

This document is an unedited version of the accepted manuscript **“Beyond the Big Five: The fear of being laughed at as a predictor of body shame and appearance control beliefs”**

Personality and Individual Differences

This version is not the copy of record and do not exactly replicate the final, authoritative version of the article.

Final version of the article: Moya-Garófano, A., Torres-Marín, J., & Carretero-Dios, H. (2019). Beyond the Big Five: The fear of being laughed at as a predictor of body shame and appearance control beliefs. *Personality and Individual Differences*, 138, 219-224.

<https://doi.org/10.1016/j.paid.2018.10.007>

Abstract

Gelotophobia has been conceptualized as an individual difference variable concerned with the fear of being ridiculed by others' laughter. Individuals high in gelotophobia are more prone to anticipate and overreact to teasing interactions. It has been suggested that certain personal features susceptible to ridicule, such as physical appearance, could be differentially exhibited among gelotophobes. This study ($N = 163$; 50.3% females) examined the associations between gelotophobia and body image-related measures controlling for Big Five personality traits. The results revealed that gelotophobia correlated to lower body appreciation and appearance control beliefs and higher body surveillance and body shame. Hierarchical regression analyses predicting these body image-related criteria showed that gelotophobia explained body shame and appearance control beliefs scores, even beyond the influence of gender, age, and Big Five personality traits. To our knowledge, this study contains the first empirical evidence of the relationship between the fear of being laughed at and body image. Further studies should be conducted to explore whether gelotophobia could be related to deficits in the perception of physical appearance.

Keywords: Gelotophobia; Big Five; Body shame; Appearance control beliefs.

**Beyond the Big Five: The Fear of Being Laughed at as a Predictor of Body Shame
and Appearance Control Beliefs**

1. Introduction

The fear of being laughed at or gelotophobia (*gelos* = laughter in Greek) has been conceptualized as an individual difference variable that refers to the disposition/degree with which one person feels the fear of being ridiculed by others' laughter (Ruch & Proyer, 2008). Individuals with higher scores on trait gelotophobia tend to anticipate derision situations and overreact to them (Ruch, 2009). This misinterpretation of humoristic interactions may trigger a set of potentially harmful attributions, emotions, and behaviors among gelotophobes. For example, they have negative beliefs about themselves (e.g., internalizing that they are a valid option for being mocked; Ruch, Hoffman, Platt, & Proyer, 2014), are more prone to exhibit others-oriented expressions of anger (Weiss et al., 2012), and try to avoid potential situations in which they can be laughed at (Titze, 2009). Furthermore, gelotophobes tend to expect others' rejection (Ruch et al., 2014) and experience greater levels of shame in their daily lives (Platt & Ruch, 2009). In line with this, it might be assumed that gelotophobes also present more concerns related to personal features that could be a source of derision than those without the fear of being laughed at. Physical appearance could be one of these characteristics (Ruch et al., 2014), considering that some teasing-related expressions are focused on body shape or weight (Thompson, Fabian, Moulton, Dunn, & Altabe, 1991). Interestingly, it has also been proven that teasing experiences related to appearance—generally initiated during childhood and adolescence—may trigger negative psychological outcomes toward body image (Kostanski & Gullone, 2007). Therefore, because gelotophobes are more susceptible to misinterpreting teasing

GELOTOPHOBIA AND BODY IMAGE

situations (Ruch et al., 2014), and considering that the experiences of ridicule associated with physical appearance might increase negative body image evaluations (Kostanski & Gullone, 2007; Thompson et al., 1991), it might be expected that gelotophobia can be somehow linked to body image disturbances.

1.1. Body image, Big Five personality traits, and gelotophobia

Body image refers to a multidimensional psychological construct that encompasses, among others, self-perceptions, feelings, and behaviors concerning one's body (Avalos, Tylka, & Wood-Barcalow, 2005). This construct has a profound effect on an adequate psychological functioning. It has been demonstrated that negative perceptions of body image might have harmful effects on self-esteem (Frost & McKelvie, 2004) and overall mood (Annesi & Gorjala, 2010). Moreover, body image-related disturbances have appeared to be related to depression and eating disorders (Wiederman & Pryor, 2000). As a consequence of the broad nature of body image, the study of this subject has involved the development of many individual dimensions to assess both the positive and negative aspects related to this construct. For example, past research has studied certain dimensions related to people's opinions about their bodies, such as body appreciation (Tylka & Wood-Barcalow, 2015) and body dissatisfaction (Mutale, Dunn, Stiller, & Larkin, 2016). Additionally, how the adoption of an outsider's perspective of the body can lead people to monitor their bodies (i.e., body surveillance), feel ashamed about them (i.e., body shame), or affect their control expectations of their physical appearance (i.e., appearance control beliefs) has also been explored (McKinley & Hyde, 1996).

