

# Fearing humor? Gelotophobia: The fear of being laughed at Introduction and overview

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## 1. Introduction

Humor researchers of different disciplines often encounter that their phenomena are neglected in their own disciplines. This can be easily observed in psychology. For example, textbooks on personality rarely even include “sense of humor” in the index, not to mention a more intense treatment of this important personality trait. Likewise, emotion psychology does not study laughter much, and models of mood states do not often incorporate cheerful mood or hilarity. Despite the fact that humor and laughter are social phenomena, they are neglected in social psychology and developmental psychology. Both fields were once a driving force in research on humor and laughter (McGhee and Chapman 1980).

This neglect of humor and laughter is no better outside psychology. The neurologists Dreyer and Wehmeyer (1978) claim that there are few reports about epileptic laughter in the literature of epilepsy because this symptom is not known to nurses and doctors and, therefore, it does not get registered. In psychopharmacology, Siegel and Hirschman (1985) see laughter as the most conspicuous, yet most neglected, effect of intoxication through psychoactive drugs. This might be due to the fact that laughter emerges unspecifically, and is considered silly and unworthy of serious research (Siegel and Hirschman 1985). When I reviewed the literature on the psychotropic effects of nitrous oxide, it became apparent that it was studied in relation to a variety of psychological phenomena (attention, memory). However, it was not studied in relation to what its “street name” indicates (i.e., that laughing gas is a potent elicitor of laughter and elation).

Likewise, humor-related phenomena get less scientific attention where they are conspicuously *absent*. Failing to show these behaviors might be

as telling as their excessive presence. People lacking a sense of humor were not specifically studied, as the inability to get amused is rarely studied in the field of depression or other disorders of personality. This list could be easily prolonged. Thus, the inclusion of the study of humor and laughter in such research settings might help illuminate these phenomena. All in all, it seems safe to assume that humor, laughter, cheerfulness, and the lack thereof, play a more prominent role in people's life than can be assumed from the academic literature.

Failure to precisely study humor and laughter might also be responsible for not detecting important phenomena or keeping everyday concepts rather than developing more precise scientific concepts. For example, when Craik et al. (1996) compiled a comprehensive list of everyday humorous conduct, they discovered that the "folk concept" of sense of humor is only covered by two of their styles but not by the other three. In other words, there is variation in people's humor behavior that is *independent* of the sense of humor. Likewise, only when psychologists started to study facial expression at a more detailed level did they find that there are more than a dozen smiles that are morphologically different. But only one of them signifies sheer enjoyment (for an overview, see Ruch 2008).

So the question emerges, what is still out there to discover in terms of humor-related phenomena? What new concepts will unfold once we decide to study different segments of the field of humor and laughter more comprehensively and precisely?

## **2. Development of research interest**

The fear of being laughed at seems to be such an overlooked phenomenon. I first heard about this phenomenon about ten years ago at one of the applied humor conferences in Switzerland. There the German psychotherapist Dr. Michael Titze claimed that for some of his patients the fear of being laughed at was a core symptom and a problem with drastic consequences to their social life. Based on his clinical work with patients he presented a complex phenomenological account of *gelotophobia* (i.e., the fear of being laughed at), a term he coined (from *gelos* = Greek for laughter, and *phobia* = fear), and the *Pinocchio complex* (Titze 1996, this issue), and how to overcome them. As Dr. Titze provided clinical case studies, a rather plastic picture of gelotophobes and their problems emerged.

I have to confess that I had my doubts. Surely, some people do not engage in humor much, but does anyone really *fear* humor? It is widely acknowledged that humor is a double-edged sword. There is a fine line between use and abuse of humor. However, there may be more damage involved than someone's feelings being hurt temporarily? I worked primarily with students and healthy adults and, hence, my understanding of responses to humor and laughter in the realm of psychopathology might escape me. Also, following a nomothetic tradition, I am used to doing studies with many participants and finding statements that are true for groups of individuals. The idiographic approach I was confronted with implied that the patterns are different for everyone and it was difficult to come up with a more general model.

When Dr. Titze encouraged me to study the phenomenon utilizing the methodology of experimental psychology, I was at first reluctant as I was busy with other things. However, if this phenomenon did indeed exist it would be a loss for humor research if it were neglected. This is why I took up this project—initially on a smaller scale. The first work was related to trying to measure the phenomenon and to find independent experimental evidence for its existence. Then, after some promising data were in, studying the fear of being laughed at became one of my main research areas for a period. This was particularly the case when Dr. Proyer came to my lab and we started to investigate gelotophobia (and later gelotophilia and katagelasticism) on a larger scale. My initial research was carried on with some doubts. However, it is a good practice in research to look for ways to falsify the theory rather than looking for confirming evidence. But it soon became clear that there was something to discover. After we collected ample evidence for the validity of the concept, we started to publish.

What needed to be done? I needed to provide evidence that the phenomenon of gelotophobia does exist outside of a clinical field, and independent of the patient-therapist interaction. Furthermore, I needed a questionnaire to start experimentation. This is why I asked Dr. Titze to provide me with statements that gelotophobes would endorse, i.e., statements that would describe them well. Then, I needed patients that were diagnosed as gelotophobes by him and his team, and who independently did also fill in the scales. While a convergence between clinical assessment and questionnaire results was required, behavioral evidence was needed too. Being trained as an empirically working psychologist, I am well aware of the potential fallacies in the interpretation of self-reports in

questionnaire data or interviews. Therefore, in a master's thesis by Olga Altfreder (2000), we looked for experimental evidence of the fear of being laughed at and found some. Publicizing any results got delayed as I then moved positions twice (from Düsseldorf University to Queens University of Belfast on to Zurich University). I have to thank Dr. Titze for his patience awaiting the publications of the research endeavors he supported and facilitated.

