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Original article

# The subjective assessment of the fear of being laughed at (gelotophobia): French adaptation of the GELOPH<15> questionnaire

## *L'évaluation subjective de la peur de faire rire de soi (gélotophobie) : adaptation francophone du GELOPH<15>*

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### Abstract

This paper describes the adaptation of the French version of the GELOPH<15>, a short questionnaire (15 items) that measures the fear of being laughed at (gelotophobia). The first empirical studies revealed that gelotophobia is a valid and useful new concept that should be interpreted as an individual differences phenomenon within the range of normality. Prior studies suggested that the GELOPH<15> is reliable, and showed a one-dimensional factor solution. In order to test psychometric properties of the French version,  $N=218$  participants from the French part of Switzerland and  $N=245$  participants from Quebec (French Canada) took the test. One item that yielded a particularly high endorsement pertained to the interpretation of others' laughter as being laughter at oneself (Switzerland); another item with the same result reflected how unease experienced while dancing is due to the conviction that one is being assessed negatively by others (Quebec). The fear of being laughed at was independent of the participants' age, sex or marital status. Additionally, the mean gelotophobia scores in the French Canadian and Swiss samples did not differ from each other. The French version of the GELOPH<15> provides a useful and reliable instrument for the subjective assessment of gelotophobia in French-speaking countries.

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**Keywords:** Fear of being laughed at; Self-assessment questionnaire; Gelotophobia; Laughter; Humor

### Résumé

Cet article décrit l'adaptation de la version française du GELOPH<15>, un court questionnaire (15 items) mesurant la peur de faire rire de soi (gélotophobie). Les premières études empiriques ont révélé qu'il s'agit d'un nouveau concept valide et utile qui devrait être interprété en tant que mesure de différences individuelles à l'intérieur de l'étendue de la normalité. Des études antérieures ont suggéré que le GELOPH<15> est une mesure fiable présentant une structure factorielle unidimensionnelle. De façon à tester les propriétés psychométriques de la version française, 218 participants provenant de la partie française de la Suisse, ainsi que 245 participants du Québec (Canada) ont complété le questionnaire. La version traduite a obtenu de bonnes propriétés psychométriques se traduisant par une fiabilité élevée dans les deux échantillons. Plus spécifiquement, les items relatifs au fait d'associer les rires des autres à sa propre personne (Suisse) et au fait de ne pas se sentir à l'aise en dansant à cause de la conviction d'être évalué négativement par autrui (Québec) obtiennent les niveaux d'endossement les plus élevés. La peur de faire rire de soi existe indépendamment de l'âge, du sexe et du statut marital des participants. Les scores moyens de gélotophobie dans les échantillons ne différaient pas entre le Québec et la Suisse. La version française du GELOPH<15> fournit une mesure utile et fiable permettant l'évaluation subjective de la gélotophobie dans les pays francophones.

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**Mots clés :** Peur de faire rire de soi ; Questionnaire d'autoévaluation ; Gélotophobie ; Rire ; Humour

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## 1. Introduction

Laughter is a strong social cue and belongs to our daily used repertoire of expressive behavior. Intuitively, laughter is an expression of positive emotions and creates positive responses in others. However, early philosophers' considerations and theories had already emphasized that laughter can incorporate malign aspects (e.g., Plato, Aristotle, Hobbes, see Ferguson and Ford, 2008; Gruner, 1978; Morreall, 1987). Laughing *at* and not *with* someone can be psychologically harmful and coercive. Interestingly, laughing *at* someone seems to also have an impact on other persons (bystanders) and not only on the person that is being laughed at or is being ridiculed (Janes and Olson, 2000). Recently, it was postulated that individuals can become abnormally sensitive towards laughter from others and develop a fear of being laughed at (Ruch and Proyer, 2008a; Ruch, 2009).

