

An Initial Study on How Families Deal with Ridicule and Being Laughed at: Parenting Styles and Parent–Child Relations with Respect to Gelotophobia, Gelotophilia, and Katagelasticism

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Abstract Familial aggregation and the effect of parenting styles on three dispositions toward ridicule and being laughed at were tested. Nearly 100 families (parents, their adult children, and their siblings) completed subjective questionnaires to assess the presence of gelotophobia (the fear of being laughed at), gelotophilia (the joy of being laughed at), and katagelasticism (the joy of laughing at others). A positive relationship between fear of being laughed at in children and their parents was found. Results for gelotophilia were similar but numerically lower; if split by gender of the adult child, correlations to the mother's gelotophilia exceeded those of the father. Katagelasticism arose independently from the scores in the parents but was robustly related to greater katagelasticism in the children's siblings. Gelotophobes remembered punishment (especially from the mother), lower warmth and higher control from their parents (this was also found in the parents' recollections of their parenting style). The incidence of gelotophilia was unrelated to specific parenting styles, and katagelasticism exhibited only weak relations with punishment. The study suggests a specific pattern in the relation of the three dispositions within families and argues for a strong impact of parenting styles on gelotophobia but less so for gelotophilia and katagelasticism.

Keywords Familial aggregation · Gelotophilia · Gelotophobia · Humor · Katagelasticism · Laughter · Parenting style

Introduction

Although humor has been shown to be a beneficial ingredient in personality development, it remains a comparatively understudied topic; negative influences have only rarely been documented. When people spend much time with each other, humor (or humorlessness) and laughter in some way play their roles (e.g., at the workplace, in school, etc.)—as they do within families. Manke (1998) reviews literature on how the family environment impacts humor in children. She reports mixed results with partial evidence for both, a *modeling/reinforcement* (parents are a model for and encourage use of humor) and a *stress and coping* hypothesis (humor is used as a way of dealing with familial stress and anxiety) but also an effect of genetic mediation. Little research has been conducted in this area lately, and the topic of laughter in families has scarcely been discussed in literature at all. None of the available studies tested the relationship between the way parents and their children deal with laughter and ridicule and how this might interact with parenting styles. There are theoretical assumptions (derived from case observations; Titze 2009) but also first empirical data (e.g., Ruch and Proyer 2009a; Ruch et al. 2010) that the way parents deal with laughter and ridicule has an impact on how their children can appreciate different types of laughter and humor. However, a closer look at familial aggregations in laughter-related personality dimensions is missing. In an effort to narrow this gap, we conducted a study based on recent research dealing with three dispositions toward ridicule and being laughed at.

Gelotophobes are exceedingly fearful of being laughed at and think of themselves as being ridiculous. They have problems appreciating the positive side of laughter (and smiling) and interpret it rather as a means of putting them down; more frequently, they experience laughter in the

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form of laughing *at* instead of laughing *with* (Ruch and Proyer 2008a; Titze 2009). Since 2009, two other dispositions toward ridicule and being laughed at have been introduced to the literature, namely, *gelotophilia* and *katagelasticism* (Ruch and Proyer 2009a). Gelotophiles actively seek and establish situations in which they can make others laugh at them. They do not feel ashamed when telling others about a misfortune that happened to them but rather enjoy the joint laughter over their own mishaps. It is important to notice that this is not pursued for putting themselves down or because of lacking self-confidence but more so for actively entertaining others and making them laugh. Katagelasticists actively seek and establish situations in which they can laugh at others. They are convinced that those who do not like being laughed at should simply defend themselves, as there is nothing wrong in laughing at others. The three dispositions toward ridicule and being laughed at have been studied as they relate to a broad variety of topics, for example, in people with Asperger's Syndrome (Samson et al. 2011a), in relation to self-presentation styles (Renner and Heydasch 2010), self-conscious emotions (Proyer et al. 2010), or aggressive humor (Samson and Meyer 2010).

Based on case observations, Titze (2009) speculates on the causes of gelotophobia. He argues that in childhood, the development of an interpersonal bridge fails (infant-care-taker interactions) and is followed by repeated, intense, and traumatic experiences of having been laughed at or ridiculed. This theory-driven speculation has, however, not yet been substantiated empirically. Ruch et al. (2010) tested some of these assumptions more specifically. The results were mixed and do *not* further substantiate the idea that repeated and frequent traumatic events of having been laughed at in childhood and youth can account *fully* for higher expressions of gelotophobia. In fact, (adult) gelotophobes do not seem to have experienced *more* incidents of having been laughed at but to have experienced the incidents more intensely (Edwards et al. 2010; Proyer et al. 2009).

