

**Intra- and Interindividual Differences and the Interpersonal Perception of Dispositions
Toward Ridicule and Being Laughed at**

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Abstract

How people deal with ridicule and being laughed at can be described among three individual differences variables: Gelotophobia (fear of being laughed at), gelotophilia (joy in being laughed at), and katagelasticism (joy in laughing at others). This thesis aims to extend the knowledge on the three personality traits by studying their role in interpersonal relationships of different degrees of closeness across five studies. In Study I, I tested whether the dispositions can be accurately perceived by strangers from short textual self-descriptions. There was robust inter-judge agreement and judgments overlapped with the targets' self-ratings a behavioral criterion (diary data aggregated across 14 days) across two sub-studies ($N = 218$ & 132). Based on these promising findings, I extended the study to intimate couples in the remaining studies. Study II examined the intra- and interpersonal associations between the dispositions and indicators of relationship satisfaction (RS) among $N = 154$ couples in Actor-Partner Interdependence Model (APIM) analyses and showed that all dispositions show differential associations with facets of RS. Further, partner similarity among the single dispositions and their profiles. Finally, I extended this line of research by examining two constructs that might contribute to understand experiencing romantic relationships; namely, romantic attachment (Studies IIIa [$N = 247$ individuals and 154 couples] and IIIb [$N = 531$ individuals]) and romantic jealousy (Study IV; $N = 228$ couples). Again, I found that each disposition relates differently and uniquely with attachment and jealousy, and that attachment contributes to explain single status with regard to gelotophobia. Further, I used the Actor-Partner Interdependence Mediation Model, which allowed to identify indirect effects of jealousy and attachment on the associations between the dispositions and RS. Also, the incorporation of partner perceptions of the dispositions in Study IV contributed to better understand the role of perceiving one's partner to deal with laughter for experiences of romantic jealousy. This work extends the knowledge on how dealing with ridicule and being laughed at plays a role for in interpersonal relationships on the intra- and interindividual level.

1 General Introduction

“Laughter, laughter

All I hear or see is laughter

Laughter, laughter

Laughing at my cries” (Hetfield et al., 1986)

Guinan: *“Being able to make people laugh or being able to laugh is not the end-all and be-all of being human.”*

Data: *“No. But there is nothing more...uniquely human.”* (Armus et al., 1988)

Laughter is an innate behavior (Ruch & Ekman, 2001), which includes laughing at others but also being laughed at. The latter is a frequent phenomenon; for example, 92% of a random sample stated to have been laughed at during the past year (Proyer, Hempelmann et al., 2009). As the two referenced quotes above exemplify, the perception of laughter can differ strongly: The lyrical first-person in Hetfield et al.’s (1986) title track of the genre-defining album *Master of Puppets* apparently perceives nothing *but* laughter, that also appears to have malicious qualities, as the laughter is even directed at their cries. On the other hand, *Star Trek*’s fictitious persona of Starfleet officer Lt. Cmdr. Data, a self-aware android who seeks to understand humanity and to become human, values the ability to laugh and making others laugh as unique human quality that he strives to master. However, apart from pop-cultural interpretations, practical wisdom predominantly views laughter and the act of laughing unequivocally positively, as folk sayings such as “laughter is the best medicine” and numerous popular quotes such as “a day without laughter is a day wasted” (attributed to Charlie Chaplin) and “a good laugh heals a lot of hurts” (attributed to Madeleine L’Engle) suggest. Although this notion has been widely accepted among laypeople and scientists alike¹, people differ in how they experience laughter and engage in laughing at oneself and others (Ruch & Proyer, 2008ab, 2009a; see also Titze, 2009). Ruch and Proyer (2008a, 2009a) introduced three individual differences variables that describe how people with ridicule and being laughed at; namely, *gelotophobia* (Greek: *gelos* = laughter, and *phobia* = fear), the fear of being laughed at; *gelotophilia*, the joy in being in being laughed at; and *katagelasticism* (Greek: *katageláō* = to laugh *at*), the joy in laughing at others. Hence, the assumption that laughter is universally perceived positively does not hold, as there are those who do not enjoy

¹For example, one might consider studies examining the effects of “laughter yoga,” which assume that engaging in laughter promotes well-being (see Bressington et al., 2018 for an overview and Proyer, Ruch et al., 2012 for a commentary), which is disputed by theoretical and empirical accounts.

being laughed at and/or engage in laughing at others. The laughter-related dispositions are conceptualized as traits that are comparatively stable over time and situations (Ruch & Proyer, 2008b, 2009a).

The introduction of the dispositions to the field has stimulated research on how people deal with ridicule and being laughed at: To date around 150 research papers have been published on the three dispositions, localizing the dispositions in broad systems of personality traits such as Eysenck's PEN-model (e.g., Ruch & Proyer, 2008b), the Five-Factor Model (e.g., Ďurka & Ruch, 2015), and the HEXACO-model (Torres-Marín, Proyer, López-Benítez, Brauer, & Carretero-Dios, 2019), testing associations with important outcomes such as well-being, life satisfaction, and maladaptive personality traits to name but a few (e.g., Brauer et al., 2022; Hofmann et al., 2017), and using numerous methodological approaches including self- and other-ratings, semi-projective tests, indicators of memory, physiological parameters, and reaction times (e.g., Brauer & Proyer, in press; Brauer et al., 2022; Papousek et al., 2014, 2016; Ruch et al., 2017; Torres-Marín et al., 2017). Also, studies are not limited to the German- or English-speaking population but also examine the dispositions worldwide (e.g., Barabadi et al., 2021; Chan et al., 2013; Dursun et al., 2020; Vagnoli et al., 2022; see also Proyer, Ruch et al., 2009). A recent sentiment analysis among German-speaking psychologists using electronic microblogs ($N = 69,963$ entries; *Twitter*) has identified the terms “gelotophobia” and “laughter” as so-called “hotspot” research topics in psychology (Bittermann et al., 2021), underscoring the interest on the dispositions. Although research has expanded the knowledge on the three dispositions substantially since 2008, there is a gap concerning the role of gelotophobia, gelotophilia, and katagelasticism in interpersonal relationships. Only few studies have examined the laughter-related dispositions in multi-actor systems (e.g., Proyer, Estoppey et al., 2012; Proyer, Neukom et al., 2012). Thus, there is only limited knowledge on the role of the three dispositions in social relationships of different degrees of closeness, from strangers to romantic partners.

In this work, I aimed at narrowing this gap in the literature by testing the role of intra- and interpersonal individual differences of the dispositions in dyadic relationships, starting with addressing the question whether the dispositions can be accurately perceived from thin slices of behavior at zero acquaintance, that is when raters and ratees are unacquainted (Study I). Further, I studied the perceptions of the dispositions in close relationships (i.e., romantic partners). After establishing whether the dispositions can be accurately perceived even under limited information, I extended the study of the dispositions in social relationships toward intimate relationships by analyzing data of couples with the *Actor-Partner Interdependence Model* (APIM; Cook & Kenny, 2005) to test the differential associations between the

dispositions and relationship satisfaction (Study II), romantic attachment styles (Study IIIa & IIIb), and romantic jealousy (Study IV). These findings would contribute to understand the role of dealing with ridicule and being laughed at in relationships of different degrees of closeness and might provide knowledge for future research that seeks to examine interventions (e.g., by deliberate or therapeutic treatments) for experiencing close relationships more positively.

