Beyond Being Timid, Witty, and Cynical: Big Five Personality Characteristics of Gelotophobes, Gelotophiles, and Katagelasticists

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Abstract. The study examines the personality correlates of gelotophobia (fear of being laughed at), gelotophilia (joy of being laughed at), and katagelasticism (joy of laughing at others) in the framework of the five-factor model. In a sample of 1,774 adults, gelotophobes were introverted neurotics with lower inclinations of openness. Furthermore, adjectives like shy, inhibited, and insecure were indicative for gelotophobia. Gelotophilia related to extraversion, low neuroticism and low conscientiousness. Gelotophiles could be well described by adjectives like cheerful, talkative, original, witty, and uninhibited. Katagelasticists were found to be younger males with low scores in agreeableness and conscientiousness. Adjectives like cynical and vengeful correlated robustly with katagelasticism. Results are discussed with respect to the current literature. Suggestions for future research are given.

Keywords: personality, Five-Factor Model, gelotophobia, gelotophilia, katagelasticism, humor, laughter.

1. Introduction

Research in humor has been a neglected field in psychology for a long time. However, researchers seemed to have gained more interest in the field in the 1970s (see Chapman and Foot 1977; Goldstein and McGhee 1972; McGhee and Goldstein 1983) and lately due to the rise of positive psychology (see Müller and Ruch 2011; Peterson and Seligman 2004; Ruch 2004; Ruch, Proyer, and Weber 2010a, b). In this line of research, humor and laughter are typically perceived as being positive; as contributing positively to the well-being of a person, alleviating mood, or serving positive social functions (cf. Martin 2007; Ruch 2007, 2008).

In a review of measurement approaches to the sense of humor, Ruch (1996, 2007) argues for a comprehensive model of the sense of humor that also includes socially undesirable forms. While current conceptualizations and measures of humor are more or less blind to its 'dark side' (an exception is, for example, the notion of maladaptive humor styles as put forward by Martin, Puhlik-Doris, Larsen, Gray, and Weir 2003), much attention has been devoted lately to the way people deal with ridicule and being laughed at (see Platt and Forabosco in press; Proyer and Ruch 2010a; Ruch 2009). Ruch and Proyer (2009a) describe three different dispositions towards ridicule and being laughed at. Firstly, there are the *gelotophobes* whose primary characteristic is their enhanced fear of being laughed at (Ruch and Proyer 2008a, b). They experience laughter by others as a threat and display an almost paranoid sensitivity towards the laughter by others. Secondly, there are the *gelotophiles*, who enjoy being laughed at and who make others voluntarily laugh at themselves. They seek and establish such situations and do not refrain from telling others about embarrassing things that happened to them for making them laugh at their misfortune. Finally, there are the *katagelasticists*, who enjoy laughing *at* others. They seek and establish situations in which they can laugh at others and do not refrain from doing so—even when going beyond what would be generally perceived as acceptable by common social norms. They see laughing at others as something normal and think that those who do not like being laughed at should just fight back.

Ruch and Proyer (2009a) developed a reliable (internally consistent, stable) measure for the subjective assessment of these three dispositions (PhoPhiKat-45). As expected, gelotophobia and gelotophilia correlated negatively without being redundant (r[363] = −.43,

$p < .01$). Gelotophilia correlates with enjoying laughing at others to a certain degree ($r = .37$, $p < .01$) and there is a zero-correlation between gelotophobia and katagelasticism ($r = -.04$, *n.s.*). Thus, there are gelotophobes who do not enjoy laughing at others but also those who do so — despite knowing how harmful this can be. While katagelasticists tend to be younger males that are not in a relationship, the other two dispositions exist widely independently from demographics (Platt and Forabosco in press).

Correlates of gelotophobia have been studied extensively lately (cf. Proyer and Ruch 2010a; Ruch 2009) with its relations to personality variables as one of the most eminent topics. In Ruch and Proyer (2009b), gelotophobes described themselves as introverted neurotics that were also higher in older, more clinically saturated variants of the Eysenckian psychoticism (P) scale. The latter fits well to theoretical accounts on a somewhat paranoid sensitivity towards laughter by others (Ruch and Proyer 2008a; Titze 2009). The notion of higher neuroticism and introversion of gelotophobes has been replicated in several studies from different countries with different instruments (Hřebíčková, Ficková, Klementová, Ruch, and Proyer 2009; Proyer and Ruch 2010b; Rawlings, Tham, and Milner Davis 2010; Ruch, Proyer, and Popa 2008). Apart from this, gelotophobia was found to relate to (low) agreeableness and (low) openness. However, these relationships were less robust as they often vanished when controlling for the other personality variables (Hřebíčková et al. 2009; Rawlings et al. 2010; Ruch et al. 2008). In these studies, gelotophobia existed independently from conscientiousness. However, while gelotophobes can already be well described in terms of personality, comparatively less is known about gelotophilia and katagelasticism.

In an initial study, Proyer and Ruch (2010b) tested the localization of the three dispositions towards ridicule and being laughed at in the PEN-model. Apart from the previously reported findings for gelotophobia that were well replicated, gelotophiles and (primarily male) katagelasticists were extraverts with higher scores in Eysenck's P-scale. Those females who enjoy making others laugh at themselves were also low in neuroticism.

The three dispositions towards ridicule and being laughed at have not yet been studied within the framework of the five-factor model of personality (FFM). When conducting such a study, ideally, a comprehensive measure should be used that encompasses different conceptualizations of the five basic factors of personality, which have also been called Big Five (cf., Ostendorf and Angleitner 1994). One such instrument is the *Bipolar Adjective Rating Scales* measure (BARS179; Ostendorf 1990) that is based on rating inventories published by Goldberg (1992), John (1983; John, Goldberg, and Angleitner 1984), McCrae and Costa (1987), Norman (1963), and Peabody (1987; Peabody and Goldberg 1989). It covers the five dimensions extraversion (E; sometimes also labeled as surgency [SU] in these sources), agreeableness (A), conscientiousness (C), neuroticism (N; emotional stability [ES]), and openness to experience (O; culture [CU], intellect [INT]). In Ostendorf and Angleitner (1994), the BARS179 was used as the standard with respect to the lexical research tradition for the comparison of different scales representing the Big Five. Additionally, it was used in the validation of the German version of the NEO-PI-R (Costa and McCrae 1992) and proved high convergence with the homologous scales there (all $\geq .60$ and $\geq .69$ in self- and peer-ratings; Ostendorf, and Angleitner 2004).

Based on the previously reported findings, it is expected that gelotophobes are introverted neurotics. However, the main question is, what is beyond E and N? Earlier findings might point at lower expressions in O and A (Hřebíčková et al. 2009; Rawlings et al. 2010; Ruch et al. 2008). One might also speculate that the gelotophobes' lack of liveliness and spontaneity (Ruch and Proyer 2008a; Titze 2009) hinders them from exhibiting openness and that they should rather be reluctant towards new experiences. This, however, should be restricted to situations where they could potentially fear being laughed at and not generalize to other areas such as, for example, academic performance (Edwards, Martin, and Dozois 2010). Thus, a

lower inclination to O has to be expected but without being one of the prime characteristics of gelotophobes.

