study of its kind, Proyer et al. (2009) investigated gelotophobia, the fear of being laughed at, with three specific aims in mind: (a) to assess whether the GELOPH<15>, a fifteen-item self-report measure of gelotophobia (Ruch & Proyer, 2008), could provide reliable results cross-culturally; (b) to provide evidence for the actual existence of gelotophobia worldwide, and (c) to rule out linguistic differences in the translations of the GELOPH as an explanation for international variation. In all, 93 samples from 73 countries were collected, including six samples from the continental United States. General findings revealed high reliability for the GELOPH<15> (median Cronbach alpha across all samples was .86). Factor analysis further revealed a factor structure similar for all samples studied with a one-dimensional solution fitting the data the best (Proyer et al., 2009, p. 263). For the overall measure and for individual items, international variation was also observed for endorsement rates ranging from 1 % to 80 % for individual items and this variation remained evident, even among samples from nations assessed using the same language version of the GELOPH<15>.

Within the United States, individuals from six different locales completed the original 46 item version of the GELOPH (Ruch & Titze, 1998), from which the GELOPH<15> was later extracted. The six United States samples included mainly university students, and average scores for these samples were comparable to one another except for one sample from the University of Cincinnati, which tended to have lower endorsements rates across most items of the GELOPH<15>. However, the general similarities across the U. S. samples may be viewed as somewhat surprising, considering that Proyer et al. (2009) observed cross-cultural differences internationally and that the sampled United States universities differed markedly in their ethnic diversity. Four of the six university sites (Miami University of Ohio, University of Cincinnati, University of Central Florida, and University of Central Oklahoma) have predominantly non-Hispanic White student populations, whereas two sites (Holy Names University in California and a cluster of New York/Pennsylvania schools, including Long Island University) have no ethnic or racial student majority.

Because of the variations in the ethnic and racial compositions of the six U. S. samples, we would have expected that the GELOPH scores across these samples have mirrored ethnic differences found for other psychologically related phenomenon, such as social anxiety and social phobia. Social anxiety, here, is defined as the fear of receiving negative and humiliating evaluations by other people, and social phobia refers to social anxiety so excessive and pervasive that it interferes with a person's daily functioning and quality of life (American Psychiatric Association, 2000).

Cross-cultural studies of social anxiety commonly find ethnic variation. In particular, researchers have found that Asian Americans often score higher than White or European Americans on self-report measures of social anxiety (Lau, Fung, Wang, & Kang, 2009; Lee, Okazaki, & Yoo, 2006; Norasakkunkit & Kalick, 2002; Okazaki, 1997, 2000, 2002). In striking contrast, epidemiological studies of social phobia find that non-Hispanic Whites in the United States evidence higher rates of social phobia than Hispanics and non-Hispanic Blacks (Breslau, Aguilar-Gaxiola, Kendler, Su, Williams, & Kessler, 2006). In our own review of the National Institute of Mental Health Collaborative Psychiatric Epidemiology Surveys (CPES, 2001-2003), we further noted higher rates

of social phobia, using DSM-IV criteria, among non-Hispanic Whites than any other racial or ethnic groups, including Asian Americans.

These different findings for social anxiety and social phobia are of particular interest to the study of gelotophobia as they suggest that at least for Asian-American populations, higher rates of reported social anxiety may not necessarily be experienced as debilitating. Why might this be so? As Wong and Tsai (2007) have observed, the emotion of shame – which is often linked to social anxiety – is not experienced in the same manner cross-culturally. In fact, persons from more individualistic societies tend to view shame as a negative emotional response to a transgression that involves a stable personal characteristic (i.e., "I failed the task, because I am no good at it."). Consequently, they are more inclined to avoid social encounters that could reveal negative attributes damaging to their self-concept. In contrast, those from collectivistic societies are more likely to experience shame as the result of a violation of normative behavior, which could lead to negative evaluations by valued others (i.e., "I failed on this task because I did not work hard enough, and my family will not think favorably of me."). In this view, shame is not seen as a negative, but rather as a more positive emotion, which helps individuals to regulate their own behavior and leads them to more socially appropriate conduct.