1.1 Dispositions Toward Ridicule and Being Laughed at

As discussed, it has been traditionally assumed that people experience laughter mostly positive and studies rather focused on preferences in producing and appreciating humor (see e.g., Martin, 2007) instead of dealing with laughter. Initial findings suggested that people differ in how they experience being laughed at as well as observing others being ridiculed (Janes & Olson, 2000; Titze, 1995, 1996). However, early research distinguished between laughing *with* and laughing *at*. When Schmidt-Hidding (1963, as cited in Platt & Forabosco, 2012) analyzed humor-related words in everyday language, he found a bipolar dimension with “laughing with” and “laughing at” on opposite poles. While “laughing with” was denoted by benevolent and positive evaluations (characterized by words such as “bantering,” “playfulness,” and “nonsense”), “laughing at” was evaluated less positively with attributes such as “mock/ridicule,” “cynic,” and “deride.” Hence, earlier research found evidence for the notion that people might differ in how they perceive and engage in being laughed at and laughing at others. Ruch and Proyer (2008a, 2009a) introduced three dispositions that are conceptualized as dimensions with the poles of low vs. high expressions to describe interindividual differences that are relatively stable over time and situations concerning how people deal with ridicule and being laughed. I will introduce the dispositions hereafter.

1.1.1 Gelotophobia.

Gelotophobia describes individual differences in the fear of being laughed at. Those with high expressions in gelotophobia (*gelotophobes*) are convinced to appear ridiculous to others and their main concern is the fear of being laughed at by others (e.g., Ruch, 2009; Ruch & Proyer, 2008ab, 2009a; Titze, 2009). Gelotophobes experience laughter as directed *at them* and they perceive the occurrence of laughter as ridicule, irrespective of its direction and intention. For example, when a gelotophobic person overhears laughter between strangers (e.g., in an open space such as on the street, in a cinema or a restaurant when strangers might laugh about a joke they share) they would feel that their laughter is directed at them, independently of its direction. Gelotophobes do not differentiate between the intention or motivation behind others’ laughter: For them, there is no difference between “laughing with” and “laughing at,” even among acquaintances (Platt, 2008; Platt & Forabosco, 2012; Ruch &

Proyer, 2009a). Hence, gelotophobes perceive others' laughter as malicious, ill-spirited, and a means to put them down instead of joyful or associated with positive emotions. To avoid experiencing being the supposed aim of ridicule and laughter gelotophobes preventively withdraw from social situations. One might argue that such withdrawal contributes to profound negative consequences for their social life, as indicated by findings on their comparatively low well-being, experiences of loneliness, lower inclinations to enter close relationships, and reduced experiences of satisfaction (see e.g., Führ et al., 2015; Platt & Forabosco, 2012; Platt et al., 2016).

1.1.1.1 Identification of a New Phenomenon. The study of gelotophobia began when psychotherapist Michael Titze (1996) provided case reports of patients who were characterized by a pronounced fear of being the target of laughter and their conviction to appear ridiculous to others (Titze, 2009). He describes gelotophobes as being unable to appreciate the benefits of laughter and provided observations on their external appearance from his clinical experience. Titze noted that gelotophobes appear wooden, lack liveliness, joy, and spontaneity, and are characterized by distant and “cold” appearances toward their peers. He coined the term “Pinocchio complex” for this pattern of appearance characteristics. Also, gelotophobes are cautious to not appear ridiculous to others and to become a potential target of laughter. This type of excessive over-controlling and preventive behavior contributes to their “wooden” appearance and eventually contributes to be perceived as ridiculous, which reinforces the conditions for gelotophobic convictions (Titze, 2009). Titze's initial work provided suggestions and notions on assessment criteria and the origins of gelotophobia. For example, he argued that experiencing shame-inducing punishment from caregivers and not being taken seriously by means of being laughed at or ridiculed would be characteristic for gelotophobes. Also, he described that these experiences would then translate to insecurities in social relationships with others (e.g., peers, teachers) during adolescence and contribute to underdeveloped social competencies throughout adulthood. He provided the first model of putative causes and consequences of gelotophobia (see Ruch, 2009). Overall, Titze's phenomenological works using idiographic approaches have provided the important starting point for the systematic and nomothetic study of the fear of being laughed at.

1.1.1.2 Assessment and Distribution. The starting point of the nomothetic study of gelotophobia was the development of a standardized assessment instrument. Therefore, Ruch and Titze compiled a list of 46 statements that gelotophobes were expected to endorse, which was then introduced as the *GELOPH<46>* self-report questionnaire. Example statements are “When others in my presence I get suspicious;” “When others make joking remarks about me, I feel paralyzed;” and “I believe that I make a funny impression on others.” Ruch and Proyer

(2008ab) examined the psychometric properties and validity of the GELOPH<46>. From early on, Ruch and Proyer (2008a) hypothesized gelotophobia rather as a *dimension* ranging from low to high fear of being laughed at, instead of a dichotomous category or clinical diagnosis that classified individuals as gelotophobic or non-gelotophobic. Thus, even when studying clinical samples initially, Ruch and Proyer assumed variability among the range of no to extreme gelotophobia. They addressed their notion in forthcoming studies: First, they tested whether the GELOPH<46> allows to statistically discriminate among groups of externally diagnosed gelotophobes², shame-bound neurotics, and non-shame-bound neurotics ($N_{\text{total}} = 863$). They expected that externally diagnosed gelotophobes would yield the highest scores in the self-report instrument whereas those with general (i.e., not laughter-specific) shame-based symptoms would score lower in comparison to gelotophobes, but higher than patients with no shame-bound symptoms. Finally, they expected a non-clinical control sample to be on the low end of the gelotophobia dimension. The empirical findings from principal axis analyses met the expectations and discriminated the groups as hypothesized. Also, the classifications derived from the external diagnoses and the self-reports in the GELOPH<46> scores converged well. Further, principal component analyses across the subgroups yielded a strong single factor that accounts for about 50% of the variance in responses, speaking for the unidimensionality. Further analyses suggested the existence of considerable variability of the scores within the control group, suggesting that non-negligible individual differences in fear of being laughed at exist in non-clinical samples as well. Initial analyses regarding associations with age and gender did not indicate demographic effects for the fear of being laughed at. In conclusion, their expectations were widely met, and their findings supported the utility of their GELOPH<46> to assess individual differences in fear of being laughed at.

Ruch and Proyer (2008b) extended the analyses of the assessment instrument and the distribution of gelotophobia in different populations. In a first step they reduced the item set of the instrument by collecting data on the prototypicality of the items from 20 clinicians acquainted with the concept of gelotophobia. After identifying the 30 most prototypical items that should reflect the core characteristics of gelotophobia, they conducted psychometric analyses of the remaining item set with four samples that met the criteria as in Ruch and Proyer (2008a; i.e., gelotophobes; non-shame-bound neurotics; shame-bound neurotics; “normal” controls). By analyzing the data according to several criteria (e.g., factor loadings $\geq .50$, item discrimination power, and associations with subgroup membership) they identified

²Diagnoses were provided by Michael Titze and his team who were well-acquainted with the concept of gelotophobia.

