

# Gelotophobia: Life satisfaction and happiness across cultures

RENÉ T. PROYER, WILLIBALD RUCH, and GUO-HAI CHEN

## *Abstract*

*The fear of being laughed at (gelotophobia) was examined in its relations to concepts from positive psychology in Austria, China, and Switzerland. It was related to satisfaction with life and Peterson et al.'s (2005) three orientations to happiness; the life of pleasure (hedonism), life of engagement (related to flow-experiences), and life of meaning (eudaimonia). Participants (N = 744) completed self-report measures of gelotophobia, satisfaction with life, and orientations to happiness. The results revealed that gelotophobia could be found in all three countries. The participants exceeded cut-off points indicating gelotophobia in Austria (5.80%), China (7.31%), and Switzerland (7.23%). The fear of being laughed at was negatively related to life-satisfaction in all three countries. Gelotophobes described themselves with lower overall estimations of their lives. Gelotophobia was negatively correlated with life engagement (i.e., flow experiences). In China, gelotophobia was also related to a lower life of pleasure and life of meaning. Overall, the results show that gelotophobes do not pursue any of the three orientations to happiness. Interventions from positive psychology (e.g., enhancing satisfaction with life, strengthening the routes to happiness) are discussed as possible treatments of gelotophobia.*

*Keywords: engagement, gelotophobia, laughter, life-satisfaction, meaning, pleasure, positive psychology.*

## **1. Introduction**

Recently, gelotophobia was introduced as a new individual difference variable that describes the fear of being laughed at on a dimension ranging from low to

high fear (Ruch 2009; Ruch and Proyer 2008a). One of the main characteristics of gelotophobes is the misinterpretation of laughter and smiling as personally negative and aversive. Furthermore, people suffering from the fear of being laughed at tend to screen social interaction-partners for signs of derision and are primarily concerned with being laughed at. This concern is reinforced by a strong conviction of actually being ridiculous and therefore being laughed at for a good reason. Gelotophobes also show a specific behavior pattern in social interaction where they potentially might be laughed at. In these situations they typically appear wooden and awkward. A more precise description of the experiential world of gelotophobes and early literature based on single-case studies is given in Ruch and Proyer (2008a) and Titze (2009).

The first studies on gelotophobia focused on clinical groups. Ruch and Proyer (2008b), however, found that 11.65% of the participants in their group of normal controls could be classified as gelotophobes by means of a gelotophobia questionnaire. The authors concluded that the concept is relevant for non-clinical populations as well. Recently, much attention has been paid to the further exploration of the fear of being laughed at. For example, Platt (2008) used a scenario test for examining the gelotophobes' emotional reactions to events of good-humored teasing and bullying ridicule. Her study suggests that gelotophobes are not able to differentiate between the harmless (playful teasing) and mean-spirited scenarios. In both cases, their emotional response pattern consisted primarily of shame, fear, and anger. Further studies have dealt with the age-related vulnerabilities (Platt et al. 2010), personality correlates (Ruch and Proyer 2009a), early teasing experiences (Edwards et al. 2010; Ruch et al. 2010), or the impact of self-presentation styles and psychological gender (Radomska and Tomczak 2010; Renner and Heydasch 2010). Ruch (2009) gives the most comprehensive overview on the current status of gelotophobia research.

### 1.1. *Life-satisfaction, orientations to happiness, and gelotophobia*

Most of the studies conducted on anxiety-related traits deal with shortcomings and related symptoms (e.g., depression, neuroticism, and so forth). Papers that study resources and variables of positive psychological functioning are few. For example, Proyer and Ruch (2009) studied the location of gelotophobia in a framework of twenty-four character strengths and six virtues in self and peer reports. Overall, gelotophobes saw themselves as less virtuous than non-gelotophobes. For some of the strengths, the peer reports were higher than the

self-reported expression of the strength. Primarily, gelotophobia was negatively related to the strengths of hope/optimism, curiosity, bravery, love, and zest. This finding is of special relevance, as these strengths (except for bravery) seem to be highly related to satisfaction with life (e.g., Peterson et al. 2007). In a recent study, Samson and colleagues (2010) found that gelotophobia was negatively related with the perseverance and passion for long-term goals (*grit*), gratitude, and different indicators of subjective well-being. Kashdan (2002) explored positive psychological factors in social interaction and social observation anxiety. Results revealed a complex pattern between the social anxiety dimension and positive concepts like curiosity. Kashdan and Steger (2006) found (by means of an experience sampling-study) that social anxious people reported less positive affect and they reported fewer positive events in everyday life. Taking a closer look at the interactions reported there it was shown that participants reported the least positive emotions when they experienced greatest social anxiety and tendency to suppress emotions. A contrary relation was reported when the least social anxiety and tendency to suppress emotion were experienced. The same relations were found for reports on daily social anxiety and the tendency to suppress emotions and daily positive events.

In positive psychology, positive subjective experiences, positive individual traits, and positive institutions are explored (see Seligman and Csikszentmihalyi 2000). An important research topic is the exploration of happiness and subjective well-being. According to Diener (2000), life-satisfaction refers to people's evaluations of their lives (affective and cognitive).