Research on personality has stressed that broad personality traits, such as neuroticism (mainly) or extraversion, can explain inter-individual differences in body image dimensions. In particular, increasing neuroticism has been associated with lower

GELOTOPHOBIA AND BODY IMAGE

body appreciation and higher body dissatisfaction (MacNeill, Best, & Davis, 2017; Swami et al., 2012). Neuroticism has also been correlated to higher body surveillance, lower appearance control beliefs (Tylka, 2004), and higher body shame (Miner-Rubino, Twenge, & Fredrickson, 2002). Furthermore, extraversion has been associated with a higher appreciation of one's own body and lower body dissatisfaction (Swami et al., 2012). Concerning agreeableness, openness to experience, and conscientiousness, Swami et al. (2012) reported that body appreciation has been positively correlated to agreeableness and conscientiousness. This latter basic trait also correlated negatively to body dissatisfaction (MacNeill et al., 2017). Miner-Rubino et al. (2002) also found that body shame was negatively related to agreeableness. Nevertheless, in general, the results of these three broad personality traits concerning body image's dimensions are less consistent than those obtained for neuroticism (Swami et al., 2012). Finally, it needs to be said that, with the exception of MacNeill et al. (2017), all of the studies previously mentioned were carried out exclusively using a female population.

In addition, further narrow traits might enhance our understanding about which factors could predict the individual differences in appearance-related criteria. In this sense, and taking into account the theoretical assumptions described above, we consider that the fear of being laughed at could be added as a potential predictor. However, in agreement with Ďurka and Ruch (2015), around the 40% of the variance in gelotophobia can be explained by high neuroticism, low extraversion, and low openness to experience. Given this amount of shared variance, controlling for the influence of the Big Five personality traits would allow us to ascertain specific effects of gelotophobia in body image-related dimensions.

The aim of this study was twofold. First, we explored the understudied relationships between gelotophobia and body image-related dimensions. Second, we

tested whether the predictive capacity of gelotophobia in body image-related dimensions goes beyond the Big Five personality traits. To evaluate body image, we included five different dimensions that have been widely used in specialized literature: (a) body appreciation, (b) body dissatisfaction, (c) body surveillance, (d) body shame, and (e) appearance control beliefs. Taking into account that teasing experiences have been associated with more negative body evaluations (Kostanski & Gullone, 2007) and that gelotophobes exhibit greater sensitivity to derision situations (Ruch, 2009; Titze, 2009), it was hypothesized that gelotophobia would predict negative outcomes concerning body image; that is, higher scores on body surveillance, body shame, and body dissatisfaction, and lower scores on appearance control beliefs and body appreciation. Finally, we expected that gelotophobia accounted for an incremental variance in body image-related measures beyond the influence of the Big Five personality traits.

2. Method

2.1. Sample

One hundred and sixty-three undergraduates (82 females [50.3%], 81 males [49.7%]) from a large public university in the south of Spain took part in this research. The participants' ages ranged from 18 to 50 years ($M = 21.36$; $SD = 5.03$). The 68.7% of the participants were studying psychology; 14.1% social work; 4.3% labor relations; 5.5% other; and 7.4% did not indicate their university degree. To estimate the adequate sample size with which to carry out our analysis approach, we conducted an a priori power analysis using G*Power 3.1 (Faul, Erdfelde, Buchner, & Lang, 2009). It indicated that 160 participants would be needed to detect a medium effect ($f^2 = 0.15$) using a linear multiple regression with eight predictors. The following input parameters were introduced: (a) power set at 0.95 and (b) desired significance level at 0.05.

GELOTOPHOBIA AND BODY IMAGE

2.2. Instruments

2.2.1 Big Five personality traits

The NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992; Spanish version by Cordero, Pamos, & Seisdedos, 2008) consists of 60 items for the assessment of several Big Five personality traits: neuroticism (e.g., item “I often feel inferior to others”), extraversion (e.g., item “I like to have a lot of people around me”), agreeableness (e.g., item “I try to be courteous to everyone I meet”), openness to experience (e.g., item “I have a lot of intellectual curiosity”), and conscientiousness (e.g., item “I keep my belongings clean and neat”). Each personality trait of the scale is evaluated using 12 items. The response format, which used a 4-point Likert scale, ranged from 0 (*completely disagree*) to 4 (*completely agree*). Prior research has supported good cross-cultural validity of this measure in Spain (e.g., Aluja, García, Rossier, & García, 2005). Internal consistencies in this sample ranged from $\alpha = .68$ (openness to experience) to $\alpha = .87$ (extraversion).