Nevertheless, the idea that the conveyance of the sense of humor and laughter from parents to child might result in the child's fear of being laughed at still seems reasonable. According to this line of reasoning, it would be expected that parents who fear being laughed at would also have children who fear being laughed at. Although the fear of being laughed at is seen as a personality characteristic at a sub-clinical level (Ruch and Proyer 2008b), it should be noted that there is empirical evidence on familial accumulations in anxiety-related disorders (phobias, e.g., Fyer et al. 1995). This may point toward similarities between parents and children in their expression of the fear of being laughed at.

There are only two studies up to now that have dealt with gelotophobia in non-adult populations. Führ (2010) found that its prevalence in Danish children and adolescents was about seven times higher than in Danish adults (Führ et al. 2009). A very similar finding has been reported for 6- to 9-year-old Swiss children (Proyer et al. 2012a). One might argue that peer-related environmental aspects are more important in this age group inasmuch as they spend much time with their peers and social comparisons are important aspects of the younger age. Several studies argue for age-related effects when retrospectively considering gelotophobia at younger ages (Platt and Ruch 2010; Platt et al. 2010).

Thus far, there are no elaborated theories on the development of gelotophilia and katagelasticism. Ruch and Proyer (2009a) found that a higher incidence of katagelasticism in adults was related to a higher frequency of remembering having been laughed at by peers in childhood and by having been laughed at by the same and opposite-sex peers in youth. Thus, the peers seem to contribute somehow to whether adults like laughing at others or not; whether this develops as a reaction of frequent experiences—or as a strategy of avoiding laughter from others (in turning the tables on a potential agent of laughter)—cannot be determined at the moment inasmuch as no longitudinal data are available. Weibel and Proyer (2012) found that lower remembered social support from peers in adolescence relates positively to the expression of katagelasticism in adults; support from parents and teachers existed widely independently from katagelasticism. Overall, this might indicate that persons of the same generation could be more similar with respect to katagelasticism than would be the case of persons of different generations. Thus, one might expect that the convergence among siblings would be higher than between parents and their adult children.

Furthermore, there are no empirical studies on how parenting styles relate to gelotophobia, gelotophilia, and katagelasticism. Perris et al. (1980) developed an instrument for the retrospective assessment of parental rearing behavior that has been widely used in research in this area ever since. The *Questionnaire of Recalled Parental Rearing Behaviour* by Schumacher et al. (1999) is based on this measure and covers the dimensions of (a) rejection and punishment (e.g., punishing the children even for minor things; physical punishment, or eliciting shame in the children), (b) emotional warmth (e.g., showing the child ones love, supporting the child, or cuddling the child), and (c) control and over-protection (e.g., worrying that the child might be harmed, not accepting the friends that the child meets, or push the child to become “the best”). These styles are assessed separately for the mother and the father. Schumacher and colleagues report good psychometric properties (e.g., all alpha-coefficients $\geq .72$) and a robust factor structure in accordance with theoretical expectations. Furthermore,

there was a good convergence for the parenting styles of the father and mother (between $r = .70$ and $.77$ for the homologous parenting styles) and intercorrelations in the expected directions (e.g., positive between rejection and control and negative between warmth and rejection; warmth and control were uncorrelated).

In this study, the relations of rearing styles to the three dispositions toward ridicule and being laughed at were studied within the dimensions proposed by Schumacher and colleagues. Based on the available literature, it is expected that gelotophobes would remember higher rejection and lower emotional warmth than non-gelotophobes. The case descriptions by Titze (2009) would indicate that the rearing style of gelotophobes' parents would be expected to be distant and not warm. Joint expression of humor and laughter should not occur frequently, possibly as a part of emotionally cool parenting behavior. Overprotection by parents would also entail parental disapproval of friends of their children: if contact with such friends were restricted, this would also partially explain why gelotophobes had lesser chance of learning humor and laughter-related social skills from peers.