15 items that allowed the assessment of the fear of being laughed at. The internal consistency of this 15-item measure, named the *GELOPH<15>*, was excellent ($\alpha_s \geq .90$ across groups). Finally, they derived cut-off scores that allow the standardized classification of different degrees of gelotophobia (i.e., expressions can be clustered as “no,” “slight,” “pronounced,” and “extreme;” Ruch [2009] added the “borderline fearful” category between “no” and “slight”). Also, the cut-off scores allow to classify participants into two groups (i.e., low vs. high gelotophobia) for experimental studies that use comparative approaches (e.g., Brauer & Proyer, in press; Platt, 2021). The *GELOPH<15>* has been translated into numerous languages with robust evidence for the reliability and validity in the adaptations (for overviews see Proyer, Ruch et al., 2009 and Ruch, Hofmann et al., 2014).

The application of the cut-off scores to the data showed that about 11.7% of the control group (i.e., participants not externally diagnosed with gelotophobia) exceeded the cut-off for gelotophobia, with 4.82% showing at least pronounced expressions and about 1% showing extreme expressions of gelotophobia. Overall, the control group covered the range of the gelotophobia spectrum, which supported the notion that the intensity of gelotophobia also varies in the non-clinical population. Based on their findings, Ruch and Proyer (2008b) recommended to understand gelotophobia as a subclinical phenomenon that is best described as an individual difference variable instead of a clinical and categorical phenomenon. Finally, they examined the stability of gelotophobia. A trait is characterized by stability over time and situations (e.g., Allport, 1961; McDonald & Letzring, 2017), and Ruch and Proyer (2009a) provided evidence for the stability of the responses over time, with test-retest correlations of $r_{tt} = .86$ across an interval of three months and $r_{tt} = .80$ across six months. Thus, the findings support the notion of gelotophobia being a stable individual differences variable that is best understood as trait.

While the factorial structure of the *GELOPH<15>* shows the best fit for a one-factor structure across random samples that cover the full spectrum of expressions in the gelotophobia dimension, Platt et al. (2012) subjected the *GELOPH<15>* to a sample of participants who were externally diagnosed as gelotophobes and who exceeded the cut-off value for slight expressions to learn more about the structure of gelotophobia by using a psychometric approach. Using Goldberg’s (2006) hierarchical factor analysis approach, they found that a solution with three correlated factors described the data well. They interpreted the three components as “disproportionate negative responses to being laughed at,” “paranoid sensitivity to anticipated ridicule,” and “coping with derision.” Further analyses showed that the latter factor can be split into the lower order factors “self-protection through controlling the situation,” “self-protection through withdrawal,” and “internalizing that one is a valid

object of derision.” This structural information gives a preliminary description and understanding of the components that constitute gelotophobia. However, Platt et al. argued that further research is needed to clarify whether these components exist in parallel or appear as a serial process over time. For example, it is an open question whether disproportionate negative responses to being laughed at precede coping with derision and the development of a sensitivity to expected ridicule (cf. Ruch, Hofmann et al., 2014).

In addition to validating the gelotophobia concept on basis of subjective self-ratings and clinical observations, differential methodological approaches have been used to examine the nomological net of the fear of being laughed at. For example, responses to written and drawn scenarios show that gelotophobes perceive situations that involve laughter as less enjoyable than non-gelotophobes (Platt, 2008, 2021; Ruch, Altfreder et al., 2009; Ruch et al., 2017) and similar findings emerged when testing subjective experiences in reaction to recordings of laughter and virtual agents, when collecting data on retrospective memories of being laughed at, and when testing whether gelotophobes differ from non-gelotophobes in their appreciation and production of humor (e.g., Proyer, Hempelmann et al., 2009; Ruch, Altfreder et al., 2009; Ruch, Beermann et al., 2009; Ruch, Platt et al., 2014; Ruch & Proyer, 2008ab). For example, it has been shown that gelotophobia does not equal humorlessness: While gelotophobes report using humor less frequently, the fear of being laughed at is unrelated to the externally rated ability to produce humor (Ruch, Beermann et al., 2009). Ruch, Beermann et al. (2009) characterize the humor of gelotophobes as inept, socially cold, and mean-spirited and by having low inclinations to using self-enhancing and affiliative forms of humor.

The study of physiological correlates has shown that gelotophobes are characterized by physical markers of cardiac and neural responses to laughter (Papousek et al., 2014; 2016) and neuroanatomical characteristics (C. L. Wu et al., 2016). Furthermore, an important contribution was the use of the *Facial Action Coding System* (FACS; Ekman et al., 2002; Rosenberg & Ekman, 2020). The FACS provides a comprehensive system of the facial muscular system which is broken down to so-called *action units* and allows fine-grained analyses of muscle activity. The FACS has been used in the study of differential expressions of smiles (e.g., Ekman & Friesen, 1982; Ekman et al., 1988; Frank & Ekman, 1993; Rosenberg & Ekman, 2020). For example, the emotion of joy is typically accompanied by a facial-muscular pattern called *Duchenne display* (“Duchenne smile”). The Duchenne smile is characterized by the symmetric joint contraction of the zygomatic major muscle and the orbicularis oculi muscles (“pulling the lip corners back- and upwards and raising the cheeks and compression of the eyelids causing eye wrinkles, respectively;” p. 776, Platt et al., 2013).

Studies using the FACS have shown that gelotophobes' muscular reactions to displays of enjoyable emotions, contempt, laughter-eliciting emotions, and different types of smiles systematically differed from those with low expressions in gelotophobia (Hofmann et al., 2015; Ruch et al., 2015; Platt et al., 2013). These findings indicate that gelotophobes show less positive emotional FACS-coded responses to stimuli of laughter, displays of laughter-evoking emotions, and when being presented with different types of smiles. Thus, independently of the methodological approaches gelotophobia is a robust predictor of responses to laughter and laughter-related expressions in faces.

While the mentioned initial studies mainly used data from German-speaking samples, Proyer, Ruch, and colleagues (2009) conducted a multi-national study of the phenomenon by collecting and analyzing data from 93 samples spanning 73 countries and 42 languages ($N = 22,610$) using the GELOPH<15>. Their findings supported the high reliability of the measure across nations (mean $\alpha = .85$) and that the fear of being laughed at shows widely similar within-country variations in cross-cultural research. While the GELOPH<15> scores were similarly distributed across nations (i.e., no specific regions where *all* items were either endorsed or rejected), certain regional patterns in response behaviors existed. These cross-national differences could be described among two dimensions: (1) Reactions to laughter of others were described among the dimension with the poles *insecure* (e.g., hiding insecurities when experiencing others' laughter; feeling involuntary ridiculous; Turkmenistan and Cambodia) and *intense avoidant-restrictive* (e.g., feeling uncomfortable when dealing with others who have previously laughed; needing time to recover from being laughed at; avoiding locations where one has been previously ridiculed; Iraq, Egypt, and Jordan), and (2) *suspicious tendencies* (e.g., being suspicious when others laugh) that ranged from low (e.g., Cambodia, Ukraine, and Scotland) to high expressions (e.g., Burkina Faso, Ethiopia, and Romania). Furthermore, findings from independent samples within the same country (e.g., six samples from the U.S. and four samples from China) were invariant and indicated regional homogeneity. Overall, this study corroborated the notion that the fear of being laughed at is a psychological phenomenon of global existence that could be reliably assessed with self-reports via the GELOPH<15>, which is to date the standard instrument for the assessment of the fear of being laughed at.

