

The fear of being laughed at, social anxiety, and memories of being teased during childhood

Kim R. Edwards¹, Rod A. Martin² & David J. A. Dozois²

Abstract

Using a sample of 207 undergraduate students, we investigated: (1) relations between gelotophobia and memories of being the target of teasing during childhood and adolescence; and (2) associations between gelotophobia and social and specific fears and anxieties. Regression analyses revealed that higher gelotophobia scores were associated with a greater history of being teased about social behavior and academic excellence, but not about family background, appearance, or performance. Overall, gelotophobia was related to distress but not frequency of childhood teasing. Additional regression analyses revealed that gelotophobia was strongly related to three measures of social anxiety, but not to specific fears relating to death/illness/injury, animals, or situations. However, significant associations between gelotophobia and a history of being teased remained even after controlling for social anxiety. These results support Titze's (2009) view of gelotophobia as a syndrome that is related to, but distinct from, social phobia, which develops in part from repeated experiences of being the target of teasing and ridicule relating particularly to anxiety-based social skills deficits and interpersonal awkwardness.

Key words: gelotophobia, social skills, social phobia, anxiety, teasing

¹ Correspondence concerning this article should be addressed to: Kim Edwards, PhD, University of Western Ontario, Department of Psychology, Westminster Hall, London, Ontario, Canada N6A 3K7; email: kEdward7@uwo.ca

² University of Western Ontario, Canada

Based on clinical case observations, Titze (2009) formulated the concept of gelotophobia, or the pathological fear of being laughed at. Because of their profound sense of shame and fear of being ridiculed by others, individuals with gelotophobia are said to be characterized by high levels of anxiety, tend to be socially withdrawn, and are highly sensitive to perceived slights from others.

According to Titze, the roots of gelotophobia can be traced to the development in early childhood of a core identity marked by a profound sense of shame or defectiveness. This shame-based self-concept develops as a result of being exposed to a punitive and critical parenting style involving little display of affection and the use of shame and ridicule as a method of discipline. As a consequence, the child develops low self-esteem, becomes socially inhibited and anxious, and fails to develop appropriate social competencies, instead developing an awkward, rigid, and unconventional style of social interaction. Because of these anxiety-based social skills deficits, such individuals are perceived by their peers to be unusual and odd, and they tend to be subjected to repeated experiences of malicious teasing, ridicule, and bullying throughout childhood and adolescence. These traumatic teasing experiences further intensify the feelings of shame, sense of self as an object of ridicule, and tendency to become increasingly socially anxious, inhibited, and withdrawn. Laughter, because of its association with ridicule and derision, becomes an aversive stimulus for these individuals, and they tend to take on an “agelotic” (i.e., humorless), serious, and cold demeanor.

Titze (2009) noted that gelotophobia is closely related to social phobia as defined in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association, 2000). Both gelotophobia and social phobia share a preoccupation with fear of negative evaluation, humiliation, and embarrassment; a tendency to avoid social situations; and anxiety-related symptoms of physiological arousal. However, Titze argued that gelotophobia may be distinguished from social phobia by the fact that, in gelotophobia, the primary focus is on one’s self-identity and the shameful conviction that one’s self is fundamentally damaged and therefore ridiculous, whereas in social phobia the primary focus is on specific embarrassing failures and lapses in social situations which result in humiliation and self-reproach. Moreover, individuals with gelotophobia are more particularly characterized by a heightened sensitivity to laughter, a misperception of even innocent laughter as a weapon of derision, and the belief that one is a ridiculous object that others laugh at for good reason.

Ruch and Proyer (2008a) developed the GELOPH<15>, a 15-item self-report questionnaire to assess the core characteristics of gelotophobia. These researchers conceptualized the trait measured by this scale as a dimension that varies across the general population, with individuals with no fear of being laughed at falling at the low end, and those with a pathological level of symptoms at the high end. Ruch and Proyer showed that scores on this measure were significantly higher in a group of psychotherapy patients who were clinically diagnosed as having gelotophobia, as compared to those of a group identified as having shame-based depressive disorders but without gelotophobia. Scores for the latter group in turn were significantly higher than those of a clinical group with non-shame-based depression, which did not differ from those of a nonpsychiatric control group.

The present study had two main objectives: (1) to investigate the hypothesis that gelotophobia originates in experiences of childhood teasing; and (2) to examine the relationship between gelotophobia and social phobia and anxiety.