Gelotophiles are expected to have experienced warmth from their parents as making others laugh at oneself and gaining joy out of this should be related to a positive and warm familial environment. It should be stressed that within this framework, making others laugh at oneself is seen as a positive way of dealing with humor and laughter and is, for example, related to extraversion, low neuroticism, or higher satisfaction with life (Ruch and Proyer 2009a, b; Proyer and Ruch 2010; Weibel and Proyer 2012). In the same line of argument, one might assume that gelotophiles would not be likely to remember high degrees of punishment or overprotection.

Finally, Ruch and Proyer (2009a) see katagelasticians as persons who exhibit somewhat rude and antisocial behavior. Thus, one way of thinking about the relationship between katagelasticism and parenting styles would be that if this is already manifested in childhood and adolescence, it is more likely that parents would have punished more frequently than non-katagelasticians. For this hypothesis, however, as for the other hypotheses too, it remains unclear up to the present whether katagelasticism is a cause or a consequence of parental punishment. Furthermore, according to this line of thinking, katagelasticians would be expected to remember lower warmth and no overprotection. The parenting style would be expected to be one of relative unconcern. It should also be noted that there are preliminary empirical data showing that peers are more important for the expression of katagelasticism than parents are (see Ruch and Proyer 2009a; Weibel and Proyer 2012). Therefore, it might be expected that the relation to parenting styles and the three dispositions toward ridicule

and being laughed at would be comparatively low for katagelasticism.

This is the first empirical study on family relations as influences on the development of gelotophobia, gelotophilia, and katagelasticism in adults. The primary aim of this study was to collect self-ratings from subjects exhibiting these three characteristics and then to determine the incidences of these characteristics with respect to familial configurations. The second aim of the study was to investigate these characteristics as they related to the various recollected parenting styles from both, (adult children) but also their parents.

Method

Samples

Sample 1 (Adult Children)

This sample consisted of 83 females and 38 males ($N = 121$). Two were 17 and the others were between 18 and 76 years of age ($M = 29.1$, $SD = 11.2$). More than half of the participants were not in a conjugal relationship (51.8 %), and more than a quarter were married or in a relationship (27.7 %). Only five (3.5 %) indicated that they were the only child.

Sample 2 (Parents)

In total, 86 mothers from 39 to 77 years ($M = 55.9$, $SD = 7.4$) and 68 fathers aged between 34 and 82 years ($M = 58.5$, $SD = 9.3$) entered the study; 67.1 % of the mothers and 80.0 % of the fathers were currently working while the others were either unemployed or retired.

Sample 3 (Siblings)

Data from 34 brothers and 42 sisters formed the sample of siblings. Their age ranged mainly between 18 and 61 ($M = 27.6$, $SD = 11.4$) years while sixteen were under 18. About half of the siblings (54.5 %) were currently working (others were in school or retired or currently unemployed). Close to three quarters (77.3 %) were single while a quarter was married.

Instruments

The *Questionnaire of Recalled Parental Rearing Behaviour* (QRPRB; Schumacher et al. 1999) is a 24-item questionnaire for the assessment of adult's recollection of their parent's (split for mother and father) employment of (a) *rejection and punishment* (e.g., having been punished

by the parents even for smaller things; physical punishment), (b) *emotional warmth* (e.g., having felt that parents did love her child and having been comforted by parents when sad), and (c) *control and overprotection* (e.g., parents did not allow things that other children were allowed to do for fear that something might happen to their child). Answers are given on a 4-point answer scale. Schumacher and colleagues report a three-factor structure, satisfying reliabilities (between .72 and .89) and relations to other measures in the expected direction (e.g., lower life satisfaction among those who remembered rejection, punishment, and control as parenting styles in their childhood and youth). The QRPRB has been found to be useful in a wide variety of studies (e.g., Beutel et al. 2002; Knappe et al. 2009). In the present sample, the reliabilities (alpha-coefficients) ranged between .65 (control) and .92 for the parenting style of the mother and between .65 (control) and .93 for the father. Means and standard deviations were in a comparable range with the data reported by Schumacher and colleagues.

Schumacher et al. (2002) used a *Parent Version* of the QRPRB for testing the convergence of perceptions from adult children (students) and their parents. Overall, the two forms converged positively (between $r = .27$ and $.59$ for the homologous scales, all $p < .01$, median = $.41$, $128 \leq N \leq 146$; alpha-coefficients were between $.54$ [rejection] and $.89$). In the present study, we used the QRPRB along with the QRPRB-parents. The reliabilities in the present sample were between $.62$ (control) and $.83$ in the mothers and between $.54$ (control) and $.89$ among the fathers.

