

# The emotions of gelotophobes: Shameful, fearful, and joyless?

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#### Abstract

The present research examines the hypothesis that the fear of being laughed at is related to three emotions: shame, fear, and (low) joy. In two selfreport studies the participants (N = 234, N = 102) filled in the GELOPH (Ruch and Titze 1998) for the assessment of the level of gelotophobia and the Anchor Que question form (Ekman 2007) measuring five parameters (latency, maximal intensity, duration, expression, and intensity during a typical week) of emotions. Across both studies gelotophobes reported that their maximal experience of shame was of a higher intensity and longer duration, also they reported experiencing shame more frequently during a typical week. Their maximal experience of happiness was less intense, and it took longer for these intense feeling to develop lasting for shorter periods of time. Gelotophobia was also positively related to intensity, duration, and intensity experienced during a typical week of fear. Among individuals with a higher prevalence of shame, compared to happiness, approximately 50% were gelotophobes. Gelotophobia is notably related to the interplay of three emotions fear, shame and the low disposition to happiness. This dynamic is a new, yet equally plausible explanation for the onset of gelotophobia.

Keywords: Amusement; emotion; fear; gelotophobia; joy; shame.

#### 1. Introduction

Almost by definition, emotions play a central role in gelotophobia. People, in general, feel upset when they are being laughed at. Mockery and ridicule induce negative emotions, like shame or anger. Most people will

not want to repeat such an experience and some even develop a more habitual *fear* of being laughed at. Gelotophobes even avoid contact with others so as not to feel such shame again. So it is quite necessary to study emotions to understand gelotophobia.

Based on individual case studies Titze (1995, this issue) proposed several consequences of gelotophobia, such as lack of liveliness, spontaneity, and joy, as well as low self-esteem and poorly developed social competence. He also purports that "many emotions manifest themselves in our muscles" (Titze 1995: 1), which causes a phenomenon that Titze labels the Pinocchio Complex, caused by "emotional panic" (Titze 1995: 3).

Platt (2008) also looked at emotional responses while socially interacting and showed that the gelotophobes had a different emotional response pattern to playful teasing situations than those who did not have any fear of being laughed at. They responded emotionally as if it were bullying type ridicule. It is therefore legitimate to assume from such research that the emotional topography of a gelotophobe is a critical component of gelotophobia.

#### 1.1. Emotions

There are many schools of thought on the definition of emotion. Some research emphasizes the biological (e.g., Davidson 2001), while others focus on the psychological processes (e.g., Izard 1991). There is even debate as to what actual feelings and behaviors constitute an emotion (Frijda 1986), such as hunger, love or hate for example. It is agreed that emotions are an integral part of human function enabling the establishment and maintenance of relationships and social interactions (Averill 1992).

Researchers also disagree as to what, if anything, are the basic emotions. The theories range from as few as two, such as happiness and sadness, suggested by Weiner and Graham (1984) to the inclusive emotional hierarchical structure contributed by Shaver et al. (2001). Ortony and Turner (1990) offer a comprehensive overview of basic emotion theories. Paul Ekman (1992) claims that although there are both unique and common features, there are significant differences, which can separate some emotional states (e.g., fear, anger, enjoyment) that allow them to be identified as basic emotions. Each basic emotion is the descriptor given to a group of common states that share characteristics (Ekman and

Friesen 1975). The six clusters of related states are: anger, fear, sadness, enjoyment, disgust, and surprise and are those which Ekman et al. (1982) define as basic emotions from extensive cross cultural studies and which have the emotional response correlated to universally recognized facial cues.

The identified universal facial cues do support basic emotion theories. Nevertheless, some emotional states may not have correlating facial expressions, yet have the label of an emotion. One such example is shame. Although it has no facial expression it does have distinct nonverbal cues such as the downward gaze (Keltner 1995). This, Ekman (2007: 217) acknowledges, "... makes sense, since when feeling these emotions the person does not want other people to know how he or she feels."