In Asian families, which tend to be more collectivistic, parents, in fact, tend to use shaming more to discipline their children as a means to develop self-discipline, relational sensitivity, social awareness, and sense of responsibility (Lieber, Fung, & Leung, 2006). Similarly, Asian Americans are more likely than European Americans to report that their parents encouraged modesty and used shaming as a form of early discipline (Lau et al., 2009). As a result, Asians and Asian Americans are more likely to develop what Markus and Kitayama (1991) have described as an interdependent construal of self – that is, to place a greater importance on and link their self-worth to the quality of their interpersonal relationships. In contrast, individuals in Western societies are more likely to possess an independent construal of self – to place greater importance on and link their self-worth to their abilities and self-efficacy. Because their need to have positive social relations is fundamental to their self-concept, individuals with an interdependent self-construal would be expected to have greater concern over negative social evaluations and be more prone to social anxiety. Further, because maintaining good social relations is so important to their self-concept, these individuals may be more likely to adopt strategies to cope with stressful social situations. If this is the case, then we might expect Asians and, in turn, Asian Americans generally to report higher levels of social anxiety, but not necessarily more outward signs of being incapacitated by this type of anxiety in social engagements.

As evidence for this pattern, Okazaki (1997) found measures of social anxiety to be positively and negatively correlated with measures of interdependent and independent self-construal, respectively. More importantly, she found that Asian Americans scored higher than White Americans on interdependent self-construal and higher on social anxiety, suggesting this important link between self-concept and social anxiety. In a later study, Okazaki, Liu, Longworth, and Minn (2002) further made the striking observation that although Asian Americans scored higher than White Americans on a trait measure of social anxiety, the *Social Phobia and Anxiety Inventory* (Turner, Beidel, Dancu, &

Stanley, 1989), Asian and White Americans did not differ significantly on anxious behaviors (fidgeting, gaze avoidance, elongated pauses, statements of negative affect) in videotaped sessions designed to promote social anxiety. In our own review of the CPES data set for Social Phobia, we were similarly struck that although Asian Americans were more likely to report *feeling shy of being the center of attention in an embarrassing situation* (71 % of the Asian American Sample, n = 331, vs. 65 % of the Non-Hispanic White American Sample, n = 1,895), Asian Americans rated themselves lower on the extent to which social fears interfered with their work of social life (M = 2.19 for Asian Americans vs. M = 2.54 for non-Hispanic Whites on a five point scale).

Titze (2009) has noted that the symptoms of gelotophobia are closely aligned with the characteristics of social anxiety and social phobia, except that gelotophobes also show dysfunction in the harmonious interplay of physical motions (see also Carretero-Dios, Ruch, Agudelo, Platt, & Proyer, 2010; Edwards, Martin, & Dozois, 2010). If this is indeed the case, then we might expect that in the original United States samples tested with the GELOPH<15>, Asian Americans would have scored higher than other ethnic groups on this measure of gelotophobia.

One useful – albeit unintended – aspect of GELOPH<15> is that this measure allows us to test not only for ethnic differences based on the overall score, but also for different patterns across the scale's 15 items that would be expected for individuals with independent and interdependent self-construals. A survey of the GELOPH<15> items in fact suggests that these items can be classified into two distinct groups: items focused on personal characteristics that could receive negative evaluation (e.g., *I believe that I make involuntarily a funny impression on others*) and items focused on reactions to negative evaluation (e.g., *It is difficult for me to hold eye contact because I fear to be assessed in a disparaging way*). We refer to the former as negative self-perception items and the latter as negative social reaction items.

We might expect then that because of a greater sensitivity to interpersonal evaluation individuals with an interdependent (Asian Americans) rather than with an independent (European Americans) construal of self would score higher on gelotophobia, but largely on the GELOPH items reflective of negative personality characteristics that could evoke heightened feelings of self-consciousness and shame. However, we would further expect, because of their stronger need to maintain positive social relationships, Asian Americans would score lower on the negative social reaction items and score in a manner similarly to their European American counterparts. To identify sources of variation, we first examined sex differences across all six United States samples in the international study of gelotophobia (Proyer et al., 2009). Then, to test our hypotheses about ethnic differences, we revisited two of the original six United States samples for which ethnic information was available to look at response patterns across different ethnic groups with specific attention given to the differences between the European and Asian American respondents.