The *PhoPhiKat-45* (Ruch and Proyer 2009a) is a 45-item measure for *gelotophobia* (“When they laugh in my presence I get suspicious”), *gelotophilia* (“When I am with other people, I enjoy making jokes at my own expense to make the others laugh”), and *katagelasticism* (“I enjoy exposing others and I am happy when they get laughed at”). Answers are given on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree). Ruch and Proyer found high internal consistencies (all alphas $\geq .84$) and high retest reliabilities $\geq .77$ and $\geq .73$ (3–6 months). Despite the recentness of its publication, the scale has already been used widely in research (e.g., Proyer et al. 2010; Renner and Heydasch 2010; Samson et al. 2011a; Samson and Meyer 2010). In the present sample, reliabilities were satisfactory to high and ranged between $.83$ and $.87$ in the samples of children, between $.70$ and $.88$ in the samples of fathers and mothers, and between $.75$ and $.91$ in the siblings.

Procedure

Participants (the adult children) were approached via pamphlets, email web lists (e.g., of clubs or associations), or personally (e.g., in University or office buildings). After agreement to participate, people were asked to indicate

whether both of their parents would participate as well and how many siblings they had. They were mailed the required copies of questionnaires along with the instruction that each of the participants should complete the questionnaire for him-/herself without sharing their results with others. The questionnaires also contained a postpaid envelope addressed to the institution where the data were collected. In order to facilitate the instructions that all participants complete the questionnaires independently, separate envelopes were prepared for each individual participant. The participants were not paid for their services. All participants who indicated an interest took part in the drawing of a prize after completion of the study.

Results

Ruch and Proyer (2008b) argue that mean scores in the gelotophobia scale ≥ 2.50 indicate at least a slight expression of the fear of being laughed at. When applying these cut-off scores, 8.9 % of the adult children could be classified with a slight and 1.7 % with a pronounced expression of gelotophobia. Among the mothers, 8.3 % were gelotophobic and there were 1.5 % gelotophobes among the fathers. For testing, the familial accumulations of the three dispositions toward ridicule and being laughed at, scores from the adult children, their parents (total score and split for mother and father) as well as the score for siblings were correlated (see Table 1).

Table 1 shows that gelotophobia among the adult children was positively related to the expression of gelotophobia in their parents (around 10–13 % overlapping variance). Parent’s gelotophilia and katagelasticism existed independently from the child’s fear of being laughed at. The child’s gelotophilia related positively only to the mother’s expression of joy in being laughed at (9 % shared variance) while the father’s gelotophilia did not correlate significantly. There was a trend toward higher expressions of the father’s score in gelotophobia and gelotophilia in the children. This relation, however, failed to reach statistical significance. The child’s joy in laughing at others was unrelated to its parent’s expression, but gelotophobia in fathers and gelotophilia in mothers was associated with katagelasticism in the children (shared variance between 5 and 7 %). Gelotophobia was unrelated among siblings but gelotophilia and katagelasticism correlated positively (around 9 % shared variance).

When considering the correlation analysis split by gender of the adult child, a few peculiarities were found that should be highlighted. Sons with higher scores in gelotophobia had fathers with higher degrees of gelotophobia but lower gelotophilia and mothers with lower degrees of katagelasticism ($r^2 = .23$) but also with lower gelotophobia and gelotophilia. When taking only the

Table 1 The relationship between three dispositions toward ridicule and being laughed at in adult children and their parents