So far no empirical study has been conducted on the satisfaction with life of gelotophobes. Studies exploring the relation between anxiety disorders and quality-of-life (e.g., Stein and Heimberg 2004) show that global well-being and life-satisfaction are impaired by the disorder. From a positive psychologists' view the experience of positive emotion is crucial for the well-being of a person. Fredrickson (2001) suggested in her influential *broaden-and-build theory of positive emotions*, that experiencing positive emotions (joy, interest, contentment, and love) broadens the momentary thought–action repertoire of a person. This is contrary to the repertoire of a person experiencing negative emotions where the repertoire is typically limited to a few acts (such as fight or flight reactions). These broadened repertoires enhance the building of personal resources that may lead to greater well-being in the future.

It might be assumed that gelotophobes often experience negative emotions as a reaction to social interaction situations. This was shown for the interpretation of acoustically presented laughter in which gelotophobes were unable to identify different qualities of laughter (see Ruch et al. 2009). Thus, it is

expected that their overall level of well-being is lower than in non-gelotophobes. This view is supported by single-case studies on gelotophobia (Titze 2009). There, gelotophobes were described as (socially) insecure with poor social competencies and in extreme cases with a restricted social-life (e.g., social withdrawal). While there is a resemblance with regard to some behaviors and convictions, it needs to be noted that gelotophobia can be psychometrically differentiated from social anxiety and fear of negative evaluation (Carretero-Dios et al. 2010). The single case observations suggest that gelotophobes tend to interpret positive social signs (e.g., friendly smiling from social interaction partners) negatively and aversively. Thus, their negatively toned reaction towards laughter-related cues is a prime characteristic of gelotophobes. Overall, it is expected that there will be a negative relation between gelotophobia and general well-being.

Next to the exploration of satisfaction with life, the research on strategies that might be used to achieve happiness is another important topic in positive psychology (Peterson et al. 2005). While in philosophy the focus of interest is on *hedonism* and *eudaimonia* as routes to happiness, positive psychologists added the pursuit of *engagement* as a third strategy. Thus, in terms of positive psychology there are three ways to happiness: Life of pleasure (derived from the hedonic principle), life of meaning (derived from the eudaimonic principle), and life of engagement (related to the flow-concept; see Csikszentmihalyi 1990). According to Peterson et al. (2005) the pleasant life can be described by a life that maximizes positive emotions and minimizes pain and negative emotion. The engaged life entails the use of positive individual traits — in a sense of high commitment to what one does. Activities of the engaged life are often related to flow experiences; i.e., experiencing an optimal balance between ones own skills and challenges of the task (Csikszentmihalyi 1990). The meaningful life is about belonging to and serving positive institutions (e.g., strong families and communities, democracy, and a free press). People who live a life of meaning have a strong idea of their purpose in life and often feel connected with something larger than themselves.

Peterson et al. (2005) showed that these three orientations can be distinguished empirically from each other and assessed by means of a self-report instrument (the Orientations to Happiness Questionnaire, OTH). Additionally, they showed that they can be pursued simultaneously and all three were (individually) related positively to life satisfaction. Participants who scored low in all three orientations also reported low life-satisfaction — the authors use the term “empty life” for describing this combination. Peterson et al. (2007) recently replicated this relation between the three orientations and life-

satisfaction in a multinational study involving data from the United States and Switzerland.

However, it is not known whether gelotophobes tend to use any of these strategies. Based on the single-case studies on gelotophobia it might be assumed that they do not tend to use any specific strategy to increase their well-being or any specific approach to increase their subjective happiness. Thus, it is expected that there will be a zero or negative relation among the fear of being laughed at and the life of pleasure, the life of engagement, and the life of meaning. It is important to study gelotophobia in its relation to positive psychological functioning for several reasons. The concepts might be helpful for the development of treatments for gelotophobia that focus on the strengths and resources of the persons. Studies have shown that positive interventions are effective—in terms of enhancing happiness and reducing the degree of depression (see Seligman et al. 2005 for an overview).

## 1.2. *Cross-cultural aspects*

Thus far, studies on gelotophobia haven been mostly conducted with the German (Ruch and Proyer 2008b) or the English form (Lampert et al. 2010; Platt et al. 2009) of the GELOPH<15>. Recently, studies in non-English speaking countries were conducted in China (Chen et al. 2009), Czech Republic (Hřebícková et al. 2009), Denmark (Führ et al. 2009), Israel (Sarid et al. 2011), Italy (Forabosco et al. 2006, 2009a, 2009b), Lebanon (Kazarian et al. 2009), Poland (Chlopicki et al. 2010), Romania (Ruch et al. 2009), Russia (Stefanenko et al. 2010), Slovakia (Hřebícková et al. 2009), and Spain (Carretero-Dios et al. 2010). Proyer et al. (2009) examined the measurement equivalence of a gelotophobia questionnaire in 73 countries around the globe (involving more than 22,500 participants). Overall the study shows that gelotophobia can be measured reliably in all of these countries involving 42 different language versions of the instrument. Nevertheless, the authors did not discuss mean level differences for the gelotophobia total score. Disregarding the different gelotophobia levels they described the countries along two dimensions; i.e., insecure (e.g., trying to hide ones experienced insecurity, feeling of being involuntarily funny) and intense avoidant-restrictive reactions towards the laughter of others vs. low to high suspicious tendencies towards the laughter of others (e.g., suspiciousness if others laugh). Austria, China, and Switzerland were neither insecure nor intense avoidant-restrictive but China was higher on the suspiciousness dimension. Nevertheless, only little is known on the relevance or

prevalence of gelotophobia in other countries. There is also only one cross-culture study on the orientations to happiness (involving 31 countries) but it does not contain data from China (Park et al. 2009). However, Austria and Switzerland were in a common cluster with high endorsements of the life of engagement and the life of meaning.