### **3. A working model for gelotophobia**

Dr. Titze gave a phenomenological, idiographic account of the phenomenon. As the conditions are seen to be different for every person it appeared unfruitful to make general statements. However, to conduct empirical studies a firm model needed to be designed in order to be able to test it. Figure 1 is an attempt (Ruch 2004) to represent the putative causes and consequences of the fear of being laughed at for a prototypical gelotophobe as derived from Titze's theory (for a detailed elaboration of the net of constructs see the article by Titze this issue).

With René Proyer, we then started examining some of the predictions that could be made from this model (e.g., that childhood ridicule relates to levels of adult gelotophobia), but also enlarged the scope by including those who enjoy laughing at others. Furthermore, we wondered whether the opposite of gelotophobia is simply having *no* fear of being laughed at, or whether we also needed a construct and a questionnaire that describes people who actually enjoy being laughed at. Most importantly, we wanted to see whether this fear exists only in the German speaking countries (where it was initially described and tested) or whether it is common everywhere and to what extent countries do differ, and if yes, why so. During this process we contacted many colleagues on all continents and in about 80 countries. As several of these started to study the fear of being laughed at, beyond contributing the desired sample for the multinational study, we thought it would be good to bring part of the existing research together to provide a basis for future investigation.

Dr. Titze gladly accepted my request to contribute an invited article summarizing his view of the concept. This way the readers have unfiltered access to the original concept and the thinking behind it. As my own studies involve primarily healthy adults (whose fear of being laughed at is not directly comparable to those of patients) the results may not be repre-

## Causes

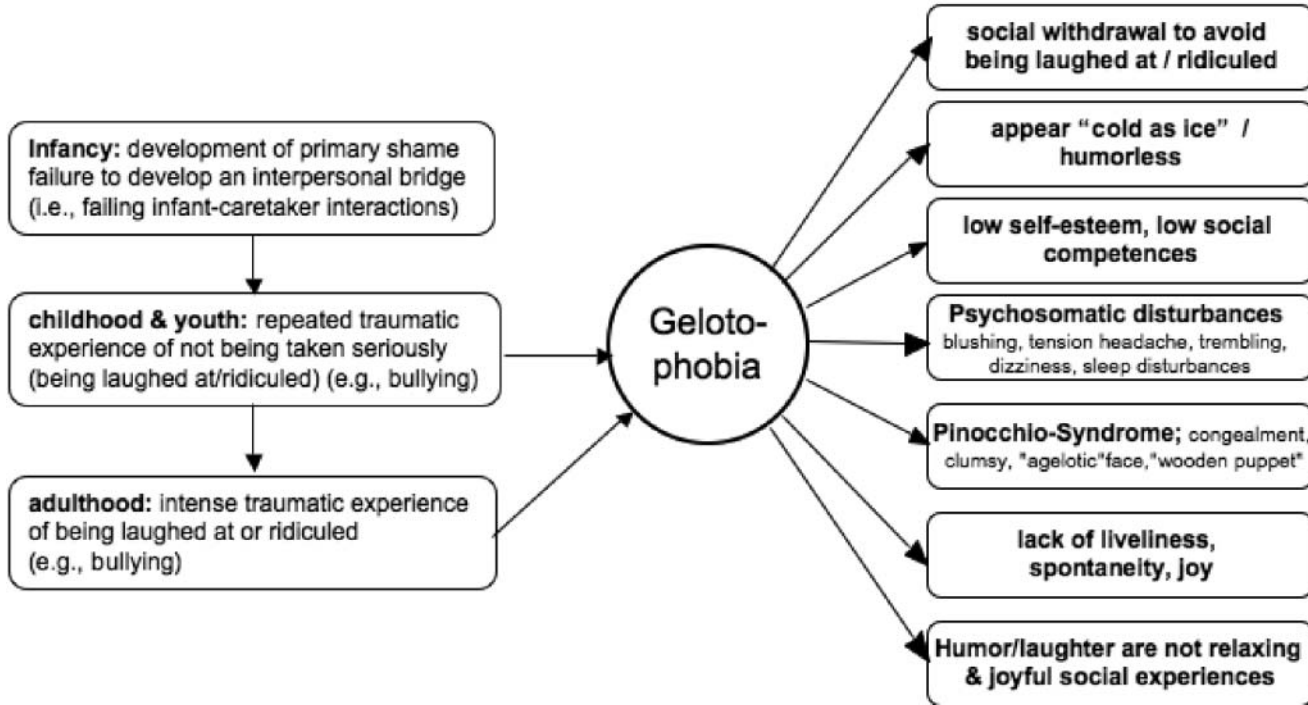


Figure 1. A model of the putative causes and consequences of gelotophobia as proposed by Titze (Ruch 2004)

sentative for the clinical realm anymore. In fact, we have moved on meanwhile and it would be only fair to state that actually two overlapping, but distinct, views of the fear of being laughed at exist. In student samples we find only between 5% and 12% with at least a slight fear of being laughed at (and an extreme fear would be very rare). Hence, we mainly can predict subclinical criteria. As I will show below, we investigate individual differences in the degree of the fear of being laughed at (and not an ill-healthy dichotomy), we see it as a symptom (not a syndrome), and we study high and low scorers in a (narrow) personality trait (or individual difference variable) of normals. Titze's patients with gelotophobia will most likely have very high scores in the GELOPH and our high scorers in a sample of adults from the population may indeed have a higher likelihood to be seen as gelotophobic by clinicians. However, the high scorers do not necessarily have a *pathological* fear of being laughed at (see below), and hence we may report results in the subclinical realm, which may or may not be relevant to the original concept. Therefore, it is essential to the researcher or applicant to learn about the original concept. Furthermore, in our research we aimed to test hypotheses that can be derived from the clinical concept, but we can see having developed the construct further, that we might find results that may not always be compatible with the model or may be interpreted in a different theoretical context. Last but not least, the inclusion of the clinical concept will hopefully help to inspire research by clinicians.