Person	Child		Father			Mother			Parents			Sibling		
	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat
<i>Adult child</i>														
Pho	-.25**	.10	.32**	-.08	.06	.36**	-.08	.11	.40**	-.08	.06	.11	-.13	-.01
Phi	1.00	.40**	.21	.08	.14	-.08	.29**	-.02	.00	.23*	.02	-.13	.28*	.26
Kat		1.00	.26*	.10	.17	.03	.22*	.10	.08	.21*	.10	.04	.10	.31*
<i>Father</i>														
Pho			1.00	-.15	.15	.28**	.16	-.06				.32*	-.21	-.09
Phi				1.00	.59**	.07	.14	.12				-.08	.20	-.01
Kat					1.00	.16	.33**	.26*				.08	.12	.06
<i>Mother</i>														
Pho						1.00	-.02	.40**				.00	-.26	-.18
Phi							1.00	.45**				-.14	.17	.24
Kat								1.00				-.14	.12	.28*
<i>Parents</i>														
Pho									1.00	-.06	.24**	.08	-.30*	-.18
Phi										1.00	.50**	-.13	.20	.26
Kat											1.00	-.11	.11	.25
<i>Siblings</i>														
Pho												1.00	-.26*	-.09
Phi													1.00	.36**
Kat														1.00
<i>Son^a</i>														
Pho	-.27	.15	.49*	-.27	-.09	-.25	-.26	-.48*	.08	-.08	-.32			
Phi	1.00	.35*	.14	.24	.42	-.03	.29	.17	.03	.15	.15			
Kat		1.00	.31	-.10	.03	-.18	.15	.05	-.01	.16	-.10			
<i>Father^a</i>														
Pho			1.00	-.43	.15	-.01	.30	-.10						
Phi				1.00	.58**	.10	.13	.29						
Kat					1.00	.30	.49	.38						
<i>Mother^a</i>														
Pho						1.00	.22	.32						
Phi							1.00	.69**						
Kat								1.00						
<i>Parents^a</i>														
Pho									1.00	.04	.15			
Phi										1.00	.59**			
Kat											1.00			
<i>Daughter</i>														
Pho	-.25*	.12	.28	-.03	.12	.51**	-.04	.28*	.46**	-.09	.19	.10	-.11	.07
Phi	1.00	.48**	.25	.04	.07	-.09	.29*	-.08	-.01	.25*	-.03	-.15	.34*	.07
Kat		1.00	.23	.16	.23	.09	.32**	.12	.11	.35**	.18	-.04	.27	.29*
<i>Father</i>														
Pho			1.00	-.05	.20	.37*	.15	-.03				.25	-.14	-.10
Phi				1.00	.61**	.11	.06	-.01				.00	.12	-.12
Kat					1.00	.11	.26	.15				.01	.20	-.05
<i>Mother</i>														
Pho						1.00	-.07	.35**				-.15	-.20	-.14
Phi							1.00	.34**				-.22	.27	.16

Table 1 continued

Person	Child		Father			Mother			Parents			Sibling		
	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat
Kat								1.00				-.21	.13	.22
<i>Parents</i>														
Pho									1.00	-.11	.19	-.05	-.25	-.17
Phi										1.00	.44**	-.19	.29*	.17
Kat											1.00	-.22	.15	.21

$N = 118$ (intercorrelations adult children), $N = 66$ (child–father), $N = 85$ (child–mother), $N = 85$ (child–parents), $N = 62$ (child–siblings); $N = 33$ (intercorrelation sons), $N = 17$ (son–father), $N = 21$ (son–mother), $N = 21$ (son–parents), $N = 13$ (son–siblings); $N = 83$ (intercorrelations daughter), $N = 49$ (daughter–father), $N = 64$ (daughter–mother), $N = 64$ (daughter–parents), $N = 49$ (daughter–siblings), $N = 68$ (intercorrelations fathers), $N = 86$ (intercorrelations mothers); Pho = gelotophobia, Phi = gelotophilia, Kat = katagelasticism

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

^a Not analyzed for males and their siblings as the sample sizes were too small ($7 \leq N \leq 11$)

highest coefficients into account, one might summarize that gelotophobic sons had gelotophobic fathers and non-katagelastistic mothers. The gelotophilic sons had fathers with higher scores in katagelasticism (and gelotophilia) and mothers that tended to score higher in gelotophilia. Investigations of katagelasticism among the sons demonstrated little relationship with the parenting styles with higher gelotophobia in their fathers being the only noteworthy correlate (9 % shared variance).

Among the daughters, higher degrees of gelotophobia correlated with higher gelotophobia ($r^2 = .26$) in their mothers and fathers but also higher parental katagelasticism. Gelotophilia among daughters correlated positively with gelotophilia in their mothers (8 % shared variance) and in their fathers (6 %). Finally, katagelasticism in daughters increased with gelotophilia in the mothers (10 %) while the other coefficients were negligible in size.