A description of gelotophobia at the level of established general factors is fruitful but maybe not parsimonious. Gelotophobes show characteristics of N (e.g., high propensity to shame and fear) and E (e.g., social withdrawal, low positive affect) and thus both are needed to predict the symptoms of the fear of being laughed at. However, gelotophobia itself appears to be a rather narrow construct and the emergence of this fear might be better predicted by a combination of narrow traits, or even a single unitary narrow disposition. More than 100 years ago the French psychiatrist Paul Hartenberg (1901) published a book on *Les Timides et la Timidité* in which he described the behavior of timid (or in current terminology: socially anxious) individuals. He expressed the view that the fear of ridicule is one of the main motivations for the social inhibition of timid people. Thus, a general inhibitedness, timidity or shyness might be the single best predictor of gelotophobia and play a role in its etiology. A more parsimonious and potentially more powerful prediction of the fear of being laughed at might be accomplished via more narrow traits located in the diagonal between introversion and neuroticism. Hence, in addition to the superfactors also lower-order traits should be examined and their predictiveness should be compared with E and N (and potentially other domains of personality).

Gelotophiles are primarily expected to be emotionally stable extraverts (Proyer and Ruch 2010b). However, hypotheses can also be set up on the relations to the other personality dimensions. For example, one might argue that as lower C individuals are less serious and more playful (in addition to being extraverted and stable) a negative correlation with conscientiousness will occur (Ruch and Köhler 2007). Furthermore, Ruch and Proyer (2009a) describe gelotophiles as sociable and primarily interested in making others laugh at themselves for gaining joy out of the laughter by others. It is evident that this should work better when being agreeable. Nevertheless, as gelotophiles were also shown not to refrain from laughing at others (Ruch and Proyer 2009a), it is expected that there is only a low positive correlation and that A is not one of their prime characteristics. Additionally, gelotophiles are expected to be open to new experiences as this provides chances for exposing themselves to new and potentially amusing situations and experiences. Openness should make it easier for them to approach people and to actively establish situations in which they can make others laugh. Also, openness is a predictor of being witty (Ruch and Köhler 2007).

High katagelasticism is expected to relate to low A and low C (as it related to high P and psychopathic personality traits; Proyer, Flisch, Tschupp, Platt, and Ruch in press; Ruch and Proyer 2010b), and to high E. Prototypical katagelasticists are described with a somewhat rude and antisocial component in their behavior (Ruch and Proyer 2009a; see also Proyer et al in press). When poking fun at others, they often cross boundaries and—in this particular moment—laughing and raising laughter at someone seems to be more important to them than social conventions. In the PhoPhiKat-45 item contents deal, for example, with disputes which emerge out of engaging oneself in joking activities or even broken friendships. Furthermore, it is known that katagelasticists endorse aggressive contents in cartoons (Samson and Meyer 2010) and have low guilt-proneness (Proyer, Platt, and Ruch 2010). It is play, however, and the aggression in cynicism is not to be confused with mere aggression. Hence a playful rudeness would imply low C and low A. Expectations for O is more difficult to derive from the literature. However, the katagelasticists' higher origence when testing their humor creation abilities (Ruch, Beermann, and Proyer 2009) might be seen as a hint of higher inclinations to openness (in the sense of original and creative productions).

For all three dispositions, it will also be tested which adjectives are most indicative; i.e., contribute beyond broader personality dimensions. For example, it is expected that gelotophobia is well represented by items expressing shyness, inhibitedness or timidity, which could add to the description of the gelotophobic personality beyond the Big Five factors.

Furthermore, the BARS179 contains humor-related adjectives (i.e., cheerful – gloomy, humorless – witty, cynical – gullible, cheerful – serious, grim – gay/mirthful) that should be addressed separately. In earlier studies, gelotophobes described their humor style as inept and themselves as not cheerful and serious (Ruch et al. 2009; see also Samson and Meyer 2010). Hence, negative relations to these items have to be expected. Gelotophiles were expected to endorse all kind of humorous expressions as long as it may involve laughter (Ruch and Proyer 2009a; Samson and Meyer 2010), while katagelasticists primarily focus on those with a negative connotation (e.g., cynical; Proyer et al. in press).

2. Aims of the Present Study

This study examines the personality of gelotophobes, gelotophiles, and katagelasticists from higher (Big Five dimensions) to lower levels (trait adjectives). Its main aim was threefold. Firstly, to examine, which of the Big Five factors relate robustly to the three dispositions towards ridicule and being laughed at. Secondly, studying what traits (or trait adjectives) are indicative for each of the three dispositions and where at facet- or item-level the three could be located. Therefore, we examined which single adjectives or adjective groups ("facets") predict the three dispositions best. Thirdly, testing the relation of humor-related item contents in the BARS179 with the three dispositions.

3. Method

3.1. Participants

The total sample consisted of 1,774 German adult volunteers (443 men and 1,331 women). Their mean age was 38.44 (SD = 12.41; range 18-79 years). Nearly half of the participants (44.02 %; n = 781) were married and 40.64 % (n = 721) were single. Close to two thirds (63.13 %; n = 1,120) indicated having a degree from University, 24.07 % (n = 424) had compulsory education, and 12.46 % (n = 221) held a school diploma qualifying for higher education at a University.

3.2. Instruments

The *PhoPhiKat-45* (Ruch and Proyer 2009a) is a 45-item questionnaire for the subjective assessment of *gelotophobia* (e.g., "When they laugh in my presence I get suspicious"), *gelotophilia* ("I seek situations in everyday life, in which I can make other people laugh at me"), and *katagelasticism* ("I like to compromise other persons and enjoy when they get laughed at"). Each scale comprises 15 positively keyed items in a four-point answer format (1 = *strongly disagree* to 4 = *strongly agree*). The measure proved to be reliable (high internal consistencies and stability across a period of up to six months) and yielded a robust 3-factor solution. It has been used widely in research (e.g., Chen, Chan, Ruch, and Proyer 2011; Platt and Ruch 2010; Proyer and Ruch 2009a, b; Renner and Heydasch 2010; Ruch et al. 2009; Samson, Huber, and Ruch 2011; Samson and Meyer 2010).

The *Bipolar Adjective Rating Scales* (BARS179; Ostendorf 1990) is a 179-item questionnaire for the measurement of the Big Five personality factors extraversion (E), agreeableness (A), conscientiousness (C), neuroticism (N), and openness to experience (O). Sample items are "talkative – silent" (E), "peaceful – quarrelsome" (A), "ambitious – aimless" (C), "hardy – vulnerable" (N), and "original – conventional" (O). Items use a six-point rating-answer format (-3 = *strongly agree to the adjective on the left hand side* to +3 =

strongly agree to the adjective on the right hand side). In several studies, the BARS179 was found to be a reliable instrument (all αs $\geq$ .92; Ostendorf 1990; Ostendorf and Angleitner 1994, 2004) with a stable factor structure (e.g., Ostendorf 1990; Ostendorf and Angleitner 1992) that reflected theoretical assumptions very well. The scales converged well with prototypicality ratings by experts as well as with self- and peer ratings (Ostendorf and Angleitner 2004). Individual scores were computed by saving factor scores in each of the five factors rotated to the Varimax-criterion as suggested by Ostendorf and Angleitner (1994).

3.3. Procedure

Participants completed the PhoPhiKat-45 and the BARS179 and provided information on demographics online on a well established website for research purposes (www.charakterstaerken.org; hosted by the institution where the study has been conducted). This website hosts mainly research instruments related to positive psychology but also instruments with a broader focus (e.g., personality, humorous temperament).

Data collection took place between April 2008 and February 2010. The website was promoted by different means, such as press coverage (e.g., newspaper and several magazines) and contacting special groups (e.g., artists, police officers, theologians) in order to ascertain heterogeneity of the sample. Respondents were not paid for participating, but were provided an automatically generated feedback on their individual results.