This is important as Scheff (2003) reasons that shame is the master emotion that is key to social control and is a self-regulation emotion. Tomkins (1963) explains that shame is an innate affect that inhibits and interrupts pleasure. Triggered in situations where there is an impediment to the continuation of positive effect, Nathanson (1992) states that shame itself is an auxiliary to positive affect, rather than an innate true affect. Collectively this research suggests that shame acts as an emotion inhibitor, stopping the pursuit of pleasure. If this is indeed so, does the intense feeling of shame experienced by gelotophobes dampen the spontaneity and joyful emotions, as described in Titze's case studies (1995)? Tangney and Dearing (2002: 156) indicate that shame prone parents use ridicule and humiliation as punishment that in turn induces shame in the child. Thus a connection between ridicule (a form of derisive laughter) and shame can be seen. Due to the crucial involvement of shame and the role it plays in gelotophobia, shame was included in the list of emotions investigated in the current study.

## 1.2. Gelotophobia

Titze (this issue) emphasizes that gelotophobia comes along with shame-bound anxiety, which already implies that gelotophobes will have a particular propensity towards shame and fear. Shame-bound anxiety serves the general purpose of avoiding inappropriate ("funny") performance in social situations. Hence, one can assume that shame and fear are the predominant emotions within the spectrum of a gelotophobe. However,

gelotophobes might also be the ones who experienced shame in high intensities. Titze (1995) states that gelotophobia, in general, originates from repeated, traumatic, experiences of being ridiculed or "put down" during childhood and adolescence. Consequently, gelotophobes have traumatic experiences of shame. One can therefore assume that among high gelotophobes the experience of high intensity levels of shame will be more salient compared to other emotions, and the shame experienced is at a higher intensity than those lacking the fear of being laughed at. Furthermore, according to Titze, gelotophobic patients lack liveliness, spontaneity, and joy. Indeed, this is highlighted as one of the consequences of gelotophobia. One might therefore assume a negative correlation between the gelotophobia measure and measures of happiness.

Correlation of gelotophobia with disposition for emotion. The model of gelotophobia outlined in the introduction allows for the prediction that gelotophobia will primarily be associated with three emotions, shame, fear and happiness. It has been claimed that the specific core-problem of gelotophobia is based on distinct traumatic experiences of shame (Titze 1995). Thus, one might expect that gelotophobes have a specific inclination to shame compared to the non-gelotophobes. They might report experiencing shame more often during the course of a typical week, that shame has a short latency and, once present, is more difficult to overcome. Gelotophobes might have had more intense experiences of shame in the past than the non-gelotophobes. Likewise, one can assume that among high gelotophobes the experience of shame will be more salient compared to other emotions. They withdraw socially as they want to avoid (or fear) the experience of being laughed at for their shortcomings. As they are afraid of being laughed at (i.e., afraid of being exposed to experience a shame-related event) their predominant emotion during a typical week should be fear. Finally, they have not learned that humor and laughter are joyful experiences to be shared with others. Hence, happiness and amusement have not been intense in their past life and it will take more to make them laugh or be happy now (i.e., longer latency). Also, positive emotions won't be prevalent during a typical week.

The impression of a wooden appearance and agelotic face (i.e., the postulate of the Pinocchio Complex) allows predicting that they don't tend to express enjoyment (and probably other emotions) facially. Hence, gelotophobes will show less overt expression of amusement and other emotions; perhaps with the exception of shame.

## 1.3. Aim of present study

The aim of the first study was to examine whether shame, fear and (low) joy are the emotions relevant for the understanding of gelotophobia. In detail, a sample of normal adults was examined as to see whether gelotophobes and non-gelotophobes differed with respect to basic parameters of eight emotions. The emotions studied were the basic emotions by Ekman, namely happiness (or joy), anger, sadness, fear, surprise, and disgust. Additionally, shame was added due to its relevance for the phenomenon. Furthermore, amusement (laughter, or mirth, exhilaration) was added to be more specific to laughter than happiness in itself. The parameters of interest were the latency, duration, and intensity of the strongest experience of the emotion ever felt, as well as the typical vocal or facial expression of that emotion and its prevalence during a typical week. These emotions were assessed via self-reports in the present study (Ekman 2007).