The data also allow the description of (dis-)similarities between the parents regarding their dispositions toward ridicule and being laughed at, and this should be reported as a side note. Males higher in gelotophobia seemed to mate with females higher in gelotophobia and males high in katagelasticism with females higher in gelotophilia but also katagelasticism. Gelotophilia in males was unrelated to their partners' expressions of the three dispositions. Hence, the data suggested that as far as ridicule and laughter were concerned, couples bonded according to their similarities rather than their dissimilarities. This, however, needs to be interpreted cautiously since the dispositions may have also been influenced after pairing.

Dispositions Toward Ridicule and Being Laughed At and Parenting Styles

The convergence between remembered parenting styles in the QRPRB by the adult children and their parents in the

QRPRB-parent (total score) was $r(87) = .24$ ($p < .05$) for punishment, $r(84) = .46$ for warmth, and $r(88) = .57$ for control. Gelotophobic parents used primarily punishment. This was found for both their own memories ($r[104] = .33$) and their children's memories ($r[89] = .30$). Additionally, they remembered less warmth as a parenting style (again for own memories ($r[104] = -.25$) and their children's ($r[88] = -.27$, all $p < .01$). Other relations yielded non-significant correlation coefficients. Thus, neither gelotophilic nor katagelastistic parents favored a specific parenting style.

There was a good convergence between the mother's remembered usage of *warmth* as a parenting style and the father's use of this style ($r = .37$); the same was true for *control* ($r = .46$, all $p < .01$). The parent's use of *punishment* also correlated positively but statistically not significant ($r = .14$). Further analyses (not reported here in full detail) examined the effects of the (dis-)similarity in the parenting styles. There, data were aggregated and split into three tentative groups for a first evaluation; namely, "father > mother," "both parents have similar expressions in the parenting style," and "mother > father." Findings indicated that the (dis-)similarities did not have an impact on how the adult children dealt with ridicule and being laughed at in this sample. However, the test for mean level differences in *katagelasticism* of the child and *control* as a parenting style approached significance in an ANOVA ($F[2, 59] = 2.69$, $p = .08$). In this analysis, those with a more controlling father than the mother yielded the numerically largest mean scores ($M = 2.12$, $SD = .42$; $n = 20$), in comparison with those with equally controlling parents ($M = 2.08$, $SD = .35$; $n = 21$), and those where the mother was more controlling than the father ($M = 1.84$, $SD = .45$; $n = 19$). Unfortunately, sample sizes were too low for analyses that also considered gender differences and interactions (e.g., parenting style of "same-sex" \times

Table 2 Correlations between dispositions toward ridicule and being laughed at and remembered parenting styles from mother and father (for the total sample and split by gender)

Parenting	Total			Males			Females		
	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat
<i>Punishment</i>									
Total	.21*	.00	.21*	.32	-.04	.24	.19	.01	.07
Mother	.25**	-.02	.20*	.37*	-.14	.24	.21	.01	.08
Father	.14	.03	.17	.20	.09	.18	.12	.00	.05
<i>Warmth</i>									
Total	-.26**	.10	.01	-.48**	.35*	.17	-.20	.03	.05
Mother	-.19*	.01	-.07	-.55**	.28	.15	-.08	-.06	-.01
Father	-.29**	.16	-.07	-.38**	.39**	.17	-.26*	.10	.07
<i>Control</i>									
Total	.20*	-.04	.05	.07	-.06	-.07	.23*	-.04	.03
Mother	.21*	-.06	.11	.12	-.18	-.04	.24*	-.04	.15
Father	.13	.04	.09	-.01	.17	.23	.18	.00	.01
<i>Parents punishment</i>									
Total	.28**	.02	.19	-.04	.23	.11	.36**	-.03	.17
Mother	.18	.05	.12	-.20	.13	.10	.27*	-.10	.13
Father	.26*	.12	.20	.11	.26	-.09	.31*	.03	.07
<i>Warmth</i>									
Total	-.08	.00	.09	-.10	.26	.32	-.07	-.07	.08
Mother	-.09	.01	.14	-.09	.25	.21	-.08	-.05	.13
Father	-.12	-.08	-.12	-.19	.06	.09	-.10	-.18	-.08
<i>Control</i>									
Total	.29**	-.04	.13	-.28	.27	.06	.41**	-.10	.13
Mother	.29**	-.13	.01	-.24	.23	-.03	.38**	-.20	-.04
Father	.20	.16	.15	-.43	.24	-.06	.37*	.14	.22

$N = 117\text{--}118$ (Total), $N = 23\text{--}24$ (Males), $N = 82\text{--}83$ (Females); for parents $N = 63\text{--}89$; $N = 17\text{--}23$ (males), $N = 47\text{--}67$ (females); Pho = gelotophobia; Phi = gelotophilia; Kat = katagelasticism; Parenting = Parenting style

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

“different-sex parent”), for example, there was only one male in the sample with a more controlling father than mother. However, an inspection of the mean scores at a purely descriptive level indicated that there might be a substance in these interactions worth following in future research. Table 2 gives the correlation coefficients among the three dispositions toward ridicule and being laughed at and the QRPRB/QRPRB-parent.

