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Ruch, Willibald ; Proyer, Rene T

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Extending the study of gelotophobia: On gelotophiles and katagelasticists

WILLIBALD RUCH and RENÉ T. PROYER

Abstract

In Ruch and Proyer (2008a), the fear of being laughed at (gelotophobia) was introduced as a new individual differences phenomenon. In this article, two new laughter-related concepts are presented: gelotophilia (the joy of being laughed at) and katagelasticism (the joy of laughing at others). The main aim of the present article was an empirical verification of these three concepts. Data analyses from a construction (N = 390) and a replication sample (N = 157) led to a three factor solution for the data comprising the three concepts. Intercorrelations among the three groups suggest that there is a negative correlation between gelotophiles and gelotophobes and a positive relation between gelotophiles and katagelasticists. The correlation coefficients, however, indicate that there is a relation but that the concepts are not interchangeable. A reliable and stable standard 45-item questionnaire (PhoPhiKat-45) and an economic short form of 30 items (PhoPhiKat-30) for the assessment of the three concepts are presented. Additionally, it was shown that, contrary to what had to be expected from early literature on gelotophobia, remembered experiences of having been laughed at by parents and peers in childhood and youth cannot be considered as major contributors to the development of gelotophobic symptoms as an adult (the same is true for gelotophilia and katagelasticism). However, gelotophobes tended to remember more events of having been ridiculed by their father. Suggestions for future research and conceptual developments are given.

Keywords: Gelotophilia; gelotophobia; humor; katagelasticism; laughter.

1. Introduction

Laughing at others might involve several people (or groups) but implies at least two persons (or roles) that need to be studied: the person (or group) ridiculing or laughing at and the person (or group) being laughed at. Furthermore, there might be bystanders/observers that may either join in the ridicule, or step in and interfere and help the target, or stay neutral. There is the assumption that the person being laughed at develops gelotophobia for that very reason; however, one might also speculate that the observer of ridicule might develop a fear of being laughed at. Furthermore, there is also the possibility that gelotophobes only assume they are being laughed at (without this actually being the case), that “laughing with” is mistakenly attributed as “being laughed at” (for first evidence, see Platt 2008), or that the person who is laughed at has actually (purposefully and knowingly) provoked the ridicule, sees it as play and is enjoying it. Finally, people might get laughed at and not bother much despite they may not like it. Therefore, for a fuller understanding of the pattern the different roles involved need to be specified more clearly, measured and investigated empirically. The present article studies the fear of being laughed at (gelotophobia) in the context of two such roles/traits relating to laughter: the joy of being laughed at and the joy of laughing at others.

1.1. *Joy in being laughed at: Gelotophilia*

For gelotophobes laughter does not entail positive aspects—instead, they experience laughter by others as a weapon to put them down. Thus, laughter is negatively connoted in gelotophobes. However, the question emerges how people generally deal with situations in which they (potentially) could be laughed at. In the preparation of the present study, we have asked participants of an online survey to write down (online and anonymously) the worst event of being laughed at that they could think of or that they could imagine. It did not matter whether they have experienced the situation themselves or only heard about it or saw it in a movie or read about it. In doing so we collected situations and experiences that people relate to incidents of having been laughed at.

The entries dealt mostly with embarrassing situations in which, for example, a person finds him-/herself naked in front of people, loses control

over his/her body functions (e.g., wetting him-/herself), something odd happening in a public speech (in front of a large audience), or is ridiculed by others for showing emotions (e.g., confessing ones love to someone) or for inferiorities of different kinds (e.g., low intellectual or physical abilities, appearance, behavior etc.). However, some of the entries did not fit into this general scheme of embarrassing and hurtful situations. For example, one of the participants wrote about a situation in which he was laughed at during a sexual intercourse. He does not provide further details on the situation itself, but in a subordinate clause he states, “that was wicked.” This is remarkable because he refers to a situation that he experienced himself and that was embarrassing for him but he also saw something good in it. Other persons noted that they could not think of a situation that would be “that emotional” to be worth writing it down. Thus, they could not think of situations where they could get emotionally challenged while being laughed at. Others referred to characters from movies or TV-shows like “Ali G” (from “Da Ali G Show”) or “Borat” (from the fake documentary “Borat—Cultural Learnings Of America For Make Benefit Glorious Nation Of Kazakhstan”). These characters are often shown in an embarrassing way that makes the viewer laugh at them. Another participant noted: “For any situation that I can imagine of being laughed at, I can also imagine not having been laughed at.” One might think in this case of a person that is able to restructure certain situations for himself in a specific way or to do something that prevents others from laughing at him or her.

Overall, the review led to the idea that being laughed at is not necessarily negatively connotated in all persons—as it is in gelotophobes. Examples like the ones mentioned lead to the assumption that there might be people that experience joy from being laughed at or that actively seek situations in which they get laughed at. One might think of persons that videotape themselves in embarrassing situations and upload these films to Internet video-platforms such as “YouTube” and make them available for everyone with access to the Internet. Obviously, these persons differ in the way they react to (potentially) being laughed at from the way gelotophobes deal with these situations.

We use the term *gelotophilia* for describing people who exceedingly enjoy being laughed at by others. Gelotophiles seek and establish situations in which they can make others laugh at their own expense. One might think of people who enjoy telling jokes and funny stories in front of (small or large) audiences of people that they know well or in front of

people that they do not know well or do not know at all. However, gelotophilia is not only about telling jokes or funny stories (that might have been prepared in advance) to entertain others but also about frankly telling stories of embarrassing or peculiar situations or misfortunes that happened to one-self in order to make others laugh at these misfortunes. These situations might typically entail that the person did something stupid, involuntarily funny or something embarrassing or a misfortune happened to the person. Likewise, gelotophiles do not mind telling others (even people that they do not know well) these stories and they enjoy making other persons laugh at them. They are not ashamed of embarrassing situations but enjoy sharing their experiences in these situations with others.

The question emerges whether gelotophilia is only the low pole on the gelotophobia-dimension, or whether it is something entirely unrelated? Gelotophobia describes the high fear of being laughed at; by definition the low pole of this dimension should have no fear of being laughed at. But enjoying being laughed at is not simply the *absence* of the fear of being laughed at, and therefore a bipolar dimension is unlikely. One might assume that gelotophobes will avoid telling such (embarrassing, shame-related etc.) stories since they try not to be laughed at. However, there might be a different group of people that specially enjoys these situations. Thinking of professions like comedians or clowns one might assume that they need to be in some way gelotophilic (at least to a certain degree) to be successful and to enjoy what they are doing. At least, they should enjoy making others laugh at their own expense and not experience it as hurtful.

However, not to be bothered by being laughed at seems to be to some extent a socially desirable characteristic. Looking through self-descriptions in lonely-hearts ads on the Internet one often finds descriptions like: “I enjoy having fun and laughing. It doesn’t matter if I am laughing with someone—or if I am being laughed at” or “I enjoy laughing at and being laughed at.” It is important to point out that gelotophiles are not ashamed if something embarrassing happens to them. They try to make the best out of the situation and enjoy making others laugh at their misfortune. They actively seek situations in which they can make others (friends or people they do not know) laugh at them.