#### **4. Measurement issues**

There are many approaches to psychological assessment. Most often concepts are measured via tests and questionnaires. However, the research participant does not need to be the only informant, and peer-reports of a trait are a valuable supplement to self-reports. Questionnaires are prone to biases (e.g., social desirability). Objective tests (where participants are not aware of the intentions of measurement) and implicit association tests (IAT, Greenwald et al. 1998) can be used to get answers that are less guided by self-presentation styles of the participant. Furthermore, projective and semi-projective tests may be used, as well as structured or unstructured interviews.

Gelotophobia was initially observed in therapist-patient interactions. The article by Dr. Titze (this issue) describes the assessment criteria for

the clinical setting. It is obvious that the diagnosis is based on the interaction in this setting and involves several domains of information, including behavioral observations and analysis of “counter-transference.” Such criteria were used in the study by Ruch and Proyer (2008a; 2008b) to identify gelotophobes, and we also wanted to see the extent to which a more economic questionnaire approximates this judgment.

So far, for the standard assessment of gelotophobia (and the supplementary concepts of gelotophilia and katagelasticism), two questionnaires have been developed: the GELOPH and the PhoPhiKat. The former is a list of 46 statements or a short form with 15 items. The latter reflects the more recent theoretical developments (see article by Ruch and Proyer this issue) and also assesses the joy of being laughed at (i.e., gelotophilia) and the joy of laughing at others (i.e., katagelasticism). Furthermore, the validity of a semi-projective approach to measurement was examined (see the article by Ruch, Altfreder, and Proyer this issue). Indeed, the results of the pilot form of the Picture-GELOPH and the GELOPH converge, to some extent, and hence it might be fruitful to construct such a test. Furthermore, Platt and Ruch developed a structured interview, which is currently being investigated in case studies. The study of gelotophobia also brought forward some other instruments and surveys, like the LDS (list of derisible situations; see Proyer, Hempelmann, and Ruch this issue) or the RTSq (Ridicule Teasing Scenario questionnaire; Platt 2008).

#### 4.1. *Gelotophobia and the GELOPH*

The main instrument for assessing gelotophobia is the GELOPH. The long version (Ruch and Titze 1998) contains 46 statements reflecting the phenomenological world of the gelotophobes. This list served as a means to examine whether a group of gelotophobes can be differentiated empirically from shame-based and non-shame-based neurotics (and normal controls) in a predictable way (Ruch and Proyer 2008a). Furthermore, it turned out that the core items are essentially one-dimensional, although some peripheral aspects yielded minor second and third factors. To construct the short version, several criteria need to be fulfilled which are described in detail in Ruch and Proyer (2008b). This led to a short version with good reliability that allows an economic assessment of the fear of being laughed at (Ruch and Proyer 2008b).

The study by Ruch and Proyer (2008b) demonstrated that gelotophobia varies considerably in non-clinical samples of adults. This made us leave the field of psychopathology altogether and led us to undertake studies of the fear of being laughed at as an individual difference variable in a normal population. Several studies were carried out with students or adults from the general population to examine some hypotheses regarding causes and consequences of the fear of being laughed at (e.g., Platt 2008; Proyer et al. forthcoming).

While we continue to use the term “gelotophobia” (to honor Titz’s contribution), we do not consider the fear of the high scorers in the GELOPH<15> to be necessarily “pathological.” We concede that the fear of being laughed at may be seen as pathological when the following criteria apply: (a) the fear appears without sufficient cause; (b) the physiological and behavioral symptoms appear with extraordinary intensity; and (c) the impact of the fear is prolonged. Regarding the first criterion, we started to think of “realistic” and “pure” gelotophobes. Some individuals do indeed get laughed at very often, by particular people, and for a certain reason, and hence their fear is realistic. Here one even might speak of an adjustment to the adverse factual life circumstances. However, others (i.e., the pure gelotophobes) might actually experience a low frequency of ridicule, but are nevertheless afraid of appearing ridiculous and getting laughed at. As the fear arises without any actual threat, we might consider it being pathological. For this diagnosis, one would need to assess the actual frequency of being laughed at (e.g., with the LDS) in addition to administering the GELOPH. However, as Platt (2008) recently showed, gelotophobes do not discriminate effectively between ridicule and playful teasing. One might ask whether they are an adequate source for the judgment of whether they are actually ridiculed. For them, all kinds of laughter are aggressive laughter, and they are prone to misinterpret harmless situations. Hence, independent sources of evidence are needed for that judgment (e.g., Ege 2008). This is also the case when one studies self-acclaimed victims of bullying (Platt 2005).

Also the second criterion, that of the physiological and behavioral symptoms, appear with extraordinary intensity are not covered by the GELOPH, as there are no self-reports of physiological symptoms. The semi-structured interview (that does ask for them) yielded answers depicting more intense physiological symptoms. The third criterion, that of the impact of the fear being prolonged, is implicitly covered by the GELOPH as a couple of items related to an excessively long time needed to recover



from events of being laughed at. Nevertheless, the judgment is left to the individual filling in the scale. As the three criteria are not (or not sufficiently) covered by the GELOPH, we prefer to speak of a fear of being laughed at which ranges from no fear to extreme fear. As we do not assess the criteria mentioned above, the issue of whether this fear is pathological or not is not really addressed in our studies.

Nevertheless, the concept of gelotophobia continues to be attractive to clinicians who investigated whether normal controls and psychiatric patients differ or not and also who try to find differences among psychiatric groups (Forabosco et al. 2006; Ivanova et al. 2008). Thus, while for us the substance of the scale per se (without additional consideration of the criteria) does not allow for the division into gelotophobic vs. non-gelotophobic, an *approximation* of this judgment may be well achieved by applying the cut-off points derived in the study by Ruch and Proyer (2008b). This approximation might be a statistical matching with the clinical group of gelotophobes but does not substitute for clinical assessment.