Michael Titze – a German psychotherapist – observed among patients in his clinical practice a subgroup that seemed to be particularly concerned with being laughed at. Titze coined the term gelotophobia from the Greek terms “gelos”, meaning laughter, and “phobia”, meaning fear, and he published several case-observations (for an overview see Titze, 2009). Gelotophobia is defined as the fear of being laughed at (Titze, 2009; Ruch and Proyer, 2008a; Ruch and Proyer, 2008b). Gelotophobes are individuals that display negative reactions to several types of laughter: they do not perceive laughter and smiling from people they interact with as positive events but as a means to put them down. Gelotophobes were further described to be very observant in presence of other people and easily get suspicious upon hearing laughter from others, often misattributing the laughter from others as directed at themselves without having an objective reason for doing so (see also Ruch et al., 2009). It is postulated that gelotophobes cannot experience laughter as relaxing or positive but merely as aggressive acts by others. These ideas are accompanied by the conviction of actually being ridiculous and therefore being laughed at for a good reason.

Since the publication of the first empirical article on gelotophobia in 2008, more than 40 studies have been published that examine gelotophobia empirically and from a theoretical point of view. In the first empirical study on the fear of being laughed at (Ruch and Proyer, 2008a), a group of clinically diagnosed gelotophobes was separated from groups of shame-based and non-shame based neurotics (Nathanson, 1992) and normal controls by means of a self-report measure. The items that yielded the highest discriminant validity focused on the core symptoms of gelotophobia – e.g., getting suspicious when hearing others laughing, relating the laughter by others to oneself, feeling unease that might impair body control at hearing laughter etc. (Ruch and Proyer, 2008a). This led to the initial idea of gelotophobia as a clinical phenomenon with a pathological component.

Ruch and Proyer (2008b) developed an economic 15-item version of the questionnaire containing only the core items of gelotophobia (GELOPH<15>), which enables to measure the fear of being laughed at. In this study, Ruch and Proyer noticed that persons from non-clinical groups exceeded empirically derived cut-off scores for the presence of gelotophobia.

They concluded that gelotophobia is of relevance in non-clinical populations as well and suggested that the fear of being laughed at should be interpreted as an individual differences phenomenon at a sub-clinical level that ranges on a continuum from low to high (extreme) fear. Most subsequent research on gelotophobia has been conducted in non-clinical settings (see Ruch, 2009 and Proyer and Ruch, 2010 for an overview). Nevertheless, a few studies have been conducted in a clinical realm (Forabosco et al., 2009b; Samson et al., *in press*A). Evidence for the validity of the concept stems from a broad variety of studies that also include experimental settings (e.g., Ruch et al., 2009; Samson and Meyer, 2010), scenario-tests (Platt et al., 2009; Platt and Ruch, 2009), or semi-projective tests (Ruch et al., 2009). Gelotophobia can be located well in current models of personality (Proyer and Ruch, 2010; Ruch and Proyer, 2009); it has been studied in relation to emotional responses to incidents of being laughed at (Papousek et al., 2009; Platt et al., 2009; Platt and Ruch, 2009; Proyer et al., 2010) or in relation to positive psychological functioning (Proyer and Ruch, 2009; Proyer et al., *in press*; Samson et al., *in press*B).

A repeated concern was the similarity and overlapping between gelotophobia and other fears, anxieties and phobias, particularly social phobia. Two recent studies found indeed a strong relation to social anxiety (Edwards et al., 2010; Carretero-Dios et al., 2010a). However, gelotophobia was not related to specific fears (relating to death/illness/injury, animals, or situations, Edwards et al., 2010). Interestingly, both studies came to the conclusion that gelotophobia is related to social phobia yet has distinct characteristics. Carretero-Dios et al. (2010a) conducted a psychometric study, a joint exploratory factor analysis and a confirmatory factor analysis for the items of the GELOPH<15> Ruch and Proyer, 2008b and Watson and Friend's (1969) Fear of Negative Evaluation and Social Anxiety and Distress Scale. The analysis yielded three distinct factors that could clearly be labeled as gelotophobia, fear of negative evaluation and social anxiety and distress. This indicates that – despite high direct correlations – the fear of being laughed at cannot be fully explained by measures of social phobia.