Method

Samples

As part of the original international survey on gelotophobia, 1,361 individuals from six different geographical regions within the United States received and returned the 46 item version of the GELOPH. However, 35 participants either did not provide crucial demographic information or failed to respond to every item on the measure. In total, 568 men and 758 women (*Mean age* = 25.98 years) completed the GELOPH>46> in full. Table 1 provides the breakdown for these participants by sex and testing site.

Of the six original test sites, though, only the New York and California sites solicited ethnic information. For this smaller set, 212 women and 142 men (*Mean age* = 25.50 years) provided their ethnicity and could be classified as either African American, Asian American, European American, or Latino/Hispanic. This final sample was composed largely of university students, and included 100 African American, 51 Asian American, 134 European American, and 69 Latino/Hispanic participants. Table 3 provides the breakdown for this sample by sex and ethnicity.

Measures

On the GELOPH<46>, respondents rated themselves on individual items on a four point scale from 1 (*Strongly Disagree*) to 4 (*Strongly Agree*). With the aid of factor analysis, Ruch and Proyer (2008) previously identified fifteen items on the larger measure as core items (the GELOPH<15>) which could provide a reliable measure of gelotophobia. Ruch (2009) has reported that the averaged overall score on the GELOPH<15> can be used as an indicator of gelotophobic tendencies from *no gelotophobia* (scores between 1.00 and 2.00) and *borderline fearful* (scores between 2.00 and 2.50) to *slight expression of gelotophobia* (scores between 2.00 and 2.50), *pronounced expression of gelotophobia* (scores between 3.00 and 3.50) and *extreme gelotophobia* (scores above 3.50).

For the present investigation, we focused exclusively on the GELOPH<15> and subdivided the items on this scale into two basic categories – Self-Perception and Social Reaction items – and computed separate average scores for each. We classified items as reflective of self-perceptions if they focused primarily on a relatively stable personality characteristic (e.g., feeling insecure and lonely, making funny or peculiar impressions). We identified six items that met this criterion. These items, with their numerical placement on the GELOPH<15>, were as follows:

2. I avoid displaying myself in public because I fear that people could become aware of my insecurity and make fun of me.
6. I control myself strongly in order not to attract negative attention, so I do not make a ridiculous impression.
7. I believe that I make involuntarily a funny impression on others.

8. Although I frequently feel lonely, I have the tendency not to share social activities in order to protect myself from derision.
10. If I did not fear making a fool of myself I would speak much more in public.
14. Especially when I feel relatively unconcerned, the risk is high for me to attract negative attention and appear peculiar to others.

We classified items as indicative of social reactions if they reflected largely behavioral or emotional responses to situation specific events (e.g., becoming suspicious of others, being unable to maintain physical contact with others, being unable to interact freely with others). Nine items fell into this category (note that the majority of these items begin with a temporal clause headed by *when* or *while*):

1. When they laugh in my presence, I get suspicious.
3. When strangers laugh in my presence, I often relate this to me personally.
4. It is difficult for me to hold eye contact because I fear to be assessed in a disparaging way.
5. When others make joking remarks about me I feel being paralyzed.
9. When I have made an embarrassing impression somewhere, I avoid the place thereafter.
11. If someone has teased me in the past, I cannot deal freely with him forever.
12. It takes me very long time to recover from having been laughed at.
13. While dancing I feel uneasy because I am convinced that those watching me assess me as being ridiculous.
15. When I have made a fool of myself in front of others, I grow completely stiff and lose my ability to behave adequately.

Two judges independently sorted the GELOPH<15> items and agreed on the indicated subdivisions with the exception of Item 8 (*Although I frequently feel lonely, I have the tendency not to share social activities in order to protect myself from derision*). Because this item focuses largely on self-characteristics (loneliness; general avoidance of social engagement) and not a reaction to a specific type of event, we classified this item as a self-perception for the purpose of analysis.