2.2.2. Humor-related trait

The Geloph <15> (Ruch & Proyer, 2008; Spanish version by Carretero-Dios, Proyer, Ruch, & Rubio, 2010) is a self-report instrument for the assessment of the individual differences in gelotophobia (e.g., item “When others laugh in my presence, I get suspicious”). It comprises 15 positively keyed items and employs a 4-point answer format ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Internal consistency in this study was $\alpha = .87$.

2.2.2 Body image-related measures

The Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2015; Spanish version by Swami, García, & Barron, 2017) is a self-report measure aimed at evaluating people’s favorable opinions about their bodies, such as respect and

GELOTOPHOBIA AND BODY IMAGE

acceptance (e.g., item “I take a positive attitude towards my body”). Individuals complete 10 items on a 5-point format with answers ranging from 1 (*never*) to 5 (*always*). Internal consistency in this study was $\alpha = .93$.

The Body Dissatisfaction Scale (Mutale et al., 2016) is an assessment tool used to measure people’s discrepancies between their actual weight and their ideal body weight. It presents a set of 9 human figures that differ in body weight from underweight to overweight. There are two versions of these computer-generated stimuli, one for males and another for females. Participants are asked to choose their ideal body shape and, later, their actual body shape. The dissatisfaction score is obtained by calculating the discrepancy between these two measures.

The Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996; Spanish version by Moya-Garófano, Megías, Rodríguez-Bailón, & Moya, 2017) is a questionnaire for the assessment of body surveillance (e.g., item “I often worry about whether the clothes I am wearing make me look good”), body shame (e.g., item “I feel like I must be a bad person when I don’t look as good as I could”), and appearance control beliefs (e.g., “I really don’t think I have much control over how my body looks”). Each of the three subscales comprises 8 items on a 7-point Likert-type, ranging scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Although the OBCS was specifically created for a female population, other studies have pointed out that this measure is a valid option for assessing these dispositions in a male population as well (Daniel & Bridges, 2010). Internal consistencies in this sample ranged from $\alpha = .73$ (appearance control beliefs) to $\alpha = .79$ (body shame).

It is worth mentioning that reliability indexes of all dimensions assessed in this study are shown in Table 1.

2.3. Procedure

The total sample was recruited through the same procedure. Two trained researchers requested volunteers to participate in personality research. Following this, a brief description with a general statement of our research (i.e., this study is aimed at evaluating personality in university students) and the estimated duration of this study was provided. No information about our research hypothesis was provided to the participants. Individuals who decided to collaborate were tested in small groups in different university centers. The questionnaire booklet included the personality traits and the body image measures mentioned above.

This study was authorized by a local ethical committee and conducted in accordance with the Ethical Standards of the 1964 Declaration of Helsinki. Information concerning the anonymity and confidentiality of their responses was highlighted at the beginning of this research. Participation was voluntary, and all of the participants obtained course credit in exchange for their cooperation.

2.4 Analyses

Pearson correlations among the Big Five personality traits, gelotophobia, and body image-related measures were conducted. Additionally, we conducted a series of hierarchical multiple regressions. Prior to conducting these analyses, the independent questionnaire variables were centered and the collinearity statistics were tested. Importantly, the Variance Inflation Factor (VIF) never exceeded the accepted limits (Akinwande, Dikko, & Samson, 2015). Then, gender and age were introduced as predictors in Step 1 (method: enter), the Big Five personality traits were considered in Step 2 (method: stepwise), and trait-gelotophobia in Step 3 (method: enter).

3. Results

The pattern of correlations among the Big Five personality traits, gelotophobia, and body image-related dimensions is given in Table 1.