Testing via the Internet has been criticized in different occasions (e.g., for sample biases). However, there are standards for the implementation of Internet-delivered-testing (Coyne and Bartram 2006) that facilitate this way of data collection. Furthermore, there is empirical evidence that data collected via the Internet leads to similar findings as more traditional paper-pencil methods (Gosling, Vazire, Srivastava, and John 2004).

4. Results

4.1. Descriptive Statistics of PhoPhiKat-45 and BARS179

Ruch and Proyer (2008b) empirically derived cut-off points for gelotophobia that allow describing different levels of the fear of being laughed at. There were about 18% ($n = 316$) gelotophobes in the sample; 12% ($n = 208$) yielded slight, 5% ($n = 90$) marked, and 1% ($n = 18$) extreme expressions. This indicates that gelotophobia can be well studied in this sample. Descriptive statistics were computed for the PhoPhiKat-45 scales as well as for the BARS179 factor scores of the Big Five. Furthermore, reliability (Cronbach alpha) and correlations to demographics were analyzed (see Table 1).

Table 1 shows that all scales were normally distributed. Gelotophobia existed independently from gender, but was higher among the younger participants. Katagelasticism was more pronounced among younger males[1]. In the BARS179, extraversion factor scores were higher for females. Conscientiousness was slightly higher in older participants. Neuroticism tended to be higher in younger females. However, shared variance between the demographics and the personality as well as the laughter-related scales did not exceed 5%. Despite this comparatively small impact, it was decided to control for demographics in the subsequently conducted analyses.

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[1] Intercorrelations among the PhoPhiKat-45 scales were −.43 between gelotophobia and gelotophilia, .12 between gelotophobia and katagelasticism, and .31 between gelotophilia and katagelasticism (all *p* < .001).

Table 1
Descriptive Statistics, Reliability, and Correlations
of PhoPhiKat-45 and BARS179 with Gender and Age

Scales	Descriptive Statistics and Reliability							Correlations	
	Min	Max	*M*	*SD*	*S*	*K*	Alpha	Gender	Age
PhoPhiKat-45									
Gelotophobia	1.00	4.00	1.99	0.56	0.61	0.01	.90	.00	–.20***
Gelotophilia	1.00	3.93	2.53	0.51	–0.05	–0.34	.88	–.01	–.07***
Katagelasticism	1.00	3.67	2.06	0.47	0.44	–0.09	.87	–.20***	–.23***
BARS179									
Extraversion (E)	–3.96	2.86	–	–	–0.52	0.37	–	.27***	.06*
Agreeableness (A)	–3.95	2.98	–	–	–0.21	0.22	–	.02	.05*
Conscientiousness (C)	–4.42	3.22	–	–	–0.40	0.53	–	.06*	.14***
Neuroticism (N)	–2.81	4.50	–	–	–0.54	0.24	–	.14***	–.18***
Openness to experience (O)	–3.18	2.79	–	–	–0.12	-0.20	–	–.01	–.01

Note. $N = 1{,}774$. S = Skewness. K = Kurtosis. Alpha = Cronbach's alpha. Spearman correlations for gender (1 = male; 2 = female). Pearson correlations for age.
– an em dash indicates that the scores were not computed (factor scores).
*$p < .05$. ***$p < .001$.

4.2. Intercorrelations Between the Three Dispositions and Personality

For a thorough examination of the relationship of gelotophobia, gelotophilia, and katagelasticism with adjective markers of the Big Five, several analyses were conducted. Firstly, partial correlations between the three dispositions and the Big Five controlled for age and gender were computed (see Table 2). Secondly, partial correlations (controlled for age and gender) between the items of the PhoPhiKat-45 and the Big Five were computed to check whether the correlations show homogeneous patterns across all items within a disposition (not shown in a table). Thirdly, multiple stepwise regression analyses were conducted separately with each of the three dispositions as criterion and the Big Five as predictors for testing their unique contribution (see Table 3). The Big Five as predictor variables entered the analysis second (step 2, method: stepwise) following age and gender which were entered first to be controlled for (method: enter). Similar results in these three ways of analyses will indicate robust relations between the three dispositions towards ridicule and being laughed at and the Big Five.

Table 2
Partial Correlations Between PhoPhiKat-45 and
BARS179 Controlled for Age and Gender

	Gelotophobia	Gelotophilia	Katagelasticism
Extraversion (E)	–.39***	.41***	.04
Agreeableness (A)	.00	–.01	–.38***
Conscientiousness (C)	–.03	–.16***	–.13***
Neuroticism (N)	.59***	–.24***	–.01
Openness to experience (O)	–.16***	.14***	.00

Note. $N = 1{,}774$.
***$p < .001$.

Step and predictor variable	R^2	ΔR^2	ΔF	β (final step)
Gelotophobia				
Step 1	.039	.039	35.79***	
Age				−.06***
Gender				.02
Step 2-5				
Neuroticism	.373	.334	943.30***	.58***
Extraversion	.499	.126	446.22***	−.37***
Openness to experience	.522	.023	84.82***	−.15***
Conscientiousness	.527	.004	16.62***	−.07**
Gelotophilia				
Step 1	.005	.005	4.34*	
Age				−.11***
Gender				−.08***
Step 2-5				
Extraversion	.170	.165	352.24***	.41***
Neuroticism	.218	.048	108.60***	−.22***
Conscientiousness	.238	.020	46.84***	−.15***
Openness to experience	.258	.020	47.45***	.14***
Katagelasticism				
Step 1	.099	.099	96.91***	
Age				−.19***
Gender				−.20***
Step 2-3				
Agreeableness	.228	.129	296.39***	−.37***
Conscientiousness	.247	.019	44.62***	−.14***

Note. $N = 1,774$. F-values for final models $F(6, 1767) = 327.69$ for gelotophobia, $F(6, 1767) = 102.48$, for gelotophilia, and $F(6, 1769) = 145.01$ for katagelasticism (all $p < .001$).
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 2 shows that gelotophobes were neurotic introverts with slightly lower inclinations to O. A closer examination at the item-level of gelotophobia (not shown in the Table) and a regression analysis with the specifications described earlier (see Table 3) substantiated these findings. Single items of the gelotophobia scale of the PhoPhiKat-45 yielded a highly homogenous pattern of correlations for N and E with O, A and C being widely uncorrelated. Items dealing with the lack of trust in others and the fear of making a fool of oneself were especially related to N (median = .41), while those on being confronted with the (presumed) laughter of a group related more strongly to E (median = −.27). The multiple stepwise regressions showed that the predictors (i.e., demographics, N, E, O, and C) explained 53% of the variance in gelotophobia with demographics accounting for only a small portion of the variance (4%). Neuroticism entered the equation second (33%) and E third (13%). O and C accounted only for 2.7% additional variance and can be neglected when further interpreting the findings.

Gelotophiles were stable extraverts with slightly lower inclinations to C, and higher O. However, correlations at the level of single gelotophilia-items yielded a homogenous spattern

for E, N, and C but not for O—and still being unrelated to A. None of the gelotophilia items (except one item about having talent for comedy; $r = .22$, $p < .001$) exceeded a correlation of $|.12|$ with O (median = .08). Items dealing with activities within a group were especially related to E (median = .25), while those expressing low shame in sharing own misfortunes with others related more strongly to low N (median = −.13; maximum = −.32). Low C was primarily related to items dealing with freely talking about own misfortunes and making witty comments at one's own expense (median = −.13; maximum: −.19). The results from a multiple regression analysis with the same specifications as above but with gelotophilia as criterion were in the same direction. The predictors (i.e., demographics, E, N, C, and O) explained 26% of the variance in gelotophilia. Demographics accounted for 0.5% of the variance. E entered the equation second (17%) followed by N (5%) while C and O accounted for additional 4% of the variance (in total).