Results

Sex differences in the United States samples

As a preliminary investigation, we looked at sex differences across all six United States samples and conducted a 2 (Sex) x 2 (Item Type) analysis of variance for a mixed factorial design. As Table 1 reveals, men scored higher than women on Gelotophobia, $F(1, 1324) = 8.28$, $p < .05$, $\eta^2 = .006$. Separate analyses for each U.S. sample revealed that

Table 1:
Men's and Women's Mean GELOPH<15> Scores for the Six United States Samples

Sample	Men	Women	Overall
New York/Pennsylvania *Long Island University & Pennsylvania State University, Central Valley*	1.69 (130)	1.70 (139)	1.69 (269)
Cincinnati, Ohio *University of Cincinnati*	1.46 (93)	1.45 (114)	1.45 (207)
Oxford, Ohio *Miami University of Ohio*	1.67 (64)	1.64 (147)	1.65 (211)
Florida *University of Central Florida*	1.79 (122)	1.62 * (115)	1.71 (237)
Edmund, Oklahoma *University of Central Oklahoma*	1.90 (101)	1.66 * (115)	1.77 (216)
Oakland, California *Holy Names University*	1.83 (58)	1.74 (128)	1.77 (186)
Overall	1.72 (568)	1.64 * (758)	1.68 (1,326)

Note: Sample sizes are in parentheses.
* Sex difference significant, $p < .05$.

this sex difference was largely evident in the Oklahoma sample, $F(1, 214) = 10.15$, $p < .05$, $\eta^2 = .045$, and the Florida sample, $F(1, 235) = 7.11$, $p < .05$, $\eta^2 = .029$. No significant sex differences were observed for the New York, California, or Ohio samples. Generally, Self-Perception scores ($M = 1.73$, $s = 0.56$) were higher than Social Reaction scores ($M = 1.63$, $s = 0.56$), and this difference was statistically significant, $F(1, 1324) = 105.62$, $p < .05$, $\eta^2 = .074$. No significant interaction was found for Sex and Item Type, $p > .05$.

Table 2 provides a breakdown for the individual GELOPH<15> items by Sex and Item Type. Individual *t*-tests revealed that men scored significantly higher than women on three of the nine Social Reaction items and on four of the six Self-Perception items, $p < .05$. Of particular interest were the two Social Reaction items which revealed significant differences (*When I have made an embarrassing impression somewhere, I avoid the place thereafter*; *If someone has teased me in the past, I cannot deal freely with him forever*). The men in the general U.S. samples, in short, were more likely than the women to express concern over personal shortcomings and were more likely to deal with uncomfortable social situations by avoiding similar encounters in the future – a pattern, as discussed earlier, that would be consistent for individuals with more of an independent rather than interdependent construal of self.

Table 2:
Men's and Women's Mean GELOPH Item Scores by Type (all samples)

Items Reflecting Negative Social Reactions	*Men*	*Women*
1. When they laugh in my presence, I get suspicious.	1.95	1.94
3. When strangers laugh in my presence, I often relate this to me personally.	1.73	1.66
4. It is difficult for me to hold eye contact because I fear to be assessed in a disparaging way.	1.55	1.47
5. When others make joking remarks about me I feel being paralyzed.	1.58	1.54
9. When I have made an embarrassing impression somewhere, I avoid the place thereafter.	1.78	1.68*
11. If someone has teased me in the past, I cannot deal freely with him forever.	1.60	1.51*
12. It takes me very long time to recover from having been laughed at.	1.56	1.54
13. While dancing I feel uneasy because I am convinced that those watching me assess me as being ridiculous.	1.82	1.59*
15. When I have made a fool of myself in front of others, I grow completely stiff and lose my ability to behave adequately.	1.50	1.46
Items Reflecting Negative Self-Perceptions		
2. I avoid displaying myself in public because I fear that people could become aware of my insecurity and make fun of me.	1.61	1.57
6. I control myself strongly in order not to attract negative attention, so I do not make a ridiculous impression.	2.10	1.97*
7. I believe that I make involuntarily a funny impression on others.	2.07	1.94*
8. Although I frequently feel lonely, I have the tendency not to share social activities in order to protect myself from derision.	1.61	1.43*
10. If I did not fear making a fool of myself I would speak much more in public.	1.90	1.97
14. Especially when I feel relatively unconcerned, the risk is high for me to attract negative attention and appear peculiar to others.	1.48	1.32*

* Mean significantly higher for men than women, based on nondirectional *t*-tests, $p < .05$.