## 2. Study I

#### 2.1. Method

- 2.1.1. Participants. Sample I consisted of 234 German adult volunteers in ages ranging from 18 to 72 years (M = 38.20, SD = 13.4). There were 52 males and 181 females, and one did not supply gender. They were very diverse with respect to occupational background.
- 2.1.2. Instruments. The Geloph  $\langle 46 \rangle$  (Ruch and Titze 1998) is a questionnaire designed for the subjective assessment of gelotophobia. It consists of forty-six items relating to gelotophobic symptomatology with a four-point category scale (1 = strongly disagree; 2 = moderately disagree; 3 = moderately agree; 4 = strongly agree). The present study scored the 15 items of the revised version by Ruch and Proyer (2008a, 2008b), which focuses on the core symptoms and behavioral manifestations of the fear of being laughed at. The list produced a high internal consistency ( $\alpha$  = .94) in the sample of the 225 participants. The consistency only dropped to a small extent ( $\alpha$  = .89) when scored for the 15-item version as recommended by the Ruch and Proyer (2008a, 2008b) studies.

The Emotion Anchor Question Form (Ekman 1989, 2007) assesses individual differences in several basic parameters (e.g., latency, intensity, duration, intensity experienced during a typical week) of the basic emotions (fear, anger, pleasure, disgust, surprise, sadness). When the instrument is first administered, the participant is asked to describe an example of the most intense experience of each of the listed emotions one can imagine that any human being has ever felt, and this example serves as an anchor for subsequent ratings of those emotions. After each experience, the intensity of personal feeling for each emotion is measured on an eight-point category scale (0 = least; 8 = most), a measure of how quickly it took for that most intense feeling to begin (0 = immediately; 8 = a long time), how long it took to recover from that most intense feeling (0 = minutes;8 = months) and how much these emotions are typically expressed vocally or facially (0 = not at all; 8 = very much). Finally, the intensity of that emotion during a typical week is assessed. While the original Anchor Que assesses the six basic emotions of sadness, fear, anger, happiness, disgust, and surprise, for the purpose of the present study amusement and shame were also selected. The latter are not among Ekman's basic emotions but their assessment was considered essential in the present study.

2.1.3. *Procedure.* The sample of adult volunteers was recruited via advertisements in newspapers and took part in a large-scale personality study. They were mailed several questionnaires, which also included the Anchor Que and the GELOPH <46>, and filled them in at home in their own time. They received feedback on group and individual results to honor their participation.

#### 2.2. Results

The Geloph score was uncorrelated for age and gender (rs = -.01 and -.06, respectively). The mean Geloph score was 1.78 (SD = 0.55) with individual scores ranging from 1.00 to 3.33. There were 8.12% and 3.00% of individuals with slight and marked gelotophobia, respectively. The gelotophobia scores were correlated with the Anchor Que. The coefficients of the five parameters of the eight emotions are presented in Table 1.

Table 1 shows that regarding the most extreme occurrence of a feeling gelotophobia is associated with the emotions of shame, fear, hap-

Emotions	Latency	Intensity	Duration	Expression	Intensitya
Sadness	03	.07	.08	03	.38***
Fear	04	.13*	.27***	.05	.49***
Anger	.03	.08	.12	.02	.32***
Happiness	.18**	19**	18**	22***	08
Disgust	.14*	01	.09	14*	.21**
Surprise	.12	09	01	11	03
Amusement	.15*	19**	01	16*	15*
Shame	02	.23***	.18**	.12	.42***

Table 1. Gelotophobia and dispositions for emotions

piness/joy and amusement. Gelotophobes felt shame in higher intensity and it took them longer to overcome that intense experience of shame than those without the fear of being laughed at. There was no effect, however, regarding how quickly this feeling of extreme shame began. The most intense feeling of happiness is also peculiar. The maximal happy feeling was of lower intensity and shorter duration but it also took longer to begin. The most intense feeling of amusement was lower too, and it took longer to begin. Finally, the most intense feeling of fear also tended to be higher; more importantly, it took gelotophobes longer to overcome this intense feeling of fear. Yet it did not begin more quickly. There are no relationships with anger, sadness and surprise, and there was only a marginal relationship with the latency of disgust.

The feelings during a typical week were characteristic too. Gelotophobes more often felt fear, shame, sadness, anger, and disgust. They less frequently felt amusement, and there was no difference regarding the frequency of surprise and happiness. Table 1 confirms that gelotophobes were "agelotic"; when they felt intense levels of happiness and amusement (but also disgust) their voice and facial expressions did not show it accordingly.