Table 2 shows, that katagelasticists were low in A and C. Correlation coefficients at the level of single katagelasticism-items yielded a highly homogenous pattern for A and C with E, N, and O being virtually uncorrelated. Items dealing with being mean, cynical or revenging were primarily related to A (median = −.21), while those on carelessness towards the feelings of others related more strongly to C (median = −.12; maximum = −.13). In the multiple regression analysis, the predictors (i.e., demographics, A and C) explained 25% of the variance in katagelasticism. Demographics accounted for about 10% of the variance. Agreeableness entered the equation as the first (13%) and C had a further but minor contribution to the prediction of the criterion (2%)[2].

These analyses provided first insights on the relation of the three dispositions within the framework of the Big Five. The BARS179, however, offers additional information that could be used for a more in depth analysis. While it is not foreseen to extract sub-factors from the measure, an analysis of single items might be indicative; i.e., examine what specific aspects within the framework of the Big Five (represented by items or item-clusters) represent the three dispositions towards ridicule and being laughed at. This was done in a sequence of three analyses. In a first step, partial correlations were computed between each of the dispositions and the items of the BARS179. In an initial analysis, demographics were controlled for and in a subsequently conducted one, the Big Five that were crucial for each of the three dispositions were controlled for additionally; i.e., N and E for gelotophobia, N, E, and C for gelotophilia as well as A and C for katagelasticism (see Table 2); secondly, for each of the three dispositions, the most relevant items (i.e., those that correlated at least with $r = |.10|$ with one of the PhoPhiKat-45 scales in the partial analyses[3]; see Table 4) were identified and grouped together (on the basis of a principal component analysis); thirdly, this scale was (or the scales were) used as predictor (predictors) in a multiple regression analysis on one of the three dispositions as criterion. Again, demographics were controlled for (step 1, enter) and the new

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[2] As an extension of the findings, a psychoticism (P) scale, based on prototypicality ratings by H. J. Eysenck (Ostendorf 1994), with 16 items was emulated from the BARS179 (Alpha = .74). Zero-order correlations were .25, −.13, and .34 (all $p < .001$) between P and gelotophobia, gelotophilia, and katagelasticism, respectively. Furthermore, controlling for age, and gender did not change the coefficients strongly. As it was shown earlier, that gelotophobia relates to earlier variants of the current EPQ-R P-scale and that katagelasticism relates to P, both were used as criterion in multiple regression analyses with E, C, N, and O as predictors (entered stepwise) together with demographics (method enter). P and A were strongly negatively related to each other ($r = −.83$; $p < .001$) and, therefore, only P was used as a predictor. There was a R^2 of .24 when predicting katagelasticism, $F(6, 1773) = 90.26$, $p < .001$. P ($\beta = .37$ in the final model) entered first, C second ($\beta = −.17$), E third ($\beta = .10$), and N fourth ($\beta = −.09$) explaining 9, 3, 1, and 1% of the variance, respectively. The prediction of gelotophobia yielded a R^2 of .53, $F(6, 1773) = 327.69$, $p < .001$. N ($\beta = .58$) entered first, E second ($\beta = −.37$), O third ($\beta = −.15$), and C fourth ($\beta = −.07$) explaining 33, 13, 2, and 0.4% of the variance, respectively.

[3] This cut-off was chosen, because after controlling for the broad personality dimensions even numerically small correlation coefficients were considered being of relevance.

scale(s) and the Big Five (corrected for those items that entered the newly computed scale/s) entered second (stepwise). All correlation coefficients are given in Table 4.

Table 4
Partial Correlations Between PhoPhiKat-45 and Items of BARS179
after Controlling for Age and Gender (First Column) as Well as
the Relevant Big Five (Second Column)

Partial r [1]	Partial r [2]	FA	Low pole of bipolar rating	High pole of bipolar rating
			Gelotophobia	
−.22	−.11	A	disagreeable	agreeable
−.09	−.11	A	undiplomatic	tactful
−.28	−.11	A	uncooperative	cooperative
−.26	−.11	A	artificial	natural
−.21	−.13	A, O	unfair	fair
.28	.13	A, E	kind	unkind
−.16	−.12	A, E, O	callous	sympathetic
.20	.12	C	responsible	irresponsible
.08	.11	C	refined	unrefined
−.01	−.11	C	sloppy	exact
.08	.14	C	skeptical	gullible
.06	.11	C	careful	careless
−.12	−.11	C	undependable	responsible
−.11	−.11	C	short-sighted	foresighted
−.17	−.15	C	illogical	logical
.12	.12	C, O	polished, refined	crude, boorish
.02	.10	C, E	deliberate	thoughtless
.03	−.11	O	simple	complex
.22	.11	O	curious	uncurious
−.18	−.15	O	ignorant	knowledgeable
.28	.18	O	cultivated	naive
.24	.19	O	intelligent	unintelligent
−.17	−.19	O	unreflective, narrow	intellectual
−.24	−.18	O	provincial	cultured
.25	.20	O	perceptive	imperceptive
−.25	−.13	O	narrow interests	broad interests
.20	.14	O	cultured	uncultured
.24	.14	O	informed	uninformed
.26	.21	O	intelligent	stupid
−.32	−.13	O, A	fanatical	open-minded
−.04	.12	O, C	reflective	unreflective
−.06	−.18	O, C	unanalytical	analytical
.36	.11	O, N	open-minded	narrow-minded
−.38	−.14	O, N, C	incompetent	capable
.32	.11	N, A	not jealous	jealous
.35	.12	N, A	not envious	envious, jealous
−.54	−.16	N, E	shy	assertive
.60	.18	N, E	self-confident	unassured
				(Table 4 continues)

(Table 4 continued)

Partial r [1]	Partial r [2]	FA	Low pole of bipolar rating	High pole of bipolar rating
			Gelotophobia	
.62	.19	N, E	self-assured	insecure
−.61	−.15	N, E	insecure	secure
.31	.11	E, A	friendly	unfriendly
−.32	−.13	E, O	humorless	witty
.41	.12	E, O, N	alert	lethargic
−.57	−.18	E, N	inhibited	uninhibited
−.55	−.11	E, N	inhibited	spontaneous
			Gelotophilia	
−.08	−.18	A	cynical	gullible
.03	−.12	C	skeptical	gullible
−.01	.11	C	short-sighted	foresighted
.03	.15	C	illogical	logical
−.12	−.13	O	perceptive	imperceptive
−.28	−.12	O	original	conventional
−.13	−.11	O	informed	uninformed
.06	.10	O	unreflective, narrow	intellectual
.04	.10	N	subjective	objective
−.37	−.12	N, E	cheerful	gloomy
−.39	−.12	E	talkative	quiet
.45	.32	E, O	humorless	witty
−.41	−.14	E, N	cheerful	serious
.38	.11	E, N	inhibited	uninhibited
.40	.12	E, N	secretive	open, frank
.41	.19	E, N	grim	gay/mirthful
			Katagelasticism	
−.30	−.21	A	cynical	gullible
.32	.13	A	forgiving	vengeful
.02	.11	E, N	grim	gay/mirthful
.14	.19	E, O	humorless	witty

Note. $N = 1,774$. FA = Big Five factor(s) with item loadings $\geq |.30|$ in the present data. E = Extraversion; A = Agreeableness; C = Conscientiousness; N = Neuroticism; O = Openness to experience.
[1] Partial correlations controlled for age and gender. [2] Partial correlations controlled for age and gender as well as N and E for gelotophobia, N, E and C for gelotophilia, and A and C for katagelasticism.