1.1.1.3 Discrimination from Theoretically Near Constructs. Gelotophobia has been distinguished from other constructs and theoretically near variables such as different degrees of social anxiety, from low to clinically relevant *phobic* expressions, to clarify its uniqueness. It might be argued that clinical observations from gelotophobes suggest overlaps with

symptoms that justify the full social phobia³ diagnosis. However, gelotophobes' fear is predominantly limited to the fear of being laughed at and being ridiculed instead of presenting generalized worries about social situations that constitute social anxiety (e.g., being negatively evaluated, being criticized, or experience embarrassment or humiliation after behaving in a social situation that did not include ridicule or laughter by others; see e.g., Ruch, 2009; Ruch & Proyer, 2008a; Titze, 2009). Interestingly, a literature review by Ruch (2009) showed that only 0.23% of 6,401 entries concerning social phobia and social anxiety mentioned “ridicule, laughing at, mock, derision, humor, smiling, smile, laughter, laugh, funny, comic, irony, sarcasm, teasing, tease” (p. 13) in their descriptions of social anxiety. Hence, the study of being laughed at and ridicule has been widely neglected in the study of the relevant clinical phenomena that might be theoretically nearby. This is somewhat surprising when considering that Hartenberg's (1901) phenomenological descriptions of the “*timidité*” phenomenon, which widely echoes the modern description of social phobia, included the *fear of ridicule* as a motivation behind the social inhibition that exists in those with social phobia (see Carretero-Dios et al., 2010; Ruch, 2009). Although the fear of ridicule is not part of what is understood as social phobia in the modern clinical literature (APA, 2000, 2013) it is of interest to examine how gelotophobia can be distinguished from theoretically near constructs.

Another approach was to examine whether gelotophobia can be psychometrically differentiated from near constructs. Carretero-Dios and colleagues (2010) analyzed self-reports of gelotophobia, fear of negative evaluation, and social anxiety in 211 Colombian participants and found the expected numerically high correlations ($r_s \leq .64$), but these did not indicate redundancy of gelotophobia and the external constructs. Also, exploratory factor analyses yielded a clear 3-factor structure with only few items showing cross-loadings of gelotophobia items on external factors. When subjecting the items of the three measures to confirmatory factor analyses, fit indexes for the three-construct solution were very satisfying (RMSEA = 0.05; CFI = 0.99) whereas one- and two-factor solutions showed worse fit and rejected the notion of overlap between the latent factors (RMSEA \geq 0.22; CFI \leq 0.73). Moreover, these findings have recently been further supported using multi-method data (i.e., self- and peer-reports of up to three acquaintances) of gelotophobia, social anxiety, and paranoid ideation: Multi-level confirmatory factor analyses again supported the discriminant validity of gelotophobia (Torres-Marín et al., 2021). Edwards and colleagues (2010)

³The Diagnostic and statistical manual of mental disorders (APA, 2000, 2013) also uses the term social anxiety disorder.

examined childhood memories of being ridiculed and correlated the frequency and intensity of such memories with gelotophobia and social anxiety. While both measures were robustly correlated, they found that the correlations with childhood memories of being teased stayed robust even after controlling for social anxiety.

Further distinguishability between gelotophobia from social anxiety was found in Ritter et al.'s (2015) experimental study of reactions to audiovisual and audio cues of laughter (i.e., three types of laughter: joyful/friendly, tickling, and taunting/unfriendly) in relation to social anxiety and gelotophobia. Participants rated each presentation on a scale with the poles "friendly/socially inclusive laughter" and "unfriendly/socially exclusive laughter" and results indicated that greater social anxiety related to greater biases (i.e., experiencing *all* types of laughter as unfriendly/ridicule) robustly, but decreased substantially after controlling for gelotophobia, suggesting that gelotophobia accounts for the associations in a meaningful way. Also, other studies examining the overlap between gelotophobia and the prevalence of clinically relevant disorders found that gelotophobia is pronounced in samples with psychiatric diagnoses (i.e., DSM-IV TR [APA, 2000] axis I and/or II diagnoses) but no study indicated redundancy in the way that gelotophobia would distinctively relate to a specific clinical diagnosis (including stable traits of personality disorders) or vice versa in random samples from the non-clinical population and samples comprising psychiatric patients (Brauer et al., 2022; Brück et al., 2018; Forabosco et al., 2009; Havranek et al., 2017; Weiss et al., 2012).

Finally, one might argue that gelotophobia is redundant with the broad personality trait of neuroticism (or emotional instability), which entails trait facets such as anxiety, depressed mood, and worries (Costa & McCrae, 2008; Eysenck & Eysenck, 1987). Studies examining the overlap between gelotophobia and neuroticism, along with low extraversion, showed robust correlations ($\leq 50\%$ variance overlap) but no redundancies using several operationalizations and assessments across the frameworks of the Eysenckian PEN-model⁴ (Eysenck & Eysenck, 1987), the Five-Factor Model (Costa & McCrae, 2008), and the HEXACO-model (Lee & Ashton, 2004) across samples (Ďurka & Ruch, 2015; Moya-Garófano et al., 2019; Rawlings et al., 2010; Proyer & Ruch, 2010; Ruch & Proyer, 2009b; Ruch, Harzer et al., 2013; Torres-Marín et al., 2020; Torres-Marín, Proyer, López-Benítez, Brauer et al., 2019; Torres-Marín, Proyer, López-Benítez, Carretero-Dios, 2019). Also, Brauer et al. (2022) showed that gelotophobia is not redundant with maladaptive personality

⁴When using older, clinically saturated operationaliations of Psychoticism, gelotophobia relates positively to this factor (Ruch & Proyer, 2009b).

traits as described in the *Personality Inventory for the DSM-5* (Kruger et al., 2012). Taken together, the literature supports the notion that gelotophobia is not redundant with existing theoretically near clinical phenomena.