However, until now nothing is known about possible relations among liking to be laughed at (gelotophilia) and personality traits (one might assume, for example, that gelotophiles are more extraverted than non-

gelotophiles) or other characteristics (e.g., intelligence). There are two related, yet different, concepts to gelotophilia that need to be discussed. Firstly, the *self-defeating humor* as suggested by Martin (see 2007 for an overview). Martin et al. (2003: 52) define the use of self-defeating humor as “excessively self-disparaging humor, or attempts to ingratiate oneself or gain the approval of others by doing or saying funny things at one’s own expense.”

It can be assumed that gelotophobes use humor for self-defeating to a certain degree. However, gelotophiles do not interpret the laughter of others as a sign of being inferior to others but as a sign of their appreciation (e.g., for sharing their misfortunes with others in a witty, entertaining, and self-confident way). They like entertaining others (at their own expense) and gain joy from their laughter. Thus, in making others laugh at them they do not try to put themselves down (e.g., as a sign of low self-esteem or neuroticism) but to experience joy from these situations.

Secondly, there is literature on laughing at oneself that needs to be considered. Numerous authors see the ability to laugh at oneself as a core component of the sense of humor (Lersch 1962) and an important part of mental health and well-being. For example, Frankl (2000) states that this ability is helpful in the search for the (ultimate) meaning in one’s life. Furthermore, learning to laugh at oneself is used in certain therapy programs (e.g., Borchardt 2002), and it is also part of the training program for the development of the sense of humor by McGhee (1999) and is incorporated as a subscale in his Sense of Humor Scale (SHS). McGhee considers the subscales laughing at oneself and humor under stress as different from the other scales of his measure because he assumes that skills related to these concepts are more difficult to develop. As Ruch and Carrell (1998) point out the expression of laughing at oneself could be interpreted metaphorically and it should be best understood as seeing and accepting the own shortcomings and mishaps. This does not necessarily lead to laughter in the person. More typically she / he (“inwardly”) *smiles*. This is a major difference to gelotophilia that primarily deals with the *laughter* of others and not so much smiling (“inwardly,” or at others). Another important difference is that gelotophiles need an audience and that laughing at oneself (as understood in the Sense of Humor Scale) does not necessarily entail the presence of other persons.

In a recent study, Beermann and Ruch (2008) asked participants to rate items from various humor questionnaires regarding their localization on a continuum from vice to virtuousness. The results for the SHS “laughing

at oneself”-subscale indicate that all of the items were rated as neutral. Nevertheless, the ratings for the items are generally closer to virtue than to vice (none was below the midpoint of the scale). However, gelotophilia is not necessarily linked to virtuousness. Gelotophiles do not hesitate to talk about embarrassing or shame-related experiences they had for making others laugh at them (disregarding whether the situation may be interpreted as vicious by others). Thus, virtuousness is not a relevant criterion for the behavior of gelotophiles. Furthermore, gelotophiles actively seek and establish situations in which they can make others laugh at their own expense. One might think of persons that are known as jokers in their peer group or that were known as clowns in the classroom in school. Their behavior pattern should not so much be interpreted as ability. Rather gelotophiles persistently pursue their goal of making others laugh at them. The laughter of others is a source of joy for them. Overall, gelotophilia is a new concept that can be differentiated from related concepts. While it may be positively related to them it is not interchangeable with them.

1.2. *Joy in laughing at others: Katagelasticism*

Next to people who fear being laughed at (*gelotophobes*) and persons who enjoy being laughed at by others (*gelotophiles*) one has to think of a third group of people. What about persons that enjoy laughing *at* others? In the previously mentioned survey we also found entries that were of particular interest because of the role of the agent of the incident or because participants wrote something that reflects the denial that laughing at others might be a harmful experience (for others). For example, one of the participants wrote after thinking of the worst experience of having been laughed at that ever could be possible: “Nothing worth mentioning comes to my mind. What does ‘laughing at’ mean? As long as there is laughter included it cannot be that bad, right?” In this case, laughing at others is connotated positively because it also entails laughter. Many situations written down in the survey, deal with experiences in school. For example, when the whole classroom laughs at a person for doing something embarrassing or with a specific person that played a prank at the others. One of the participants wrote about a self-experienced situation: “Everyone was laughing when I stood in the class-room with a small bottle of a juice brand full of urine. I had filled it by crawling on all fours

in a locker in the class-room during a lesson—I did this for a teacher that did not allow me to go to the toilet.” One might assume that he wanted to embarrass his teacher by doing that and presumably enjoyed laughing at him (together with the other pupils). In this case the person was the agent in this laughter-related situation and he wanted to make the other ones laugh at the teacher. One can hardly imagine this person being gelotophobic because there would be too much potential embarrassment in the situation. Also, his motivation might not have been to make the others laugh at him but to make them laugh at the teacher who did not allow him to go to the toilet but who could not prevent him from doing what he wanted to do. Thus, at the end, the embarrassment was on the side of the teacher who lost his authority over his pupil and probably over the whole class.

In the present study, we are interested in the relation of the fear of being laughed at to the role of the agent of laughter. It is of interest to examine whether gelotophobes are also prone to laugh at others disregarding their own fear—and disregarding that they know how harmful laughter from other can be.

We use the term *katagelasticians*¹ (from the Greek word *katagelao* indicating “laughing at”) to describe persons that actively seek and enjoy situations in which they can laugh at others at the expense of these persons. Also, they do not hesitate to take advantage of situations in which others behave in a ridiculous way or in which one can make fun at others by chance. Katagelasticism, in turn, is used to refer to the phenomenon of enjoying laughing *at* others.

One might think of persons that play harmless pranks on others but also persons who do not hesitate embarrassing others beyond what is accepted in many countries and cultures—for example, practical jokes on April Fool’s day. Thus, the behavior of these persons entails a somewhat antisocial or rude component. For example, a katagelasticist would typically hold the opinion that laughing at others is part of the daily life and that people who do not like to be laughed at should fight back. If the others are not able to do so they have to blame themselves. Katagelasticians do not have a bad conscience about laughing at others or for gloating over someone’s misfortune.

Compromising others is fun for them and typically they would not see any reason why they should not use the chance to do so. Katagelasticians observe others very closely and if they see a chance to make a funny remark or to make fun of others, they take the opportunity to do so.

However, they would also agree to statements indicating that others provoke getting laughed at. Unlike gelotophiles they do not make fun of themselves for entertaining others. However, they do not fear the laughter of others. One might imagine that katagelasticians who get laughed at will immediately start thinking of a response to the agent. That response, in the best case, leads to an even bigger laugh at the expense of someone else (preferably the agent; “An eye for an eye, a tooth for a tooth”). Other persons might describe katagelasticians with a sharp tongue not hesitating to say something unkind or rude for the sake of a joke and a laugh. Katagelasticians sometimes cross the line and a joke that started harmless might lead to serious consequences (e.g., a broken friendship or a dispute).