Insert Table 1

As can be seen, neuroticism was negatively correlated with body appreciation ($r = -.39, p < .001$) and appearance control beliefs ($r = -.27, p < .01$). It was also correlated to higher body surveillance ($r = .32, p < .001$) and higher body shame ($r = .31, p < .001$). Furthermore, neuroticism was uncorrelated to body dissatisfaction ($r = .09, p = .25$). Extraversion was correlated to a higher body appreciation ($r = .33, p < .001$), and it was uncorrelated to the other dimensions of body image assessed ($p > .05$). With regard to the other Big Five personality traits, agreeableness was only negatively correlated to with body surveillance ($r = -.21, p < .01$), openness to experience was only positively correlated to body appreciation ($r = .21, p < .01$), and conscientiousness was correlated to higher body appreciation ($r = .23, p < .01$) and higher appearance control beliefs ($r = .18, p < .05$). Additionally, the pattern of results between the Big Five personality traits and gelotophobia showed the expected relationships between neuroticism and high gelotophobia ($r = .60, p < .001$) and extraversion and low gelotophobia ($r = -.42, p < .001$). The fear of being laughed at also correlated to low conscientiousness ($r = -.17, p < .05$). Concerning gelotophobia and body image-related variables, our data were in line with our expectations. Gelotophobia showed a pattern of results quite similar to neuroticism's findings. A greater inclination of this humor-related disposition was correlated to lower body appreciation ($r = -.39, p < .001$), lower appearance control beliefs ($r = -.29, p < .001$), higher body surveillance ($r = .24, p < .01$), and higher body shame ($r = .35, p < .001$). Finally, it was uncorrelated to body dissatisfaction ($r = .12, p > .01$).

GELOTOPHOBIA AND BODY IMAGE

Hierarchical regression analyses were conducted to predict the different body image-related criteria. Concerning *body appreciation* (see Table 2), being male ($\beta = .18$, $p < .05$) was the only significant predictor among socio-demographics (ΔR^2 for the Step 1 = .060). Then, neuroticism ($\beta = -.35$, $p < .001$; $\Delta R^2 = .114$), openness to experience ($\beta = .28$, $p < .001$; $\Delta R^2 = .074$), extraversion ($\beta = .20$, $p < .05$; $\Delta R^2 = .031$), and conscientiousness ($\beta = .16$, $p < .05$; $\Delta R^2 = .019$) also contributed to the prediction of this body image dimension. In this case, gelotophobia had no influence beyond gender and the abovementioned broad personality traits ($\beta = -.10$, $p = .28$; $\Delta R^2 = .005$).

Insert Table 2

Regarding *body dissatisfaction* (see Table 3), being female was predictive ($\beta = -.39$, $p < .001$; ΔR^2 for the Step 1 = .162). Contrary to expectations, none of the Big Five personality traits yielded an incremental variance in participants' actual-ideal discrepancy (all $ps > .05$). Gelotophobia did not account for a significant amount of explained variance in this dimension ($\beta = .03$, $p = .67$; $\Delta R^2 = .001$).

Insert Table 3

In regard to *body surveillance* (see Table 4), being female ($\beta = -.33$, $p < .001$) and young ($\beta = -.21$, $p < .01$) were predictors of this variable (ΔR^2 for the Step 1 = .194). Then, agreeableness ($\beta = -.23$, $p < .01$; $\Delta R^2 = .053$) and neuroticism ($\beta = .18$, $p < .05$; $\Delta R^2 = .028$) were predictive among the Big Five personality traits. Again, gelotophobia did not predict an additional part of the variance in body surveillance ($\beta = .03$, $p = .73$; $\Delta R^2 = .001$).

Insert Table 4

Concerning *body shame* (see Table 5), being female ($\beta = -.24, p < .01$) was the only significant predictor among socio-demographics (ΔR^2 for the Step 1 = .072). Among the Big Five personality traits, neuroticism ($\beta = .29, p < .01; \Delta R^2 = .077$) significantly contributed to the prediction of this dimension. Interestingly, gelotophobia ($\beta = .25, p < .05; \Delta R^2 = .039$) accounted for an additional part of the variance in body shame.

Insert Table 5

Finally, *appearance control beliefs* (see Table 6) were not explained by gender and age (ΔR^2 for the Step 1 = .002). On the other hand, neuroticism ($\beta = -.28, p < .01; \Delta R^2 = .072$) contributed to predicting this body image dimension. As for body shame, it was found that gelotophobia ($\beta = -.22, p < .05; \Delta R^2 = .031$) accounted for an additional part of the variance in this dimension.