The relationship between maximal levels of emotions and gelotophobia require further analyses. Two ANOVAs were performed with the different intensity levels as independent variable and the gelotophobia scores as dependent variable for shame and joy/happiness separately. Degree

N = 237 (individual correlations between 228 and 234)

<sup>&</sup>lt;sup>a</sup> Experienced during a typical week

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .001

of happiness had a significant effect on gelotophobia, F(5,227) = 3.423; p = .0053. Post-hoc tests (Fisher's PLSD) revealed that the two groups lowest in happiness (level = 0-3; n = 11; level = 4; n = 16) did yield higher scores than all groups with a happiness level of 5 and higher. The effects of intensity of maximal experience of shame on gelotophobes seemed to be discontinuous, F(7,224) = 2.023, p = .0532. For shame, it seems that the two highest groups did not differ from each other but from all lower groups (p < .05). There was no effect of fear, F(7,225) = 1.617, ns.

However, maximal intensity of happiness was positively correlated with both shame and fear, rs = .240, p < .001 (d.f. = 229 and 230). Therefore, a difference score was computed for the inclination to shame rather than happiness by subtracting the highest intensity for happiness from the maximal intensity score for shame. This yielded 13 different groups with scores ranging from -7 to +5. One person each had a score of +4 and +5, and these two were combined with the group of individuals with a difference score of +3. Then the frequency of the groups ranged from n = 6 ("group +3") to 47 per cell ("group 0"). An ANOVA was computed for relative inclination for shame over happiness as an independent variable (11 groups) and the gelotophobia score as a dependent variable. This yielded a significant effect, F(10, 220) = 5.438, p < .0001. Most of the differences could be explained by a linear trend, F(1,220) = 30.267, p < .0001. However, a quadratic trend was significant too, F(1,220) = 4.939, p = .0273, suggesting that the form of the relationship needs further exploration. The form of this function is given in Figure 1 and post-hoc tests (Fisher's PLSD) were used to explore the differences.

Figure 1 shows that groups where shame exceeded happiness by at least one point had gelotophobia scores of 2.0 and higher. Indeed groups 1, 2, and 3–5 exceeded the other ones significantly. Also, the indifference score was higher than the ones where joy prevailed, F(1,220) = 10.419, p = .0014. With the exception of group -3 there was no difference for the groups where happiness was higher than shame (i.e., groups -7 to -1). Thus, as a rule of thumb, gelotophobia was prevalent among the ones who experienced shame at higher intensity than they experienced happiness. More precisely, in the shame-dominant group (+2 to +5) there were 53.33% gelotophobes. As a comparison there were 4.50% and 12.38% gelotophobes in the happiness-dominant (-7 to -2) and balanced (-1 to +1) groups, respectively.

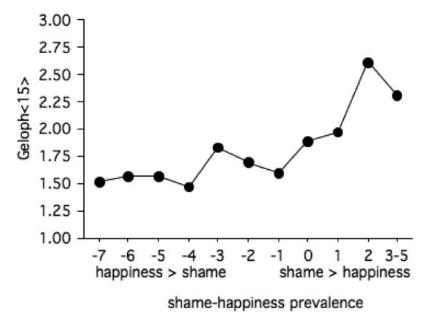


Figure 1. Mean gelotophobia level as a function of individual's location on a dimension ranging from joy-dominance to shame-dominance

#### 2.3. Discussion

The analysis of the most intense feeling of an emotion was telling inasmuch as it confirmed that gelotophobes have a characteristic stance to the triad of happiness, shame, and fear. Their peak experience in terms of happiness was of a comparatively lower intensity and it faded rather quickly. The gelotophobes lower inclination to happiness is consistent with Titze's (this issue) view. However, Titze sees lower inclination to happiness to be a consequence of gelotophobia, not an antecedent.

Gelotophobes experienced more shame, and this maximal experience of shame did last longer than maximal shame lasted for non-gelotophobes. The model predicted that gelotophobes had traumatizing experiences of being laughed at during childhood and adolescence; no doubt such experiences would be associated with reporting a higher intensity of shame. However, it might also be that those who have an inclination to experience shame habitually in a higher intensity and a longer duration are

predisposed to experience milder events as more traumatizing. Fear was experienced more intensively too, but even more importantly so the maximal experience of fear prevailed longer and was not overcome quickly. So it seems that gelotophobes are inclined to experience shame and fear, and those prevail longer.