The origins of gelotophobia are somewhat unclear at the moment. In his theoretical papers, Titze traced it back to repeated and intense experiences of having been laughed at in the past (see Titze, 2009 for an overview). He argues that during infancy, the infant–caretaker(s) relationship becomes impaired, and together with intense, repeated, and traumatic experiences of being laughed at or being ridiculed, leads to the development of the fear of being laughed at. Potential consequences of gelotophobia are quite diverse. They might range from low self-esteem, low social competences, and social withdrawal to lack of liveliness, psychosomatic disturbances, or the inability to appreciate laughter and smiling as joyful social experiences. Titze's ideas are based on case-observations and are of theoretical nature – they have not been fully empirically tested. There exists some empirical evidence that even contradicts some of the assumption in the model. For example, clinically diagnosed gelotophobes did not remember more incidents of having been laughed at in childhood and youth than normal controls (Ruch et al., 2010). On the other hand, as a recent study showed, gelotophobes recalled

situations in which they had been laughed at with a high intensity of negative feelings (Proyer et al., 2009). Also, in a study with individuals with Asperger's syndrome, a positive correlation between incidents of having been laughed at and gelotophobia has been found (Samson et al., *in press A*).

An important application of this line of research lies in studies on bullying. (Platt et al., 2009) discovered that the expression of gelotophobia was a strong indicator that the afflicted person remembered of having been bullied previously in their life. The study suggests that gelotophobes misinterpret non-hostile jokes, comments, or playful teasing among colleagues as offensive because of their extreme fear of being laughed at. The authors raised the question whether some (but not all, of course) bullying incidents might be 'false alarms' caused by gelotophobes that are unable to see the playful aspects of laughing among colleagues. Führ (2010) provided data on bullying and gelotophobia in children and adolescents, which converged very well with the findings for adults. However, research in bullying is not the only practical application of the concept. For example, there is empirical evidence that gelotophobes are less satisfied with their life than non-gelotophobes (Proyer et al., *in press*; Samson et al., *in press*). Thus, it seems as if this condition has an impact on the daily lives of people and that interventions addressing how people deal with being ridiculed and laughed at might help improve people's well being. Furthermore, it enriches research (and various applied aspects) in humor in general, which previously has tended to focus more on positive aspects of laughter (see Martin, 2007; Ruch, 2007). As gelotophobia was shown to be related to social phobia, one might also argue that studying these relations might add to the knowledge on anxiety-related conditions – in the sense that the roles of humor, laughter, ridicule etc. have been neglected in various fields of psychology (e.g., clinical psychology but also psychiatry) and that this field of research might establish more awareness of these topics. Finally, the cross-cultural understanding of how people deal with humor and laughter can only be enabled when reliable measures exist that allow research in the field in the respective countries.

### 1.1. Gelotophobia in Quebec (Canada) and Switzerland

Gelotophobia has been intensely studied in the past few years. Up till now, the German version of the GELOPH<15> was mainly used in these studies, but meanwhile the psychometric properties of the GELOPH<15> are published not only for the German (Ruch and Proyer, 2008b) but also for translations to Arabic (Kazarian et al., 2009), Czech (Hřebíčková et al., 2009), Danish (Führ et al., 2009), English (Platt et al., 2009), Hebrew (Sarid et al., *in press*), Italian (Forabosco et al., 2009a), Romanian (Ruch et al., 2008), Slovakian (Hřebíčková et al., 2009), and Spanish (Carretero-Dios et al., 2010b). In order to provide a reliable instrument to measure gelotophobia and to use the questionnaire in a variety of research questions in French samples, the French version of the questionnaire was developed. Thus far, the fear of being laughed at has not been studied comprehensively with a French-speaking sample. However, one might assume that the outcomes should be somewhat comparable to Western countries like England or Germany.