Table 2 shows that higher gelotophobia was related to remembering greater levels of punishment (especially from the mother), lower warmth (from both parents), and higher control. When splitting the analysis by gender, the results revealed that greater gelotophobia in males was associated with less remembered warmth from both parents while gelotophilia in females only correlated with lower warmth from the father. For males, punishment by (primarily) the mother and for females higher control also from the mother related to greater expressions of the fear of being laughed at.

Gelotophilia was least well represented by the parenting styles. Splitting the results by gender likewise did not reveal any significant relations—except for higher warmth from the father among the males. Thus, gelotophilia existed widely independently from the parenting styles covered by the QRPRB. For katagelasticism, only a slightly numerically higher tendency for punishment as parenting style was found; males and females did not differ strongly in their correlation coefficients while the effects of more punishment seemed to be stronger among the males.

The results were somewhat similar from the parents’ view on their parenting styles. Again, gelotophobia was related to higher punishment (especially among the females) and higher control but warmth was uncorrelated. Especially among the males a controlling father (18 % shared variance) and among the females control from both parents (14 %) contributed to the fear of being laughed at. It is, however, important to notice that among the males, lower remembered control and among the females, higher

remembered control related to the fear of being laughed at. Gelotophilia existed widely independently from the parents' recollection of parenting styles. The same was true for katagelasticism with the exception that remembered warmth by the parents was more strongly related to enjoying laughing at others ($r^2 = .10$). When computing a difference score from the remembered parenting styles (child minus parents), higher remembered warmth by the parents was related to higher fear of being laughed at in the adult child ($r[83] = -.21, p = .05$) while the other correlation coefficients were of negligible size.

Discussion

This study illuminates on how the three dispositions toward ridicule and being laughed at are distributed within families and how their development in an individual may be influenced by parenting styles. There was a stable pattern for adults with high scores in gelotophobia also having parents who score high in this disposition. One might speculate that parents pass their fear of being laughed at on to their offspring, and indeed, it does seem likely that children learn how to deal with laughter and being laughed at from their parents. If the parents do not experience humor and laughter as relaxing and as something positive, their children seem likely to adapt to this negative attitude. In these regards, gender seems to play an important role within the families. It was apparent that higher gelotophobia in males was associated with lower expressions of katagelasticism in mothers but higher gelotophobia and lower gelotophilia in fathers. The pattern was slightly different for the females. Among them, higher gelotophobia correlated with both, gelotophobia but also katagelasticism in their mothers. This might be a hint at different patterns in the rearing behavior of parents, which may have different impacts on how their male and female children deal with laughter and ridicule. Otherwise, one might argue that children perceive their same-sex and opposite-sex parents differently and interpret signs from them differently.

The homologous correlation coefficient for gelotophilia was much lower—yet in the same direction (especially for gelotophilia in the mothers). Again, one might speculate that within families where people enjoy making others laugh at themselves, children adapt to that type of behavior. Overall, there was a relation between children's joy in being laughed at and gelotophilia in the mother. When taking a closer look at gender-specific outcomes, gelotophilic males had katagelastistic fathers. The pattern of correlations was least clear for katagelasticism. While the homologous correlation was non-significant, katagelastistic children tended to have parents that enjoy being laughed at. It can be speculated that a family where all

members enjoy laughing at each other would be highly dysfunctional. Katagelasticians are described with a somewhat rude and antisocial component (Ruch and Proyer 2009a) and an inclination to psychopathic personality traits (Proyer et al. 2012b). Again, some gender-specific findings were reported. While higher expressions in katagelasticism in were associated with higher scores in their fathers, the daughters high in katagelasticism had mothers high in gelotophilia. Gelotophilia and katagelasticism demonstrated positive relations among the siblings. It can only be speculated whether this reflects a specific way of interaction among the siblings and potential interactions. Nevertheless, the findings suggest that the developmental aspects of the joy of laughing at others are less clear at the moment compared to gelotophobia and gelotophilia.