Table 4 shows that 45 items out of 179 yielded correlations $\geq |.10|$ for gelotophobia, 16 for gelotophilia, and four for katagelasticism. For example, items on the intersection of the E- and N-factor dealing with being shy, inhibited, and insecure yielded meaningful correlation coefficients (despite controlling for N and E). To examine the dimensionality of the items on the intersection of the E- and N-factor correlating with gelotophobia, a principal component analysis was conducted. The first three eigenvalues were 4.24, 0.66, and 0.43 indicating a clear one-dimensional solution, which was supported by a parallel analysis by Horn (yielding eigenvalues of 1.08, 1.04, and 1.01). A scale computed out of these items (Cronbach Alpha = .92) was used as a predictor along with the Big Five (step 2, method: stepwise) and demographics (step 1; enter) in a multiple stepwise regression analysis with gelotophobia as criterion. Demographics accounted for 4% of the variance, $F (2, 1771) = 35.79$, $p < .001$. The new scale entered second and explained 47% of the variance, $\Delta F (1, 1770) = 1665.41$, $p <$

.001, β_{final} = .45. N (β_{final} = .20), E (β_{final} = −.17), and C (β_{final} = .04) entered in the third to fifth step, respectively, explaining between 0.2 and 1.6% of the variance.

Results remained the same for different ways of analyses: (a) using factor sores of N and E from a principal component analyses that contain these six items; (b) not averaging the items to compute the scale, but saving the factor scores for the first unrotated principal component. Additionally, when entering N and E first and then the new scale, it still explained further 6% of the variance in gelotophobia. Thus, it is either a narrow factor of timidity (with some minor further contributions from N, E, and C) that predicts gelotophobia, or it is N, E (and C), and some specific variance due to timidity that best predicts the fear of being laughed at. Therefore, it is not clear yet whether a single (narrow, and lower order) factor accounts for this phenomenon or a combination of higher order factors of general validity. However, the combination of both the broad factors of E and N (with minor contributions of C) with the narrow factor of timidity led to the best prediction of the fear of being laughed at in terms of explained variance.

As Table 4 shows, gelotophilia correlated with two different groups of items beyond E, N, and C. Firstly, humor related items like cheerful, gay/mirthful, and witty but also items indicating to be open/frank and uninhibited, and, secondly, items dealing with being logical, foresighted, and intellectual. For the examination of the dimensionality of these items a principal component analysis was conducted. The first five eigenvalues were 4.43, 2.71, 1.13, 1.08, and 0.90. The scree plot and a parallel analysis by Horn (yielding eigenvalues of 1.16, 1.13, 1.10, 1.08, and 1.06) would allow for a two- or a three-factor solution. The more parsimonious two-factor solution was chosen as it fitted theoretical considerations better. The items were rotated orthogonally to the Varimax-criterion. Half of the items (e.g., cheerful, talkative, original, witty, or uninhibited) loaded on the first factor that was tentatively labeled "humorous, verbally versatile" (loadings ranged between |.48| and |.78|, median = |.73|). The eight other items (e.g., informed, perceptive, skeptical, or logical) loaded on the second factor that was labeled as "analytical competence" (loadings ranged between |.43| and |.68|, median = |.62|). None of the items exceeded loadings on the other factor of .30 and none of the loadings differed less than .28 from the main loading. Therefore, two scales were computed and yielded satisfactory corrected-item total correlations (median = .64 and .45 for the humorous, verbally versatile and analytical competence, respectively) and internal consistencies (.85 and .73 for the two scales); their intercorrelation was r = .15 ($p < .001$).

A multiple stepwise regression was computed with the new scales and the Big Five as predictors with gelotophilia as criterion. Demographics explained less than 1% of the variance in gelotophilia, F (2, 1771) = 4.34, $p < .05$. The humorous, verbally versatile scale entered second and accounted for 30% of the variance, ΔF (1, 1770) = 749.96, $p < .001$, β_{final} = .62. Due to the large sample size, more predictors of minor weight entered the equation. In detail, it was C (β_{final} = −.12), A (β_{final} = −.04), analytical competence (β_{final} = .12), O (β_{final} = −.10), and N (β_{final} = .07) entering in the third to seventh step, and explaining between 0.3 and 1.4% of the variance in gelotophilia.

Only four items yielded meaningful correlations with katagelasticism beyond A and C. For the examination of the dimensionality of these items a principal component analysis was conducted. The eigenvalues were 1.66, 1.22, 0.71 and 0.41 and according to a parallel analysis by Horn (yielding eigenvalues of 1.05, 1.01, 0.98, and 0.95) the 2-factor solution was to be preferred. Scale 1 comprised mean-spirited items (cynical and vengeful) while the second scale comprised items that both relate to humor (witty and gay/mirthful). The scales correlated with r = −.10 ($p < .001$). A multiple stepwise regression analysis was conducted with katagelasticism as criterion and the two scales as well as the Big Five as predictor variables (demographics were controlled for as before). The mean-spirited scale entered second explaining 14% of the variance, ΔF [1, 1770] = 333.12, $p < .001$, β_{step2} = .39, β_{final} =

.28. A (ΔF [1, 1769] = 56.24, $p < .001$, $\beta_{final} = -.27$) and the scale with the two humor related items (ΔF [1, 1768] = 97.66, $p < .001$, $\beta_{final} = .15$) entered in the third and fourth step, explaining 2.3% and 3.8% of the variance, respectively. Due to the large sample size, C ($\beta_{final} = -.08$), E ($\beta_{final} = .10$), and O ($\beta_{final} = -.05$) entered the equation in the fifth to seventh step, although they explained little variance in katagelasticism (between 0.2 and 0.6%).

4.3. Intercorrelations Between the Three Dispositions and the Humor Related Items in the BARS179

For testing the relation of humor-related items with the three dispositions towards ridicule and being laughed at, correlations were computed controlling for demographics as well as for demographics and the Big Five. The correlation coefficients are shown in Table 5.

Table 5
Correlations Between The Humor Related Items and the PhoPhiKat-45
With and Without Controlling The Big Five

Items	Partial-correlations[1]			Partial-correlations[2]		
	Pho	Phi	Kat	Pho	Phi	Kat
Cheerful – gloomy	.53***	–.37***	.01	.01	–.11***	–.06*
Humorless – witty	–.32***	.45***	.14***	–.06*	.29***	.21***
Cynical – gullible	.00	–.08**	–.30***	.03	–.16***	–.23***
Cheerful – serious	.44***	–.41***	–.05*	.03	–.14***	–.10***
Grim – gay/mirthful	–.44***	.41***	.02	–.03	.16***	.13***

Note. N = 1,774. Pho = Gelotophobia; Phi = Gelotophobia; Kat = Katagelasticism.
[1] Partial correlation controlled for age and gender.
[2] Partial correlation controlled for age and gender as well as the Big Five.
*p < .05. **p < .01. ***p < .001.

Table 5 shows that gelotophobes described themselves as low in humor while it seems that there were cynical but also non-cynical gelotophobes in the sample (zero-correlation). However, these relations seemed to have been mediated through personality, as virtually all of the coefficients were non-significant after controlling for the Big Five. Gelotophiles endorsed all kinds of humorous conduct; i.e., they were cheerful, witty, gay/mirthful but also cynical. Katagelasticists were primarily cynical and witty while the other items correlated significantly but seemed less indicative for them (all $r^2 \leq .02$).