Insert Table 6

4. Discussion

This study explored the relationship between gelotophobia and certain body image-related dimensions. To extend the scope of our data, we also tested whether these potential relationships went beyond the influence of the Big Five personality traits. We considered that this humor-related trait could be relevant to the study of body image, given that teasing experiences focusing on physical appearance have a profound negative impact on body perception (Kostanski & Gullone, 2007). In addition, it has been suggested that certain personal features susceptible to being ridiculed, such as physical appearance, could be differentially exhibited among gelotophobes (Ruch et al.,

2014). Our results are consistent with this idea, revealing evidence for the connection between gelotophobia and negative body image-related outcomes.

Gelotophobia was associated with a lower body appreciation, which might imply that gelotophobes do not display favorable opinions and respectful attitudes about their bodies. This supports other studies, which have demonstrated that gelotophobes show low self-esteem and greater feelings of inferiority (Ruch, 2009; Ruch et al., 2014). Furthermore, gelotophobia was also associated with higher body surveillance. To avoid possible teasing situations, gelotophobes could observe their physical appearance with a greater intensity, with the purpose of adjusting how they look to the normative group. This heightened inclination to self-monitor could be understood as a way of coping with derision by controlling the situation, a strategy that has been found to be a typical behavior of gelotophobes (Ruch et al., 2014). Nevertheless, it should be noted that when we tested the predictive power of gelotophobia in body appreciation and body surveillance while controlling for gender, age, and the Big Five personality traits, this humor-related trait did not yield an incremental variance in these dimensions.

By contrast, gelotophobia predicted an additional part of the variance in body shame and appearance control beliefs. More specifically, gelotophobia was positively associated with body shame. Perhaps, because gelotophobes usually display biased negative perceptions about themselves (Titze, 2009), they could consider their physical appearance not to fulfill peer and group standards. This negative comparison may lead them to feel ashamed of their bodies. This result connects to previous literature, which has pointed out that shame plays an essential role in gelotophobes' daily lives (Platt, 2008; Platt & Ruch, 2009). Last, gelotophobia was related to lower appearance control beliefs. Past research has indicated that gelotophobes internalize being a valid object of others' laughter as another strategy to cope with derision (Ruch et al., 2014). It means

that they accept that something is wrong with them and that they deserve to be mocked (Ruch, 2009; Titzte, 2009). In line with this notion, individuals high in gelotophobia could assume a lack of control of their physical appearance. Thus, when gelotophobes' physical appearance does not conform to group standards, they accept that this characteristic is intrinsically linked to them and that there is nothing they can do about it. The fact that these effects emerge, regardless of the influence of socio-demographics and the Big Five personality traits, could imply that specific components of gelotophobia account for some inter-individual differences in these body image-related dimensions. Therefore, our findings constitute additional support for the existence of differential features of gelotophobia.

Additionally, this study provides further evidence of the relationship between the Big Five personality traits and body image-related measures using a sample of males and females. Regarding gender effects, being a male was predictive of body appreciation, whereas being a female was predictive of body dissatisfaction, body surveillance and body shame. Concerning the Big Five personality traits, neuroticism was the more consistent predictor of negative body image-related outcomes, increasing the prediction of a lower body appreciation, higher body surveillance, higher body shame, and lower appearance control beliefs. These findings concerning neuroticism are similar to other studies conducted only with females (Miner-Rubino et al., 2002; Swami et al., 2012; Tylka, 2004). Furthermore, openness to experience, extraversion, and, to a lesser extent, conscientiousness accounted for a higher body appreciation, while agreeableness predicted a lower body surveillance. Altogether, it reveals the predictive capacity of the certain Big Five traits goes beyond the influence of gender. Finally, not all the results were in line with our expectations, since neither broad personality dimensions nor gelotophobia predicted body dissatisfaction.

4.1. Limitations and further studies

Certain limitations of this study should be considered. In the first place, we recruited the sample using a non-probabilistic convenience method, and only undergraduates composed it. Future studies should replicate these findings using general population samples. Second, the inclusion of body image-related measures was not exhaustive and could be extended in additional research. Third, the influence of gelotophobia on body image could be also tested by controlling for additional variables not included in this research. After demonstrating that the effect of the fear of being laughed at on some body image-related dimensions goes beyond the Big Five personality traits (e.g., neuroticism), it would be necessary to determine whether these results are robust even incorporating similar low-order traits such as the fear of negative evaluation. In a previous study, Carretero-Dios, Ruch, Agudelo, Platt, & Proyer (2010) proved that gelotophobia presents some particularities which make it distinct from this partially overlapped construct. They suggested that gelotophobes are especially sensitive to those negative evaluations that are expressed through ridicule and laughter. Since physical appearance is proved to be a possible target of teasing/mockery (Ruch et al., 2014; Thompson et al., 1991), one might argue that gelotophobia would remain as a significant predictor of body image outcomes over and above even the influence of similar constructs such as the fear of negative evaluation. Future studies should clarify these relationships. Finally, given that correlations and regression analyses cannot be used to infer a causal association between gelotophobia and the previously mentioned dispositions concerning body image (e.g., higher body shame), new empirical studies aimed at clarifying this relationship should be addressed. Our current design does not allow us to confirm whether, for example, the fear of being laughed at produces a greater sensitivity to body shame experiences or less appearance control beliefs. In