The peak experience of happiness was not of high intensity, and that peak experience took longer to evolve and lasted only briefly among gelotophobes. This might help illuminate their stance toward laughter and elicitors of positive emotions. Maybe laughter of others is not contagious for gelotophobes. They will be less inclined to feel positively about it. Exactly this was found by Ruch, Altfreder, and Proyer (this issue). Laughter of a group might be more easily misunderstood as the mood of the merry group is not matched by one's own positive affect. When in doubt, this might leave some leeway for the misattribution of the reasons for the laughter. This might be the case when alternative interpretations are readily available. Individuals having experienced shame at a high intensity might be more inclined to interpret laughter as directed at them. Such an interpretation would have been paved by more intense shame felt before and typically felt. Thus, when individuals are less inclined to experience happiness but more easily moved to experience shame they will be more likely to interpret laughter negatively. This perception will be especially likely when they are in danger of appearing foolish.

It also seems that it takes them longer to overcome feelings of shame and fear. Once these emotions are there it takes more effort to cope with them. Feelings of happiness are also shorter. The involvement of fear is not surprising, as gelotophobes *fear* being laughed at. Therefore, a lesser inclination to experience fear might help reduce developing gelotophobia. For example, it might be better to feel anger when being laughed at (Ruch and Proyer this issue).

The hypothesis regarding the generalized masked expression of the high gelotophobes will be answered next. Indeed the gelotophobes are agelotic; they don't express happiness and amusement (laughter). Furthermore, they don't express disgust, but there is no correlation with the other emotions. However, one cannot say that the gelotophobes are generally non-expressive; the correlation with the sum of all six basic emotions was r = -.10, d.f. = 232, ns. The correlation with the expression of shame is positive but low (r = .12, p = .0664). Using an ipsative a score for expression of shame the correlation increased and was significant (r = .19, p < .01).

The highest correlations were found for the prevalence of different emotions during a week. It appears that the high scorer in gelotophobia experiences more fear, sadness, shame and anger, while the typical intensity of amusement during a week is less. None of the core items relate to shame and thus there is no confounding due to content overlap.

The shortcoming of study I is that the number of gelotophobes with a pronounced fear of being laughed at was only mildly present in the sample. This did not permit the study of absolute levels of fear, shame, and happiness among those with no, slight, or marked fear of being laughed at. Rather analyses were restricted to correlations. A study is needed that involves higher levels of gelotophobia. Also, a replication in a different cultural context is desirable.

### 3. Study II

The aim of study II is to examine the emotions of the gelotophobes in more detail. The list of emotions will be reduced to the three relevant ones from study I—namely happiness, fear, and shame. Furthermore, in order to take a closer look at the emotions of gelotophobes it will be necessary to have more individuals from the higher end of the spectrum (without studying a clinical sample). This allows for the examination of those with no, slight, and pronounced fear of being laughed at.

#### 3.1. Method

- 3.1.1. Participants. Sample II consisted of 103 adult English and American volunteers with English as their first language. The sample consisted of 37 males and 66 females, whose ages ranged from 18 years to 76 years (M=39.60; SD=14.51) and recruited by means of personal contact, Internet contact, or via publicity through an international antibullying support network group. The sample consisted of 45 single, 9 cohabiting, 39 married, 6 divorced, and 4 widowed individuals. All participants completed the study in the country of their origin.
- 3.1.2. *Material.* The *Geloph*  $\langle 15 \rangle$  (Ruch and Proyer 2008b) is a 15-item questionnaire designed for the subjective assessment of gelotophobia. It contains items relating to gelotophobic symptomatology with a

four-point category scale (1 = strongly disagree; 2 = moderately disagree; 3 = moderately agree; 4 = strongly agree). Cronbach alpha was .89 in the present sample.

A modified version of the *Emotion Anchor Question Form* (Ekman 1989, 2007) was used to assess individual differences in the parameters latency, intensity, duration, expression and intensity experienced during a typical week of the three emotions of happiness, fear, and shame. The instructions and rating scales were identical to Study I.

3.1.3. Procedure. Participants in sample II were contacted via electronic mail, in person or by the telephone. Those contacted via electronic mail or in person had expressed an interest in volunteering to participate in a study and had given contact details for future use. After a mail sent to bullying groups and forums, Just Fight On (an international self help and advice group), agreed to ask members if they wished to participate. A cover letter and introduction explaining the study and guaranteeing confidentiality, or an equivalent conversation in person or over the telephone outlining briefly the questionnaire and what was expected from any volunteers was the first communication with all participants. After the initial contact all participants were asked to complete the GE-LOPH(15) and Anchor Que instruments.