Soon after the first empirical studies on gelotophobia by Ruch and Proyer (2008a, 2008b) the question emerged whether gelotophobes are only the targets of the laughter by others or whether they also engage in laughing at others. In the latter case, they would laugh at others despite knowing how harmful ridicule can be. One might argue that gelotophobes avoid laughing at others, but it is also possible that they have learned to engage in this form of humor, but were less successful (e.g., due to poor wittiness).

However, the relation among gelotophobia, gelotophilia, and katagelasticism is previously unknown. We do not know whether katagelasticians also get laughed at or whether katagelasticism is a strategy to prevent others from laughing at one-self. Additionally, it is unknown whether gelotophobes also like to laugh at others or whether they prefer avoiding such situations at all. Furthermore, it is unclear whether gelotophiles can also be found among katagelasticians or whether they are perfectly satisfied in making themselves the objects of laughter without mocking others. Thus, we do not yet know whether they are the (self-imposed) targets of laughter only or whether they enjoy laughing at others as well.

1.3. *Putative causes of gelotophobia and their relation to the expression of gelotophilia and katagelasticism*

Titze (this issue) interprets early and repeated experiences of being mocked and laughed at in childhood and youth as causes of the fear of being laughed at. Ruch et al. (2008) showed that remembered experiences

of being laughed at by parents, teachers, and peers in different situations were not more frequently remembered among (clinically diagnosed) gelotophobes but were of higher relevance in a group of normal controls. However, the relation between gelotophobia and these putative causes remained unclear. In that study, the participants were not asked to rate the remembered events split for the mother and the father separately and they also were not asked to comment on events entailing peers of the same or of the opposite sex. As these differences might be of relevance it is of importance to examine them in more detail.

Nothing much can be said about the putative causes of the joy of being laughed at (gelotophilia) and the joy of laughing at others (katagelasticism). One might argue that katagelastistic parents reproduce katagelastistic children and that, likewise, gelotophilic parents have children who have learnt to enjoy making others laugh at themselves. Otherwise, one might also think that gelotophilia might be used as a strategy for coping with early experiences of being laughed at. In that case, gelotophiles would probably remember having been laughed at more frequently in their childhood and youth. Putatively, they would have learned to avoid being laughed at by others by making them voluntarily laugh at them. Thus, it is of interest to study the relation of the three concepts to remembered events of being laughed at in the past.

1.4. *Aims of the present study*

Overall, the aim of the present study is to examine the role of agents and targets in the process of being laughed at and laughing at others. The research conducted so far shows that gelotophobes have difficulties in all social situations that entail laughter. However, we do not know whether they are the targets of laughter only or whether they are able to be the agents of laughing at others as well. In early single-case studies on gelotophobia (see Titze this issue) it was argued that repeated and intense experiences of being laughed at and being brought down, for example, by parents, teachers, or peers might be an eliciting factor of gelotophobia. However, if it is true that gelotophobes reproduce gelotophobes they must be able to be agents (i.e., katagelasticians) as well. Thus, they potentially must know and be able to use the strategies of laughing at others and harming them. This would somehow change the picture of gelotophobes as being the targets of laughter only. We assume that there

is a negative relation between gelotophobia and gelotophilia, as it is unlikely that there are persons who have the predisposition to enjoy and fear being laughed at the same time. We do expect that the three concepts are correlated to some degree but that they are not interchangeable.

For achieving these aims a scale for the subjective assessment of gelotophobia, gelotophilia, and katagelasticism was developed. As there is empirical evidence for the validity and usefulness of a self-report inventory for gelotophobia (see this issue as well as Ruch and Proyer 2008a, 2008b) similar scales for gelotophilia and katagelasticism will be presented in this paper. Thus, an important aim of this study is the examination of the psychometric properties of a new scale for the assessment of the three concepts. The best suiting items out of a larger pool, with respect to their psychometric properties as well as regards the content of the items (e.g., avoidance of redundancies), for the assessment of gelotophilia and katagelasticism were selected for a final scale for the measurement of all three concepts. Information on their reliability and intercorrelations in a construction and a replication sample will be presented. Additionally, the final scale is designed to be economic in its use and a (sufficiently reliable) short form for research purposes will be presented.

Furthermore, the study is aimed at an examination of the relation between gelotophobia, gelotophilia, and katagelasticism and remembered experiences of being laughed at by parents, teachers, and peers (same sex and opposite sex) in childhood and youth—this design allows to overcome some shortcomings of the Ruch et al. (2008) study. If the assumption from the early single-cases studies on gelotophobia is correct one might assume that gelotophobes will remember more of these events. If these assumptions are not true one has to take other eliciting factors of gelotophobia into account. However, it can only be speculated whether gelotophiles and katagelasticists will remember having been laughed at more or less frequently than gelotophobes. In any case the appraisal of these situations should be different since laughter related situations are evaluated differently among the three groups.

2. Method

2.1. Research participants

Construction sample. The sample consisted of $n = 138$ men and $n = 252$ women ($N = 390$ in total). The age of the participants ranged from 18 to

80 years with a mean age of $M = 32.43$ years ($SD = 13.13$). Regarding the marital status, $n = 269$ were single (68.97%), $n = 88$ were married (22.56%), $n = 1$ was widowed (.26%), and $n = 23$ were separated or divorced (5.90%); $n = 9$ participants did not provide information on their marital status (2.31%).

Replication sample. The sample consisted of $N = 157$ ($n = 34$ men and $n = 123$ women) adults. They were between 18 and 59 years ($M = 28.118$, $SD = 9.34$). $n = 131$ (83.44%) were single, $n = 17$ (10.83%) were married), $n = 1$ was widowed (0.64%), and $n = 8$ were separated or divorced (5.10%).

2.2. *Instruments*

The *PhoPhiKat-57* (gelotoPhobia, gelotoPhilia, and Katagelasticism) consists of 15 statements for the *subjective assessment of gelotophobia* (based on the GELOPH(46) by Ruch and Titze (1998) using the scoring key by Ruch and Proyer 2008b; a sample item is “When they laugh in my presence I get suspicious”), 23 items for the subjective assessment of *gelotophilia* (e.g., “I seek situations in everyday life, in which I can make other people laugh at me”), and 19 items for the subjective assessment of *katagelasticism* (e.g., “I enjoy exposing others and I am happy when they get laughed at.”). All items are positively keyed and they use a four-point answer scale (1 = strongly disagree; 2 = moderately disagree; 3 = moderately agree; 4 = strongly agree). The items were preceded by an instruction.