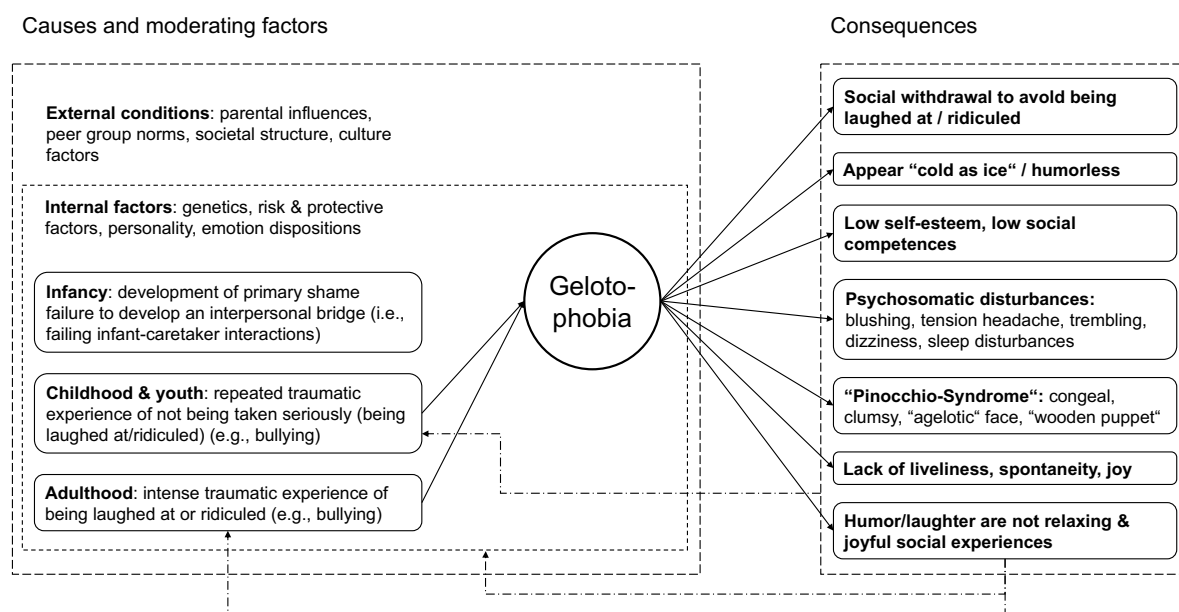
1.1.1.4 Demographic Characteristics. Gelotophobia is widely independent from age and gender (e.g., Ruch & Proyer, 2008ab, 2009ab; see Platt, Ruch et al., 2010 and Ruch, Hofmann et al., 2014 for overviews). While systematic longitudinal studies on the development of gelotophobia are yet missing, Platt (2009, as cited in Platt et al., 2010) asked 164 participants aged 41 years or older whether they remember a time in which they did not feel uncomfortable being confronted with other people's laughter and smiling. Her findings showed a negative association between gelotophobia and age, with a peak in adolescence that declined until the 40's. However, these data must be interpreted cautiously as they were of cross-sectional nature and were based on retrospective self-reports that can be biased. In addition to age and gender, studies examined whether gelotophobia relates to relationship status. Across studies, those in relationships showed on average lower expressions in the fear of being laughed at than singles (Führ et al., 2009; Forabosco et al., 2009; Ruch & Proyer, 2008a, 2009ab; Platt & Forabosco, 2012; Platt, Proyer et al., 2009; Platt, Ruch et al., 2010), which suggests that gelotophobia might be of relevance for the establishment and/or maintenance of romantic relationships.

1.1.1.5 Putative Causes and Consequences. Titze (2009) postulated a model of putative causes and consequences of gelotophobia on basis of his observations from his clinical case studies. In 2014, Ruch, Hofmann and colleagues provided the revised model under consideration of the acquired knowledge from the numerous studies on the fear of being laughed at. Figure 1 depicts Ruch, Hofmann et al.'s revised model and shows the broad distinction into causes (and potential moderators) and consequences. The causes are further distinguished into external (e.g., psychosocial variables such as parental influences and normative and cultural aspects) and internal factors (e.g., genetics, and phenotypical expressions of risk and protective factors; personality traits and emotional dispositions).

In line with the knowledge on the development of individual difference variables and personality traits over the life span (e.g., Allport, 1961; Borkeu et al., 2001; Caspi, 1998; Caspi et al., 2005; Loehlin, 1992; Roberts & Mroczek, 2008; Roberts et al., 2001), the model acknowledges that differential experiences throughout different life phases, from infancy (e.g., failure to develop an interpersonal attachment to the primary caregiver) to childhood (e.g., repeated experiences of being laughed at) and adulthood (e.g., dealing with [intense] experiences of being laughed at), might affect the development of the fear of being laughed at, and that internal and external factors interact with each other. Further, the model describes the

Figure 1

Model of Putative Causes and Consequences of the Fear of Being Laughed at By Ruch, Hofmann, Platt, and Proyer (2014)



consequences that have been reported by and observed in gelotophobes (cf. Titze, 2009; Pinocchio syndrome), their internal experiences (e.g., low self-esteem) and social interactions (low social competencies; not enjoying the company of others), trait-like manifestations and enduring convictions of how they see themselves and others (e.g., lack of liveliness), and behavioral consequences such as social withdrawal to avoid (the fear of) being laughed at, as well as consequences when being confronted with ridicule and laughter (e.g., psychosomatic disturbances and avoiding situations in which they might be laughed at).

This model has contributed to guiding research on the fear of being laughed at and many studies support notions on the hypothesized causes and consequences, but there are gaps concerning the in-depth study of certain assumptions. For example, the study of gelotophobia in close relationships and their role in social areas has received comparatively less attention while other areas (e.g., testing reactions to laughter and the humor of gelotophobes) have been studied hitherto well. Taken together, the identification of the gelotophobia phenomenon has extended the field of personality and humor research, as its introduction has contributed to assess and understand individual differences in how people deal with ridicule and being laughed at on a dimension that describes no to extreme expressions in fear of being laughed at (Ruch & Proyer, 2008ab, 2009a).

1.1.2 Gelotophilia and Katagelasticism

While the initial introduction of gelotophobia helped to understand individual differences in how people deal with laughter and ridicule from the perspective of being afraid to be the *target* of ridicule, people might also differ in how they deal with being the *agent* who actively directs laughter and ridicule at themselves or others. This notion received support when Ruch and Proyer (2009a) asked participants to name the worst experience of being laughed at they can remember. Besides entries describing hurtful and embarrassing situations such as being naked in front of others, momentary loss of body functions (e.g., wetting oneself), or being ridiculed for showing emotions, they found that some participants do not experience any situation as being “the worst” or that being ridiculed would affect them substantially. Instead, some experience joy in being laughed at as well as directing ridicule and being laughed at toward others, as their responses showed. Also, Proyer and Ruch (2010) discussed rituals that aim at ridiculing oneself or others deliberately; for example, when Hip-Hop artists mock other artists (*dissing*) as part of the artistic musical expression within the subcultural confinements. Ruch and Proyer further discussed and examined individual differences in dealing with directing ridicule and laughter at oneself and others and introduced the concepts of *gelotophilia* (joy in being laughed at) and *katagelasticism* (joy in laughing at others). In the following, I will give a brief overview concerning their definition, assessment, and describe prior findings on their associations with external constructs.

1.1.2.1 Joy in Being Laughed at. Gelotophilia is an individual difference variable that describes how people vary on a dimension from no to high joy in being laughed at (Ruch & Proyer, 2009a). Those high in gelotophilia (gelotophiles) experience being laughed at as joyful and consider being laughed at as a sign of appreciation. To gain others’ laughter, gelotophiles actively seek and establish situations in which they can get laughed at, which also entails ridiculing themselves by (re)telling and exaggerating events such as misfortunes and embarrassing situations or pointing out flaws of themselves. Here, “others” is not limited to acquainted persons but also strangers; for example, when participating at social festivities etc. Ruch and Proyer argue that self-descriptions in lonely-hearts advertisements support the notion of the gelotophilia concept; for example, when people describe themselves as “I enjoy having fun and laughing. It doesn’t matter if I am laughing with someone — or if I am being laughed at” and “I enjoy laughing at and being laughed at.” (p. 186; 2009a).