#### 4.2. *Definition of cut-off points for degrees of gelotophobia*

Ruch and Proyer (2008b) attempted to find scores that needed to be exceeded to speak of gelotophobia. When is the fear slight, marked, or extreme? Of course, definition of such cut off-points will affect the “prevalence rate.” We discussed three ways for defining cut off-points and our rationale was not only based on theoretical considerations but also on empirical results obtained. First, such a cut off-point could be oriented on the answer format, which ranges from 1 to 4. The midpoint of the scale is 2.5. Thus, different groups may be distinguished already on the basis of the averaged responses to all 15 items (see Figure 2).

Figure 2 shows that the continuum from no fear to extreme fear of being laughed at may be divided into different segments. Two and three subgroups may be separated in the no gelotophobia and gelotophobia segments, respectively. These subgroups are comprised of the following:

- (1) *No gelotophobia (G0)*: the fear of being laughed at or ridiculed is not present at all or only to a non-salient extent if the GELOPH scores are between 1.0 and 2.0. At the low pole of this dimension, individuals strongly disagree to all of the statements relating to symptoms. At the high end, they disagree moderately.

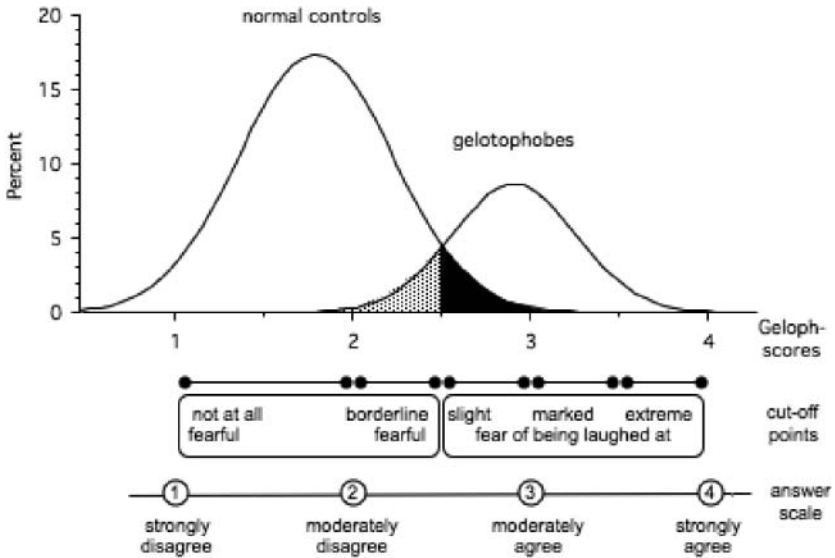


Figure 2. *Distribution of gelotophobia scores for normal controls and gelotophobes on a continuum ranging from no fear to extreme fear of being laughed at segmented into subgroups of not fearful (no fear, borderline) and gelotophobic (slight, marked, and extreme fear) along with the cut-off values*

- (2) *Borderline fearful* (Gb): In studies with healthy adults, the scores vary tremendously, and some hypotheses relating to gelotophobia might already be studied by comparing high and low scorers in the scale—even when no slight gelotophobia is present (i.e., when the high scorers do not exceed the 2.5 threshold). For those who score between 2.0 and 2.5, we would like to reserve the term “borderline” fearfuls. We do not call those gelotophobes. Only on the high end of this segment the participants slightly agree to less than half of the symptoms.
- (3) A *tendency for, or slight expression* (Gs) of gelotophobia (i.e., scores between 2.5 and 3.0). For the identification of gelotophobia, one might demand that at least every second symptom applies. Thus, requesting an average score of 2.5 means that someone agrees to one half of the items and disagrees with the other half (or that the symptoms on average apply to the same extent as they do not apply).
- (4) A *pronounced* (Gp) or *marked expression* of gelotophobia (or GELOPH scores between 3.0 and 3.5). Thus, if a person slightly agrees to all statements (i.e., if all symptoms apply albeit even slightly so) this would lead to an average score of 3.0. The presence of *all* symptoms would speak for a pronounced manifestation of the fear. The qualification “*pronounced expression of gelotophobia*” is applied to scores exceeding 3.0.

- (5) An *extreme* (Ge) expression of gelotophobia: Scores of 3.5 and more represent an *extreme manifestation* of gelotophobia as half of the symptoms apply strongly while the other half applies slightly. Note that it is likely that such individuals also may display extreme physiological responses when actually being laughed at. Strictly speaking, this is not covered by the contents of the items.

In research articles on personality traits, the mean and standard deviation of the scales are often given. Indeed, such a practice will tell about how the mean level and variation in the fear of being laughed at of the present sample differs from normative data. Furthermore, in research articles, groups above and below the median are often compared. However, as a strong fear of being laughed at is not very frequent, in some samples there might actually be no or only few gelotophobes among the high scorers. Thus, researchers are advised to check and report the percentage of gelotophobes in the three groups. This is not trivial, as some phenomena might only appear, for example, for pronounced gelotophobia, but not for intensity levels below (e.g., Platt 2008).

The classification of results made above is based on one of three criteria examined only by Ruch and Proyer (2008b), namely the purely rational one. However, the cut-off point of 2.5 also yielded empirical verification. The distribution of scores of a group of gelotophobes and the normal controls crossed roughly at 2.5 (see Figure 2). Furthermore, the cut-off point on the scale also coincides with the score two standard deviations above the (German) mean. Thus, the three criteria converge quite well regarding the onset of a *slight* fear.