### 1.2. Aims of the present study

The aim of the present study was threefold. First, the psychometric properties of the gelotophobia-scale in the French translation were examined. Therefore, reliability analyses and factor analyses were computed. The results were compared with the original German form (Ruch and Proyer, 2008b). Furthermore, the correlations of each item and the total score for gelotophobia with age, sex, and the marital status were computed. The latter might provide information on whether being in a relationship or not might in any way be related to the expression of the fear of being laughed at. One might, for example, speculate whether gelotophobes are seen by others as somewhat "strange" and therefore have difficulties in finding a partner or that they, more generally spoken, prefer staying alone as this protects from derision. The French version can be recommended for the use in research and practice if the psychometric properties are comparable to those of the original version. Secondly, data was collected from two different French-speaking samples. This allows replicating the findings from the first sample (collected in Switzerland) with the second sample (Quebec, Canada). If the stability of the findings across the two samples is provided, the French version can be recommended for use for research purposes. Thirdly, the relevance of single items (i.e., symptoms) in terms of low vs. high agreements in each sample was evaluated. This allows a more qualitative description of important contents for the respective samples.

## 2. Method

### 2.1. Sample

#### 2.1.1. Construction sample (Switzerland)

A sample of  $N=218$  adults completed the GELOPH<15>. Their mean age was 24.77 years (standard deviation [S.D.] = 8.86) with an age range from 18 to 66 years. Seventy-five were males and 143 were females. Hundred and seventy-one were not married (single) and 40 were either married or in a relationship.

#### 2.1.2. Replication sample (Quebec, Canada)

The sample consisted of  $N=245$  participants. Eighty were males and 164 were females (one did not specify gender). The mean of the age was 28.72 (S.D. = 12.13) and ranged from 17 to 65 years. Hundred and thirty-six were not married (single) and the others ( $N=103$ ) were either married or in a relationship (six did not specify their marital status).

### 2.2. Instrument

The GELOPH<15> (Ruch and Proyer, 2008b) is questionnaire consisting of 15 items for the subjective assessment of gelotophobia. A sample item is "When others laugh in my presence I get suspicious". All items are positively keyed and the 4-point answer format ranges from 1 = "strongly disagree" to 4 = "strongly agree". The GELOPH<15> is the standard instrument for the subjective assessment of gelotophobia and is widely

Table 1  
Descriptive statistics, corrected item-total correlations, and correlations with age, gender, and marital status for the French form of the GELOPH<15> in the construction and the replication sample.