Additionally, there is only one empirical psychological study of humor in Mainland China (Chen and Martin 2007). Therefore, it is difficult to derive specific hypotheses. In the present study, data from China will be included in order to comment on (a) the relevance of gelotophobia in a non English/German-language country and on (b) a comparison of the relations among gelotophobia, well-being, and ways to happiness in Austria, China, and Switzerland. The three countries show several interesting distinguishing aspects that make it worth exploring possible differences. Besides the obvious language-differences, the countries also differ in the individualism-collectivism dimension (Hofstede 2001). While the two European countries could be described as individualistic countries, China would represent collectivistic cultures. So far nothing is known about the relation of the fear of being laughed at along this cultural dimension. However, one might assume that the fear of being laughed at might be of higher relevance in collectivistic cultures since here a single person has a higher responsibility for his or her social group, which means that more social norms are of relevance and have to be taken into account in everyday life. Additionally, the proneness to shame should be different in the countries. In literature, Asian countries are often referred to as “face-saving cultures” that are preferably directed at behaviors to avoid embarrassment (cf. Cheung et al. 2001). This distinction might be of special relevance for the present study indicating that one might assume higher gelotophobia-scores in China than in Austria and Switzerland.

Diener and Suh (1999) present data on different levels of life satisfaction in 41 nations (taken from the World Values Study Group 1994). There, the highest satisfaction with life scores were reported for Switzerland. Austria was ranked at position 8 and China at position 22. Studies like that suggest that there is a difference in the mean levels of life-satisfaction in the three countries included in this study. Thus, the relations among the variables in countries with high or low national well-being scores will be investigated. It will be interesting to see whether national differences in the level of the subjective well-being will show different results in the variables investigated in the present sample. Overall, the present study is aimed at an examination of the relation among the fear of being laughed at, the subjective well-being, and three different ways to happiness in two German-language European countries and China.

## 2. Method

### 2.1. Sample

*Austria:*  $N = 138$  psychology students (23 males, 113 females, 2 participants did not provide information on their gender) completed the questionnaires. Most of the students were in their third year of education. The age of the participants ranged from 21 to 47 years ( $M = 25.31$ ,  $SD = 4.58$ ). All participants were registered psychology students of the University of Vienna.

*China:*  $N = 260$  participants between 18 and 23 years of age ( $M = 20.15$ ,  $SD = 1.19$ ) completed the study. The sample consisted of 88 males and 172 females. None of the participants were married. All of the participants were university students at Guangzhou in the P. R. China.

*Switzerland:*  $N = 346$  (120 males and 226 females) were tested. The participants were between 18 and 77 years of age ( $M = 29.55$ ,  $SD = 11.57$ ). Most of them were single ( $n = 239$ ),  $n = 94$  were cohabiting with a partner, one was separated, 10 were divorced, and 3 were widowed.

### 2.2. Instruments

The *GELOPH<15>* is a 15-item questionnaire for the subjective assessment of gelotophobia. Answers are given on a 4-point scale ranging from 1 = “strongly disagree” through 4 = “strongly agree”. A sample item is “When they laugh in my presence I get suspicious”. All items are positively keyed. The questionnaire is the standard instrument for the assessment of gelotophobia and proved its usefulness in several studies in different countries (e.g., Papousek et al. 2009; Platt 2008; Platt et al. 2009; Ruch 2009; Ruch and Proyer 2008a, 2008b, 2009a).

The *Satisfaction with Life Scale* (SWLS; Diener et al. 1985) was used for the subjective assessment of the participants’ life satisfaction. Answers are given on a 7-point scale ranging from 1 = “strongly disagree” through 7 = “strongly agree”. A sample item out of the total of five items is “The conditions of my life are excellent”. The SWLS was used in various studies demonstrating its usefulness, its good psychometric properties and its validity (e.g., Pavot and Diener 1993).

The *Orientations to Happiness Scale* (OTH; Peterson et al. 2005) was used for the subjective assessment of three orientations to happiness (life of pleasure, life of engagement, and life of meaning). The scale consists of 18 items (six items for each of the scales). A sample item is “Regardless of what I am doing, time passes very quickly” (life of engagement). Answers are given on a

5-point scale ranging from 1 = “very much unlike me” through 5 = “very much like me”. The OTH is the only instrument available for the subjective assessment of the three orientations to happiness and demonstrated good psychometric properties in various studies (Park et al. 2009; Peterson et al. 2007; Ruch et al. 2010).

### 2.3. *Procedure*

The student sample in Austria was recruited in the first lesson of a course in writing psychological reports. At this time the students did not have any prior courses in psychological assessment and no deeper knowledge of the assessment process. The testing took place at the Faculty of Psychology at the University of Vienna. The students did not receive any tokens for their participation (in terms of a bonus for the final exam or something similar) but a general feedback was given a few weeks after the testing session. The testing was supervised by the lecturer of the course and took place during the teaching time. The questionnaires were completed anonymously. It took the participants approximately 15 minutes to complete all three scales.