5. Discussion

This study closes a gap in literature by examining the personality correlates of gelotophobia, gelotophilia, and katagelasticism for the first time within the framework of the five-factor model. Analyses on higher levels (i.e., the broader Big Five dimensions) and lower levels (i.e., items) yielded new insights and revealed hitherto unknown relations.

As in earlier studies, gelotophobes were found to be neurotic introverts (e.g., Hřebíčková et al. 2009; Proyer and Ruch 2010b; Rawlings et al. 2010; Ruch and Proyer 2009b; Ruch et al. 2008). However, there are personality variables beyond these two major dimensions that need to be considered when describing a gelotophobes' personality. Notably, indicative adjectives of the fear of being laughed at were shy, inhibited, and insecure. Thus, the results of the present study poses the question whether the fear of being laughed at is either best predicted by a single, narrow lower-order personality concept of shyness (or inhibitedness, insecurity)

or by a combination of the two more global dimensions of introversion and neuroticism. The first solution is more parsimonious but the second might have more explanatory power. Psychometrically both solutions are equivalent and the regression analyses showed that both of them are insufficient and both levels (broader factors, narrow traits) were needed for the best prediction.

Following these two interpretations, theoretically also two explanations are possible to describe the causal relation between personality and gelotophobia. One might argue that a personality disposition exists that evokes the dynamics of experiencing being laughed at and in turn the fear of being laughed at develops. For example, a shy, inhibited person with high inclinations to shame tends to avoid others or behaves in a peculiar way when confronted with others, or with humor and laughter in general. In fact, already Hartenberg (1901) stated that timid people are the ones fearing ridicule. This inept social behavior might cause others to laugh at them, which, in turn, might further facilitate the development of a fear of being laughed at. Also Titze (2009) claimed that gelotophobes are not able to deal with humorous material in an uninhibited way or that insecurity would be a consequence in persons with shame-bound anxieties. Hints for insecurity among gelotophobes were also found empirically; for example, when studying their emotion regulation abilities (i.e., insecurity of being able to manage [negative] emotions; Papousek, Ruch, Freudenthaler, Kogler, Lang, and Schulter 2009). Furthermore, insecurity was one of the dimensions identified by Proyer et al. (2009) underlying cross-cultural differences in the fear of being laughed at beyond pure mean-level differences. Likewise, one might also argue that neuroticism is the inclination to experience fear and shame and, therefore, to show the excessive response of fear and shame to everyday laughter of others. Furthermore, the introversion might be responsible for the lower joy (and the associated misunderstanding of positive emotion and laughter) and the tendency to prefer being alone, even before any "social withdrawal" due to having been ridiculed.

Both explanations lead to the same prediction and they seem to be equivalent as the higher inclination of gelotophobes to shyness – which is known to be located in the introversion-neuroticism-quadrant of personality (e.g., Briggs 1988) – inhibition and insecurity can well be explained by theoretical accounts on basic factors of personality. Most likely, a condition is already there before people develop a fear of being laughed at; either it is a sort of inhibitedness or shyness (that then gets more pronounced and involved elements of fearing laughter) or neuroticism and introversion which may explain why mockery is being processed to be more hurtful and that people prefer less gregariousness. Of course, a third interpretation is possible as well, albeit unlikely. Individuals with no specific predispositions experience traumatic or repeated mockery, ridicule and not being taken seriously, so that they actually develop a neurotic introverted (or timid and shy) personality. While inferences on causality cannot be drawn from the available data one can still say that the latter explanation is least likely.

As in Ruch et al. (2009), gelotophobia was related to lower expressions of being cheerful, witty, and funny. This relates well to studies describing the gelotophobes' emotional profile with low joy but high inclination to fear and shame (see Platt 2008; Platt and Ruch 2009; Proyer et al. 2010). However, the present findings should not be over-interpreted as they are based on single items and there was a zero-relation when controlling for personality.

In line with our hypothesis, gelotophiles turned out to be stable extraverts (see also Proyer and Ruch 2010b) with lower levels of conscientiousness. Alternatively, one can describe them by the lower order factor of a humorous, verbally versatile, witty, and non-serious person. Gelotophiles can be well described by adjectives such as cheerful, talkative, original, witty, and uninhibited (i.e., being humorous and verbally versatile). One might even go further and argue that gelotophilia is an ability to not take life and oneself too seriously, so that gelotophiles "can breeze through troubles and deflect the impact of shame, thus not be affected negatively by such situations" (Platt and Ruch 2010; p. 223). Gelotophilia is known

to be related to more positive emotional responses in humorous situations or a preference for a histrionic self-presentation style which is characterized by playing around, joking, and making fun (Renner and Heydasch 2010; Samson and Meyer 2010). It needs to be mentioned that gelotophiles endorsed not only positive variants of humor but also cynicism. This is in line with findings from Samson and Meyer (2010) who found that gelotophiles enjoy many forms of humor even if it has an aggressive tone. This aspect might be worthwhile studying in the future; i.e., under what circumstances do gelotophiles use negative forms of humor—and do they ever turn into katagelasticists and under what circumstances?

The katagelasticists' prime characteristic was low agreeableness and low conscientiousness, or, alternatively, they are witty and cynical. The former result seems to relate to earlier findings on a positive relation between psychoticism and psychopathic personality traits and katagelasticism (Proyer and Ruch 2010b). This relation seems somewhat obvious from the descriptions of katagelasticists given in the literature (e.g., do not hesitate embarrassing others beyond what is commonly accepted in social interactions, compromising others is fun for them; Ruch and Proyer 2009a). Contrary to Proyer and Ruch (2010b) extraversion did not contribute to the expression of enjoying laughing at others (or only if a P-scale is emulated out of the BARS179 and entered into a regression instead of A). Thus, one might argue that katagelasticists are not necessarily outgoing or affiliation seeking for enjoying to laugh at others—it might probably be more a question of observing others very closely and then using a chance to laugh at others if there is an opportunity to do so. The lower order factor description of katagelasticists as witty cynics is valid, too, and adjectives like cynical and vengeful correlate robustly with katagelasticism even after controlling for agreeableness. Katagelasticists are known to especially enjoy aggressive variants of humor and indicate low aversion towards it (Samson and Meyer 2010) and additionally, are not guilt-prone (Proyer et al. 2010).

The scientific research on the three dispositions towards ridicule and being laughed at has only recently begun but the first results are encouraging. Further studies on the relationship between the three dispositions and the Big Five should include measures that allow for computing facets for a conclusive description of the personality of gelotophobes, gelotophiles, and katagelasticists. Results indicated that item-level analyses were too specific and dimension-level analyses were too broad to fully explain variance in the dispositions towards ridicule and being laughed at. Hence, examining the relationships between the Big Five and the three dispositions on the medium, facet level will provide further important information.

As a limitation of the study, it should be noted that results presented here primarily rely on self-rating data. Further research is needed utilizing both self- and peer-rating data to further validate the findings. As a further limitation of the study, it should be noted that the sample contained a lot of participants with high educational level (i.e., two third held a degree from University). Typically people log on to the research website because they are interested in positive psychology and want to learn more about their character strengths, satisfaction with life, and related topics. It is assumed that especially higher educated people are interested in learning more about themselves and complete additional questionnaires about personality as well as laughter and ridicule. Therefore, perhaps fewer high katagelasticists are in the sample (see also Platt and Ruch 2010). Additionally, the prevalence of gelotophobia was higher in this sample as in the sample of Germans in Ruch and Proyer (2008b). The latter data were collected in paper pencil format and it might be that gelotophobes find it easier completing questionnaires in an anonymous setting via the Internet.

References

Briggs, Stephen R. 1988. "Shyness: Introversion or neuroticism?" *Journal of Research in Personality, 22(3)*, pp. 290-307.