The *Childhood and Youth-Parent-Peer-Ridiculing-Inventory* (CYPPRI; Ruch and Proyer 2008c) consists of seven items in which the participants had to answer to questions regarding remembered events of having been ridiculed by parents, teachers, and peers (of the same and the opposite sex) in their childhood and teenage years. First, the participants are asked whether they remember having been ridiculed by their mother, father, and peers in childhood and youth (for this age span the questions are split for peers of the same and the opposite sex). In case the subjects remember having been laughed at, they have to rate on a 9-point scale (from 1 = “lowest possible emotional reaction on being laughed at” to 9 = “strongest possible emotional reaction on being laughed at”) how strong their emotional reactions were. Thus, the CYPPRI provides separate scores for the *frequency* and *intensity* with which participants

remember having been laughed at by their mother, father and peers. The CYPRI can be found in the Appendix I.

2.3. *Procedure*

All participants took part in an Internet survey and completed the questionnaires and the additional questions in a single session using their private computers. Data for the construction and the replication sample were collected using the same platform but the data was collected at two different points in time. Gosling et al. (2004) showed that Internet-based studies are usually equally reliable and valid as paper-pencil based methods (more traditional strategies) and that samples collected via the Internet are usually more diverse than other samples. While the scale for the subjective assessment of gelotophobia is well validated and, as this special issue shows, is used as the standard instrument for the subjective assessment for the fear of being laughed at (see also Ruch and Proyer 2008a, 2008b), the other items were newly developed for the present study.

The rationale behind the construction of the items for the PhoPhiKat-57 was to choose statements that fit the descriptions of the concepts given in the introductory section of this paper. The descriptions can be interpreted as a first definition of the concepts. In total 42 new items were generated and set together with 15 gelotophobia items in the PhoPhiKat-57, as an initial, experimental version of a questionnaire that needed to be tested empirically. An additional criterion for the generation of the items was that all of them should be easy to understand for all participants. Higher-grade students checked the comprehensibility of the items. The wording of the items was further refined based on their feedback. Finally, the items were checked for redundancies and tested in a small student sample. All participants of the study completed the PhoPhiKat-57. The CYPRI was administered to a sub-sample of 114 participants out of the construction sample.

The study was announced on the website of the University of Zurich and hosted by the University. Additionally, a short announcement for a study on laughing and laughing at was posted in a free local newspaper in Zurich that is popular among readers using the public transport system. Participants were not paid for their services but on demand they received an individual feedback on their test results a few weeks after completing the survey. The feedbacks were electronically mailed to them

in a standardized sheet. Overall, it took approximately 30 minutes to complete the survey.

3. Results

3.1. Examination of the factor structure

A principal component analysis was computed for the total of 57 statements (gelotophobia, gelotophilia, and katagelasticism). The Scree test suggested the extraction of three factors (Eigenvalues were 12.39, 5.90, 3.34, 1.86, and 1.68, respectively), which explained 37.95% of the variance. Three factors were rotated according to the Oblimin criterion ($\delta = 0$). The items for the final solution were selected based on their factor loadings ($\geq .40$ on one factor or a difference of .20 or more between the main factor and the factor with the second highest loading, and loadings $\leq .30$ on the other factors), their corrected item total correlation (and the alpha coefficients for the final scales), and their content. This led to the exclusion of eight items for gelotophilia and four items for katagelasticism.

A principal component analysis was computed for the remaining 45 items. Three factors were extracted that explained 39.14% of the variance. Following the same procedure as above, the three factors were rotated according to the Oblimin criterion ($\delta = 0$). The factors of the final solution were easily interpretable; factor one comprised by the gelotophilia-items (the loadings were from .37 to .74 on this factor; median = .62; highest loading for the item "For raising laughs, I pleurably make the most out of embarrassments or misfortunes that happen to me of which other people would be ashamed"), factor two was constituted by the katagelasticism-items (loadings from .38 to .68; median = .54; highest loading for "Since it is only fun I do not see a problem in embarrassing others in a funny way"), and factor three by the gelotophobia-items (loadings from .37 to .75; median = .57; highest loading for "Especially when I feel relatively unconcerned, the risk is high for me to attract negative attention and appear peculiar to others"). Descriptive statistics, corrected item-total correlations, and loadings of all items of the final version of the scale can be found in Table 1.

Table 1 shows that all items of the final version have their highest loadings on the targeted factor and that there were no high loadings on a

Table 1. *Best suiting 45 items for the subjective assessment of gelotophobia, gelotophilia, and katagelasticism (PhoPhiKat-45)*

Items	Scale	M	SD	CITC	F1	F2	F3
Item 1	Pho	1.92	0.85	.54	-.08	.08	.58
Item 2	Phi	2.65	0.88	.54	.66	.05	.10
Item 3	Kat	1.35	0.63	.37	-.07	.49	-.06
Item 4	Pho	2.23	0.96	.66	-.22	.01	.63
Item 5	Phi	3.00	0.80	.58	.57	.05	-.15
Item 6	Kat	1.43	0.66	.44	.09	.50	.12
Item 7	Pho	2.11	0.90	.62	-.14	-.14	.62
Item 8	Phi	2.11	0.95	.48	.49	-.05	-.20
Item 9	Kat	2.06	0.88	.51	-.02	.59	.02
Item 10	Pho	2.42	0.98	.61	-.16	-.13	.60
Item 11	Phi	2.04	0.85	.59	.63	-.09	-.13
Item 12	Kat	1.24	0.56	.35	.10	.38	.11
Item 13	Pho	2.19	0.85	.21	.50	.11	.48
Item 14	Phi	2.23	0.95	.56	.63	.16	.07
Item 15	Kat	2.10	0.95	.52	.09	.59	-.03
Item 16	Pho	1.49	0.80	.70	-.08	.05	.72
Item 17	Phi	2.36	0.81	.50	.46	.09	-.22
Item 18	Kat	1.56	0.74	.42	.10	.49	.15
Item 19	Pho	2.02	1.01	.60	-.10	.01	.63
Item 20	Phi	2.26	1.08	.40	.37	.05	-.16
Item 21	Kat	2.71	0.94	.49	-.01	.59	.00
Item 22	Pho	2.15	0.97	.62	-.12	-.16	.64
Item 23	Phi	2.13	0.99	.47	.52	.11	.03
Item 24	Kat	1.71	0.79	.63	.09	.68	-.07
Item 25	Pho	2.21	1.11	.40	-.23	.17	.37
Item 26	Phi	2.07	0.93	.70	.74	.07	.02
Item 27	Kat	1.77	0.89	.56	-.05	.68	-.05
Item 28	Pho	1.76	0.89	.61	.17	-.17	.75
Item 29	Phi	2.48	0.83	.60	.68	.02	.03
Item 30	Kat	1.93	0.86	.47	.10	.54	-.13
Item 31	Pho	2.01	0.86	.56	-.07	.08	.61
Item 32	Phi	2.94	0.89	.49	.42	.02	-.34
Item 33	Kat	2.73	0.90	.40	-.03	.52	-.19
Item 34	Pho	1.92	0.83	.59	-.08	.06	.64
Item 35	Phi	2.31	0.90	.50	.55	.09	-.01
Item 36	Kat	3.37	0.76	.37	.10	.40	-.16
Item 37	Pho	1.95	0.89	.70	-.11	-.01	.72
Item 38	Phi	3.07	0.81	.64	.69	.01	-.02
Item 39	Kat	2.12	0.89	.35	-.40	.60	.09
Item 40	Pho	1.98	0.93	.34	.24	.10	.48
Item 41	Phi	2.04	0.85	.43	.39	.01	-.26
Item 42	Kat	2.12	0.97	.58	.14	.63	-.01
Item 43	Pho	1.83	0.84	.57	.00	-.13	.65
Item 44	Phi	2.60	0.95	.64	.69	.01	-.06
Item 45	Kat	1.83	0.89	.44	.15	.48	.15

M = mean; *SD* = standard deviation; CITC = corrected item-total correlation; Pho = gelotophobia-item; Phi = gelotophilia; Kat = katagelasticism.