Applying a cut-off score is a pragmatic procedure to define groups for studies, but it does not guarantee identifying gelotophobes and non-gelotophobes. While only about 7% of the clinically diagnosed gelotophobes had a score lower than 2.5, there is already an indication that the cut-off score will miss some gelotophobes in a larger sample (i.e., the dotted area in Figure 2). Furthermore, about 12% of the control group of adults exceeded this score (i.e., the black area below the normal curve). One cannot say that all these would count as false positives or false alarms. As this group has not been screened clinically, but participated in surveys only, it might well be that a clinical interview could have identified some of them as being gelotophobic. Furthermore, although reliability is very high (alpha is often in the .90 range), this still means that the standard error of measurement is about .31. Thus, a total score of 2.75 expresses slight gelotophobia, but the true score could lie between

2.44 and 3.1 ( $p < .05$ ), being borderline and expressing pronounced fear, respectively.

It should be noted that those scores were found for German-speaking samples and need verification in other countries before being applied to identify equivalent groups differing in the fear of being laughed at. Again, especially when not knowing the cultural context, it is not clear whether high scores speak for pure or realistic gelotophobia. In fact, it will be necessary that clinical psychologists and psychiatrists get involved to tackle the issue.

## **5. Open questions and future studies**

As the scientific study of the fear of being laughed at is relatively new, a broad range of research approaches is needed to identify the causes and consequences of the fear of being laughed at. The same is true for gelotophilia and katagelasticism. As the latter two were introduced after the first empirical studies on gelotophobia were performed, it might be fruitful to replicate these findings with the inclusion of the additional concepts (e.g., relating self and peer reports of personality and performance). Furthermore, more experimental evidence for laughter and humor-related anomalies need to be identified and related to these concepts. For example, more evidence is needed for the misperception-hypothesis—which may be paraphrased as, “. . . all laughter is (must be) bad laughter.” The prime aim should be to predict humor and laughter related behaviors by these concepts. An activated fear of being laughed at (e.g., by laughter tracks or videos) should impair rather than facilitate performance. As the enjoyment of humor involves appreciation of incongruities in a safe context, the presence of “play signals” might be relevant. The context may generally not be safe for gelotophobes in social laughter conditions. However, when it involves others, who perhaps have the intention to mock the recipient, it is not a safe situation: maybe a signal is needed. Humor related professionals and amateurs (cynics, satirists, clowns, entertainers, stand-up comedians, class-clowns) might differ in the three concepts.

From a broader point of view, a few selected basic crucial questions may be highlighted. For example, there is no empirical study on interventions for the fear of being laughed at, nor is it known whether extreme expressions of gelotophilia or katagelasticism might call for treatments

as well. Research questions might be whether programs aimed at improving the sense of humor (McGhee 1999) are effective among all participants (e.g., non-gelotophobes vs. marked-gelotophobes; gelotophobes vs. katagelasticians etc.) and whether specific interventions (see the contribution by Titze in this issue) are more effective in reducing the fear of being laughed at than more traditional approaches, such as techniques from behavior-oriented treatments.

The fear of being laughed at, gelotophilia, and katagelasticism, need to be studied in the context of related concepts. For example, one branch of the emotional intelligence model by Salovey and Mayer (1990) is the ability to perceive emotions properly. Emotional intelligence is the ability to recognize, understand and manage emotions in ourselves and others. As gelotophobes can not recognize laughter well, and do not distinguish between benevolent and malicious laughter (Platt 2008; see also Ruch, Altfreder, and Proyer this issue), a study relating emotional intelligence to the fear of being laughed at, but also to gelotophilia and katagelasticism, would be a contribution to the field.

Although the research has focused on studies on the fear of being laughed at among normals, there is room for clinical studies as well. For example, it is striking that research in social phobia (or social anxiety disorder) has not as yet been interested in humor, laughter, and mock/ridicule. Perusing the index of several key books (e.g., Beidel and Turner 2007; Heimberg et al. 1995) did not show any of the relevant key words. A literature search in PsycInfo (May 28, 2008) using both keywords “social anxiety” and “social phobia” retrieved 6401 entries. Only a small fraction (i.e., 0.23%) of these articles also mention one of the relevant key words (i.e., ridicule, laughing at, mock, derision, humor, smiling, smile, laughter, laugh, funny, comic, irony, sarcasm, teasing, tease), and none investigated so far whether social phobia is associated with a fear of being laughed at. This is surprising as social phobia and gelotophobia seem to have a common ancestor. The French psychiatrist Paul Hartenberg published a book in 1901 on *Les Timides et la Timidité*. Hartenberg’s account of ‘*timidité*’ was rediscovered recently by Fairbrother (2002) who stated that Hartenberg’s understanding of its phenomenology is surprisingly similar to modern conceptualizations of social phobia. In fact, Hartenberg anticipated the criteria for social anxiety (or social phobia) as used in the DSM and ICD. For example, Hartenberg noted that both shame and fear occur in situations where there is no actual danger, and that these emotions occur only in the presence of others. In his review of *Les*

*Timides et la Timidité*, Pace (1902: 101) noted that "... timidity is a combination of fear and shame—both groundless—which is felt in the presence of other persons. Its symptoms are, on the organic side, trembling, blushing, disturbances in speech and in the visceral and secretory functions. These are accompanied, on the psychological side, by derangements in the processes of attention, reflection, volition and memory."

However, most importantly, Hartenberg suggested that one of the main reasons why timid people (i.e., social phobics according to Fairbrother 2002) are fearful of self-disclosure and expressing their opinions is a *fear of ridicule*. When talking about the character of timid people, Hartenberg distinguished between the primary qualities of timidity and the modifications that it produces. Pace (1902: 101) summarizes that "[T]he former include sensitiveness, fear of ridicule, scrupulosity and a certain secretiveness which is due, not to reserve, but to the dread of being misunderstood." The resulting modifications show a peculiar blending of opposite traits—misanthropy and benevolence, humility and pride. Further consequences are egotism and dilettantism, repression of the feelings, and eventually, inability to express them. Thus in Hartenberg's view, the fear of ridicule is one of the main motivations for the social inhibition of timid (or socially anxious) individuals. This factor obviously is central to gelotophobia but did not receive much attention in research on social phobia. Hartenberg listed a variety of etiological factors; but actual traumatic experiences of being laughed at during childhood or adolescence are not among them (see Fairbrother 2002). However, he noted that the first objective of the affected person is to hide outward manifestations of his/her anxiety. Fairbrother (2002) summarizes that the efforts "... to mask his/her emotions gives the person's movements, gestures, and posture a stiff, rigid, uptight, and artificial appearance. Hartenberg suggests that this stiffness is apparent not only in anxiety-provoking situations, but becomes the ... typical presentation." This clearly is related to the "Pinocchio complex" (see Figure 1 and Titze this issue).