1.1.2.2 Joy in Laughing at Others. While gelotophobia and gelotophilia describe how people deal with being ridiculed and laughed at *by others*, katagelasticism describes individual differences of the joy in laughing *at others* (Ruch & Proyer, 2009a). Hence, katagelasticism regards to the inclinations to enjoying laughing at others but also to direct others’ laughter and ridicule at a target. Those high in katagelasticism (katagelasticists)

actively seek situations in which they can ridicule others as well as seeking attributes in others that are suited to ridicule them (e.g., by making a funny remark about them). According to Ruch and Proyer (2009a), this might include playing a harmless prank on others but also actively ridiculing others in a way that they feel embarrassed. Katagelasticians accept the risk of straining social relationships; as katagelasticians view being laughed at and being ridiculed as part of life, and they do not feel remorse when ridiculing others. From their perspective, laughter is part of life and targets of ridicule should fight back if they take offense, thus, following the “eye-for-an-eye” principle when it comes to ridicule and being laughed at.

1.1.2.3 Assessment. Ruch and Proyer (2009a) have provided the standard self-report instrument for the assessment of gelotophilia and katagelasticism: The *PhoPhiKat-45* (acronym for gelotophobia, gelotophilia, and katagelasticism) contains 45 items, that include the 15 items from the GELOPH<15> (Ruch & Proyer, 2008b) for the assessment of gelotophobia and 15 items each for assessing gelotophilia and katagelasticism. Sample items for gelotophilia are “When I am with other people, I enjoy making jokes at my own expense to make the others laugh” and “I do not hesitate telling friends or acquaintances something embarrassing or a misfortune that happened to me, even at the risk of being laughed at;” sample items for katagelasticism are “I enjoy exposing others and I am happy when they get laughed at” and “Often, disputes emerged because of funny remarks or jokes that I make about other people.” Contrary to the existence of cut-off scores for gelotophobia, no cut-off scores have been tested or introduced for gelotophilia and katagelasticism. Principal component analyses support the three-factorial structure for the PhoPhiKat-45 and showed a distinct item-factor loading pattern. The item- and scale analyses showed good item-total correlations and internal consistency coefficients for the newly introduced gelotophilia ($\alpha = .87$) and katagelasticism ($\alpha = .84$) scales and the retest-correlations suggested stability of the scores across 3-month and 6-month intervals ($r_{tt} = .80$ and $.73$ for gelotophilia; $.77$ and $.75$ for katagelasticism; also between $.87$ to $.92$ in a Chinese sample; Chen et al., 2011). Brauer and Proyer (2021a) extended the knowledge on the PhoPhiKat-45 by showing that confirmatory factor analyses supported the 3-factorial structure and providing MacDonald’s ω reliability estimates that supported the reliability of the PhoPhiKat-45 ($.89$ for gelotophobia and gelotophilia, and $.87$ for katagelasticism). As with the GELOPH<15>, the PhoPhiKat-45 has been translated into numerous languages and studies replicated the findings on the reliabilities and the factor structure using confirmatory factor analyses (RMSEAs $\leq .077$, CFIs $\geq .96$; e.g., Dursun et al., 2020; Torres-Marín, Proyer, López-Benítez, Carretero-Dios, 2019; C. L. Wu, Chan et al., 2019).

Alternative versions of the standard PhoPhiKat-45 have been tested: Ruch and Proyer (2009a) also examined a brief 30-item version, the *PhoPhiKat-30*, and found also robust evidence for the reliability and factorial validity. Further, Hofmann and colleagues (2017) developed a 9-item short form, the *PhoPhiKat-9*, which assesses each disposition with three items and, thus, allows for the economic assessment of the three dispositions for large scale studies depending on intensive assessments such as required in longitudinal studies. The PhoPhiKat-9 shows good psychometric properties, reliabilities, and a robust 3-factorial structure under consideration of its low number of items. Brauer and Proyer (2021a) adapted the PhoPhiKat-45 to the Expanded response format (Zhang & Savalei, 2016), in which each item response is explicated as a full sentence⁵. Brauer and Proyer's (2021a) findings across three samples (two samples providing responses for the Expanded version and one control sample providing responses in the standard Likert-type version of the PhoPhiKat-45) indicated robust structural validity for all types of the PhoPhiKat-45 in confirmatory factor analyses and robust self-other agreement for all dispositions in a sample of acquaintances ($r_s \geq .40$). Thus, showing initial support for the *PhoPhiKat-Expanded* and providing initial support for the notion that a peer-rating form using 3rd-person wordings of the items is suitable for the assessment of judgments of the three dispositions as well as further supporting the validity of self-reports of the three dispositions.

Finally, Proyer, Neukom and colleagues (2012) introduced the *PhoPhiKat-30c* for the assessment of the three dispositions in children. They tested the validity in a sample of 6-to-9-year-olds and found that individual differences in gelotophobia, gelotophilia, and katagelasticism exist already at an early age. Similar to the adult version of the PhoPhiKat versions for adults, the children version yielded good internal consistency (.68 for gelotophobia, .84 for gelotophilia, and .74 for katagelasticism) and was characterized by a robust three-factorial structure. The PhoPhiKat-30c has been used to study individual differences in dealing with ridicule and being laughed at in children and adolescents successfully (e.g., Brauer & Proyer, in press; Proyer, Estoppey et al., 2012; Proyer & Neukom, 2013).

1.1.2.4 Interrelations Between the Three Dispositions. As mentioned, factor analyses support the notion that the three dispositions are inter-related but form distinct

⁵Zhang and Savalei (2016) reported that the Expanded response format can contribute to reduce response biases and provide clearer factorial structures of questionnaires. The motivation to adapt the PhoPhiKat-45 was to examine potential changes in the response behaviors and influences on the assessment of the three laughter-related dispositions, but the item response format did not affect the factorial structure. However, there was a shift in the item difficulties, which led to the recommendation that the cut-offs for gelotophobia cannot be adapted for the PhoPhiKat-Expanded.

factors. Studies converge well in their findings on their interrelations. Gelotophobia correlates negatively with gelotophilia but coefficients do not indicate redundancy ($r_s \approx -.30$), thus, supporting the notion that gelotophilia is not the mere opposite of gelotophobia (e.g., Brauer & Proyer, 2021a; Dursun et al., 2020; Ruch & Proyer, 2009a). Further, gelotophobia relates positively to katagelasticism and, thus, there is a group of gelotophobes who, despite being afraid of being ridiculed, enjoy laughing at others. Finally, gelotophilia and katagelasticism are positively correlated, which is in line with the notion that katagelasticians view laughter as a part of life and also accept being ridiculed (Ruch & Proyer, 2009; Proyer et al., 2009). The inter-relations replicated across studies, also in the structure of informant ratings (e.g., Brauer & Proyer, 2021a, 2022).