The first 30 items are considered as suitable for the short-form (CITCs are for the 45-item version).

different factor. This is true except for the sixth gelotophobia-item; i.e. “I believe that I make a funny impression on others” and deals with the gelotophobes’ conviction of being ridiculous. This item worked well in previous studies for the subjective assessment of gelotophobia (see Ruch and Proyer 2008a, 2008b). It was assumed that the meaning of the item changed after new items (especially the gelotophilia-items) were added. These items deal primarily with making others voluntarily laugh at oneself. In this new context, the gelotophobia item might now be misunderstood in the sense of making others voluntarily laugh at oneself (in the sense of entertaining others). Nevertheless, it was decided to include the item in the final version of the PhoPhiKat-45 and to rephrase it for future studies (“I believe that I involuntarily make a funny impression on others”²). The PhoPhiKat-45 reprinted in the Appendix contains the rephrased item.

3.2. Selecting items for a short form (PhoPhiKat-30)

For research purposes it might be useful to have a shorter version of the present 45-item scale. Thus, a suggestion for a short form consisting of ten statements for each of the concepts is also given in Table 1. The most important rationale for the selection of the short form was based on the content of the items. In working on the Proyer et al. (this issue) study, for example, it had to be taken into account that some of the items might have culture-bound meanings. Thus, these statements were excluded from the short form (disregarding that they probably would have shown better psychometric properties than other statements in the present sample) to make the PhoPhiKat-30 more easily applicable in future cross-cultural settings. The full PhoPhiKat-45 with complete instructions can be found in the Appendix II and it is available from the first author by request.

3.3. Descriptive statistics and reliability of the PhoPhiKat-45 and the PhoPhiKat-30 in the construction and the replication sample and their relation to sociodemographic variables

Mean scores and standard deviations for the PhoPhiKat-45/-30 were computed. While it already has been shown that there are no gender differences in gelotophobia (see Ruch and Proyer 2008a, 2008b) and that age also does not relate to the expression of gelotophobes, nothing is

Table 2. *Descriptive statistics and reliability for the PhoPhiKat-45 and the PhoPhiKat-30*

	M	SD	Sk	K	α	$r_{tt(3)}$	$r_{tt(6)}$
PhoPhiKat-45							
Gelotophobia	1.97	0.54	0.67	0.05	.88	.86	.80
Gelotophilia	2.43	0.55	0.06	-0.46	.87	.80	.73
Katagelasticism	1.99	0.46	0.43	-0.29	.84	.77	.75
PhoPhiKat-30							
Gelotophobia	2.03	0.54	0.50	-0.09	.82	.71	.76
Gelotophilia	2.30	0.56	0.15	-0.49	.82	.83	.75
Katagelasticism	1.77	0.47	0.53	-0.38	.79	.68	.70

$N = 547$ (composite sample of construction and replication sample). M = mean; SD = standard deviation; α = Cronbach alpha; $r_{tt(3)}, r_{tt(6)}$ = retest reliability (stability) for three and six months, respectively (based on a $N = 170-174$ sample).

known on age or gender-effects of gelotophilia and katagelasticism. The reliability of the measure was described in terms of internal consistency and retest reliabilities (stability for three and six months, respectively). For the latter, a sample of $N = 174$ participants (55 males, 119 females; 18-76 years, $M = 44.37$, $SD = 13.56$) completed the PhoPhiKat three times within six months. Additionally, it was examined whether the size of the town in which people are living in or the marital status are in any way related to one of the concepts. Finally, reliability was determined for all scales (see Table 2).

Table 2 shows that all scales of the final version of the PhoPhiKat yielded a satisfactory reliability. Across all scales and for the total sample the alpha coefficients were all $\geq .84$ for the 45-item version and $\geq .79$ for the 30-item version. Similar results were found for each of the subsamples (construction and replication). The corrected item-total correlations (45 item version; scores for the 30 item version are given in square brackets) ranged between .19 [.18] and .67 [.64] for gelotophobia (median = .58 [.54]), .39 [.38] and .66 [.63] (median = .52 [.50]) for gelotophilia, and .36 [.31] and .63 [.63] (median = .46 [.47]) for katagelasticism, respectively. The PhoPhiKat-45 yielded high retest reliabilities (all $r_{tt} \geq .73$) in a time-period of three and six months, respectively. The results indicated high stability of both, the 45- and the 30-item version.

Gelotophobia and gelotophilia were uncorrelated with age, sex, size of town the participants live in, and their marital status. However, katagelasticism was related to age ($r = -.24$, $p < .01$), sex ($r = -.24$, $p < .01$; 1 = males, 2 = females), and marital status ($r = -.15$, $p < .05$; 1 = single, 2 = married).

Table 3. *Intercorrelations among gelotophobia, gelotophilia, and katagelasticism split by construction and replication sample*

	<i>PhoPhiKat-45</i>			<i>PhoPhiKat-30</i>		
	Pho	Phi	Kat	Pho	Phi	Kat
Gelotophobia	1.00	-.43**	-.04	1.00	-.37**	-.04
Gelotophilia	-.33**	1.00	.37**	-.23*	1.00	.37**
Katagelasticism	-.10	.50**	1.00	-.14	.58**	1.00

Pho = gelotophobia; Phi = gelotophilia; Kat = katagelasticism; Correlations above the diagonal are for the construction ($N = 362-365$) and correlations below the diagonal are for the replication ($N = 144$) sample.

** $p < .01$

3.4. *Intercorrelations of the PhoPhiKat-45 and the PhoPhiKat-30 in the construction and the replication sample*

The correlation among gelotophobia, gelotophilia, and katagelasticism was computed. Again both samples were used and Table 3 shows the correlation coefficients for the 45- and the 30-item versions.

Table 3 shows that the correlations among the three scales were in the expected direction. Gelotophobes were not likely to be gelotophiles at the same time, but there was a positive relation between katagelasticism and gelotophilia. Among the gelotophobes there were both, katagelasticians and non-katagelasticians. Gelotophobia was negatively correlated with the joy of being laughed at. In the construction sample there was a zero-correlation between gelotophobia and katagelasticism (though a bit higher in the replication sample). Overall, there was a relation among the three scales but they were not interchangeable.