The testing in China was completed in a similar vein. The students did not receive a special token for their participation. The testing time was also approximately 15 minutes. All scales were translated to Chinese from the English and back translated by a native speaker. For the translation of the SWLS the Chinese version of the scale by Xing Zhanjun (see 2005) was considered as well. The participants did not report any problems with the language of the questionnaires.

Students in a course on psychometrics and test construction recruited the Swiss participants. Each of them had to collect data among student and non-student populations. They needed a minimum number of collected questionnaires for their exam in the course. The three questionnaires reported here were parts of a larger test battery. None of the participants reported problems with the language or handling of the questionnaires.

## 3. **Results**

### 3.1. *Examination of differences in the mean scores*

We first computed mean scores and standard deviations for the instruments in all samples. Additionally, we computed the correlations between the variables



and sex and gender of the participants. The data are presented along with information on their distribution and reliability in Table 1.

Table 1. *Descriptive Statistics for the Measures of Gelotophobia, Life Satisfaction, and Orientations to Happiness in the three Samples*

	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Sk</i>	<i>K</i>	<i>CITC</i>	$\alpha$	Age	Sex
<i>Gelotophobia</i>										
Austria	1.77	0.48	1.00	3.53	0.77	0.82	.53	.87	-.14	.08
China	1.84	0.44	1.00	3.40	0.30	0.04	.51	.86	.06	-.06
Switzerland	1.75	0.47	1.00	3.73	0.81	0.88	.52	.87	-.13*	-.05
<i>SWLS</i>										
Austria	4.98	1.16	2.20	7.00	-0.73	-0.18	.67	.86	-.01	-.04
China	3.68	1.20	1.00	7.00	-0.14	-0.69	.62	.82	.03	.16*
Switzerland	5.16	0.90	1.20	7.00	-0.83	1.38	.63	.83	-.05	.08
<i>OTH-P</i>										
Austria	3.27	0.70	1.00	4.83	-0.34	0.08	.50	.76	-.15	.01
China	3.39	0.78	1.00	5.00	-0.16	-0.23	.52	.78	.03	.04
Switzerland	3.48	0.64	1.50	4.83	-0.40	-0.03	.48	.74	-.30**	.01
<i>OTH-E</i>										
Austria	3.00	0.63	1.33	4.67	-0.17	-.02	.40	.67	.08	-.15
China	3.15	0.67	1.33	5.00	0.09	.13	.45	.72	.11	-.09
Switzerland	3.08	0.53	1.67	4.67	-0.05	.13	.34	.60	.12*	-.10
<i>OTH-M</i>										
Austria	3.04	0.76	1.17	4.67	0.01	-0.45	.50	.76	.05	-.19*
China	3.23	0.75	1.17	5.00	-0.10	-0.11	.51	.76	.04	-.06
Switzerland	2.88	0.71	1.17	5.00	0.07	-0.27	.49	.75	-.02	-.07

Note. *N* = 134–138 (Austria), 260 (China), 343–346 (Switzerland); *M* = mean; *SD* = standard deviation; min = lowest score in the scale; max = highest score in the scale;  $\alpha$  = reliability (Cronbach Alpha coefficient); *CITC* = mean of corrected item-total correlation across all items; *Sk* = skewness; *K* = kurtosis; *SWLS* = Satisfaction with Life Scale; *OTH-P* = life of pleasure; *OTH-E* = life of engagement; *OTH-M* = life of meaning; age = correlation with age; sex = correlation with sex (1 = men, 2 = women).

\**p* < .05; \*\**p* < .01.

Table 1 shows that all scales yielded satisfactory reliabilities and the corrected-item total correlation of all measures were highly similar. ANOVAs were computed with the three samples as classification variables and gelotophobia, life satisfaction, and the three orientations to happiness-scales as dependent variables. The three groups did not differ regarding their life of engagement and their expression of gelotophobia (however, the three countries differed in both variables at the *p* < .10 level). The country mean scores differed in the expression of life of pleasure ( $F(2, 740) = 4.66$ ; *p* < .01). Swiss participants scored higher than Austrians but both did not differ from the Chinese sample. The

three samples also differed regarding their life of meaning ( $F(2, 740) = 16.75$ ;  $p < .01$ ). The Chinese mean scores were significantly higher than the Austrians and Swiss while the latter did not differ from each other. Finally, the groups also differed in their life satisfaction ( $F(2, 739) = 154.99$ ;  $p < .01$ ). Here, the two European countries (that did not differ from each other) reported significantly higher satisfaction with life than the Chinese.

Gelotophobia was not related to age (there was a significant but small correlation towards higher scores for younger participants in Switzerland) or gender of the participants. Life-satisfaction existed independently from demographic data except for a small positive correlation indicating higher satisfaction with life among Chinese women. The life of pleasure was more highly endorsed among younger persons in Switzerland but not so in Austria and China. The life of engagement existed independently from demographic variables with higher scores among older Swiss participants. Also, the life of meaning was not related to demographics except for higher scores among Austrian females. However, it should be mentioned that all of these correlations were small in size (all  $r^2$  ranged from .01 to .09) and that after adjusting the alpha level for multiple simultaneously performed correlational analyses (Bonferroni correction) only the life of pleasure and lower age-relation (Switzerland) remained significant while the other correlations failed to reach statistical significance.