#### 3.2. Results

The individual gelotophobia scores ranged from 1.00 to 3.67 with a mean of 2.14 and a SD of 0.65. There were 68 (66.02%) with no fear and 25 (24.27%) and 10 (9.71%) with a slight and marked/extreme fear of being laughed at, respectively. There was no gender difference, and while age and gelotophobia tended to correlate negatively (r = -.15) this was far from being significant.

The relationship between gelotophobia and inclinations to different emotions was investigated first. Correlations between scores in the Geloph and the parameters (latency, intensity, duration, expression, and intensity during a typical week) of the three emotions were computed. The results are given in Table 2.

Table 2 shows that also for the English-speaking sample the gelotophobes have a typical pattern with respect to their most extreme feelings of shame, fear and happiness. Again, the actual intensity of the most

	Latency	Intensity	Duration	Expression	Intensitya
Fear	.04	.18#	.38***	.31**	.37***
Happiness	.28**	23*	36***	05	36***
Shame	06	.25*	.18#	.20*	.53***

Table 2. Gelotophobia and dispositions for emotions in the English sample

intense experience of shame ever experienced increased with levels of gelotophobia. Also, gelotophobes reported that it took them longer to overcome that intense feeling of shame. Furthermore, the most intense fear ever experienced tended to be higher for gelotophobes but, more importantly, it took longer for them to overcome fear. Finally, it took longer for the most extreme happiness ever felt to start. The happiness was not of high intensity, and it did not last long.

The feelings of gelotophobes during a typical week were characterized by more intense feelings of fear and shame, and less intense feelings of happiness. Gelotophobes did not report to be "agelotic." The coefficients were negative but not significant. Gelotophobes did report that when they felt shame and fear their voice and facial expressions did show it.

In order to take a closer look at the actual levels several  $3 \times 3$  AN-OVAs with repeated measures were computed with degree of gelotophobia (no fear, slight fear, pronounced fear) as classification variables and type of emotions (happiness, fear, shame) as repeated measures was performed for the scores on intensity, duration and typical intensity during a week. Subsequently, post hoc tests (Fisher's PLSD) were computed to examine the differences between the emotions for each of the three groups of gelotophobes separately.

As expected, the interaction between gelotophobia and emotion was significant for the most intense emotion experienced (F[4,198] = 2.49, p < .05), typical intensity during a week (F[4,200] = 19.38, p < .0001) and the time needed to overcome that intense emotion (F[4,200] = 6.05, p < .0001). The means are presented in Figure 2a to 2c.

Figure 2a shows that for the group with no fear the intensity of the most intense emotion experienced was significantly higher for happiness than for both shame and fear (p < .001). Shame was numerically lower than fear but not significantly so (p = .141). For the individuals with

N = 103 (individual correlations between 102 and 103)

<sup>&</sup>lt;sup>a</sup> Experienced during a typical week

<sup>#</sup>p < .05 (one-tailed); \*p < .05; \*\*p < .01; \*\*\*p < .001

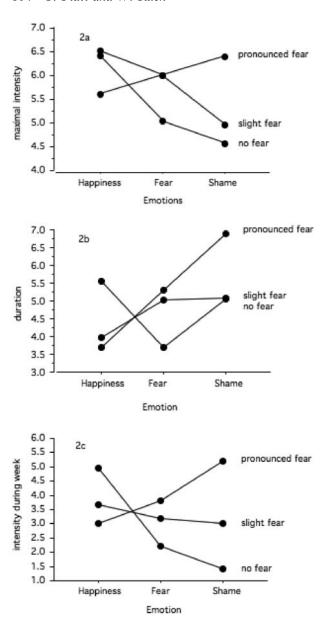


Figure 2. Happiness, fear and shame in relation to gelotophobia: Mean intensity (Figure 2a) and duration (Figure 2b) of the most extreme experience of the emotion and mean intensity during a typical week (Figure 2c) as a function of individuals location on a dimension for individuals with no, slight, and pronounced fear of being laughed at

slight fear of being laughed at both happiness (p < .001) and fear (p < .01) were experienced at significantly higher intensity levels than shame. The intensity of happiness and of fear did not differ, however. Finally, for the individuals with marked gelotophobia the picture was entirely different. While the differences were not significant, Figure 2a shows that there was a different rank order among the emotions: intensity of shame was highest, followed by intensity of fear, which in turn, was numerically higher than intensity of happiness.