3.5. *Remembered events of being laughed at in childhood and youth in gelotophobes, gelotophiles, and katagelasticians*

Using the *Childhood and Youth-Parent-Peer-Ridiculing-Inventory* (CY-PPRI) the participants rated whether they could remember a situation in which they have been laughed at by their mother, father, or peers in childhood or youth (in youth for both, same sex and opposite sex peers). All participants who claimed that they remembered such a situation were asked to rate their emotional reaction to this event on a 9-point scale.

For the analysis of the intensity ratings the lowest two categories in the ratings were excluded from the further analysis since the total intensity of these two categories is too low for a useful examination of the actual intensity with which these events were remembered. Descriptive statistics for the CYPRI are given in Table 4.

Table 4 shows that most of the participants remembered having been ridiculed by peers while mockery by the parents was comparatively remembered with a lower frequency. Having been laughed at by peers during youth and childhood was also remembered frequently; i.e., 85 and 73%, respectively. About the same number of participants remembered having been laughed at by their parents in childhood and youth (28/29% and 24/26%, respectively). The intensity ratings were highest for the peers in the childhood but mockery by peers of the same sex yielded the same intensity ratings than the remembered intensity of the mockery by the father. The highest intensity ratings were reported for peers of the opposite sex in youth. The mean scores of males and females did not differ signifi-

Table 4. *Mean scores, standard deviations, skewness, and kurtosis for the Childhood and Youth-Parent-Peer-Ridiculing-Inventory (CYPRI)*

Age span	M	SD	Sk	K
Childhood				
Mother	0.28	0.46	0.99	-1.02
Mother (I)	5.77	2.41	-0.43	-0.67
Father	0.29	0.45	0.96	-1.10
Father (I)	5.41	2.81	-0.39	-1.19
Peers	0.85	0.36	-2.01	2.09
Peers (I)	6.21	2.04	-0.57	-0.46
Youth				
Mother	0.24	0.43	1.21	-0.56
Mother (I)	5.03	2.60	-0.22	-0.88
Father	0.26	0.44	1.12	-0.76
Father (I)	5.68	2.61	-0.53	-0.75
Peers (SS)	0.80	0.40	-1.52	0.31
Peers (SS; I)	5.68	2.15	-0.19	-0.94
Peers (OS)	0.73	0.45	-1.05	-0.91
Peers (OS; I)	6.44	2.09	-0.70	-0.46

N = between 111 and 114 for the frequency ratings (1 = yes, i.e. remembered being laughed at by the respective group; 0 = no); and *N* = 35 for the ratings on the remembered intensity of the ridiculing by the mother, *N* = 37 by the father, *N* = 96 by the peers in childhood, *N* = 31 by the mother, *N* = 31 by the father, *N* = 95 by same sex, and *N* = 84 by opposite sex peers in youth; all intensity ratings were given on a 9-point scale with 9 indicating the highest intensity; M = mean; SD = standard deviation; Sk = Skewness; K = Kurtosis; (I) = intensity; SS = same sex; OS = opposite sex.

cantly from each other with the frequency of remembered events of being laughed at by the mother in childhood as the only exception. Men yielded lower mean scores than women ($M = .14$ vs. $M = .34$; $t(111) = -2.09$, $p < .05$) indicating that women remembered more frequently than men being laughed at by their mother (as a child).

The scores out of the CYPRI were correlated with the PhoPhiKat-45 for an examination of the relation between gelotophobia, gelotophilia, and katagelasticism and the frequency and intensity of remembered events of being ridiculed by parents and peers in childhood and youth (see Table 5).

Table 5. *Relations among gelotophobia, gelotophilia, katagelasticism and the frequency and intensity-scales from the Childhood and Youth-Parent-Peer-Ridiculing-Inventory (CYPRI)*

Age span	Gelotophobia	Gelotophilia	Katagelasticism
Childhood			
Mother	.13	-.06	-.05
Mother intensity	.20	.27	-.20
Father	.26**	-.10	-.07
Father intensity	.46*	-.15	-.01
peers	.13	.03	.21*
peers intensity	.02	.05	-.01
Youth			
Mother	.06	.02	-.15
Mother intensity	.16	-.09	-.01
Father	.31**	-.04	-.04
Father intensity	.44*	-.23	.15
Peers (SS)	.21*	.09	.30**
Peers intensity (SS)	.07	.03	.01
Peers (OS)	.05	.12	.20*
Peers intensity (OS)	.11	.10	-.02
Total			
Frequency	.23*	-.02	.04
Intensity	.24*	.02	.02

$N =$ between 111 and 114 for the mother, father, and peer ratings (1 = “Yes, I remember a situation of being laughed at”; 0 = “No, I do not remember a situation of being laughed at”) and $N = 30$ for the intensity-ratings related to the mother and the father (childhood), $N = 88$ for peers in childhood, $N = 25$ for the mother in youth, $N = 26$ for the father in youth, $N = 89$ for same sex peers and $N = 80$ for opposite sex peers (this questions had only to be answered if the previous answer was “yes”; the two lowest categories were discarded from further analysis); SS = same sex; OS = opposite sex; total frequency = total score of all events for which the participant remembered having been laughed at by parents or peers; total intensity = sum score of all intensity ratings (excluding the lowest two ratings).

* $p < .05$. ** $p < .01$

Table 5 shows that gelotophobia was related to more frequent and more intense memories of being laughed at by the father in childhood and by youth and peers of the same sex in youth. Conversely, the expression of gelotophilia was irrelevant to remembered events of being laughed at by parents or peers in childhood or youth. Katagelasticians remembered having been laughed at by peers in childhood and youth (of the same sex and of the opposite sex). However, this relation was limited to the frequency of the events and was not found for the intensity with which these events were recollected. The total scores for the frequency and the intensity of parents and peers were related to gelotophobia only. Gelotophobes remembered having been laughed at more frequently and more intensely. On the other hand, there were zero correlation coefficients for gelotophilia and katagelasticism to the total scores.

4. Discussion

The joy of being laughed at (*gelotophilia*) and the joy of laughing at others (*katagelasticism*) are two extensions of the gelotophobia-concept. There is a zero-correlation between gelotophobia and katagelasticism (a low negative relation in the replication sample). These findings indicate that there are gelotophobes that are able to ridicule others despite that they know how harmful this might be. On the other hand there are gelotophobes who do not mock others. This means that gelotophobes are not a homogenous group of targets for mockery; at least a subgroup of gelotophobes exists that enjoys laughing at others. Therefore, some gelotophobes are agents despite they know how harmful laughter can be. The correlational pattern among the three scales was stable in two independently collected samples. Gelotophobia and gelotophilia exist independently from demographic variables. Contrarily, katagelasticians are more likely to be younger (median split in the sample), males and not in a relationship.