### 3.2. Examining different levels of gelotophobia in the samples

The prevalence of the fear of being laughed at in the three samples was computed. The data was split according to the cut-off scores for the GELOPH<15> derived by Ruch and Proyer (2008b) into groups of non-gelotophobes (mean score  $\leq 2.50$ ), slight gelotophobes ( $M \geq 2.50$ ), pronounced gelotophobes ( $M \geq 3.00$ ), and extreme gelotophobes ( $M \geq 3.50$ ). The percentage of participants exceeding one of the cut-off scores is shown in Table 2.

Table 2. *Expression of Gelotophobia in the Austrian, Chinese, and Swiss Sample*

	G <sub>0</sub>	G <sub>s</sub>	G <sub>p</sub>	G <sub>e</sub>	Gelotophobes
Austria	94.20	2.90	2.17	0.72	5.80
China	92.69	6.54	0.77	0.00	7.31
Switzerland	92.77	5.49	1.45	0.29	7.23

*Note.*  $N = 138$  (Austria),  $260$  (China),  $346$  (Switzerland); G<sub>0</sub> = mean score  $< 2.50$  (non gelotophobes); G<sub>s</sub> = mean score  $> 2.50$  (slight gelotophobia); G<sub>p</sub> = mean score  $> 3.00$  (pronounced gelotophobia); G<sub>e</sub> = mean score  $> 3.50$  (extreme gelotophobia); Gelotophobes = percentage of participants exceeding the cut-off points.

Table 2 shows that gelotophobia was of relevance in all three countries; the prevalence rates were between 5.80% and 7.31% of the participants with at least a slight expression of the fear of being laughed at. The prevalence rates were similar across all three countries. Only a few participants exceeded the score for extreme expression of gelotophobia.

The question emerged whether non-gelotophobes, slight, pronounced, and extreme gelotophobes differed in any of the variables used in the study. Therefore, we computed ANOVAs with the cut-off scores as classification variable (we merged pronounced and extreme gelotophobes to a single category because of the low number of cases in the extreme group), and life-satisfaction and the orientations to happiness as dependent variables. All analyses were computed for each country separately. In Austria, there were no differences in the mean scores. In Switzerland, groups differed in their life of engagement ( $F(2, 342) = 4.51; p < .01$ ) and their life-satisfaction ( $F(2, 345) = 20.30; p < .01$ ). In both cases, the group of slight gelotophobes scored lower than the non-gelotophobes. Interestingly, there were no mean differences between the pronounced gelotophobes and any of the other groups (but this may be mainly due to the low number of participants in this group). The results were highly similar for the Chinese sample. Again, the three groups differed in their life of engagement ( $F(2, 259) = 3.31; p < .05$ ) and their life-satisfaction ( $F(2, 259) = 5.43; p < .01$ ). Again, non-gelotophobes differed from the group with slight gelotophobia but not from the group with a pronounced expression of gelotophobia. However, there were only two participants in the Chinese sample that were in the pronounced and extreme group (6 in the Swiss and 4 in the Austrian sample).

### 3.3. *Satisfaction with life and the use of orientations to happiness among gelotophobes*

The relations between gelotophobia and the orientations to happiness and life satisfaction were examined by computing the correlation coefficients among the three scales. Analyses were performed for each country separately (see Table 3).

Table 3 shows a similar pattern of relations for many of the scales. For example, life satisfaction was significantly negatively related to gelotophobia in all three countries. Similarly, life of engagement was also negatively related to the fear of being laughed at in Austria, China, and Switzerland. Contrary to the European countries, gelotophobia was also negatively related to the life of

Table 3. Correlations Among Gelotophobia, Life Satisfaction, and the Orientations to Happiness in Samples from Austria, China, and Switzerland

	Austria			China			Switzerland					
	SWLS	OTH-P	OTH-E	OTH-M	SWLS	OTH-P	OTH-E	OTH-M	SWLS	OTH-P	OTH-E	OTH-M
GELOPH	-.40**	-.15	-.25**	-.10	-.29**	-.23**	-.31**	-.18**	-.40**	.02	-.16**	-.04
SWLS		.30**	.40**	.20*		.27**	.32**	.22**		.16**	.30**	.24**
OTH-P			.41**	.40**			.52**	.43**			.28**	.18**
OTH-E				.39**				.56**				.45**

Note. N = 138 (Austria), 260 (China), 343–346 (Switzerland); GELOPH = GELOPH<15>; SWLS = Satisfaction with Life Scale; OTH-P = life of pleasure; OTH-E = life of engagement; OTH-M = life of meaning.  
 \*  $p < .05$ ; \*\*  $p < .01$ .

pleasure and the life of meaning in China. In Switzerland, there was a zero correlation to the pleasurable and the meaningful life. This indicated that there were both gelotophobes that were high and gelotophobes that were low in life of pleasure and life of meaning in the Swiss sample. These two orientations to happiness were related negatively, yet not statistically significant to gelotophobia in the Austrian sample. After adjusting the alpha level for the multiple analyses performed, in most of the cases correlation coefficients  $> .20$  still yielded statistical significance.