With regard to the first objective, although clinical case studies suggest that childhood experiences of teasing and ridicule are an important element in the development of gelotophobia (Titze, 2009), little previous empirical research has investigated this key assumption. Proyer, Hempelmann, and Ruch (2009) asked participants to rate the frequency and intensity of their experiences of being laughed at over the previous year. The results revealed that the intensity, rather than the frequency, of reported experiences of being laughed at distinguished individuals with gelotophobia from other groups. However, given that its focus was on experiences of being laughed at during the preceding year, this study does not provide information about whether individuals high in gelotophobia are also more likely to report experiences of being teased and laughed at during childhood and adolescence.

A more recent study reported elsewhere in the present issue is more relevant to the present one. In an investigation of the putative causes of gelotophobia, Ruch, Proyer, and Ventis (this issue) presented nonpsychiatric participants with four items asking them to rate the degree to which they experienced childhood teasing, ridicule, and sarcastic comments from peers, teachers, and parents, and the degree to which they avoided peers in order to avoid being teased. Ruch et al. found sizable correlations between gelotophobia scores and ratings on each of these items in a non-clinical sample and a sample of psychotherapy patients with non-shame-based disorders. However, these correlations were non-significant in clinical samples of patients with shame-based disorders and patients diagnosed with gelotophobia. In addition, although patients with shame-based disorders and those with gelotophobia obtained higher mean scores on these items than did the non-patients and patients with non-shame-based disorders, these ratings did not distinguish between the shame-based and gelotophobic patients. The authors concluded that their results provide only partial support for the hypothesized causes of gelotophobia, and suggested that further research is needed to examine a broader range of childhood teasing experiences.

Accordingly, in the present study we made use of a measure of childhood teasing in which participants are asked to report the frequency and distress of recalled teasing experiences during childhood on a list of 35 potential reasons for being teased (Storch et al., 2004). Factor analyses by Storch et al. have found that these teasing items can be categorized into five domains: performance (e.g., not being good at sports), academics (e.g., being “nerdy” or the teacher’s pet), social behavior (e.g., being shy around other kids), family background (e.g., having a funny name), and appearance (e.g., being overweight).

One of the goals of this study was to determine whether gelotophobia scores are more strongly correlated with teasing in some domains than in others. In particular, based on the etiological theory outlined above, one would predict that gelotophobia should be particularly associated with recollections of being teased in the social behavior domain, which has to do with social awkwardness, stuttering, shyness, nervousness, and so on. In

contrast, teasing about performance, academics, family background, and appearance would seem to be less relevant to the development of gelotophobia and should therefore be less strongly correlated. In addition, we compared correlations between gelotophobia and both the distress and frequency of overall recalled teasing, to determine whether these recollections of childhood teasing would replicate the finding of Proyer et al (2009) that gelotophobia was more strongly related to the intensity than to the frequency of teasing experienced over the preceding year.

Our second main objective was to examine the relationship between gelotophobia and social anxiety and phobias. As noted previously, Titze (2009) acknowledged some overlap between these conditions, but also claimed that they are distinct. Very little previous research has investigated the similarities and differences between gelotophobia and social anxiety, phobias, and anxiety disorders generally. Forabosco, Ruch, and Nucera (2009) examined differences in mean gelotophobia scores in groups of psychiatric patients diagnosed with anxiety disorders, mood disorders, eating disorders, personality disorders, and schizophrenia, as well as a group of non-patients. The patients with schizophrenia and those with personality disorders scored significantly higher than did the other patient groups and the non-patients. Somewhat surprisingly, there were no significant differences between the patients with anxiety disorders and the non-patient group. However, in addition to social anxieties, the anxiety disorders included such conditions as obsessive-compulsive disorder, panic disorder, and post-traumatic stress disorder, which are theoretically less likely to be related to gelotophobia. The sample of individuals with social phobia was too small to compare this group separately.

In the present study, we employed three measures assessing different aspects of social anxiety. These included measures of: the fear of negative evaluation (addressing cognitive aspects); fear and avoidance of social interaction and performance situations (emotional and behavioral aspects); and specific fears (including both social and nonsocial fears). Because our participants were university students, our focus was on the normal range of anxieties and fears, rather than clinically diagnosable phobias. Based on the preceding discussion of the assumed overlap between gelotophobia and social phobia, we expected that scores on the GELOPH<15> would be quite strongly correlated with the fear of negative evaluation and with social anxiety and phobias, but less strongly related to other specific phobias such as fears of situations and activities (e.g., thunderstorms, flying in an airplane) or fears of death, illness, injury, or animals (e.g., spiders, snakes). In addition, in view of the assumption that a history of being the target of teasing and ridicule is particularly relevant to the development of gelotophobia, we expected that recollections of childhood teasing, particularly in the social domain, would predict gelotophobia scores even after controlling for scores on the social anxiety and fear of negative evaluation measures. Such a finding would support the distinctness of gelotophobia relative to social anxieties more generally.