Gelotophobia and katagelasticism both are correlated with gelotophilia but in different ways. As expected, gelotophilia is negatively related to gelotophobia. This means, that gelotophobes will not actively search for situations in which they might entertain others on their own expense (make them laugh at themselves; i.e. gelotophilia). Gelotophiles, on the other side are not likely to show gelotophobic tendencies. Contrarily, gelotophilia correlates positively with katagelasticism. This indicates that

gelotophiles enjoy entertaining others at their own expense but will probably not avoid laughing at others or not avoid using a given chance of poking fun at others. Again, it has to be mentioned that this is different from self-defeating use of humor. The gelotophiles' intention is not to put themselves down by making others laugh at them. They truly enjoy laughing *with* others at their own expense. Therefore, gelotophiles also need an audience (agents of laughter) for being able to enjoy these situations.

The PhoPhiKat-45 (and its short-form the PhoPhiKat-30) proved to be a reliable and useful self-report measure for gelotophobia, gelotophilia, and katagelasticism. Therefore, this study presented the first empirical results on gelotophilia and katagelasticism and helped define the concepts. However, different interpretations still might be useful for consideration. For example, one might think of gelotophilia as a different way of coping with incidents of being laughed at. In doing so one would preferably focus on harmless and not serious laughter-related situations and gain personal success by coping with these harmless situations. For research and practical applications we suggest using the forty-five-item form for general purposes and the thirty-item short-form in large-scale studies in which gelotophobia, gelotophilia, and katagelasticism might be interesting variables.

A second main result of the study was that frequently remembered events of being laughed at by the father in childhood and youth were related to the expression of gelotophobia. While gelotophilia was not related to any of the events of having been laughed at by different persons at different ages, katagelasticians reported to remember having been laughed at by peers in childhood and youth (same and opposite sex). Thus, katagelasticians have probably learned that ridiculing others might be a protective strategy for preventing the mockery of others. However, the results from the Proyer et al. (this issue) study suggest that katagelasticians actually remembered having been laughed at in the past twelve months but neither the frequency nor the intensity of these events was an important contributor to the expression of katagelasticism. Thus, the strategy seems to be useful to a certain degree but does not prevent katagelasticians from being laughed at in general.

The relation of the expression of gelotophobia to remembered experiences of being laughed at by the father in childhood and youth needs to be examined in more detail in future studies. It is difficult to argue why the role of only one of the parents should be of importance for the devel-

opment of gelotophobic symptoms. Interestingly, the total scores of remembered events of being laughed at by parents and peers and the total score for the intensity are only related to the expression of gelotophobia. Contrary, there is no such relation to the total scores in gelotophiles and katagelasticians.

However, Ruch et al. (2008) showed that remembered events of being laughed at by teachers, parents or peers in school and at home were higher related to the expression of gelotophobia in a group of normal controls than in (clinically diagnosed) gelotophobes. Thus, a study including children and adolescents involving their parents and teachers (with self and peer-ratings) is needed for a further examination of this relation. It has to be mentioned that there might be cultural differences that may have an impact on the (perceived) role of the parents and peers and the interaction with these persons. There might be social cues that indicate who is "allowed" of poking fun at the other person and who is allowed to answer back or is not allowed to do so (e.g., symmetrical and asymmetrical relationships, cf. Radcliffe-Brown 1940). Potential cross-cultural differences in the causes of gelotophobia are on the schedule of a large multinational study of gelotophobia that was recently initiated (see Proyer et al. this issue).

The distinction among gelotophobia, gelotophilia, and katagelasticism is of importance when thinking of the development of treatments for gelotophobia (yet it is unclear whether gelotophiles and katagelasticians show symptoms and behaviors that indicate treatment or whether there are people who feel impaired in their everyday life because of extreme expressions in one of these concepts). For example, one might think of a training program for gelotophobes in which they learn that it might be fun sharing a funny experience with others even if it is related to something embarrassing. However, intervention programs for gelotophobia are in a rudimentary form at the present moment with short descriptions of the outlines on a general level (see Titze this issue).

As a limitation of the study it has to be mentioned that the validity of remembered events of having been laughed at and the intensity of the reactions to these situations might be biased for several reasons. One might argue that a repressive coping style in stressful and (potentially) harmful situations would prevent the individual from remembering these experiences. The current setting does not indicate whether the remembered situations have truly happened or whether other (harmful) events were not remembered due to a repressive coping style. Additionally, we have

not clearly defined the age boundaries for “childhood” and “youth” in the instructions to the CYPRI and this might have resulted in different interpretations of the two categories among the participants.

However, future studies on the personality structure of gelotophobes, gelotophiles, and katagelasticians are needed. One might argue that a specific personality structure (e.g., Introversion or Neuroticism) makes persons prone to be laughed at by others; i.e. because of being shy, withdrawn, anxious, or reserved in social situations. On the other hand it is unclear how far certain personality characteristics might be associated with being a gelotophilic person (e.g., Extraversion) or being a katagelastician (e.g., Psychoticism, Sensation Seeking, or low Agreeableness).

So far nothing is known about the humor of gelotophobes. However, one might argue that gelotophobes fear being laughed at because they do not have the ability to respond to jokes in the same way as the agent (e.g., due to poor wittiness). Thus, an in depth examination of the humor of gelotophobes is needed as an important step in the study of the phenomenon. Additionally, we do not know whether gelotophilia and katagelasticism are in any way related to humor production or the quality of the produced humor (cf. Ruch et al. this issue). Depending on the results of this study, humor intervention programs could be developed as effective treatments of gelotophobia.

University of Zurich

Appendix I

Childhood and Youth-Parent-Peer-Ridiculing-Inventory (CYPRI; Ruch and Proyer 2008c) Instructions. The following questions deal with events that happened in your childhood and youth. You will be asked to remember situations in which you have been laughed at either by your parents or peers in your childhood or youth. Since the questions deal with your memory there are no right or wrong answers. Please do not think too long for your answer and answer with the first thought that comes to your mind.

- (1) Do you remember having been laughed at by your *mother, father, or peers* in your childhood (Yes/No)?

- (1a) If you have answered the question above with “Yes” then please indicate below how strong you have experienced your emotional reaction on having been laughed at (answers can be given on a scale ranging from 1 to 9 while 1 = the lowest possible emotional reaction to having been laughed at and 9 = strongest possible emotional reaction on having been laughed at).
- (2) Do you remember having been laughed at by your *mother, father, peers of the same sex, peers of the opposite sex* in your youth (Yes/No)?
- (2a) If you have answered the question above with “Yes” then please indicate below how strong you have experienced your emotional reaction on having been laughed at (answers can be given on a scale ranging from 1 to 9 while 1 = the lowest possible emotional reaction to having been laughed at and 9 = strongest possible emotional reaction on having been laughed at). (...)