1.1.2.5 Differential associations and localization in broad personality trait classifications. Many studies have examined the overlap between the dispositions and external variables to examine the validity of the concepts and the overlap and distinction with regard to external variables. For example, Ruch and Proyer (2009a) provided correlations with remembered events of being laughed at during childhood and youth for the three dispositions and found that gelotophobia related positively to remembered experiences of being laughed at, particularly the father figure during both phases, childhood and youth (r_s up to .46; total $r = .23$ for the remembered frequencies and .24 for the intensity) whereas gelotophilia and katagelasticism did not robustly relate to overall memories of being laughed at (total r_s between $-.02$ and $.04$). However, katagelasticism related to remembered experiences of being laughed at by peers in childhood and youth ($r_s .20$ to $.30$). Also, when Proyer et al. (2009) examined the relations between the dispositions and remembered situations of being ridiculed, gelotophilia related robustly to “making others laugh at oneself” ($r = .30$) and accordingly being teased by others ($r = .25$) whereas katagelasticism was not associated with making others laugh at oneself ($r = .08$) but being teased by others (strangers and professionals; $r = .37$ and $.24$). Their findings show initial evidence for the differential associations and non-redundancy of the dispositions.

One might argue that gelotophilia and katagelasticism overlap with Martin et al.’s (2003) humor styles. Particularly, that gelotophilia could be a form of what Martin and colleagues described as *self-defeating* humor style (i.e., “attempts to ingratiate oneself or gain the approval of others by doing or saying funny things at one’s own expense,” p. 52) as well as the *self-enhancing* humor style (i.e., maintaining a humorous outlook on life, being frequently amused by the incongruities of life, maintaining a humorous perspective even under stress and adversity, using humor to cope with adversities). However, Proyer and Ruch (2010) argue that gelotophilia is neither directed at gaining others’ approval by disparaging

themselves nor directing laughter at themselves in order to deal with stress. Instead, gelotophilia describes the joy in making others laugh at their own expense and genuinely enjoy being laughed at. Proyer and Ruch's notion found support across studies, as gelotophilia showed the expected positive correlations with Martin et al.'s Humor Styles Questionnaire⁶, but the associations were far from redundancy ($\leq 40\%$ variance overlap with all humor styles including age and gender; Dursun et al., 2020, Torres-Marín, Proyer, López-Benítez, Carretero-Dios, 2019). Similarly, one might argue that katagelasticism is an expression of Martin et al.'s *aggressive* humor style ("use of humor to manipulate others by means of an implied threat of ridicule;" Martin et al., 2003; p. 54). However, it can be argued that katagelasticians do not ridicule others to put them down or to threaten them, as described in the aggressive humor style, whereas katagelasticians view laughter as a part of life instead of a means to hurt others (cf. Ruch & Proyer, 2009a). Again, the findings show the expected overlap between katagelasticism and the aggressive humor style but without indicating redundancy (Dursun et al., 2020, Torres-Marín, Proyer, López-Benítez, Carretero-Dios, 2019). Thus, the dispositions should not be understood as humor style, but individual differences variables that describe the narrow behaviors, attitudes, and experiences when it comes to dealing with ridicule and being laughed at.

Gelotophilia and katagelasticism, along with gelotophobia, have been localized in the broad personality trait classifications (PEN-model, Five Factor Model, and HEXACO; Ďurka & Ruch, 2015; Proyer & Ruch, 2010; Ruch, Harzer et al., 2013; Torres-Marín et al., 2020; Torres-Marín, Proyer, López-Benítez, Brauer et al., 2019; Torres-Marín, Proyer, López-Benítez, Carretero-Dios, 2019). As mentioned, gelotophobia is best described by introversion and neuroticism, but also with lower inclinations to honesty-humility (Torres-Marín, Proyer, López-Benítez, Brauer et al., 2019). Gelotophilia is characterized by extraversion, psychoticism, and low neuroticism in the PEN-model. These findings replicated well when localizing them in the Five Factor- and HEXACO-models of personality, where gelotophilia was unrelated to openness, agreeableness, conscientiousness, and honesty-humility but showed the expected correlations with extraversion and emotional stability. Katagelasticism showed associations of small size with psychoticism and extraversion in the Eysenckian PEN-model, and low agreeableness and low expressions in honesty-humility in the Five Factor Model and HEXACO models. Thus, the three narrow dispositions can be localized well in classifications of broad personality traits across conceptualizations (i.e., 3-, 5-, and 6-

⁶Despite the popularity and frequent use of the Humor Styles Questionnaire, there is concern with regard to its validity (see e.g., Heintz, 2017, 2019; Heintz & Ruch, 2015, 2016; Ruch & Heintz, 2017).

dimensional models) and samples. Recently, the dispositions have also been localized in the PID-5 classification of *maladaptive* personality traits (Brauer et al., 2022). Overall, the findings mirrored those from prior studies on the Five Factor Model well: Negative affectivity, detachment (cf. extraversion), and psychoticism characterized gelotophobia; disinhibition (cf. conscientiousness) and low detachment (cf. extraversion) characterized gelotophilia; and predominantly antagonism (cf. agreeableness) characterized katagelasticism. Brauer et al. additionally examined the contribution of informant ratings: Their analyses showed no discrepancies between self- and other views on gelotophobes', gelotophiles', and katagelasticists' maladaptive personality traits. The overlap between the PID-5 traits and the three dispositions was not indicating redundancy ($\leq 46\%$ shared variance) with maladaptive domains of personality.

The dispositions have also been localized in systems of traits that are morally valued, positively (character strengths; Peterson & Seligman, 2004) and negatively (Dark Triad; Paulhus & Williams, 2002). The study of strengths (Proyer & Ruch, 2009; Proyer et al., 2014) showed that the fear of being laughed at is characterized by low self-reported virtuousness, particularly for the strengths of humor/playfulness, bravery, forgiveness, and open-mindedness), gelotophilia goes along with inclinations to strengths such as humor, love, bravery, zest, and creativity, and katagelasticism relates robustly negatively to the strengths of modesty, kindness, and fairness. Further, Proyer and colleagues (2014) collected ratings of the participants' character strengths from knowledgeable others and compared the self- and peer ratings in relation to the expressions in the three dispositions. They found that gelotophobia goes along with the robust *underestimation* of their virtuousness whereas katagelasticism goes along with *overestimating* virtuousness in comparison to their peers' views. When localizing the dispositions into the traits of the dark triad (Machiavellianism, narcissism, and psychopathy; Torres-Marín et al., 2019) and facets of psychopathy (Proyer, Flisch et al., 2012), gelotophobia relates to manipulateness/impulsivity, gelotophilia is associated with narcissism and superficial charm, and katagelasticism is characterized by higher expressions in Machiavellianism and psychopathy, particularly callous and unemotional, manipulative, and antisocial behaviors. Across all trait models, the dispositions cannot be explained by any of the broad or narrow traits, and neither by positively or negatively valued traits from existing personality taxonomies. Further, the differential associations and localizations of the dispositions within the nomological net of broad and narrow personality traits support the unique associations and distinctiveness of the dispositions.