| Item  | Construction sample (Switzerland) |      |      |        |        |       | Replication sample (Quebec, Canada) |      |      |         |         |       |
|-------|-----------------------------------|------|------|--------|--------|-------|-------------------------------------|------|------|---------|---------|-------|
|       | M                                 | S.D. | CITC | Age    | Sex    | Ms    | M                                   | S.D. | CITC | Age     | Sex     | Ms    |
| 1     | 2.09                              | 0.88 | 0.45 | −0.06  | 0.09   | −0.05 | 1.92                                | 0.89 | 0.60 | −0.21** | 0.06    | −0.10 |
| 2     | 1.51                              | 0.78 | 0.52 | 0.12   | −0.03  | 0.10  | 1.44                                | 0.74 | 0.49 | 0.05    | −0.05   | 0.00  |
| 3     | 1.8                               | 0.81 | 0.64 | 0.05   | 0.08   | 0.03  | 1.62                                | 0.82 | 0.61 | −0.16*  | 0.13*   | −0.08 |
| 4     | 1.49                              | 0.76 | 0.63 | 0.04   | 0.14*  | −0.05 | 1.52                                | 0.77 | 0.56 | −0.11   | 0.10    | −0.01 |
| 5     | 1.97                              | 0.91 | 0.49 | −0.12  | 0.27** | −0.06 | 1.79                                | 0.81 | 0.57 | −0.05   | 0.10    | 0.04  |
| 6     | 1.67                              | 0.85 | 0.57 | 0.16*  | 0.03   | −0.03 | 1.8                                 | 0.91 | 0.59 | −0.08   | 0.00    | 0.00  |
| 7     | 1.57                              | 0.78 | 0.39 | 0.07   | −0.05  | −0.06 | 1.63                                | 0.83 | 0.51 | −0.12   | −0.10   | −0.09 |
| 8     | 1.20                              | 0.53 | 0.60 | 0.26** | −0.02  | 0.03  | 1.34                                | 0.71 | 0.66 | −0.02   | −0.04   | −0.01 |
| 9     | 2.01                              | 0.92 | 0.61 | 0.14*  | 0.17*  | 0.02  | 1.75                                | 0.85 | 0.57 | −0.19*  | 0.11    | −0.11 |
| 10    | 1.72                              | 0.90 | 0.59 | −0.01  | 0.05   | −0.09 | 1.88                                | 0.95 | 0.57 | −0.01   | 0.17**  | −0.08 |
| 11    | 1.62                              | 0.87 | 0.35 | 0.17*  | −0.05  | −0.02 | 1.72                                | 0.83 | 0.53 | −0.01   | 0.07    | 0.05  |
| 12    | 1.75                              | 0.90 | 0.63 | 0.08   | 0.11   | 0.02  | 1.73                                | 0.86 | 0.54 | 0.08    | 0.11    | 0.08  |
| 13    | 1.65                              | 0.88 | 0.40 | 0.02   | −0.06  | −0.08 | 1.91                                | 1.01 | 0.45 | −0.20** | −0.21** | −0.06 |
| 14    | 1.34                              | 0.65 | 0.57 | 0.24** | −0.06  | −0.09 | 1.27                                | 0.57 | 0.43 | −0.01   | 0.05    | −0.01 |
| 15    | 1.60                              | 0.79 | 0.48 | −0.02  | 0.14   | 0.00  | 1.47                                | 0.69 | 0.55 | −0.05   | 0.09    | −0.12 |
| Total | 1.67                              | 0.49 | 0.57 | 0.13   | 0.11   | −0.05 | 1.65                                | 0.50 | 0.56 | −0.12   | 0.06    | −0.06 |

$N=217-218$  for sample 1 and  $236-244$  for sample II. M: mean, S.D.: standard deviation; CITC: corrected item-total correlation (total = median CITC); age: correlation with age; sex: correlation with sex (1 = males, 2 = females); Ms: correlation with marital status (1 = single [i.e., single, separated]; 2 = in a relationship [i.e., cohabiting, married]). \*:  $P < 0.05$ ; \*\*:  $P < 0.01$ .

used in research (see for example, (Forabosco et al., 2009a; Forabosco et al., 2009b; Papousek et al., 2009; Platt, 2008; Ruch, 2009; Ruch and Proyer, 2009)). It allows computing cut-off scores for no expression (means  $\leq 2.50$ ), slight (2.50 to 2.99), marked (3.00 to 3.49), and extreme ( $\geq 3.50$ ) expressions of gelotophobia. The French version can be found in Appendix I (the wording of some items has been slightly adapted for improving its readability).

### 2.3. Procedure

The GELOPH<15> was translated from German to French and an independent translator reverse-translated this version back to German. The two German versions were compared and modifications were applied. The authors of the original version helped in critical cases. This procedure ensured that the translated version was correct but also that cultural specifications could be taken into account.

In Switzerland, 230 questionnaires were distributed in seminars in French psychological lectures at a university in a bilingual (French and German) city of Switzerland of which 220 were returned. Two hundred and eighteen were completely filled in and entered the study. Participants were not paid for their services. They were asked to participate in a short scientific study and that it would not take more than ten minutes to complete the questionnaire.

In Quebec, participants were recruited in classrooms at a large university, as well as individually in public places around the university. Participants did not receive compensation for their services. Only those who agreed to participate received a questionnaire.