Chapman, Antony J. and Foot, Hugh C. 1977. *It's a funny thing, humour*. Oxford, United Kingdom: Pergamon Press.

Chen, Hsueh-Chih, Chan, Yu-Chen, Ruch, Willibald and Proyer, René T. 2011. "Evaluating the reliability and validity of a Traditional Chinese version of the PhoPhiKat-45". *Psychological Testing in Taiwan (TSSCI), 58(1)*, pp. 119-145.

Costa, Paul T., Jr. and McCrae, Robert R. 1992. *Revised NEO Personality Inventory (NEO PI-R) and NEO Five Factor Inventory. Professional Manual.* Odessa, FL: Psychological Assessment Resources.

Coyne, Iain and Bartram, Dave. 2006. "ITC guidelines on computer-based and Internet-delivered testing" [Special Issue]. *International Journal of Testing, 6(2)*.

Edwards, Kim R., Martin, Rod A. and Dozois, David J. A. 2010. "The fear of being laughed at, social anxiety, and memories of being teased during childhood". *Psychological Test and Assessment Modeling, 52(1)*, pp. 94-107.

Eysenck, Hans J. 1992. "Four ways five factors are *not* basic". *Personality and Individual Differences, 13(6)*, pp. 667-673.

Goldberg, Lewis R. 1992. "The development of markers for the Big-Five factor structure". *Psychological Assessment, 4(1)*, pp. 26-42.

Goldstein, Jeffrey H. and McGhee, Paul E. 1972. *The psychology of humor: Theoretical perspectives and empirical issues.* New York, NY: Academic Press.

Gosling, Samuel D., Vazire, Simine, Srivastava, Sanjay and John, Oliver P. 2004. "Should we trust web-based studies? A comparative analysis of six preconceptions about Internet questionnaires". *American Psychologist, 59(2)*, pp. 93-104.

Hartenberg, Paul. 1901. *Les timides et la timidité* [The socially anxious and social anxiety]. Paris, France: Félix Alcan.

Hřebíčková, Martina, Ficková, Emilia, Klementová, Miroslava, Ruch, Willibald and Proyer, René T. 2009. "Strach ze zesměšnění: Česká a slovenská verze dotazníku GELOPH 15 pro zjišťování gelotofobie" [The fear of being laughed at: Czech and Slovak version of a questionnaire for gelotophobia]. *Československá Psychologie, 53(5)*, pp. 468-479.

John, Oliver P. 1983. *Effects of language and culture on trait attribution and evaluation: A preliminary report of methodology and some results.* Department of Psychology, University of Oregon.

——— Goldberg, Lewis R. and Angleitner, Alois. 1984. "Better than the alphabet: Taxonomies of personality-descriptive terms in English, Dutch, and German". In: H. Bonarius, G. Van Heck and N. Smid (eds.), *Personality psychology in Europe: Theoretical and empirical developments*. Lisse, the Netherlands: Swets & Zeitlinger, pp. 83-100.

Martin, Rod A. 2007. *The psychology of humor: An integrative approach.* Burlington, MA: Elsevier Academic Press.

——— Puhlik-Doris, Patricia, Larsen, Gwen, Gray, Jeanette and Weir, Kelly. 2003. "Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire". *Journal of Research in Personality, 37(1)*, pp. 48-75.

McGhee, Paul E. and Goldstein, Jeffrey H. 1983. *Handbook of humor research*. New York, NY: Springer.

McCrae, Robert R. and Costa, Paul T. (Jr.). 1987. "Validation of the Five-Factor Model of personality across instruments and observers". *Journal of Personality and Social Psychology, 52(1)*, pp. 81-90.

Müller, Liliane and Ruch, Willibald 2011. "Humor and strengths of character". *The Journal of Positive Psychology, 6(5)*, pp. 368-376.

Norman, Warren T. 1963. "Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings". *Journal of Abnormal and Social Psychology, 66(6)*, pp. 574-583.

Ostendorf, Fritz. 1990. *Sprache und Persönlichkeitsstruktur: Zur Validität des Fünf-Faktoren-Modells der Persönlichkeit* [Language and structure of personality: On the validity of the Five-Factor Model of personality]. Regensburg, Germany: S. Roderer Verlag.

———. 1994. "Zur Taxonomie deutscher Dispositionsbegriffe" [A taxonomy of German dispositional terms]. In W. Hager and M. Hasselhorn (eds.), *Handbuch deutschsprachiger Wortnormen*. Göttingen, Germany: Hogrefe, pp. 382-441.

——— and Angleitner, Alois. 1992. "On the generality and comprehensiveness of the Five-Factor Model of personality: Evidence for five robust factors in questionnaire data". In G. V. Caprara, & G. L. van Heck (eds.), *Modern personality psychology: Critical reviews and new directions*. New York, NY: Harvester-Wheatsheaf, pp. 73-109.

——— and Angleitner, Alois. 1994. "A comparison of different instruments proposed to measure the Big Five". *European Review of Applied Psychology, 44*, pp. 45-53.

——— and Angleitner, Alois. 2004. *NEO - Persönlichkeitsinventar (revidierte Form, NEO-PI-R) nach Costa und McCrae* [NEO-Personality Inventory (revised form, NEO-PI-R) by Costa and McCrae]. Göttingen, Germany: Hogrefe.

Papousek, Ilona, Ruch, Willibald, Freudenthaler, H. Harald, Kogler, Eva, Lang, Brigitte and Schulter, Günter. 2009. "Gelotophobia, emotion-related skills and responses to the affective states of others". *Personality and Individual Differences, 47(1)*, pp. 58-63.

Peabody, Dean. 1987. "Selecting representative trait adjectives". *Journal of Personality and Social Psychology, 52(1)*, pp. 59-71.

——— and Goldberg, Lewis R. 1989. "Some determinants of factor structures from personality-trait descriptors". *Journal of Personality and Social Psychology, 57(3)*, pp. 552-567.

Peterson, Christopher and Seligman, Martin E. P. 2004. *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association.

Platt, Tracey. 2008. "Emotional responses to ridicule and teasing: Should gelotophobes react differently?" *Humor: International Journal of Humor Research, 21(2)*, pp. 105-128.

——— and Forabosco, Giovannantonio (in press). "Gelotophobia: The fear of being laughed at". In: P. Gremigni (ed.), *Humor and health promotion*. Hauppauge, NY: Nova Science Publishers.

——— and Ruch, Willibald. 2009. "The emotions of gelotophobes: Shameful, fearful, and joyless?" *Humor: International Journal of Humor Research, 22(1/2)*, pp. 91-110.

——— and Ruch, Willibald. 2010. "Gelotophobia and age: Do disposition towards ridicule and being laughed at predict coping with age-related vulnerabilities?" *Psychological Test and Assessment Modeling, 52(2)*, pp. 231-244.

Proyer, René T., Flisch, Rahel, Tschupp, Stefanie, Platt, Tracey and Ruch, Willibald. in press. "How does psychopathy relate to humor and laughter? Dispositions towards ridicule and being laughed at, the sense of humor, and psychopathic personality traits". *International Journal of Law and Psychiatry*.

——— Platt, Tracey, and Ruch, Willibald. 2010. "Self-conscious emotions and ridicule: Shameful gelotophobes and guilt free katagelasticists". *Personality and Individual Differences, 49(1)*, pp. 54-58.

——— and Ruch, Willibald. 2009a. "How virtuous are gelotophobes? Self- and Peer-reported character strengths among those who fear being laughed at". *Humor: International Journal of Humor Research, 22(1/2)*, pp. 145-163.