contrast to this potential explanation, these dimensions regarding one's body may be part of a set of vulnerability factors that lead to gelotophobia development. In this sense, longitudinal studies would be useful to clarify the pattern of relationships.

4.2. Conclusions

As far as we know, this research entails the first empirical evidence about the relationship between gelotophobia and the negative psychological outcomes concerning body image. In addition, our data revealed that gelotophobia accounted for the incremental inter-individual variance in body shame and appearance control beliefs beyond socio-demographics and the Big Five personality traits. Our data are consistent with the idea that teasing affects body image evaluation (Kostanski & Gullone, 2007; Thompson et al., 1991). In this sense, this contribution adds new research variables of interest to the literature concerning the fear of being laughed at.

References

- Akinwande, M. O., Dikko, H. G., & Samson, A. (2015). Variance Inflation Factor: As a condition for the inclusion of suppressor variable(s) in regression analysis. *Open Journal of Statistics*, 05, 754–767. <https://doi.org/10.4236/ojs.2015.57075>
- Aluja, A., García, O., Rossier, J., & García, L. F. (2005). Comparison of the NEO-FFI, the NEO-FFI-R and an alternative short version of the NEO-PI-R (NEO-60) in Swiss and Spanish samples. *Personality and Individual Differences*, 38, 591–604. <https://doi.org/10.1016/j.paid.2004.05.014>
- Annesi, J. J., & Gorjala, S. (2010). Body satisfaction and overall mood: Effects of race in exercisers with obesity. *Social Behavior and Personality: An International Journal*, 38, 1105–1109. <https://doi.org/10.2224/sbp.2010.38.8.1105>
- Avalos, L., Tylka, T. L., & Wood-Barcalow, N. (2005). The Body Appreciation Scale: Development and psychometric evaluation. *Body Image*, 2, 285–297. <https://doi.org/10.1016/j.bodyim.2005.06.002>
- Carretero-Dios, H., Proyer, R. T., Ruch, W., & Rubio, V. J. (2010a). 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 Health Psychology*, 10, 345–357.
- Carretero-Dios, H., Ruch, W., Agudelo, D., Platt, T., & Proyer, R. T. (2010b). Fear of being laughed at and social anxiety: A preliminary psychometric study. *Psychological Test and Assessment Modeling*, 52, 108-124. <https://doi.org/10.5167/uzh-33204>

GELOTOPHOBIA AND BODY IMAGE

- Cordero, A., Pamos, A., & Seisdedos, N. (2008). *NEO PI-R, Inventario de Personalidad NEO Revisado* [NEO PI-R, NEO personality inventory-revised] (3^a ed). Madrid: TEA.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO personality inventory (NEO PI-R) and NEO five-factor inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Daniel, S., & Bridges, S. K. (2010). The drive for muscularity in men: Media influences and objectification theory. *Body Image*, 7, 32-38.
<https://doi.org/10.1016/j.bodyim.2009.08.003>
- Ďurka, R., & Ruch, W. (2015). The location of three dispositions towards ridicule in the five-factor personality model in the population of Slovak adults. *Personality and Individual Differences*, 72, 177-181. <http://doi.org/10.1016/j.paid.2014.08.045>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149–1160. <https://doi.org/10.3758/brm.41.4.1149>
- Frost, J., & McKelvie, S. (2004). Self-esteem and body satisfaction in male and female elementary school, high school, and university students. *Sex Roles*, 51, 45–54.
<https://doi.org/10.1023/b:sers.0000032308.90104.c6>
- Kostanski, M., & Gullone, E. (2007). The impact of teasing on children's body image. *Journal of Child and Family Studies*, 16, 307–319.
<https://doi.org/10.1007/s10826-006-9087-0>