## 3. Results

### 3.1. Analyses for the construction sample

The reliability analysis indicated that the French version yielded a high internal consistency ( $\alpha = .87$ ). Mean scores and S.D. for each item separately were calculated and a total score was computed. The items and the mean score in gelotophobia were correlated with age, sex, and marital status of the participants. All analyses were performed for the construction and the replication sample separately (Table 1).

Table 1 shows that the corrected item-total correlations (CITC) ranged between .35 and .64 (median = .57). Gelotophobia was shown to exist independently from demographic variables. Besides single items, neither, age, sex, nor the marital status was related to the fear of being laughed at.

For the examination of the factorial structure (dimensionality) of the scale, a principal components analysis for the 15 items was computed. The analysis revealed one strong first factor. The eigenvalues were 5.62, 1.35, and 0.94, respectively. The first factor explained 37.47% of the variance. The loadings of the items on the first factor ranged between 0.41 (item 11; “If someone has teased me in the past I cannot deal freely with him forever”) and 0.72 (item 4; “It is difficult for me to hold eye contact because I fear being assessed in a disparaging way”). The median of the loadings on the first factor was 0.63. Overall, a one-dimensional solution fitted the data best.

The answer categories of the questionnaire provide a possibility of estimating the relative importance of single items (symptoms). Therefore, a total score of the two answer categories indicating agreement to an item (i.e., “agree” and “strongly agree”) and the frequency of the endorsement to each

item was computed. The average item endorsement was 16.98% and the range was between 4.13% (item 8; “Although I frequently feel lonely, I have the tendency not to share social activities in order to protect myself from derision”) and 30.88% (item 1; “When others laugh in my presence I get suspicious”).

The application of the cut-off scores by (Ruch and Proyer, 2008b) allows an estimation of the number of gelotophobes in the sample. As already mentioned, (Ruch and Proyer, 2008b) empirically derived cut-off points indicating slight, pronounced, and extreme expressions of gelotophobia. The criteria used were:

- the answer format of the questionnaire (the scale midpoint is 2.50, based on a subject’s agreement with half the items);
- a score of two S.D. above the mean in the group of normal controls;
- the score at which the distribution curves of normal controls and diagnosed gelotophobes intersected.

These three criteria converge very well and therefore the cut-off of 2.50 was applied. In the Swiss sample, 6.88% of the participants exceeded the cut-off score that indicated at least a slight expression of the fear of being laughed at. 3.67, 2.75, and 0.46% exceeded the cut-off points for slight (mean score:  $\geq 2.50$ ), marked ( $\geq 3.00$ ), and extreme gelotophobia ( $\geq 3.50$ ) in the sample.

### 3.2. Replication of the findings with a French Canadian sample

The alpha coefficients were almost identical for the two samples ( $\alpha = .88$ ) indicating a high internal consistency of the items. The same was true for the CITC that ranged between .43 and .66 (median = .56). The lowest CITCs were even higher than in the Swiss sample. None of the demographic variables contributed to the expression of the fear of being laughed at. Albeit non-significant it should be noted that the sign for the correlation with age differed between the two samples. However, as the correlation coefficients were low ( $r^2 \leq 0.02$ ) in both cases this result should not be over-interpreted. The comparison of the mean GELOPH<15> scores showed that the two samples did not differ significantly from each other in their expression of the fear of being laughed at ( $t[461] = -0.33$ ,  $P = 0.74$ ). Among the participants, 8.57% exceeded the cut-off point for indicating at least a slight expression of gelotophobia (7.35% slight and 1.22% pronounced).

The factor structure was also tested for the French Canadian sample by means of a principal components analysis for the 15 items. Again, a very potent first factor emerged indicating that a one-dimensional factor solution fitted the data best. The eigenvalues were 5.83 (explaining 38.86% of the variance), 1.29, and 1.06 for the first three factors. The loadings on the first factor ranged from 0.50 (item 14; “Especially when I feel relatively unconcerned, the risk is high for me to attract negative attention and appear peculiar to others”) to 0.73 (item 8; “Although I frequently feel lonely, I have the tendency not to share social activities in order to protect myself from derision”)

with a median of 0.63. Overall, the factorial structure was highly similar to the one reported for the Swiss sample.