Ethnic differences in the New York and California samples

For the New York and California samples, we performed a 4 (Ethnicity) x 2 (Item Type) analysis of variance on the data. As illustrated in Table 3, Asian Americans (M = 1.87, s = 0.58) and Latinos (M = 1.76, s = 0.62) scored higher than European Americans (M = 1.64, s = 0.48) and African Americans (M = 1.69, s = 0.60). The main effect for Ethnicity was significant, $F(3, 350) = 2.76$, $p < .05$, $\eta^2 = .023$, and post-hoc analyses with Tukey HSD procedures revealed that Asian Americans scored significantly higher than European Americans on the GELOPH<15>, $p < .05$. No other differences for Ethnicity were significant. In fact, 23.5 % of the Asian American sample had GELOPH<15> scores above 2.50 and could be classified, using the Ruch (2009) criteria, as having a slight or greater tendency toward gelotophobia. In comparison, only 10.8 % of the European American, 11.0 % of the African American, and 14.5 % of the Latino samples had scores this high.

Table 3:
Men's and Women's Mean GELOPH<15> Scores by Ethnicity within the Combined New York and California Samples

*Ethnicity**	*Men*	*Women*	*Overall*
African American	1.67	1.70	1.69
	(39)	(61)	(100)
Asian American	1.85	1.88	1.87
	(21)	(30)	(51)
European American	1.61	1.67	1.64
	(60)	(74)	(134)
Hispanic/Latino	1.88	1.71	1.76
	(22)	(47)	(69)

Note: Sample sizes are in parentheses.
* Significant overall difference for Ethnicity, $p < .05$. Significant difference between Asian and European American respondents based on Tukey HSD post-hoc procedures, $p < .05$.

As with the larger sample, New York and California Self-Perception scores (M = 1.80, s = 0.62) were higher than the Social Reaction scores (M = 1.65, s = 0.59), and again, this difference was statistically significant, $F(1, 350) = 46.17$, $p < .05$, $\eta^2 = .12$. The interaction between Ethnicity and Item Type also approached significance, $F(3, 350) = 2.43$, $p = .065$, $\eta^2 = .02$. Analyses of simple effects revealed a significant difference for Ethnicity for Self-Perception scores, $F(3, 350) = 4.32$, $p < .05$, $\eta^2 = .04$, but not for the Social Reaction scores, $p < .05$. Again, Tukey HSD tests for Self-Perception revealed the only significant pairwise difference to be between the European and Asian American samples with the Asian Americans scoring higher, $p < .05$. The overall breakdown for Ethnicity by Item Type is provided in Table 4.

Table 4:
Self-Perception and Social Reaction Scores by Ethnicity within the Combined New York and California Samples

Ethnicity[*]	*Self-Perception*	*Social Reaction*[*]
African American	1.76	1.64
Asian American	2.03	1.76
European American	1.69	1.60
Hispanic/Latino	1.87	1.69
Overall	1.80	1.65

* Significant main effects for Ethnicity and for Item Type, $p < .05$. Interaction for Ethnicity and Item Type, $p = .065$.

Finally, we looked at the differences between the European and Asian American samples across all GELOPH<15> items by Item Type. These comparisons are laid out in Table 5. Individual *t*-tests revealed that Asian Americans scored significantly higher than European Americans on four of the six Self Perception items, but on only one of the Social Reaction items, $p < .05$. The one Social Reaction item producing a significant difference (*When I have made a fool of myself in front of others, I grow completely stiff and lose my ability to behave adequately*) is worth special note. Generally, the Social Reaction items refer to a response to real or expected actions of other people. Only this one item refers to a response by the individual to his or her *own* behavior. As such, this one item may tap a perceived personal flaw requiring self-correction (i.e., a tendency to make a fool of oneself), and this interpretation may explain why this particular Social Reaction item aligns more with the Self-Perception items among the differences between Asian and European Americans.