Multiple regression analyses were computed with all scales of positive psychological functioning (OTH, SWLS) and gelotophobia as dependent variable for a global estimation of the relation. The multiple correlations were .42, .38, and .42, for the samples from Austria, China, and Switzerland, respectively. This indicated that roughly 16% of the variance in gelotophobia was accounted for by life-satisfaction and the three orientations to happiness.

The relations between life satisfaction and the orientations to happiness were highly similar in all three countries. In all cases there was a significant positive relation indicating that participants who scored higher in life-satisfaction also scored higher in the orientations to happiness. The three orientations had positive intercorrelations in the three countries.

#### **4. Discussion**

The present study was aimed at the examination of the relation among the fear of being laughed at, life-satisfaction, and three orientations to happiness in three countries. Despite the cultural differences among Austria, China, and Switzerland, we found some similar patterns across all samples. Firstly, the fear of being laughed at was negatively related to life satisfaction in all samples. Therefore, gelotophobes describe themselves with lower overall estimations (affective and cognitive) of their lives. Secondly, the life of engagement was also negatively related to gelotophobia in all three samples. This orientation to happiness is closely related to flow-experiences. Thus, one might assume that gelotophobes do not experience many situations in which they are completely absorbed with what they are doing and forget the time they are spending with the activity. Though the correlational design does not allow for causal interpretations of the findings, one might hypothesize that the results might be useful for the development of interventions for gelotophobia. Of course, it seems to be a promising strategy to start with the development by adapting interventions that were developed for anxiety-related conditions.

However, one might also think that an enhancement of flow-experiences might be a useful strategy for the treatment of gelotophobia (for flow-related intervention programs see e.g., Csikszentmihalyi 1990). Thirdly, gelotophobia existed independently from the sex in all samples and from the age in the Swiss sample (the variation in the age was low in Austria and China and therefore the correlation coefficients cannot be interpreted as for the Swiss data).

One of the major differences was the relation of the life of pleasure and life of meaning to gelotophobia in the three samples. The fear of being laughed at exists independently from hedonistic and eudaimonic principles in Switzerland—there are high and low scorers among both gelotophobes and non-gelotophobes—higher fear of being laughed at in China is related to lower expressions in pleasure and meaning. Life of pleasure and life of engagement both demand a certain amount of activity from the person himself/herself. These activities may entail engagement or social contact with other people. One of the core symptoms of gelotophobia is the misperception and misinterpretation of social cues like smiling or laughter. Furthermore, gelotophobes are convinced of being strange and ridiculous objects to others (see Ruch and Proyer 2008a). For people who are convinced of being ridiculous or strange, even pleasure seeking (hedonism) may be a difficult task since they might fear to become the butt of laughter from others when taking part in fun activities. However, it appears to be hard for them to engage in different activities or offering their strengths and talents for an institution because they might think they are too inferior to help others. However, it is up to empirical investigations to determine whether treatments that are based on the three orientations to happiness (see Peterson et al. 2005) might reduce a gelotophobic symptomatology. As a limitation of the study, it has to be mentioned that the samples are not fully comparable, as the Austrian and Chinese samples consist of students, while the Swiss sample is based on students and non-students. Furthermore, there are relatively few extreme gelotophobes in the samples. Thus, it might be fruitful to examine the gelotophobia-orientations to happiness relations again in a new sample that entails more extreme gelotophobes. Also, the inclusion of two further characteristics (i.e., *gelotophilia* [the joy in being laughed at] and *katagelasticism*, the joy in laughing at others; Ruch and Proyer 2009b) would provide a fuller picture on how dispositions towards ridicule and being laughed at relate to the “good life.”

One of the main differences among the three countries are differences in the national scores of satisfaction with life. The multinational Proyer et al. (2009) study permits the relation of the gelotophobia mean scores to other data from cross-cultural studies. In the present study, the differences among the countries

did not have much impact on the expression of gelotophobia. However, it would be interesting to relate country-specific variables (e.g., in the satisfaction with life) to the gelotophobia-scores of the country. Additionally, other culture-specific variables such as collectivism vs. individualism or the human development index need to be considered. Currently, it cannot be said whether these factors also contribute to the gelotophobia-orientations to happiness relation. Further studies are needed to examine these putative influences.

*Department of Psychology, University of Zurich, Switzerland  
School of Management, Guangdong University of Foreign Studies,  
P.R. China*

## **Acknowledgements**

The authors wish to thank the lecturers at the Division for Assessment and Applied Psychometrics from the Faculty of Vienna (University of Vienna) who helped with the collection of the data from Austria. Further, we are grateful to Xing Zhanjun from the Centre for Personnel Evaluation and Social Survey Research in Shangdong Province P. R. China for support with the Chinese version of the SWLS.