GELOTOPHOBIA AND BODY IMAGE

- McKinley, N., & Hyde, J. S. (1996). The Objectified Body Consciousness Scale. Development and validation. *Psychology of Women Quarterly*, 20, 181–215. <https://doi.org/10.1111/j.1471-6402.1996.tb00467.x>
- Miner-Rubino, K., Twenge, J. M., & Fredrickson, B. L. (2002). Trait self-objectification in women: Affective and personality correlates. *Journal of Research in Personality*, 36, 147–172. <https://doi.org/10.1006/jrpe.2001.2343>
- Moya-Garófano, A., Megías, J. L., Rodríguez-Bailón, R., & Moya, M. (2017). Spanish version of the Objectified Body Consciousness Scale (OBCS). *Revista de Psicología Social*, 32, 362-394. <https://doi.org/10.1080/02134748.2017.1292700>
- Mutale, G. J., Dunn, A., Stiller, J., & Larkin, R. (2016). Development of a Body Dissatisfaction Scale assessment tool. *The New School Psychology Bulletin*, 13, 47-57.
- Platt, T. & Ruch, W. (2009). The emotions of gelotophobes: Shameful, fearful, and joyless? *Humor - International Journal of Humor Research*, 22, 91-110. <https://doi.org/10.1515/HUMR.2009.005>
- Ruch, W. (2009). Fearing humor? Gelotophobia: The fear of being laughed at. Introduction and overview. *Humor - International Journal of Humor Research*, 22, 1-25. <https://doi.org/10.1515/humr.2009.001>
- Ruch, W., Hofmann, J., Platt, T., & Proyer, R. T. (2014). The state-of-the art in gelotophobia research: A review and some theoretical extensions. *Humor - International Journal of Humor Research*, 27, 23-45. <https://doi.org/10.1515/humor-2013-0046>

GELOTOPHOBIA AND BODY IMAGE

- Ruch, W., & Proyer, R. T. (2008). Who is gelotophobic? Assessment criteria for the fear of being laughed at. *Swiss Journal of Psychology*, 67, 19–27. <https://doi.org/10.1024/1421-0185>.
- Swami, V., García, A. A., & Barron, D. (2017). Factor structure and psychometric properties of a Spanish translation of the Body Appreciation Scale-2 (BAS-2). *Body Image*, 22, 13–17. <https://doi.org/10.1016/j.bodyim.2017.05.002>
- Swami, V., Tran, U. S., Brooks, L. H., Kanaan, L., Luesse, E. M., Nader, I. W., ... Voracek, M. (2012). Body image and personality: Associations between the Big Five Personality Factors, actual-ideal weight discrepancy, and body appreciation. *Scandinavian Journal of Psychology*, 54, 146–151. <https://doi.org/10.1111/sjop.12014>
- Thompson, J. K., Fabian, L. J., Moulton, D. O., Dunn, M. E., & Altabe, M. N. (1991). Development and validation of the Physical Appearance Related Teasing Scale. *Journal of Personality Assessment*, 56, 513–521. https://doi.org/10.1207/s15327752jpa5603_12
- Tylka, T. L. (2004). The relation between body dissatisfaction and eating disorder symptomatology: An analysis of moderating variables. *Journal of Counseling Psychology*, 51, 178–191. <https://doi.org/10.1037/0022-0167.51.2.178>
- Tylka, T. L., & Wood-Barcalow, N. L. (2015). The Body Appreciation Scale-2: Item refinement and psychometric evaluation. *Body Image*, 12, 53–67. <https://doi.org/10.1016/j.bodyim.2014.09.006>
- Titze, M. (2009). Gelotophobia: The fear of being laughed at. *Humor - International Journal of Humor Research*, 22, 27–48. <https://doi.org/10.1515/humr.2009.002>

Weiss, E. M., Schuler, G., Freudenthaler, H. H., Hofer, E., Pichler, N., & Papousek, I.

(2012). Potential markers of aggressive behavior: The fear of other persons'

laughter and its overlaps with mental disorders. *PLoS One*, 7.

<https://doi.org/10.1371/journal.pone.0038088>

Wiederman, M. W., & Pryor, T. L. (2000). Body dissatisfaction, bulimia, and

depression among women: the mediating role of drive for thinness. *The*

International Journal of Eating Disorders, 27, 90-95.