Taken together, the overall analysis and follow-up investigation of the individual items on the GELOPH<15> suggest a pattern consistent with our earlier prediction. The findings here support the idea that Asian Americans, by virtue of a more interdependent self-construal, are more likely to identify personal fears about social interaction, but to maintain positive social relationships, do not show higher levels of negative social reactions.

Discussion

In the first international study of gelotophobia, Proyer *et al.* (2009) reported that the GELOPH<15> provided a stable and reliable measure of gelotophobia, which served well to identify differences in the fear of being laughed at across the 73 different nations sampled. However, the original finding that the six United States samples showed similar response patterns across the GELOPH<15> items seemed somewhat surprising, given the differences in the cultural diversity of the six test sites.

Table 5:
European and Asian American's Mean GELOPH Item Scores
(New York & California Samples)

Items Reflecting Negative Social Reactions	*Asian*	*European*
1. When they laugh in my presence, I get suspicious.	1.90	1.75
3. When strangers laugh in my presence, I often relate this to me personally.	1.78	1.54
4. It is difficult for me to hold eye contact because I fear to be assessed in a disparaging way.	1.51	1.44
5. When others make joking remarks about me I feel being paralyzed.	1.69	1.70
9. When I have made an embarrassing impression somewhere, I avoid the place thereafter.	1.90	1.66
11. If someone has teased me in the past, I cannot deal freely with him forever.	1.71	1.49
12. It takes me very long time to recover from having been laughed at.	1.75	1.49
13. While dancing I feel uneasy because I am convinced that those watching me assess me as being ridiculous.	1.76	1.88
15. When I have made a fool of myself in front of others, I grow completely stiff and lose my ability to behave adequately.	1.86	1.51*
Items Reflecting Negative Self-Perceptions		
2. I avoid displaying myself in public because I fear that people could become aware of my insecurity and make fun of me.	1.98	1.68*
6. I control myself strongly in order not to attract negative attention, so I do not make a ridiculous impression.	2.29	2.00
7. I believe that I make involuntarily a funny impression on others.	2.24	1.97
8. Although I frequently feel lonely, I have the tendency not to share social activities in order to protect myself from derision.	1.78	1.40*
10. If I did not fear making a fool of myself I would speak much more in public.	2.20	1.78*
14. Especially when I feel relatively unconcerned, the risk is high for me to attract negative attention and appear peculiar to others.	1.69	1.32*

* Mean significantly higher for Asian than European Americans, based on nondirectional *t*-tests, $p < .05$.

The body of research on cross-cultural differences in self-conscious emotions and psychopathology led us to consider potential sources for similarities and differences among the individual items of the GELOPH<15> across different ethnic groups within the United States. The self-conscious emotion of shame in particular starts to emerge around 2 years of age and is based in the ability to distinguish the self from others and to recognize that others can make judgments about the self. Self-conscious emotions, such as shame, can be seen to help individuals make appropriate accommodations to the unique requirements of various social groups. However, when concern over social adaptation becomes elevated, the result can be social anxiety, and its extreme debilitating form, social phobia.

Researchers in personality and social psychology have established that social concerns and strategies for self-regulation vary across cultures and these differences can be linked to the individual's concepts of self and other. Markus and Kitayama (1991) have observed that individuals from collectivistic Asian societies tend to have interdependent self-construals. They tend to value social harmony, are less likely to seek attention for the self, are more likely to fear social repercussions from others, and consequently, are more likely to experience social anxiety. As Markus and Kitayama (1991, p. 224) point out, a popular aphorism in Japan is, "The nail that sticks out gets hammered down," meaning there is a distinct danger involved in making a social spectacle of oneself. Emerging research on Asian culture focuses on the profound influence that a fear of the loss of face plays within Asian communities. Loss of face, defined as the threat or loss of one's social integrity, has been identified as a key and often-dominant interpersonal dynamic in Asian social relations (Sue & Morishima, 1982).