The study suggests that there is a positive relation between gelotophobes and greater levels of punishment and less warmth as favored parenting styles. Ratings from adult children and their parents converged well in this respect, while parents also remembered higher control. This argues for a strong impact of the parenting behavior on the fear of being laughed at in adults. Warmth may be most strongly associated with joint laughter and enjoying humor together; this experience seems to be impaired in those suffering from the fear of being laughed at. Interestingly, when relating parents' self-rated parenting styles and their own expression of gelotophobia, lower warmth and higher punishment yielded meaningful relations. One might argue that this combination occurs when specific skills are lacking, for example, communicating with their children in a carefree, relaxed, and even humorous way. Thus, their own insecurity about humor and laughter seemed to pervade on the parenting behavior.

Like gelotophilia, katagelasticism was not strongly related to any of the parenting styles covered by the QRPRB. There was a low relation to higher punishment; this seemed to be more pronounced among the males. Again, however, other factors (e.g., peers) seemed to contribute more strongly to the development of gelotophilia and katagelasticism than parenting styles. There was no clear pattern for the katagelastistic but, surprisingly, the parent's perception of warmth correlated with higher katagelasticism in the adult boys (total score). Whether this was a reaction toward somewhat deviant behavior or whether other factors play a role here (e.g., biological) cannot be answered with the present data.

This study is a first step toward a better understanding of developmental processes and the relevance familial relations in gelotophobia, gelotophilia, and katagelasticism. There are stable patterns that provide a basis for future studies. While there are a few studies on humor and genetics (e.g., Manke 1998; Steger et al. 2007; Vernon et al. 2008a; Vernon et al. 2008b), there are *no* studies on the heritability of the three dispositions toward ridicule and being laughed at. Such a

study would be the next logical step and help delineate environmental from genetic effects. Additionally, a closer look at parenting styles and, especially, the effects of gender and interactions (e.g., “same-sex” × “different-sex parent”) is warranted. One might argue that parents use different parenting tactics with same- and opposite-sex children and that this could reflect in various outcome variables (cf. Conrade and Ho 2001; Gordon Simons and Conger 2007; Winsler et al. 2005). Hence, studying these effects but also further potential contributors (e.g., age of the parents, socioeconomic status) is a goal for future research. Sample sizes did not allow for a closer evaluation of these aspects with the current data. However, the question arises on whether the (dis-)similarities could be harmful or a protective factor in the developmental processes. The level of certainty or uncertainty for the child regarding the parenting behavior of the parents might also have an impact on how they deal with ridicule and being laughed at (see Titze 2009; Ruch et al. 2010; Weibel and Proyer 2012). Furthermore, it might be fruitful studying different parenting tactics in more detail (e.g., differentiating between different forms of punishment or support).

As a limitation, it should be noted that the current sample showed some peculiarities that need to be considered. For example, typically, there are no gender differences in the incidence of gelotophobia (e.g., Ruch and Proyer 2008a, b, 2009a). In the present sample, however, there were more than 5 times more gelotophobic mothers than fathers. Most likely, this seems to be an effect of self-selection as less males wanted to join the study and it is assumed that those males with gelotophobic tendencies might have decided not to participate. However, in the sample of the adult children, there were more gelotophobes than we usually find in samples from Switzerland (Samson et al. 2011b). Perhaps the way the participants were approached facilitated this tendency and more persons who feared being laughed at participated—unlike the fathers that were approached in a different way (i.e., by their children).

Additionally, some of the sample sizes (when performing analyses split by gender and relating this to father and mother separately) were rather low (<20) thus demanding attention to the preliminary character of this study and caution in extrapolating from these results to the general case. A further limitation is that we only covered *remembered* parenting behavior. In this respect, it also needs to be considered that recollections may vary since the time span for the recollections were different (i.e., having left the parent’s home very recently to a long time ago).

Only very recently, Proyer et al. (2012a) have developed an instrument that allows testing the three dispositions toward ridicule and being laughed at in children (starting from the age of six). In future studies, it will therefore be

possible to collect data directly from children and also add observer reports of the actual parenting behavior as it is being exercised. Combining these elements with a longitudinal design, developmental aspects, and further implications for adult development could be more definitively described.

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