Method

Participants

The sample was comprised of 207 first-year undergraduate students (74 males, 133 females) enrolled in an introductory psychology course at the University of Western Ontario. Participants were recruited through the department research participant pool and were compensated with partial course credit. The mean age of participants was 18.7 years ($SD = 2.86$). With regard to ethnicity, 67.6 % identified themselves as being of European origin, 8.2 % Asian, 4.8 % Latin American, 2.9 % African/Caribbean, 1.0 % South Asian, 1.0 % Native Canadian, and 14.5 % other. Seventy-nine percent of participants were born in Canada and 86.5 % indicated that English was their first language.

Measures

Demographics: A brief demographic questionnaire was administered to provide general information about participants' age, gender, ethnicity, country of birth, and first language spoken.

GELOPH<15> (Ruch & Proyer, 2008a), the standard instrument used to assess gelotophobia, consists of 15 items reflecting the experiential world of individuals with gelotophobia. In this study we employed the English version of this measure (with some minor wording changes to improve comprehensibility) published by Platt, Proyer, and Ruch (2009). The items, all positively keyed, are aimed at tapping into a person's typical or usual behavior patterns. A sample item is "It takes me very long to recover from being laughed at." Participants are asked to rate the degree to which they agree with each statement on a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). High scores indicate a stronger fear of being laughed at. *GELOPH<15>* has been translated into over 40 different languages (Proyer, Ruch et al., 2009) and past research has found the scale to be a valid and reliable unidimensional instrument for the assessment of gelotophobia (see Ruch, 2009; Ruch & Proyer, 2008b). The internal consistency (Cronbach's alpha) for the *GELOPH<15>* in the present sample was .87.

Teasing Questionnaire – Revised (TQ-R; Storch et al., 2004) is comprised of 35 statements and is intended to assess memories of being the target of childhood teasing. A sample item is "I was teased because I didn't do well in school." Participants are asked to rate each statement on two scales: the degree to which they were teased about each topic (Frequency) and how distressed they felt about being teased (Distress) using 5-point Likert-type scales ranging from 0 (*I was never teased about this*) to 4 (*I was always teased about this*) for frequency, and 0 (*I did not feel upset about this at all*) to 4 (*I felt extremely upset about this*) for distress. Total teasing frequency and distress scores were computed separately by summing the ratings across all 35 items.

Individual scores were also computed for five factors that have been found in previous research with the TQ-R, assessing unique domains of teasing (Storch et al., 2004; Straw-

ser, Storch, & Roberti, 2005). These domains include: performance (3 items; e.g., "I was teased because I was not good at sports"), academic excellence (6 items; e.g., "I was teased because I excelled at school"), social behavior (8 items; e.g., "I was teased because I often looked nervous"), family background (3 items; e.g., "I was teased for having a funny name"), and appearance (14 items; e.g., "I was teased about my weight"). Mean item scores (combining the frequency and distress ratings) were computed for each of the five factors. Previous studies have found that the TQ-R has good psychometric properties. In the current sample, internal consistency of the five factors revealed alpha coefficients as follows: academic excellence (.89), social behavior (.84), appearance (.83), performance (.70), and family background (.69).

Brief Fear of Negative Evaluation Scale (FNEB; Leary, 1983) is a commonly used 12-item measure, based on Watson and Friend's (1969) 30-item Fear of Negative Evaluation scale, to assess the degree to which people are concerned with the possibility of being evaluated unfavorably by others, an important component of social anxiety. Higher scores indicate a greater social-evaluative anxiety. Participants are asked to rate the degree to which each statement describes them on a 5-point Likert-type scale ranging from 1 (*not at all characteristic of me*) to 5 (*extremely characteristic of me*). A sample item is, "I worry about what kind of impression I am making on someone." Previous research demonstrates that the FNEB exhibits good psychometric properties (Collins, Westra, Dozois, & Stewart, 2005; Leary, 1983). The FNEB demonstrated high internal consistency in the current study, $\alpha = .95$.