[https://doi.org/10.1002/\(SICI\)1098-108X\(200001\)27:1<90::AID-](https://doi.org/10.1002/(SICI)1098-108X(200001)27:1<90::AID-EAT10>3.0.CO;2-0)

[EAT10>3.0.CO;2-0](https://doi.org/10.1002/(SICI)1098-108X(200001)27:1<90::AID-EAT10>3.0.CO;2-0)

GELOTOPHOBIA AND BODY IMAGE

Table 1. Descriptive statistics for all scales and Pearson correlations among the Big Five personality traits, gelotophobia and body image-related measures.

	<i>M</i>	<i>SD</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
NEO-FFI dimensions													
(1) Neuroticism	2.78	0.71	.86										
(2) Extraversion	3.60	0.65	-.42***	.87									
(3) Agreeableness	3.46	0.47	-.21**	.24**	.77								
(4) Openness	3.72	0.57	.14	.06	.08	.68							
(5) Conscientiousness	3.60	0.60	-.40***	.13	.08	-.05	.84						
Humor-related trait													
(6) Gelotophobia	1.92	0.52	.60***	-.46***	-.03	-.10	-.17*	.87					
Body image													
(7) Body Appreciation	3.73	0.76	-.39***	.33***	.09	.21**	.23**	-.39***	.93				
(8) Body Dissati.	0.46	1.31	.09	-.00	.03	-.10	-.03	.12	-.36***	-			
(9) Body Surveillance	4.11	1.03	.32***	-.02	-.21**	-.02	-.05	.24**	-.33***	.31***	.75		
(10) Body Shame	3.10	1.11	.31***	-.14	-.00	-.07	-.06	.35***	-.53***	.43***	.45***	.79	
(11) App. Control Bel.	5.04	0.92	-.27**	.11	-.04	.08	.18*	-.29***	.24**	.11	.05	-.12	.73

Note. *N* = 143-163. Cronbach's alphas in italics. Openness = Openness to experience; App. Control Bel. = Appearance Control Beliefs; Body Dissati = Body

Dissatisfaction.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 2. Hierarchical regression analysis predicting body appreciation.

Predictors	ΔR^2	β
Step 1: Demographics		
Model 1	.060**	
Gender		.18*
Age		.12
Step 2: NEO-FFI dimensions		
Model 2	.114***	
Neuroticism		-.35***
Model 3	.074***	
Openness to experience		.28***
Model 4	.031*	
Extraversion		.20*
Model 5	.019*	
Conscientiousness		.16*
Step 3: Gelotophobia		
Model 6	.005	
Gelotophobia		-.10
Total R^2	.304***	

Note. N = 163. Gender: 0 = female, 1 = male.

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 3. Hierarchical regression analysis predicting
body dissatisfaction.

Predictors	ΔR^2	β
Step 1: Demographics		
Model 1	.162***	
Gender		-.39***
Age		-.03
Step 3: Gelotophobia		
Model 2	.001	
Gelotophobia		.03
Total R^2	.163***	

Note. N = 162. Gender: 0 = female, 1 = male.

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 4. Hierarchical regression analysis predicting
body surveillance.

Predictors	ΔR^2	β
Step 1: Demographics		
Model 1	.194***	
Gender		-.33***
Age		-.21**
Step 2: NEO-FFI dimensions		
Model 2	.053**	
Agreeableness		-.23**
Model 3	.028*	
Neuroticism		.18*
Step 3: Gelotophobia		
Model 4	.001	
Gelotophobia		.03
Total R^2	.276***	

Note. N = 161. Gender: 0 = female, 1 = male.

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5. Hierarchical regression analysis predicting body shame.

Predictors	ΔR^2	β
Step 1: Demographics		
Model 1	.072**	
Gender		-.24**
Age		-.07
Step 2: NEO-FFI dimensions		
Model 2	.077**	
Neuroticism		.29**
Step 3: Gelotophobia		
Model 3	.039*	
Gelotophobia		.25*
Total R^2	.188***	

Note. N = 144. Gender: 0 = female, 1 = male.

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 6. Hierarchical regression analysis predicting appearance control beliefs.

Predictors	ΔR^2	β
Step 1: Demographics		
Model 1	.002	
Gender		.02
Age		.03
Step 2: NEO-FFI dimensions		
Model 2	.072**	
Neuroticism		-.28**
Step 3: Gelotophobia		
Model 3	.031*	
Gelotophobia		-.22*
Total R^2	.104**	

Note. N = 159. Gender: 0 = female, 1 = male.

* $p < .05$; ** $p < .01$; *** $p < .001$