## **Note**

Corresponding address: r.proyer@psychologie.uzh.ch

## **References**

- Carretero-Dios, Hugo, René T. Proyer, Willibald Ruch & Victor J. Rubio. 2010. The Spanish version of the GELOPH<15>: Properties of a questionnaire for the assessment of the fear of being laughed at. *International Journal of Clinical and Health Psychology* 10(2). 345–357.
- Carretero-Dios, Hugo, Willibald Ruch, Diana Agudelo, Tracey Platt & René T. Proyer. 2010. Fear of being laughed at and social anxiety: A preliminary psychometric study. *Psychological Test and Assessment Modeling* 52(1). 108–124.
- Chen, Guo-Hai, Chao-Chih Liao, René T. Proyer & Willibald Ruch. 2009. A summary on research in gelotophobia. *China Journal of Health Psychology* 17(1). 893–895.
- Chen, Guo-Hai & Rod A. Martin. 2007. A comparison of humor styles, coping humor, and mental health between Chinese and Canadian university students. *Humor: International Journal of Humor Research* 20(3). 215–234.
- Cheung, Fanny M., Kwok Leung, Jian-Xin Zhang, Hai-Fa Sun, Yi-Qun Gan, Wei-Zhen Song & Dong Xie. 2001. Indigenous Chinese personality construct: Is the Five-Factor Model complete? *Journal of Cross-Cultural Psychology* 32(4). 407–433.

- Chlopicki, Wladyslaw, Anna Radomska, René T. Proyer & Willibald Ruch. 2010. The assessment of the fear of being laughed at in Poland: Translation and first evaluation of the Polish GELOPH<15>. *Polish Psychological Bulletin* 41(4). 172–181.
- Csikszentmihalyi, Mihaly. 1990. *Flow: The Psychology of Optimal Experience*. New York: Harper Collins.
- Diener, Ed. 2000. Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist* 55(1). 34–43.
- Diener, Ed, Robert A. Emmons, Randy J. Larsen & Sharon Griffin. 1985. The Satisfaction with Life Scale. *Journal of Personality Assessment* 49(1). 71–75.
- Diener, Ed & Eunkook M. Suh. 1999. National differences in subjective well-being. In Daniel Kahneman, Ed Diener, and Norbert Schwarz (eds.), *Well-being: The Foundations of Hedonic Psychology*. New York: Russel Sage Foundation. 434–450.
- Edwards, Kim R., Rod A. Martin & David J. A. Dozois. 2010. The fear of being laughed at, social anxiety, and memories of being teased during childhood. *Psychological Test and Assessment Modeling* 52(1). 94–107
- Forabosco, Giovannantonio, Elisa Mazzotti Drei & Natalie Missiroli. 2006. La gelotofobia. Una ricerca con pazienti psichiatrici [Gelotophobia. A study with psychiatric patients]. *Frammenti. Rivista di Psichiatria* 15(1). 67–77.
- Forabosco, Giovannantonio, Willibald Ruch & Pietro Nucera. 2009a. The fear of being laughed at among psychiatric patients. *Humor: International Journal of Humor Research* 22(1–2). 233–251.
- Forabosco, Giovannantonio, Margherita Dore, Willibald Ruch & René T. Proyer. 2009b. Un'indagine sulla gelotofobia in Italia. *Giornale di Psicologia* 3. 183–190.
- Fredrickson, Barbara L. 2001. The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist* 56(3). 218–226.
- Führ, Martin, René T. Proyer & Willibald Ruch. 2009. Assessing the fear of being laughed at (gelotophobia): First evaluation of the Danish GELOPH<15>. *Nordic Psychology* 61(2). 62–73.
- Hofstede, Geert. 2001. *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Thousand Oaks, CA: Sage Publications.
- Hrebicková, Martina, Emilia Ficková, Mirka Klementová, Willibald Ruch & René T. Proyer. 2009. Strach ze zesmesnění: Česká a slovenská verze dotazníku pro zjišťování gelotofobie [The Fear of being laughed at: The Czech and Slovak version of the GELOPH 15 for the assessment of gelotophobia]. *Ceskoslovenská Psychologie* 53. 469–480.
- Kashdan, Todd B. 2002. Social anxiety dimensions, Neuroticism, and the contours of positive psychological functioning. *Cognitive Therapy and Research* 26(6). 789–810.
- Kashdan, Todd B. & Michael F. Steger. 2006. Expanding the topography of social anxiety: An experience-sampling assessment of positive emotions, positive events, and emotion suppression. *Psychological Science* 17(2). 120–128.
- Kazarian, Shahe, Willibald Ruch & René T. Proyer. 2009. Gelotophobia in the Lebanon: The Arabic version of a questionnaire for the subjective assessment of the fear of being laughed at. *Arab Journal of Psychiatry* 20. 42–56.
- Lampert, Martin D., Kate L. Isaacson & Jim Lyttle. 2010. Cross-cultural variation in gelotophobia within the United States. *Psychological Test and Assessment Modeling* 52(2). 202–216.
- Papousek, Ilona, Willibald Ruch, Harald H. Freudenthaler, Eva Kogler, Brigitte Lang & Günter Schuler. 2009. Gelotophobia, emotion-related skills and responses to the affective states of others. *Personality and Individual Differences* 47. 58–63.
- Park, Nansook, Christopher Peterson & Willibald Ruch. 2009. Orientations to happiness and life satisfaction: National comparisons. *The Journal of Positive Psychology* 4(4). 273–279.
- Pavot, William & Ed Diener. 1993. Review of the Satisfaction with Life Scale. *Psychological Assessment* 5(2). 164–172.