There was a clear rank order regarding the typical intensity during a week for the non-gelotophobes. They experienced happiness more frequently than both fear and shame (p < .001), and shame was even less frequent than fear (p < .01). The same rank order could be found for the individuals with a slight fear of being laughed at; however, none of the differences were significant (p > .13). For the ones with pronounced gelotophobia, however, the emotions were clearly different in prevalence. Shame was typically more intense than happiness (p < .05). Shame was also numerically more prevalent than fear but this failed to be significant (p = .15).

For the non-gelotophobes fear was experienced more briefly than both happiness (p < .001) and shame (p < .01). They experienced happiness more frequently than both fear and shame (p < .001), and shame was even less frequent than fear (p < .01). For the individuals with a slight fear of being laughed at happiness seemed to be shorter than fear (p < .11) and shame (p < .10), but these differences failed to be significant. For the ones with pronounced gelotophobia, however, shame was typically lasting longer than happiness (p < .01). Fear tended to be longer than happiness (p = .08) but shorter than shame (p < .08). However, these differences did not meet the critical difference for the 5% level of significance (two-tailed).

The relative propensity to shame vs. happiness was examined next. As in study I, the difference score was computed for the inclination to shame rather than happiness by subtracting the maximal intensity for happiness from the maximal intensity score for shame. This yielded 16 different groups with scores ranging from -8 to +7. A score of "0" was most frequent (n = 18), and some scores ("4", "5", "6") were represented only by one person. Due to the smaller sample size in the English sample three groups were formed. Those with a higher intensity of happiness than shame (scores -8 to -2; n = 48), those with intensity of shame and happiness being about equal (scores: -1 to +1; n = 40), and those with

higher intensities in shame (scores +2 to +7; n=14). The ANOVA yielded a significant main effect, F(2,99)=4.35, p=.0155. Fisher's PLSD showed that the group with a higher inclination to shame (than for happiness) had a significantly (p<.05) higher level of gelotophobia (M=2.54, SD=0.56) than both the indifferent (M=2.20; SD=0.63) and the happiness-prone group (M=1.99, SD=0.66), which did not differ from each other (p=.12). Again, among individuals where shame exceeded happiness by more than 1 point the mean gelotophobia scores indicated the presence of at least a slight fear of being laughed at. Among these 21.43% and 28.57% had slight and marked fear of being laughed at, respectively.

#### 3.3. Discussion

The functions of the second study were to replicate the findings of study I in a different cultural setting and to obtain a substantial amount of higher scoring gelotophobes to ensure a comprehensive range from those with no fear, to pronounced fear of being laughed at. The second study confirmed the characteristic interplay between happiness, fear and shame and gelotophobes.

Again, the non-gelotophobes emotional intensity of happiness was significantly higher than the intensity they felt for either shame or fear. Their experiences of happiness during a typical week both started quicker and lasted longer than it did for the gelotophobes. Those with gelotophobia appear to be slower at experiencing feelings of happiness and this is exacerbated because this feeling, once experienced, does not last as long. Once gelotophobic characteristics are present, in the slight gelotophobic range, the intensity of fear increases but not shame.

The more pronounced the gelotophobia the more dominant the emotion shame becomes, ranking above fear and happiness in intensity and how often it would be experienced during the course of a typical week. Thus, overall study II replicated most of the findings of study I. Nevertheless, the results regarding the expressivity of gelotophobes were not consistent between studies. In the first sample, the stronger the fear of being laughed at the less the display of happiness, yet study II showed that gelotophobes display more shame and fear. This might in part be cultural differences or differences between the two samples regarding the relative number of gelotophobes.

#### 4. General discussion

The two studies show a remarkable convergence. Gelotophobes are not predisposed to experience happiness or intense happiness. The most extreme level of happiness ever experienced was lower than that of the individuals without fear of being laughed at. This episode of high happiness also took longer to start and it passed more quickly. Conversely, gelotophobes are predisposed to shame and fear. They reported that they had experienced higher levels of shame and fear, and those episodes also tended to last longer. Neither fear nor shame had a shorter latency.