## **6. Various potential applications**

Gelotophobia, gelotophilia, and katagelasticism will be of relevance to researchers and practitioners in different areas. Currently there are a broad variety of programs fostering laughter and training for humor, as there is the belief that both are beneficial. However, one should consider that a certain percentage of participants might actually feel uncomfortable

when confronted with laughter (i.e., the gelotophobes) or displays of nasty humor when encouraged to be funny (i.e., the katagelasticians). No study has been performed yet to study whether these individuals profit equally from such programs or not, or whether their presence in the group is actually counterproductive to the success.

There are professionals (e.g., teachers, actors in theatre, newsreaders on TV and radio, public speakers) who perform in public and who always are at risk for bloopers — the funny mistakes that would make their audience laugh. It might be interesting to study, for example, actors of serious plays and see how much a state of fear of being laughed at is activated during their performance. Furthermore, there are groups of individuals with salient peculiarities or difficulties (e.g., stuttering, protruding ears, handicaps) who, under unfavorable life circumstances, might have had an enhanced likelihood of a history of being laughed at. Clearly, it would be interesting to see, for example, what factors protect one from developing an excessive fear of being laughed at. In general, what does constitute resilience against mockery (i.e., in being frequently laughed at by others yet maintaining a low level of gelotophobia)? Furthermore, it is possible that some individuals with a fear of being laughed at develop entertaining skills and take up roles as entertainers to get control over other's inevitable laughter. However, also the gelotophiles might excel in such roles and professions.

Gelotophobia, gelotophilia, and katagelasticism might play a role in the school, work, and leisure activities. Bullying in schools is currently a hot topic and the focus of much research activity. Apparently laughing at others (e.g., in form of “funny” nicknames) is common among children, and preventive programs often need to be established. Janes and Olsen (2000) found that observing ridicule of others enhances one's conformity and lowers creativity. However, exploration and curiosity are important for learning, and during the learning process mistakes (that may be involuntarily funny) occur. Hence, a strong fear of ridicule might impair curiosity and willingness to practice. Indeed, De Leeuw (1995) reports that 7% of pupils in elementary school report feeling fear of being laughed at in speaking a foreign language (i.e., English).

Bullying at work is a hot topic as well. Titze pointed out a link between bullying and gelotophobia. The study by Tracey Platt (2008) indeed provided the first empirical evidence for this hypothesized relationship by showing a high correlation between reports of having been bullied and degrees of gelotophobia. However, she pointed out a second interesting

way of interpreting the data. Could people be prone to false alarms due to gelotophobia and feel ridiculed and bullied while there is actually no objective evidence for it? Obviously, the individuals with slight and marked fear of being laughed at did not distinguish between ridicule and more benevolent teasing. For them, all laughter was bad laughter. Thus, gelotophobia needs to be investigated in the context of adult bullying at work. Furthermore among the “bullies,” there might be a higher percentage of katagelasticians.

The concepts might also be related to leisure time activity. For example, gelotophobes may refrain from activities (e.g., dancing, karaoke) where they are at risk of being laughed at, thereby possibly impairing their quality of life. Katagelasticians may participate in practical jokes more often, upsetting their friends.

An unstudied area would be in the field of forensic psychology. It is not yet studied how many impulsive violent acts were carried out in response to ridicule. Similarly, acts of revenge often are based on sensitivity to ridicule. A few years ago, a tragic event involved a juvenile killing spree happened in Germany when an adolescent was entering his school masked to shoot at teachers and pupils. Subsequently, a farewell letter of only seven sentences was found on the Internet. Strikingly, two of these sentences referred to his taking revenge for having been laughed at.

These and related questions could be studied in applied settings in psychology but also in other disciplines. Media research might study the function of ridicule in films, such as when laughing at is involved and what consequences are involved. Likewise, it would be of interest to study the biographies of well-known gelotophobes and the impact of the fear of being laughed at on their thinking and work. Historically, humor and laughter were often condemned to be sinful and malicious. It might be interesting to see whether such views (or negative views of laughter) would be more likely put forward by gelotophobes.

## **7. The articles**

The collection of articles comprises both theoretical accounts and empirical studies related to the fear of being laughed at. The articles provide evidence for the existence of gelotophobia in different sources of data (questionnaire, semi-projective test, experimental tasks), different populations (healthy, psychiatric patients), and different countries. They also deal with putative causes (e.g., being laughed at during childhood) and



consequences of the fear of being laughed at (e.g., misperception of individual abilities). An attempt was made to cover diverse topics (e.g., emotion, intelligence, character) and to show the relevance of gelotophobia to the humor researcher and practitioner. Due to the novelty of the approach, not many researchers were initially involved in active research. Basically, my group in Zurich did extensive studies, but only one segment is presented in the special issue. However, this changed after we initiated the multi-nation study, and a symposium (“The fear of being laughed at: Gelotophobia”) was held at the 20th International ISHS Humor Conference in Alcalá de Henares, Madrid, Spain (7–11 July, 2008) that comprised ten speakers. The collection of articles in this special issue aims at balancing different approaches and is a compromise between the research that has been conducted so far and an effort to maximize the quality of future studies.