In contrast, people living within individualistic Western societies tend to develop independent self-construals. They are more likely to value uniqueness, to prefer autonomy, to have lower levels of fear of negative evaluation, and consequently, to experience lower levels of social anxiety (Okazaki, 1997). The Western aphorism that encapsulates the cultural mores in this case is, "The squeaky wheel gets the grease," emphasizing the advantages of personally standing out (Markus & Kitayama, 1991, p. 224).

We reasoned that the differences in interdependent and independent construals of self would predict fundamental differences between United States residents of Asian and European heritage in their responses to real or imagined critical evaluations by others, and by extension, in their fears of being laughed at. We predicted that because of their greater sensitivity to social evaluation, Asian Americans would score higher than European Americans on gelotophobia, but largely on GELOPH items reflective of negative personality characteristics which could evoke heightened feelings of self-consciousness and shame. We also predicted that because of their stronger need to maintain positive social relationships, Asian Americans would score lower on the negative social reaction items and in a manner similarly to their European American counterparts.

The present study supported these hypotheses. Findings indicated that rates of gelotophobia varied across cultural subgroups within the United States. Further, when we examined GELOPH<15> items for our Asian and European American samples, we found that Asian Americans indeed tended to score higher than European Americans on the

Self-Perception items, indicative of stronger feelings toward social evaluation, but not higher on Social Reactions items. The latter we interpreted as due in part to a stronger need to maintain harmonious relationships with others.

Our findings are consistent with the greater body of research on cross-cultural differences on the self and social anxiety. But do these findings really tell the whole story? Cross-cultural researchers have been criticized for using a simple psychometric paradigm of translating a survey or questionnaire across languages and comparing the data. In this light, we see the current research to represent only one small step toward understanding gelotophobia across cultures. As Matsumoto (1999) notes, "we need to consider the incorporation of extra-individual factors that influence psychological phenomena" (p. 304). Specifically, Matsumoto recommends gathering different types of qualitative information to supplement quantitative data and to provide a stronger basis for understanding the differences found between groups.

We were only able to examine data from two of the six United States samples surveyed in the original study because ethnic information was not requested from all six sites. However, the patterns in the data are consistent across these two regions, and are strong enough to indicate a meaningful trend. In order to fully explore the differences in the development and expression of gelotophobia we would need to increase the power of the study and to recruit larger U.S. samples, especially of identifiable Asian and Latino participants. Also, although the two samples analyzed were from similar demographic areas – which was ideal for controlling for extraneous variables by having comparable groups – we can offer little regarding what might exist across different ethnic groups across the entire United States.

Further, although research findings on cross-cultural differences in the construction of self are robust, these findings are not without criticism. Some researchers (e.g., Matsumoto, 1999) argue that the cultural landscape is not as sharply defined as some cross-cultural research literature would have us believe. Rarely are individuals in the U.S. influenced only by the culture of their ethnic origins. And when they are not, it is unclear which of an individual's "cultures" is influencing their social-cognitive behaviors. For example, bicultural Asian Americans, and first-generation Americans, have consistently shown a tendency to shift their cultural base for cognitive interpretive tasks depending on the priming cues provided by the environment (Hong, Morris, Chiu, & Benet-Martinez, 2000). A future study on the development and expression of gelotophobia would preferably include information on social context as well as bicultural and acculturation status.

Finally, interdependent vs. independent self-construal is but one theoretical dimension that can account for the cross-cultural difference observed for social anxiety in general and gelotophobia in particular. Other cultural variables can direct the development of self-conscious emotions, cognitive processes, and in turn, the development of pathological fears. To understand cross-cultural differences within the United States for gelotophobia, we suggest it needs to be examined not only with larger more representative samples, but alongside other mitigating variables such as self-construal, acculturation, and comorbid psychopathologies (such as the presence of another major anxiety disorder), so that differences between groups might not only be noted but also fully under-

stood. In summary, the present study does move us forward in our understanding of the cross-cultural variability of gelotophobia, but it also calls for further investigation into the cultural origin, development, and manifestation of this phenomenon across different ethnic and cultural communities.

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