Liebowitz Social Anxiety Scale (LSAS; Liebowitz, 1987) is a 24-item questionnaire designed to assess a variety of social interaction and performance situations that people with social phobia may fear and/or avoid. Participants are asked, based on their actual experience of the past week, to give each item one score for fear and one score for avoidance on 4-point Likert-type scales ranging from 0 (*None*) to 3 (*severe*) for fear, and 0 (*Never 0 %*) to 3 (*Usually, 67-100 %*) for avoidance. Eleven statements pertain to social interaction and 13 items concern performance situations. Sample items include "Eating in public places" and "Talking to people in authority." In the current study a total social anxiety score was obtained by summing the scores for both fear and avoidance. Previous research indicated that the LSAS had strong internal consistency as well as convergent and discriminant validity (Heimberg et al., 1999). In the current study, internal consistency was $\alpha = .94$.

Fear Survey Schedule-II (FSS-II; Geer, 1965) is designed to assess the degree to which individuals experience fear in response to common phobic objects and situations. This instrument consists of a list of 51 potentially fear-evoking stimuli and situations, including such items as: hypodermic needles, snakes, speaking before a group, and driving a car. Participants are instructed to rate the intensity of their discomfort or distress on a 7-point Likert-type scale ranging from 0 (*None*) to 6 (*Terror*). Numerous factor analytic studies have been conducted on the FSS-II with somewhat different patterns of results, and no standardized set of subscales has been established (Antony, Orsillo, & Roemer, 2001). We therefore conducted a factor analysis on these items using Varimax rotation, and found three factors based on the scree plot: (1) social fears (14 items; e.g., looking foolish; meeting someone for the first time); (2) death, illness, injury, and animals (22

items; e.g., blood; cemeteries; spiders); and (3) situations/activities (15 items; e.g., being a passenger in an airplane; heights; crowded places). The three factors together accounted for 35.9 percent of the total variance, and had eigenvalues of 12.4, 3.5, and 2.5, respectively. Factor loadings of items on their respective factors ranged from .25 to .78. These factors are generally consistent with those found in several previous factor analyses of this measure (e.g., Landy & Gaupp, 1971). Mean item scores were computed for each of the three factors. Internal consistency analyses of the three factors revealed alpha coefficients as follows: social fears (.90), death/illness/injury/animals (.88), and situations/activities (.80).

Procedure

Participants were tested in groups of 10 to 20. After signing an informed consent form, they completed a package of self-report questionnaires in randomized order. After completing the measures, they were given a debriefing sheet describing the purpose of the study. Any remaining questions they may have had were answered at this time. The study took less than one hour to complete.

Results

Table 1 presents the means, standard deviations, and skewness of all the measures used in this study, as well as the simple correlations between the GELOPH<15> and the remaining measures. With regard to our first objective, the results shown in Table 1 reveal that scores on the gelotophobia measure were significantly correlated with both the frequency and distress scores on the teasing questionnaire, as well as four of the five domains of teasing (all $p < .05$). The one exception was teasing in the family background domain. Because the five teasing domains tended to be significantly correlated with each other (mean $r = .32$, range = .04 to .44), we explored these associations further by conducting a stepwise regression analysis, predicting gelotophobia scores from scores on the five teasing domains. This approach examines the association between gelotophobia and each teasing domain while controlling for the remaining domains. This analysis revealed that the five teasing scores together were strongly predictive of gelotophobia scores, $R = .51$, Adj $R^2 = .24$, $F(5, 201) = 13.97$, $p < .05$. The regression weights for individual domains, which are presented in Table 2, show that, as predicted, childhood teasing in the domain of social behavior remained a significant predictor of gelotophobia after controlling for the other four teasing domains. Unexpectedly, teasing in the academic excellence domain also remained a significant predictor. As expected, childhood teasing with regard to appearance, performance, and family background were no longer significantly associated with gelotophobia after controlling for each of the remaining domains.