Again, the endorsement rates for single items were computed. They ranged between 5.38% for item 14 (“Especially when I feel relatively unconcerned, the risk is high for me to attract negative attention and appear peculiar to others”) and 27.23% (item 13; “While dancing I feel uneasy because I am convinced that those watching me assess me as being ridiculous”) with a median of 16.04%. Thus, there were different item contents of relevance for the two countries.

## 4. Discussion

The present study described the French adaptation of the GELOPH<15>, a questionnaire for the subjective assessment of the fear of being laughed at (gelotophobia) in two samples from different countries. Data were independently collected in the French language parts of Canada and Switzerland. Overall, the results were stable for the construction as well as the replication sample. Thus, the use of the scale can be recommended for research and practical purposes in case empirical information on the fear of being laughed at is needed.

The results showed that the French version yielded good psychometric properties in terms of high reliability ( $\alpha \geq .87$ ). It was shown that gelotophobia is of relevance in Quebec and in Switzerland. In the two samples, 6.88 and 8.57% of the participants exceeded the cut-off score indicating at least a slight expression of gelotophobia. This is lower than for a German-speaking sample (11.65%; Ruch and Proyer, 2008b), a sample from Spain (11.63%; Carretero-Dios et al., 2010a) and a sample from the United Kingdom (13%; Platt et al., 2009), but comparable to an Israeli sample (5.91%; Sarid et al., in press), samples from the Czech Republic (6.29%) and Slovakia (6.14%; Hřebícková et al., 2009) and a Spanish-speaking sample from Columbia (8.53%; Carretero-Dios et al., 2010a) and higher than in Denmark (1.61%; Führ et al., 2009). Thus, it seems that gelotophobes can be found in both countries and that further studies in the two countries can provide more insights into causes, correlates, and consequences of gelotophobia. Nevertheless, it should be noted that the cut-off scores were validated in German-speaking countries and that they do not necessarily need to be applicable for other countries. However, it is assumed that they provide a good approximation until cut-off scores for specific countries are available.

The one-dimensional factor solution in both samples is highly comparable to the one reported for the German form (see Ruch and Proyer, 2008b). Thus, in terms of reliability and construct validity it seems to be a useful instrument for the assessment of the fear of being laughed at in French-speaking countries. Interestingly, gelotophobia existed independently from demographic variables. Neither age, sex nor marital status were related to the fear of being laughed at. This is in line with findings from the German-speaking world (see Ruch, 2009; Ruch and Proyer, 2008b).

Intuitively, laughter is perceived as to be positive, but with a closer look on laughter, it is striking that not all laughter events that are *meant* to be positive are *perceived* as posi-

tive. The power of laughter as a social cue that can be very supportive and rewarding on one hand, while extremely rude, mean-spirited, and castigatory on the other, cannot be underestimated. A few people are negatively affected by every type of laughter. Recent studies showed that gelotophobes generally seem to underestimate their abilities (intelligence, humor performance, see above) and appear to be rather inept at regulating their own emotions. This poses the question whether interventions might be useful in improving not only self-confidence of gelotophobes but also on their ability to differentiate between mean-spirited and well-intentioned laughter events. Thus far, there is no empirically tested intervention program for gelotophobia. Practitioners report positive experiences when using different techniques of humor drama (see Titze, 2009). However, this is still an understudied area. Also, there is only limited knowledge about the expression of gelotophobia in children and adolescents (see Führ, 2010 for first results) – as well as on developmental aspects. Furthermore, information on how gelotophobia is distributed in families is rather limited at the moment (e.g., do parents who fear being laughed at pass this on to their children? What are genetic influences?). Thus, there are a lot of open questions in this line of research that need to be addressed.