——— and Ruch, Willibald. 2009b. "Intelligence and gelotophobia: The relations of self-estimated and psychometrically measured intelligence to the fear of being laughed at". *Humor: International Journal of Humor Research, 22(1/2)*, pp. 165-181.

——— and Ruch, Willibald. 2010a. "Dispositions towards ridicule and being laughed at: Current research on gelotophobia, gelotophilia, and katagelasticism". *Psychological Test and Assessment Modeling, 52(1)*, pp. 49-59.

——— and Ruch, Willibald. 2010b. "Enjoying and fearing laughter: Personality characteristics of gelotophobes, gelotophiles, and katagelasticists". *Psychological Test and Assessment Modeling, 52(2)*, pp. 148-160.

——— Ruch, Willibald, Ali, Numan S., Al-Olimat, Hmoud S., Amemiya, Toshihiko, Adal, Tamirie Andualem, Ansari, Sadia Aziz, Arhar, Špela, Asem, Gigi, Baudin, Nicolas, Bawab, Souha, Bergen, Doris, Brdar, Ingrid, Brites, Rute, Brunner-Sciarra, Marina, Carrell, Amy, Dios, Hugo Carretero, Celik, Mehmet, Ceschi, Grazia, Chang, Kay, Guo-Hai, Chen, Cheryomukhin, Alexander, Chik, Maria P. Y., Chlopicki, Wladyslaw, Cranney, Jacquelyn, Dahourou, Donatien, Doosje, Sibe, Dore, Margherita, El-Arousy, Nahwat, Fickova, Emilia, Führ, Martin, Gallivan, Joanne, Geling, Han, Germikova, Lydia, Giedraityte, Marija, Goh, Abe, González, Rebeca Díaz, Ho, Sai Kin, Hrebíčková, Martina, Jaime, Belen, Kaare, Birgit Hertzberg, Kamble, Shanmukh, Kazarian, Shahe, Kerkkänen, Paavo, Klementová, Mirka, Kobozeva, Irina M., Kovjanic, Snjezana, Kumaraswamy, Narasappa, Lampert, Martin, Liao, Chao-Chih, Levesque, Manon, Loizou, Eleni, Díaz Loving, Rolando, Lyttle, Jim, Machline, Vera C., McGoldrick, Sean, Mcrorie, Margaret, Min, Liu, Mõttus, René, Munyae, Margret M., Navia, Carmen Elvira, Nkhalamba, Mathero, Pedrini, Pier Paolo, Petkova, Mirsolava, Platt, Tracey, Popa, Diana-Elena, Radomska, Anna, Rashid, Tabassum, Rawlings, David, Rubio, Victor J., Samson, Andrea C., Sarid, Orly, Shams, Soraya, Sisokohm, Sek, Smári, Jakob, Sneddon, Ian, Snikhovska, Irena, Stephanenko, Ekaterina A., Stokenberga, Ieva, Stuer, Hugo, Tanoto, Yohana Sherly Rosalina, Tapia, Luis, Taylor, Julia, Thibault, Pascal, Thompson, Ava, Thörn, Hanna, Toyota, Hiroshi, Ujlaky, Judit, Vanno, Vitanya, Wang, Jun, Van Der Westhuizen, Betsie, Wijayathilake, Deepani, Wong, Peter S. O., Wycoff, Edgar B., Yeun, Eun Ja. 2009. "Breaking ground in cross-cultural research on the fear of being laughed at (gelotophobia): A multi-national study involving 73 countries". *Humor: International Journal of Humor Research,* 22 (1/2), pp. 253-279.

Rawlings, David, Tham, Tsu A. and Milner Davis, Jessica. 2010. "Gelotophobia, personality and emotion ratings following emotion-inducing scenarios". *Psychological Test and Assessment Modeling, 52(2)*, pp. 161-170.

Renner, Karl-Heinz and Heydasch, Timo. 2010. "Performing humor: On the relations between self-presentation styles, gelotophobia, gelotophilia, and katagelasticism". *Psychological Test and Assessment Modeling, 52(2)*, pp. 171-190.

Ruch, Willibald. 1996. "Measurement approaches to the sense of humor: Introduction and overview". *Humor: International Journal of Humor Research, 9(3/4)*, pp. 239-250.

———. 2004. "Humor". In C. Peterson and M. E. P. Seligman (eds.), *Character strengths and virtues: A handbook and classification*. New York, NY: Oxford University Press, pp. 583-598.

———. (ed.). 2007. *The sense of humor: Explorations of a personality characteristic*. Berlin, Germany: Mouton de Gruyter.

———. 2008. "The psychology of humor". In V. Raskin (ed.), *A primer of humor*. Berlin, Germany: Mouton de Gruyter, pp. 17-100.

———. 2009. "Fearing humor? Gelotophobia: The fear of being laughed at. Introduction and overview". *Humor: International Journal of Humor Research, 22(1/2),* pp. 1-25.

———— Beermann, Ursula and Proyer, René T. 2009. "Investigating the humor of gelotophobes: Does feeling ridiculous equal being humorless?" *Humor: International Journal of Humor Research, 22(1/2)*, pp. 111-143.

———— and Köhler, Gabriele. 2007. "A temperament approach to humor". In W. Ruch (Ed.), *The sense of humor: Explorations of a personality characteristic.* Berlin, Germany: Mouton de Gruyter, pp. 203-230.

———— and Proyer, René T. 2008a. "The fear of being laughed at: Individual and group differences in gelotophobia". *Humor: International Journal of Humor Research, 21(1)*, pp. 47-67.

———— and Proyer, René T. 2008b. "Who is gelotophobic? Assessment criteria for the fear of being laughed at". *Swiss Journal of Psychology, 67(1)*, pp. 19-27.

———— and Proyer, René T. 2009a. "Extending the study of gelotophobia: On gelotophiles and katagelasticists". *Humor: International Journal of Humor Research, 22(1/2)*, pp. 183-212.

———— and Proyer, René T. 2009b. "Who fears being laughed at? The location of gelotophobia in the Eysenckian PEN-model of personality". *Personality and Individual Differences, 46(5/6)*, pp. 627-630.

———— Proyer, René T. and Popa, Diana E. 2008. "The fear of being laughed at (gelotophobia) and personality". In: Romanian Academy, "George Barit" Institute of History, Department of Social Research (ed.), *Studies and researches in social sciences*. Cluj-Napoca, Romania: Argonaut Press, pp. 53-68.

———— Proyer, René T. and Weber, Marco. 2010a. "Humor as character strength among the elderly: Theoretical considerations". *Zeitschrift für Gerontologie und Geriatrie, 43(1)*, pp. 8-12.

———— Proyer, René T. and Weber, Marco. 2010b. "Humor as character strength among the elderly: Empirical findings on age-related changes and its contribution to satisfaction with life". *Zeitschrift für Gerontologie und Geriatrie, 43(1)*, pp. 13-18.

Samson, Andrea C., Huber, Oswald and Ruch, Willibald. 2011. "Teasing, ridiculing and the relation to the fear of being laughed at in individuals with Asperger's Syndrome". *Journal of Autism and Developmental Disorders, 41(4)*, pp. 475-483.

———— and Meyer, Yonni. 2010. "Perception of aggressive humor in relation to gelotophobia, gelotophilia, and katagelasticism". *Psychological Test and Assessment Modeling, 52(2)*, pp. 217-230.

Titze, Michael. 2009. "Gelotophobia: The fear of being laughed at". *Humor: International Journal of Humor Research, 22(1/2)*, pp. 27-48.

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