To determine whether gelotophobia is more strongly associated with the distress of childhood teasing than with the frequency, we conducted partial correlations between

Table 1:

Pearson Product-Moment Correlations between GELOPH<15> and FNEB, LSAS, TQ-R, and FSS-II, with Means, Standard Deviations, and Skewness

| Measure: | M | SD | Skewness | Corr. with GELOPH<15> |
|--------------------------------|-------|-------|----------|--------------------------|
| GELOPH<15> | 1.92 | 0.53 | 0.44 | |
| TQ-R - Frequency | 21.99 | 12.70 | 0.67 | .37 * |
| TQ-R - Distress | 17.58 | 13.99 | 1.01 | .44 * |
| TQ-R - Academic Excellence | 0.70 | 0.66 | 0.98 | .30 * |
| TQ-R - Social Behavior | 0.43 | 0.52 | 1.66 | .45 * |
| TQ-R - Appearance | 0.66 | 0.52 | 1.18 | .28 * |
| TQ-R - Performance | 0.64 | 0.59 | 0.95 | .30 * |
| TQ-R - Family Background | 0.47 | 0.56 | 1.33 | .11 |
| FNEB | 33.97 | 11.60 | 0.22 | .70 * |
| LSAS | 42.51 | 21.40 | 0.29 | .67 * |
| FSS-II - Social | 2.07 | 0.95 | 0.33 | .64 * |
| FSS-II - Death/Injury/Animals | 2.31 | 0.89 | 0.28 | .27 * |
| FSS-II - Situations/Activities | 1.38 | 0.73 | 0.51 | .37 * |

* $p < .05$ ($N = 207$)

Note: TQ-R = Teasing Questionnaire – Revised; FNEB = Brief Fear of Negative Evaluation Scale; LSAS = Liebowitz Social Anxiety Scale; FSS-II = Fear Survey Schedule-II

Table 2:

Step-wise multiple regression analysis predicting gelotophobia (GELOPH<15>) from five teasing domains (TQ-R)

| Predictor Variable | β | t | p |
|--------------------------|---------|-------|-------|
| TQ-R Academic Excellence | .20 | 2.79 | .006 |
| TQ-R Social Behavior | .39 | 5.59 | .0001 |
| TQ-R Appearance | .04 | 0.57 | ns |
| TQ-R Performance | .06 | 0.80 | ns |
| TQ-R Family Background | -.06 | -0.91 | ns |

Note: TQ-R = Teasing Questionnaire – Revised

gelotophobia and each of these two scores, controlling for the other one. In support of our prediction, the partial correlation between gelotophobia and teasing distress, controlling for frequency, was significant (partial $r = .27$, $p < .05$), whereas the partial correlation between gelotophobia and teasing frequency, controlling for distress, was nonsignificant (partial $r = .06$, ns).

With regard to the second main objective of this study, the results shown in Table 1 reveal that scores on the GELOPH<15> were significantly correlated with scores on the FNEB, the LSAS, and all three factors of the FSS-II. Because these social anxiety and fear measures tended to be significantly correlated with each other (mean $r = .52$, range = .27 to .68), we explored these associations further by conducting a stepwise regression analysis, predicting gelotophobia scores from scores on the FNEB, the LSAS, and all three factors of the FSS-II. This analysis revealed that these anxiety and fear measures together were strongly predictive of gelotophobia, $R = .78$, Adj $R^2 = .60$, $F(5, 201) = 63.44$, $p < .05$. As predicted, scores on the three measures pertaining to social anxiety (i.e., FNEB, LSAS, and FSS-II-Social) continued to be significantly associated with gelotophobia (see Table 3), whereas the measures of non-social fears (i.e., FSS-II-Death/Illness/Injury/Animals; and FSS-II-Situations/Activities) were no longer significant.

Table 3:

Step-wise multiple regression analysis predicting gelotophobia (GELOPH<15>) from scores on FNEB, LSAS, and three FSS-II factors

| Predictor Variable | β | t | p |
|--------------------------------|---------|-------|-----------|
| FNEB | .41 | 6.82 | .0001 |
| LSAS | .34 | 5.19 | .0001 |
| FSS-II - Social | .21 | 2.89 | .004 |
| FSS-II - Death/Injury/Animals | -.09 | -1.42 | <i>ns</i> |
| FSS-II - Situations/Activities | -.02 | -0.35 | <i>ns</i> |

Note: FNEB = Brief Fear of Negative Evaluation Scale; LSAS = Liebowitz Social Anxiety Scale; FSS-II = Fear Survey Schedule-II

To test our prediction that childhood teasing would be related to gelotophobia even after controlling for social anxiety and other fears, we computed partial correlations between GELOPH<15> scores and the five teasing domains on the TQ-R, controlling for scores on the FNEB, LSAS, and the three factors of the FSS-II. The results of these analyses, which are presented in Table 4, revealed that, as predicted, gelotophobia is significantly related to recollections of childhood teasing in the social behavior domain even after controlling for other anxieties and fears (partial $r = .18$, $p < .05$). The partial correlation between gelotophobia and teasing in the academic excellence domain was also significant (partial $r = .15$, $p < .05$). As expected, partial correlations between gelotophobia and teasing in the domains of appearance, performance, and family background were nonsignificant.