Up to now, the fear of being laughed at has been studied with several methods (questionnaire data, psychometric measures, experimental studies) with respect to intelligence, personality characteristics, character strengths, emotion regulation, humor and other laughter-related phenomena. However, many questions still remain open to investigation. The presented French version of the GELOPH<15> provides a useful, valid and reliable instrument to expand the knowledge about the phenomenon of the fear of being laughed at for the French-speaking research community.

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## Appendix A. French version of the GELOPH<15>

### Instructions :

Les énoncés suivants se réfèrent à vos sentiments, vos actions et vos perceptions **en général**. Essayez de décrire le mieux possible vos comportements ainsi que vos attitudes **habituels**, en marquant d'un « X » l'une des quatre alternatives. Veuillez S.V.P. utiliser l'échelle suivante :

- (1) tout à fait en désaccord
- (2) modérément en désaccord
- (3) modérément en accord
- (4) tout à fait en accord

### Par exemple :

Je suis une personne joyeuse. .... (1) (2) (3) (4)

Si vous êtes tout à fait en accord avec cette affirmation, donc que vous êtes **en général** une personne joyeuse, **mettez un X**

**sur le (4)**. Si vous êtes tout à fait en désaccord, donc que vous n'êtes **habituellement pas** une personne joyeuse, **mettez un X sur le (1)**. Si vous avez de la difficulté à répondre à une question, choisissez la réponse qui s'applique **le plus**.

Veuillez S.V.P. répondre à toutes les questions et n'en omettre aucune.

|     |   |     |     |     |     |
|-----|---|-----|-----|-----|-----|
| 1.  | Lorsque les gens rient en ma présence, je deviens suspicieux.   | (1) | (2) | (3) | (4) |
| 2.  | J'évite de m'exposer en public parce que j'ai peur que les gens se rendent compte de mon incertitude et puissent ainsi se moquer de moi.  | (1) | (2) | (3) | (4) |
| 3.  | Lorsque des inconnus rient en ma présence, j'associe souvent cela à ma personne.  | (1) | (2) | (3) | (4) |
| 4.  | Il m'est difficile de maintenir le contact visuel, parce que je crains d'être jugé négativement.  | (1) | (2) | (3) | (4) |
| 5.  | Quand les gens se moquent de moi, je me sens comme paralysé/e.  | (1) | (2) | (3) | (4) |
| 6.  | Je me contrôle fortement pour ne pas attirer l'attention d'une façon négative, afin d'éviter de me ridiculiser.                           | (1) | (2) | (3) | (4) |
| 7.  | Je crois que je donne involontairement une impression comique aux gens.   | (1) | (2) | (3) | (4) |
| 8.  | Bien que je me sente fréquemment seul/e, j'évite les activités sociales de façon à me protéger des moqueries.                             | (1) | (2) | (3) | (4) |
| 9.  | Lorsque j'ai fait quelque chose d'embarrassant quelque part, j'évite cet endroit par la suite.  | (1) | (2) | (3) | (4) |
| 10. | Si je n'avais pas si peur de me ridiculiser, je parlerais beaucoup plus en public.  | (1) | (2) | (3) | (4) |
| 11. | Si quelqu'un m'a taquiné/e dans le passé, je ne pourrai plus jamais agir librement avec lui/elle.   | (1) | (2) | (3) | (4) |
| 12. | Ça me prend beaucoup de temps pour m'en remettre lorsqu'on a ri de moi.   | (1) | (2) | (3) | (4) |
| 13. | Lorsque je danse, je me sens mal à l'aise parce que je suis convaincu que les gens qui me regardent considèrent que je suis ridicule.     | (1) | (2) | (3) | (4) |
| 14. | Je cours un grand risque de me faire remarquer et d'apparaître bizarre, particulièrement lorsque je me sens relativement insouciant.      | (1) | (2) | (3) | (4) |
| 15. | Lorsque je me suis rendu/e ridicule devant les autres, je deviens complètement figé et je perds la capacité de me comporter adéquatement. | (1) | (2) | (3) | (4) |

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