Appendix II

PhoPhiKat-45

Age: _____

Gender: male female

Are you? single cohabiting married separated widowed

Instructions:

The following statements refer to your feelings, actions, and perceptions **in general**. Please try as much as possible to describe your **habitual** behavior patterns and attitudes by marking an X through one of the four alternatives. Please use the following scale:

- (1) strongly disagree
- (2) moderately disagree
- (3) moderately agree
- (4) strongly agree

For example

I am a cheerful person (1) (2) (3) (4)

If you strongly agree with this statement, that is, if you are **in general** a cheerful person, **mark an X through (4)**. If you strongly disagree, that is, if you are **habitually not cheerful at all**, **mark an X through (1)**. If you have difficulty answering a question, pick the response that **most** applies.

Please answer every question, do not omit any.

- 1 When they laugh in my presence I get suspicious. (1) (2) (3) (4)
- 2 When I am with other people, I enjoy making jokes at my own expense to make the others laugh. (1) (2) (3) (4)
- 3 I enjoy exposing others and I am happy when they get laughed at. (1) (2) (3) (4)
- 4 I avoid displaying myself in public because I fear that people could become aware of my insecurity and could make fun of me. (1) (2) (3) (4)
- 5 I do not hesitate telling friends or acquaintances something embarrassing or a misfortune that happened to me, even at the risk of being laughed at. (1) (2) (3) (4)
- 6 Often, disputes emerged because of funny remarks or jokes that I make about other people. (1) (2) (3) (4)
- 7 When strangers laugh in my presence I often relate it to me personally. (1) (2) (3) (4)
- 8 There is no difference for me whether people laugh at me or laugh with me. (1) (2) (3) (4)
- 9 When related to making jokes or funny remarks about other people I rather follow the motto "An eye for an eye, a tooth for a tooth" than "If someone strikes you on the right cheek, offer him the other also." (1) (2) (3) (4)
- 10 When others make joking remarks about me I feel being paralyzed. (1) (2) (3) (4)
- 11 I enjoy it if other people laugh at me. (1) (2) (3) (4)

- 12 It has happened that humorless persons have broken off their friendship with me or at least threatened me to do so, because I overdid ridiculing them over of something embarrassing or a misfortune that happened to them. (1) (2) (3) (4)
- 13 I believe that I make involuntarily a funny impression on others. (1) (2) (3) (4)
- 14 I am the joker in my circle of friends, who entertains the others (often with jokes at my own expense). (1) (2) (3) (4)
- 15 If other people poke fun at me than I pay them back in the same way—but more so. (1) (2) (3) (4)
- 16 I control myself strongly in order not to attract negative attention so I do not make a ridiculous impression. (1) (2) (3) (4)
- 17 I enjoy it if other people poke fun at me since this might also be a sign of recognition. (1) (2) (3) (4)
- 18 If it is for entertaining other people it is justified to make jokes or funny remarks that might be painful or mean about other people. (1) (2) (3) (4)
- 19 When I have made an embarrassing impression somewhere, I avoid the place thereafter. (1) (2) (3) (4)
- 20 If someone caught me on a camera while something embarrassing or a misfortune happen to me, I would not mind, if s/he send the tape to a television show that broadcast such videos. (1) (2) (3) (4)
- 21 Some people set themselves up for one to make fun at them. (1) (2) (3) (4)
- 22 If someone has teased me in the past I cannot deal freely with him forever. (1) (2) (3) (4)
- 23 I have talent for being a comedian, cabaret artist or clown. (1) (2) (3) (4)
- 24 Since it is only fun, I do not see any problems in compromising others in a funny way. (1) (2) (3) (4)

- 25 It takes me very long to recover from having been laughed at. (1) (2) (3) (4)
- 26 For raising laughs I pleurably make the most out of embarrassments or misfortunes that happen to me which other people would be ashamed of. (1) (2) (3) (4)
- 27 Laughing at others is part of life. People who do not like to be laughed at just should fight back. (1) (2) (3) (4)
- 28 Especially when I feel relatively unconcerned, the risk is high for me to attract negative attention and appear peculiar to others. (1) (2) (3) (4)
- 29 I enjoy contributing to the open laughter of others by telling them embarrassing things or misfortunes that happened to me. (1) (2) (3) (4)
- 30 If I am with a group of people and I am the only one that notices that someone has done something embarrassing or that something embarrassing happened to him/her, than I do not hesitate to tell the others about it. (1) (2) (3) (4)
- 31 It is difficult for me to hold eye contact because I fear being assessed in a disparaging way. (1) (2) (3) (4)
- 32 When I am with other people and something embarrassing happens to me (e.g., a slip of the tongue or a misfortune) I am more pleased than angry and laugh along with it. (1) (2) (3) (4)
- 33 I do not have a bad conscience when I laugh at the misfortunes (e.g., slips of the tongue) of others. (1) (2) (3) (4)
- 34 Although I frequently feel lonely, I have the tendency not to share social activities in order to protect myself from derision. (1) (2) (3) (4)
- 35 If I drop a clanger, I enjoy it a little because I can hardly wait to tell my friends about this misfortune. (1) (2) (3) (4)
- 36 Nothing is better than stealing a pretenders thunder with a funny remark. (1) (2) (3) (4)

- 37 When I have made a fool of myself in front of others I grow completely stiff and lose my ability to behave adequately. (1) (2) (3) (4)
- 38 I do not mind telling something embarrassing in a group that happened to me if I know that the others will find it funny. (1) (2) (3) (4)
- 39 It is easier for me to laugh at others than to make fun of myself. (1) (2) (3) (4)
- 40 While dancing I feel uneasy because I am convinced that those watching me assess me as being ridiculous. (1) (2) (3) (4)
- 41 Nothing much could happen to me that I would be so ashamed that I would not tell it others. (1) (2) (3) (4)
- 42 In my circle of friends I am known for my “sharp tongue” (e.g., making cynical remarks and jokes about others). (1) (2) (3) (4)
- 43 If I did not fear making a fool of myself I would speak much more in public. (1) (2) (3) (4)
- 44 My friends know me for not being ashamed of telling them of embarrassing situations that happened to me. (1) (2) (3) (4)
- 45 I, myself notice that I sometimes cross the line and jokes that others experience as painful started harmless (at least from the viewpoint of demure people). (1) (2) (3) (4)

Please check to see that you have answered every statement.

Scoring key PhoPhiKat

PhoPhiKat-30: *Pho* = 1, 4, 7, 10, 13, 16, 19, 22, 25, 28

PhoPhiKat-45: *Pho* = 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43

PhoPhiKat-30: *Phi* = 2, 5, 8, 11, 14, 17, 20, 23, 26, 29

PhoPhiKat-45: *Phi* = 2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41, 44

PhoPhiKat-30: *Kat* = 3, 6, 9, 12, 15, 18, 21, 24, 27, 30

PhoPhiKat-45: *Kat* = 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45

Notes

Correspondence address: w.ruch@psychologie.uzh.ch

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1. We would like to thank Sean Harrigan and Christian F. Hempelmann for their help in coining this term.
2. In the meantime we have used the PhoPhiKat-45 in different studies (e.g., Proyer et al. this issue; Ruch et al. this issue) and the rephrased item worked well as a gelotophobia-item again.

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