The first article is by Michael Titze, the father of the concept who coined the term “gelotophobia.” In this invited contribution, Titze outlines his phenomenological account of gelotophobia and the “Pinocchio complex,” his assumptions about its etiology and consequences, and various possible treatments. He develops the clinical view of gelotophobia as a pathological fear of being an object of laughter, and presents a single case exemplifying the phenomenon. While he considers gelotophobia to be a specific variant of shame-bound anxiety, in its extreme form, it also involves a pronounced paranoid tendency, a marked sensitivity to offence, and a resulting social withdrawal. One section is devoted to pointing out how the fear of being laughed at is similar to social phobia, but also how the two concepts differ. This concise presentation of Titze’s understanding of gelotophobia will be an invaluable English source to those who don’t have access to the German literature and who wish to test predictions (e.g., to the development and consequences) based on his views. Practitioners and people in research on therapy will appreciate the substantial proportion of his article that is devoted to various therapeutic techniques, which were developed for the treatment of the fear of being laughed at.

The article by Christie Davies considers the theoretical underpinnings of the concept, “fear of being laughed at.” Humor theory has long assisted our understanding of the ingredients of jokes and the affiliated cognitive processes. However, where can the theories come from that may help us to understand the phenomenon of someone who has a pathological fear of being laughed at? Can we draw on established theories or

do we need to develop new ones? Davies clearly has strong doubts about Bergson's view of laughter as a social corrective and he challenges the superiority theory of laughter by Thomas Hobbes. Knowledge in psychology and sociology has progressed since these theories were set forth. Nevertheless, Davies acknowledges that they may still serve as a basis for devising hypotheses.

Christie Davies' overview will not only be relevant when making predictions about cultural differences in the fear of being laughed at, but also for integrating gelotophobia in a network of antecedent variables and consequences within societies. The concept of the fear of being laughed at will need to consider inputs from many sources. Regarding cultural differences, Davies sees variations in mean levels of gelotophobia as related to two clusters of social variables. One cluster is related to the place of laughter in pressures to conform and maintain harmony that involve shame, face, adherence to etiquette, and embarrassment. The other relates to such societal variables, as hierarchy, status divisions and power. Taken together, this means that we would expect a high prevalence of gelotophobia in hierarchically organized societies where the main means of social control is shame.

The study by Ruch, Altfreder, and Proyer looks for indicators of the fear of being laughed at in domains other than direct self-reports, and whether individual differences in such phenomena converge with the GELOPH-results. They speculate that if gelotophobes fear laughter, then maybe all kind of laughter will sound like malicious laughter to them. Hence, they present tape recordings of laughter of different emotional qualities to participants and ask them to rate, among other things, how pleasant vs. unpleasant it was and to estimate the emotional-motivational state of the laughing person. Indeed, gelotophobes found positively motivated laughter not very pleasant and had difficulty accepting its innocent nature. Furthermore, gelotophobes were expected to misperceive ambiguous social situations more easily when there is laughter involved. These subjects were shown cartoons depicting situations involving laughter or the potential for someone's being laughed at, and they were asked to indicate what the target person would think or say. As the gelotophobes did indeed give more answers expressing ridicule and fear of being laughed at than the other participants, one can consider this semi-projective test as an alternative route to the assessment of gelotophobia. Further research is needed that looks at anomalies relating to laughter and links it to levels of gelotophobia. One might think of further experi-

mental validation of the concept including the IAT (implicit association tests).

Four articles locate gelotophobia in different domains of personality or psychological functioning: namely, emotions, humor, character (i.e., strengths and virtues), and intelligence. The article by Platt and Ruch tested a core assumption related to gelotophobia, namely that the emotions of shame and fear are of special relevance for those fearing ridicule as proposed by Titze (i.e., gelotophobia is shame-anxiety) but also Hartenberg (1901). Using the Anchor Que question form by Paul Ekman, they find—for their English and German speaking samples—that gelotophobes compared to non-gelotophobes reported that their maximal experience of both shame and fear was of a higher intensity and longer duration. They also reported experiencing shame and fear more frequently during a typical week. Moreover, joy is relevant too, mostly in its absence. In fact, the axis shame-joy was even more powerful statistically; gelotophobia was more prevalent among individuals with a higher inclination to shame than to happiness.

Humor has an emotional component too, and hence it is not surprising that Ruch, Beermann, and Proyer found that gelotophobes are less cheerful and more inclined to be in a bad mood. Using a multitude of humor questionnaires and performance tests they investigated the humor of gelotophobes and found that feeling ridiculous does not automatically equal being altogether humorless. While gelotophobes characterize their humor style as inept, a performance test of humor creation ability showed that they are no different from those without a fear of being laughed at. This casts doubts on the validity of self-reports of humor, but of course, the measure of an inept humor style is broader than being able to create humor on the spot. Other findings relate to displaying a socially cold and mean-spirited humor style, but those with a fear of being laughed at also report less frequent use of coping humor, self-enhancing and social humor. It would be good if these findings also received replication in peer-reports of the humor scales. Nevertheless, it can be said that gelotophobes have a negative stance towards several forms of humor even if this is only true for their subjective experience of it. This is why interventions aimed at reducing fear of being laughed at should involve training of humor skills and knowledge about humor.