Table 4:

Partial correlations between GELOPH<15> and five TQ-R domains controlling for scores on FNEB, LSAS, and FSS-Social

| | Partial r |
|--------------------------|-----------|
| TQ-R Academic Excellence | .15 * |
| TQ-R Social Behavior | .18 * |
| TQ-R Appearance | .06 |
| TQ-R Performance | .03 |
| TQ-R Family Background | -.06 |

* p < .05

Note: FNEB = Brief Fear of Negative Evaluation Scale; LSAS = Liebowitz Social Anxiety Scale; TQ-R = Teasing Questionnaire – Revised; FSS-II = Fear Survey Schedule-II

Discussion

This study had two main objectives. The first of these was to explore the hypothesized link between gelotophobia and childhood experiences of being teased. According to Titze's (2009) theoretical model based on clinical case studies, gelotophobia results in part from repeated experiences of being maliciously teased and ridiculed during childhood and adolescence because of poor social skills and awkward, odd, and rigid social behavior patterns. This pattern of social behavior in turn was seen as being a consequence of earlier experiences of parental shame-based criticism and ridicule, resulting in the development of a profound sense of shame or defectiveness. Based on this etiological model, we expected that individuals who are higher on gelotophobia would particularly recall more frequent and distressing experiences of being teased about anxiety-based deficits in social skills and awkward social behavior.

In support of this prediction, in our multiple regression analysis we found that gelotophobia was significantly associated with scores on the social behavior domain of the TQ-R. This domain includes recollections of being teased because of looking nervous (blushing, having shaky hands, etc.), not being very good at initiating and maintaining conversations with others, being shy around other children, crying easily or acting like a baby, and speech problems such as stuttering. These items seem to reflect particularly the types of unconventional interpersonal behaviors described by Titze. It is easy to see how a vicious cycle could develop, in which being teased and ridiculed because of these sorts of anxiety-based interpersonal difficulties further intensifies feelings of anxiety and inhibition, leading to even greater interpersonal awkwardness and more teasing.

As expected, our regression analysis showed that gelotophobia is not related to a history of being teased about one's appearance (e.g., being overweight, wearing glasses, hair color), family background (e.g., skin color, ethnic or cultural differences, name), or poor performance (e.g., not being good at sports or music). The fact that gelotophobia is re-

lated to being the target of teasing in some domains and not others further supports Titze's theory that it has to do particularly with experiencing ridicule related to shame- and anxiety-based unconventional interpersonal behavior rather than simply being laughed at for a variety of reasons.

An unexpected finding, however, was that gelotophobia was also related to a history of being teased in the domain of academic excellence (e.g., excelling in school, being "nerdy," being the "teacher's pet," caring more about schoolwork than sports or other activities). It is difficult to know how to explain this finding. Perhaps individuals with a vulnerability to gelotophobia, due to faulty early parenting, tend to compensate by seeking to excel academically in a way that alienates them from their peers and results in excessive teasing. It must be noted that the present sample consisted of university students who, as a group, likely tended to be high achievers academically throughout their school years. Thus, it may be that individuals with high scores on gelotophobia are teased by peers during earlier school years not merely because of their academic achievement orientation, but because of the way this is presented to peers. For example, they may tend to be particularly serious and socially isolated in their pursuit of academic success. Further research is needed with other populations to determine whether this finding is generalizable beyond university students.

Another possible explanation for the association between being teased about academic excellence and the development of gelotophobia pertains to the idea that one's sense of achievement, like the interpersonal realm, is important to self-definition. Freud, for example, is credited with stating that "love and work are the cornerstones of our humanity". Beck (1995) contended that maladaptive core beliefs that make individuals vulnerable to depression and anxiety disorders typically fall into the two domains of achievement (e.g., helplessness/incompetence) and interpersonal (e.g., unlovability). Moreover, research has demonstrated that failures in the achievement domain also tend to be interpreted as having interpersonal ramifications (e.g., Frewen & Dozois, 2006). Thus, teasing related to academic achievement, like teasing about social behavior, might impinge on the shame-based core identity of individuals who are vulnerable to developing gelotophobia.