During a typical week they experience higher levels of shame and fear, and lower levels of positive affect. And, in the English sample they report that they express the feelings of shame and fear facially and vocally.

The "agelotic" face did yield some support in one sample, but not in the other. A negative correlation between gelotophobia and facial expressions of happiness would not be surprising. Given the low inclination of gelotophobes to experience happiness it is not surprising that they also don't express happiness very much. However, this is not a matter of a reduced expressivity but of a general lower tendency to happiness. The crucial question is, of course, whether gelotophobia leads to a lower level of happiness, or whether a lower level of happiness facilitates the development of the fear of being laughed at. Regarding longer levels of well-being Proyer et al. (forthcoming) found gelotophobes to be lower in satisfaction with life, a more cognitive appraisal of longer lasting happiness.

The findings reported in the present study provide a first valuable insight into the emotions of gelotophobes. However, these need to be substantiated by behavioral and physiological data elicited under controlled conditions. In fact, the parameters of latency until onset, onset, apex, and offset of the relevant emotions may be measured and related to the gelotophobia scores. Furthermore, it will be of interest to study different facets of positive emotions, like contentment, joy, and satisfaction and examine the gelotophobes stance towards them. Also, it might be interesting to look at the different variations of the response, including smiling, laughter, and other facets. Likewise it might be interesting to look at shame in relation to embarrassment and shyness. Are gelotophobes equally inclined to all three?

The Anchor Que did not specify the time when the shame-related offence occurred; also it did not ask for its nature. However, research participants provided information of how the personally experienced strongest shame event was compared to the most intense shame event possible. Indeed, high scorers in gelotophobia (in a sample of normal adults) reported having experienced higher shame than the low scorers. These data are, of course, compatible with the view that traumatic shame events actually *induce* gelotophobia. However, the data presented do not allow for a causal interpretation. It might be that high gelotophobes simple remember shame related events better or magnify their intensity in retrospect. However, it is only *shame* that provides this correlation with intensity of affect; none of the other negative emotion categories yielded a similar correlation. Also, the intensity of shame correlated with the items relating to the putative causes of gelotophobia, validating this interpretation.

Gelotophobia is related to the three emotions of fear, shame, and happiness (be they causes or consequences). That a low disposition for happiness might facilitate the development of gelotophobia is equally as plausible as the postulate that "dissociated" children, which are prone to gelotophobia, will be impaired in their development of happiness and amusement. Maybe those that have a low inclination to joy will be less likely to find laughter contagious. They will not mirror the emotional state of the person laughing and will also value the occasion for the laughter less. Thus, all the information necessary for the salient interpretation (i.e., "this is play") is not there, and hence such individuals will need to look for alternative interpretation for the motivation of the laughs. At the very least, they might feel excluded by the laugh, or see it directed at them. Putting the inclination to shame and the low tendency for joy together one can see that in ambiguous situations gelotophobes will misinterpret laughter. The present study does not distinguish among these alternative interpretations.

How would a gelotophobic judgment emerge in a laughter situation? There is a high latency regarding happiness and amusement; it takes long for positive emotions to evolve. This allows for searching of other interpretations, which is facilitated by the past experience of shame. Shame then lasts longer and is painful. Hence it is likely that gelotophobes will avoid being hit again and affected by longer lasting experiences of shame. They will avoid situations of laughter, as these led to such experiences. They might fear such situations, fear that such episodes happen again and such fear typically is of longer duration too. Not surprisingly, typical emotions during a week are filled with fear, shame and sadness.

It was suggested that shame inhibits happiness, as both Scheff (2003) and Tomkins (1963) predicted. It seems that shame does have a regulatory affect on the pleasure emotion, happiness. While these authors refer to actual emotions, this principle can be expanded to individual differences. People whose habitual inclination to shame is stronger than their inclination to joy might be the ones whose joy is more often overruled by shame. This is exactly what was found in the two samples. This phenomenon seems to be a reliable indication that the people who experience a fear of being laughed at typically experience shame more than happiness. The findings of Ruch and Proyer (2008a) confirm that patients with shame-based pathologies generally score higher in Gelotophobia than those with no shame-based neurosis.

However, overall, gelotophobia can, at least in part, be understood by this triad of emotions. The findings of the present study are quite consistent across two countries. However, it might be worthwhile to verify these tendencies in other domains as well (e.g., facial, behavioral, and psychophysiological).

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