- Peterson, Christopher, Nansook Park & Martin E. P. Seligman. 2005. Orientations to happiness: The full life versus the empty life. *Journal of Happiness Studies* 6(1). 25–41.
- Peterson, Christopher, Willibald Ruch, Ursula Beermann, Nansook Park & Martin E. P. Seligman. 2007. Strengths of character, orientations to happiness, and life satisfaction. *The Journal of Positive Psychology* 2(3). 149–156.
- Platt, Tracey. 2008. Emotional responses to ridicule and teasing: Should gelotophobes react differently? *Humor: International Journal of Humor Research* 21(2). 105–128.
- Platt, Tracey, René T. Proyer & Willibald Ruch. 2009. Gelotophobia and bullying: The assessment of the fear of being laughed at and its application among bullying victims. *Psychology Science Quarterly* 51(2). 135–147.
- Platt, Tracey, Willibald Ruch & René T. Proyer. 2010. A lifetime of the fear of being laughed at: An aged perspective. *Zeitschrift für Gerontologie und Geriatrie* 43(1). 36–41.
- Proyer, René T. & Willibald Ruch. 2009. 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). 145–163.
- Proyer, René T., Willibald Ruch, Hmoud S. Al-Olimat, Numan S. Ali, Tamirie Anduaem Adal, Špela Arhar, Gigi Asem et al. 2009. Breaking the 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). 253–279.
- Radomska, Anna & Anna Tomczak. 2010. Gelotophobia, self-presentation styles, and psychological gender. *Psychological Test and Assessment Modeling* 52(2). 191–201.
- Renner, Karl-Heinz & Timo Heydasch. 2010. Performing humor: On the relations between self-presentation styles, gelotophobia, gelotophilia, and katagelasticism. *Psychological Test and Assessment Modeling* 52(2). 171–190.
- Ruch, Willibald. 2009. Fearing humor? Gelotophobia: The fear of being laughed at [Special Issue]. *Humor: International Journal of Humor Research* 22(1–2).
- Ruch, Willibald, Olga Altfreder & René T. Proyer. 2009. How do gelotophobes interpret laughter in ambiguous situations? An experimental validation of the concept. *Humor: International Journal of Humor Research* 22(1–2). 63–89.
- Ruch, Willibald, Claudia Harzer, René T. Proyer, Nansook Park & Christopher Peterson. 2010. Ways to happiness in the German-speaking countries: The adaptation of the German version of the Orientations to Happiness Questionnaire in paper-pencil and internet samples. *European Journal of Psychological Assessment* 26(3). 227–234.
- Ruch, Willibald & René T. Proyer. 2008a. The fear of being laughed at: Individual and group differences in gelotophobia. *Humor: International Journal of Humor Research* 21(1). 47–67.
- Ruch, Willibald & René T. Proyer. 2008b. Who is gelotophobic? Assessment criteria for the fear of being laughed at. *Swiss Journal of Psychology* 67(1). 19–27.
- Ruch, Willibald & René T. Proyer. 2009a. Who fears being laughed at? The location of gelotophobia in the Eysenckian PEN-model of personality. *Personality and Individual Differences* 46. 627–630.
- Ruch, Willibald & René T. Proyer. 2009b. Extending the study of gelotophobia: On gelotophiles and katagelasticists. *Humor: International Journal of Humor Research* 21(1). 183–212.
- Ruch, Willibald, René T. Proyer & Diana E. Popa. 2008. The fear of being laughed at (gelotophobia) and personality. In Romanian Academy, “George Bariț” Institute of History, Department of Social Research (ed.), *Studies and Researches in Social Sciences*, 53–68. Cluj-Napoca, Romania: Argonaut Press.
- Ruch, Willibald, René T. Proyer & Larry Ventis. 2010. The relationship of teasing in childhood to the expression of gelotophobia in adults. *Psychological Test and Assessment Modeling* 52(1). 77–93.

- Samson, Andrea C., René T. Proyer, Grazia Ceschi, Pier P. Pedrini & Willibald Ruch. 2011. The fear of being laughed at in Switzerland: Are there regional differences and the role of positive psychology. *Swiss Journal of Psychology* 70(2). 53–62.
- Sarid, Orly, Willibald Ruch & René T. Proyer. 2011. Gelotophobia in Israel: On the assessment of the fear of being laughed at. *Israel Journal of Psychiatry and Related Sciences* 48(1). 12–18.
- Seligman, Martin E. P. & Mihaly Csikszentmihalyi. 2000. Positive psychology: An introduction. *American Psychologist* 55(1). 5–14.
- Seligman, Martin E. P., Tracy A. Steen, Nansook Park & Christopher Peterson. 2005. Positive psychology progress: Empirical validation of interventions. *American Psychologist* 60(5). 410–421.
- Stein, Murray B. & Richard G. Heimberg. 2004. Well-being and life satisfaction in generalized anxiety disorder: Comparison to major depressive disorder in a community sample. *Journal of Affective Disorders* 79(1–3). 161–166.
- Stefanenko, Ekaterina, Alyona Ivanova, Sergey Enikolopov, René T. Proyer & Willibald Ruch. 2011. The fear of being laughed at diagnostics: Russian adaptation of gelotophobia questionnaire. *Psikhologicheskii Zhurnal* 32(2). 94–108.
- Titze, Michael. 2009. Gelotophobia: The fear of being laughed at. *Humor: International Journal of Humor Research* 22(1–2). 27–48.
- Xing, Zhanjun. 2005. *Measuring Well-being: Subjective Well-being Studies*. Beijing, P.R. China: Beijing People Press.