Consistent with Proyer et al (2009), who found that gelotophobia was more strongly related to the reported intensity than to the frequency of being laughed at over the preceding year, our results showed that a significant correlation between gelotophobia and the distress associated with childhood teasing remained even after controlling for teasing frequency, whereas the correlation between gelotophobia and teasing frequency became nonsignificant after controlling for distress. Thus, individuals with gelotophobia seem to be distinguished from others not so much by the frequency with which they recall being teased by peers during childhood, but by the distress associated with such teasing, perhaps due to a greater intensity or maliciousness of the teasing.

The second major objective of this study was to explore the relationship between gelotophobia and other types of fears and anxieties. At a clinical level, gelotophobia seems quite similar to social phobia, one of the anxiety disorders identified in the DSM-IV-TR (American Psychiatric Association, 2000). As described in DSM-IV-TR, social phobia is

characterized by a “marked and persistent fear of social or performance situations in which embarrassment may occur” (p. 456). Social phobia may be specific to particular situations in which the individual fears embarrassment (e.g., public speaking, eating in restaurants, attending parties), or it may be generalized to most social and performance situations. Given that it involves a wide range of situations, gelotophobia seems most related to the generalized type of social phobia. A question arises as to whether gelotophobia is a unique syndrome or whether it is merely a characteristic or symptom that commonly occurs in individuals with generalized social phobia. Indeed, some of the items on the GELOPH<15> appear to be ones that would be endorsed by individuals with social phobia generally (e.g., “If I did not fear making a fool of myself I would speak much more in public”). As noted previously, Titze (2009) acknowledged an overlap between the two, but argued that gelotophobia should be considered a distinct syndrome.

An alternative possibility would be to view gelotophobia as a type of specific phobia, which is described in the DSM-IV-TR as “marked and persistent fear of clearly discernible, circumscribed objects or situations” (p. 443). These can involve a wide range of stimuli such as particular animals (e.g., snakes), objects in the natural environment (e.g., storms), situations (e.g., elevators), blood, injury, and so on. If gelotophobia is viewed as a persistent fear of laughter, this could perhaps be considered a type of specific phobia.

To explore these questions, we examined the correlations between gelotophobia and scores on several measures relating to dimensions of social phobia (including cognitive, emotional, and behavioral aspects) and specific phobias (although, given that we studied a nonclinical sample, it is more appropriate to refer to these as fears and anxieties rather than phobias). As expected, gelotophobia was highly correlated with the measures of social fears and anxiety (the FNEB, LSAS, FSS-II-Social), with simple correlations in the .60 to .70 range. Simple correlations with specific fears (FSS-II-Death/Injury/Animals and FSS-II-Situations/ Activities) were in the moderate range (.27 and .37). Our multiple regression analysis revealed that, when the other fear and anxiety measures are controlled statistically, the social anxiety measures continue to contribute strongly to the prediction of gelotophobia, whereas the specific fear measures are no longer significant predictors. These results support the view that gelotophobia is closely related to social anxiety (and, at the clinical level, to social phobia), but not to specific fears (or phobias).

To begin to address the question of whether gelotophobia is unique from social anxiety in general, we examined whether it is significantly associated with childhood experiences of teasing even after controlling for other types of fears and anxieties. This was based on Titze’s view that a history of repeated experiences of teasing and ridicule is particularly relevant to gelotophobia, more so than social phobia in general. Our partial correlations revealed that, as predicted, gelotophobia continued to be significantly (although weakly) correlated with childhood teasing in the domains of social behavior and academic excellence, even after controlling for the other measures of social and specific fears and anxiety. These findings provide support for the view that, although gelotophobia is closely related to social anxiety generally, it does seem to have some unique characteristics that distinguish it from other anxieties. At a clinical level, perhaps it is best viewed as a specific subtype of social phobia. Further research is needed to explore this question in

greater detail, examining for example the degree to which gelotophobia is uniquely associated with particular etiological factors and responsive to particular treatment approaches.

An important limitation of this study is the fact that it was conducted with a nonclinical sample of university students. Further research using patient samples is needed to determine whether these findings may be generalized to clinically significant levels of gelotophobia, or whether they are limited to the variations in this trait within the normal range. In particular, a stringent test of Titze's model would be to determine whether patients diagnosed with gelotophobia differ from those diagnosed with other shame-based disorders but without gelotophobia (cf. Ruch et al., this issue). Another limitation of this study is that the assessment of childhood teasing was necessarily retrospective in nature and may have been prone to memory biases. For instance, it is possible that individuals with a fear of being laughed at recall greater experiences of mood-congruent childhood memories because of availability or accessibility heuristic biases. Notwithstanding these limitations, the findings do help to elucidate the relationships among gelotophobia, childhood teasing, and social anxiety.