From emotions and humor it is a bigger step to virtues and intelligence. Both character and intelligence are uni-polar and they refer to mental and moral excellence. For both, multidimensional models exist. Models of

intelligence often show a one-dimensional general intelligence on top and correlated primary abilities at an intermediate level. More recently, character was unpacked into (six ubiquitous) virtues and (24 distinct but correlated) strengths. Would those with a fear of being laughed at be impaired in these domains of psychological functioning? In both studies, Proyer and Ruch use objective and self-report measures and indeed there is a consistent discrepancy between them. Gelotophobes report themselves to be less intelligent and less virtuous than they actually seem to be. Again, this tells us that humor research should not rely only on self-report measures. Nevertheless, there also seems to be substantive effects. In detail, the general level of strengths is lower for those fearing being laughed at than those without fear—even in the peer-reports. It should be noted that peer-reports tended to be higher than self reports anyway. Furthermore, gelotophobes might have a distinct pattern of character strengths and virtues. It is often said that ridicule may be used to control deviant behavior. Thus, those being laughed at repeatedly and believing this is deserved might develop modesty or prudence more so than those without this experience. The study of strengths is also important as they are linked to a higher satisfaction with life, a trait gelotophobes generally seem to lack (Proyer et al. forthcoming). The results show that strengths like hope, curiosity, bravery, love and zest are the ones that need building up to potentially enhance gelotophobes' happiness. Psychometric intelligence is not related to gelotophobia, however, gelotophobes do not trust their abilities much. In particular their self-estimation of general intelligence, vocabulary, and attention is low. As they tend to underestimate their true ability, they will probably select less ambitious projects and will remain low key in occupational or school settings. Counseling of gelotophobes will also need to address their self-presentation and help develop a more positive view of his/her self, including their potential to achieve.

The next article (by Ruch and Proyer) tries to fill a gap in the study of gelotophobia by introducing katagelasticism and gelotophilia as well as an instrument for their assessment (i.e., the PhoPhiKat). If individuals fear being laughed at, then there must also be people enjoying laughing at others or at least not refraining from it. No target is without the agent or presumed agent. Also, some people do react differently to ridicule and even initiate it. Hence, those enjoying laughing at others (katagelasticists) and enjoying being laughed at (gelotophiles) need to enter the equation. The article describes the construction of the standard and short versions of the PhoPhiKat and examines the interrelation among gelotophobia,

gelotophilia, and katagelasticism. Most interestingly, those who fear being laughed at do not necessarily avoid laughing at others; these two concepts are virtually unrelated. Thus, the picture of gelotophobes as victims of the laughter by others is not necessarily true for all of them. At least a subgroup of gelotophobes seemed to enjoy laughing at others despite knowing how harmful laughter can be. These new concepts and the scale received initial validation from several studies. While remembered experiences of having been laughed at by parents and peers in childhood and youth cannot count as major contributors to the development of gelotophobic symptoms as an adult, gelotophobes tended to remember more events of having been ridiculed by their father. Using recalls of events of being laughed at is not a sound method for the assessments of childhood experiences of ridicule. Other factors need to be taken into account as well, such as genetic factors or personality traits (see Ruch and Proyer in press).

What about being laughed at during adulthood? The article by Proyer, Hempelmann, and Ruch examines more closely how often adults actually remember having been laughed at during the time span of a year, and whether gelotophobes, gelotophiles, and katagelasticists get laughed at for different reasons in real life situations. The advantage of such a study is the use of a more comprehensive list of derisible situations (i.e., the LDS) and the distinction of frequency and perceived intensity. The downside, of course, is that this is a self-report scale prone to memory or self-presentation bias like any other self-report scale. Nevertheless, the survey shows that most people remember having been laughed at at least once and the context was most often an embarrassing situation, chauvinism of others or being laughed at for doing something awkward or clumsy. Gelotophobes, gelotophiles, and katagelasticists were indeed ridiculed for different reasons, and gelotophobes recalled higher intensity levels of being laughed at. Further evidence for the PhoPhiKat comes from the study of humor production. While the ability to create humor is unrelated to gelotophobia, it tends to be positively correlated with gelotophilia and katagelasticism.

Although the fear of being laughed at is studied among healthy adults, it should be more prevalent among psychiatric patients. The article by Forabosco, Ruch, and Nucera attempts to suggest where to look. The study brings together a sample of reasonable size composed of patients whose diagnoses were established in agreement with the DSM IV criteria. Patients with personality disorders and patients with schizophrenic

disorders scored higher on gelotophobia than normal controls and the other diagnostic groups, such as mood and anxiety disorders. The number of social phobics was too small to warrant separate treatment and needs to be studied in more detail in future research. Nevertheless, it is clear that gelotophobia will not be high in only *one* diagnostic category. Interestingly, the patients studied who had eating disorders also scored high, but the number was too small to reach significance. Future studies also need to take the intensity of the disorder into account and—as the present study shows—the number of years spent in psychiatric care is a relevant factor too. Besides studies with psychiatric patients, future studies might also take the route of dimensional approaches to personality pathology by studying community samples (e.g., the DAPP-BQ; Livesley and Jackson in press).

So far published research on gelotophobia only involves a few countries. The article by Proyer, Ruch, and a consortium of researchers from 73 countries, however, investigates whether gelotophobia can be found not only in England, Germany, Italy, and Switzerland, but virtually everywhere. This ambitious project involves several steps. In this first article, basic measurement issues are addressed. Can gelotophobia be measured everywhere with a sufficient reliability? Do the same or different items get endorsed in all countries? Do they measure the same construct (i.e., a one-dimensional fear of being laughed at)? Do differences between countries indeed reflect differences in the prevalence of the fear of being laughed at or maybe just that different language versions are used? Would different language versions applied to the same multi-lingual country converge? How representative are the samples drawn; how much do the results for additional samples from the same country differ? Are there cultural differences in the endorsement of the GELOPH between the countries that exist independently from putative mean-level differences? Such questions need to be addressed before mean levels for countries are compared.

As the GELOPH seems to be reliable in all samples, future studies using that scale in these countries will be helpful in accumulating knowledge of gelotophobia as it measures the same things everywhere. Nevertheless, these versions will need to be validated. While the scale is one-dimensional, the analyses of items (aggregated for each sample) across countries show systematic variation beyond the national level of the fear of being laughed at. A multidimensional scaling analysis yielded two dimensions of insecure vs. intense avoidant-restrictive and low vs. high-

suspicious tendencies towards the laughter of others, which refer to the within-country emphasis of type of symptoms. Future publications then will allow focusing on deriving national differences in the fear of being laughed at and studying putative causes.

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## Notes

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