References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual (4th Edition Text Revised)*. Washington: Author.
- Antony, M. M., Orsillo, S. M., & Roemer, L. (2001). *Practitioner's guide to empirically based measures of anxiety*. New York: Kluwer Academic/Plenum Publishers.
- Beck, J. S. (1995). *Cognitive therapy: Basics and beyond*. New York: Guilford.
- Collins, K. A., Westra, H. A., Dozois, D. J. A., & Stewart, S. H. (2005). The validity of the brief version of the Fear of Negative Evaluation Scale. *Journal of Anxiety Disorders*, 19(3), 345-359.
- Forabosco, G., Ruch, W., & Nucera, P. (2009). The fear of being laughed at among psychiatric patients. *Humor: International Journal of Humor Research*, 22(1-2), 233-251.
- Frewen, P. A., & Dozois, D. J. A. (2006). Social, achievement, and control dimensions of personality-life event vulnerability to depression. *Cognitive Therapy and Research*, 30(1), 1-17.
- Geer, J. H. (1965). The development of a scale to measure fear. *Behaviour Research and Therapy*, 3(1), 45-53.
- Heimberg, R. G., Horner, K. J., Juster, H. R., Safren, S. A., Brown, E. J., Schneier, F. R., et al. (1999). Psychometric properties of the Liebowitz Social Anxiety Scale. *Psychological Medicine*, 29(1), 199-212.
- Landy, F. J., & Gaupp, L. A. (1971). A factor analysis of the fear survey schedule-III. *Behaviour Research and Therapy*, 9(2), 89-93.
- Leary, M. R. (1983). A brief version of the Fear of Negative Evaluation Scale. *Personality and Social Psychology Bulletin*, 9(3), 371-375.

- Liebowitz, M. R. (1987). Social phobia. *Modern Problems of Pharmacopsychiatry*, 22, 141-173.
- Platt, T., Proyer, R. T., & Ruch, W. (2009). Gelotophobia and bullying: The assessment of the fear of being laughed at and its application among bullying victims. *Psychological Science Quarterly*, 51(2), 135-147.
- Proyer, R. T., Hempelmann, C. F., & Ruch, W. (2009). Were they really laughed at? That much? Gelotophobes and their history of perceived derisibility. *Humor: International Journal of Humor Research*, 22(1-2), 213-231.
- Proyer, R. T., Ruch, W., Ali, N. S., Al-Olimat, H. S., Amemiya, T., Adal, T. A., et al. (2009). Breaking ground in cross-cultural research on the fear of being laughed at (gelotophobia): A multinational study involving 73 countries. *Humor: International Journal of Humor Research*, 22(1-2), 253-279.
- Ruch, W. (2009). Fearing humor? Gelotophobia: The fear of being laughed at: Introduction and overview. *Humor: International Journal of Humor Research*, 22(1-2), 1-25.
- Ruch, W., & Proyer, R. T. (2008a). Who is gelotophobic? Assessment criteria for the fear of being laughed at. *Swiss Journal of Psychology*, 67(1), 19-27.
- Ruch, W., & Proyer, R. T. (2008b). The fear of being laughed at: Individual and group differences in gelotophobia. *Humor: International Journal of Humor Research*, 21(1), 47-67.
- Ruch, W., Proyer, R. T., & Ventis, W. L. (in press). The relationship of teasing in childhood to the expression of gelotophobia in adults. *Psychological Test and Assessment Modeling*.
- Storch, E. A., Roth, D. A., Coles, M. E., Heimberg, R. G., Bravata, E. A., & Moser, J. (2004). The measurement and impact of childhood teasing in a sample of young adults. *Journal of Anxiety Disorders*, 18(5), 681-694.
- Strawser, M. S., Storch, E. A., & Roberti, J. W. (2005). The Teasing Questionnaire-Revised: Measurement of childhood teasing in adults. *Journal of Anxiety Disorders*, 19(7), 780-792.
- Titze, M. (2009). Gelotophobia: The fear of being laughed at. *Humor: International Journal of Humor Research*, 22(1-2), 27-48.
- Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. *Journal of Consulting and Clinical Psychology*, 33(4), 448-457.

Acknowledgements

This research was supported by a grant from the Social Sciences and Humanities Research Council of Canada to the third author. This funding is gratefully acknowledged. The authors also wish to thank Nathan Finucci and Pauline Leung for their help with data collection.