Beyond the basic research mentioned, numerous studies have examined the dispositions using differential approaches (e.g., network analysis; Lau et al., 2022) and a

variety of outcomes in samples across the world; for example, causal attributional styles, humor perceptions, self-presentation styles, creativity, the distribution and associations within families, life- and job satisfaction, coping strategies, and roles in bullying-type situations to name but a few (Brauer & Proyer, 2020; Canestrari et al., 2019; Chan et al., 2013; Hofmann et al., 2017; Proyer, Estoppey et al., 2012; Proyer, Neukom et al., 2012; Renner & Heydasch, 2010; Samson & Meyer, 2010). In conclusion, the literature shows that the dispositions show differential associations with external variables and are not redundant.

1.1.2.6 Associations with Demographic Variables. The initial examination of associations between gelotophilia and katagelasticism with age, gender, and relationship status by Ruch and Proyer (2009a) has shown that gelotophilia was independent from demographics, whereas katagelasticism was higher in people of younger age, males, and singles (r s between .15 and .24). This finding has been replicated well across studies, but it must be noted that the effect sizes for the associations between katagelasticism and relationship status as well as age were of small size (e.g., Brauer & Proyer, 2020; Platt & Ruch, 2010; Torres-Marín et al., 2019; C. L. Wu, Chan et al., 2019).

1.2 Dispositions Toward Ridicule and Being Laughed at and Social Relationships

Since the introduction of gelotophobia, gelotophilia, and katagelasticism, numerous studies have broadened the understanding of their nomological net, consequences, and correlates. However, there is a gap in the literature concerning the role of the laughter-related dispositions in social relationships. Prior studies highlighted that the dispositions are associated with relationship status (e.g., Platt & Forabosco, 2012; Ruch & Proyer, 2008a, 2009ab), and social experiences of loneliness (Führ et al., 2015), bullying-roles in the classroom (Proyer, Meier et al., 2013; Proyer, Neukom et al., 2012), parental attachment (C. L. Wu, Huang et al., 2019), and self-presentation strategies to ascertain others' views (Renner & Heydasch, 2010). However, to my knowledge only few studies have examined multi-actor systems (Brauer et al., 2022; Proyer, Estoppey et al., 2012; Proyer, Meier et al., 2013; Proyer & Neukom, 2013; Proyer, Neukom et al. 2012; Proyer, Wellenzohn et al., 2014; Torres-Marín et al., 2021) and no study has hitherto examined the relations between the dispositions and outcomes in social relationships under consideration of social partners' (e.g., friends or romantic partners) interdependence. Since social relationships are characterized by a system of interdependent others, their unique dyadic characteristics must be considered theoretically and empirically (e.g., Brauer & Proyer, 2021b; Kenny et al., 2006; Rusbult & Arriaga, 1997; Weidmann et al., 2016). The lack of dyadic studies of gelotophobia, gelotophilia, and katagelasticism is surprising when considering the social role and functions of laughter for interpersonal relationships. I will give a brief overview on the social functions of smiling and

laughter as a basis for my assumption of why the laughter-related dispositions should be studied in interpersonal relationships in the following section.

1.2.1 The Social Functions of Laughter and Smiling

Laughter is an innate behavioral pattern in humans and nonhuman primates in response to internal and/or external stimuli that is expressed by activation of the respiratory system (i.e., cascades of breathing out) and fulfills vocal expressive signal functions (e.g., Darwin, 1872/1965; Platt & Ruch, 2012; Ruch & Ekman, 2001). It has been observed to appear at an early age, as already 4-month-olds laugh in interactions with others (Sroufe & Wunsch, 1972; see also Nwokah et al., 1994). This behavioral phenomenon has received comparatively small attention in psychology and other scientific fields (Ruch, 2008), but existing research suggests that laughter is characterized and partly distinguished by numerous mechanisms and functions. For example, acoustic features, laryngeal activity, the air pressure, respiration, phonation, and muscular activity in different body parts such as the face, abdomen, and body movements in the act of laughing, but also with regard to *what* evokes laughter (e.g., Bachorowski et al., 2001; Chafe, 2014; Owren, 2014; Svebak, 2014; Ruch & Ekman, 2001 for an overview). Moreover, each of those characteristics can be assessed with different methods and approaches. Due to the multi-faceted approaches to laughter, definitions are not unambiguous, which led to mixed findings on the same phenomenon (e.g., when assessing the average duration of an episode of laughter⁷) and in some cases the study of laughter is understood synonymously with the study of humor, despite their distinctiveness (cf. Ruch, 2008). Systematic studies of emotional expressions (e.g., FACS analyses; see Platt & Ruch, 2012) and in relation to narrower enjoyable emotions (e.g., amusement, contentment, and excitement; Ekman, 2003) showed that smiling and laughing can signal positive or negative emotions alike (e.g., “sadistic smiles,” or due to embarrassment, e.g., Platt & Ruch, 2012; Ruch & Ekman, 2001). Also, smiles can be distinguished between authentic (i.e., spontaneous) and false (i.e., faked) smiles (e.g., Ekman, 2003; Ruch & Ekman, 2001). As mentioned in the discussion of the FACS methodology, authentic smiles are also called Duchenne smiles and are characterized by a specific involuntary muscular activation pattern whereas fake smiles are based on voluntary contractions of facial muscles. However, up to 20 types of smiles are distinguished (Platt & Ruch, 2012) and, as mentioned, the behavior of laughing is a complex phenomenon.

⁷For example, Ruch (1990) reports a mean duration of 4.5 seconds while acoustic studies report average durations of 1.2 seconds, as the latter “includes only parts the parts during which respiratory changes occur and they cover only a smaller portion of the entire response” (p.23, Ruch, 2008).

Overall, there is consensus that laughter functions as a communicative signal, but different notions on the signals exist. Darwin (1872/1965) assumed on basis of his observations of animals and humans that laughter and smiling are expressions of joy and, thus, signal positive emotions. Van Hoof (1972) described laughter in primate infants as “relaxed open mouth display” that would appear in the context of non-serious interactions, also called the play face. On the contrary, others assumed that laughter might have a social-corrective function (e.g., Bergson, 1900/1914; Grammer & Eibl-Eibesfeldt, 1990) that contributes to identifying deviant behavior and correct it. Moreover, such corrections might support the consensus among them who laugh together at their target(s). Interestingly, studies support the existence of both positive and corrective signal functions (e.g., Curran et al., 2018). For example, there is robust evidence that laughter is a means to correct mistakes in workplace and professional settings (e.g., Coser, 1959; Keyton & Beck, 2010; Lynch, 2010) while shared laughter has been identified as a predictor of satisfaction in close relationships among friends and romantic couples (e.g., Kurtz & Algoe, 2015, 2017). Thus, considering the communicative signals that go along with smiling and laughter in interpersonal situations, it can be assumed that laughter contributes to establish, regulate, and maintain social relationships across contexts and degrees of intimacy, whether at the workplace, school, friendships, or in romantic relationships (for an overview see e.g., Wood & Niedenthal, 2018).

Taking the complexity of the behavioral phenomena of laughing and smiling into account, it is unsurprising that people differ in how they experience and react to laughter and smiling, when being the target of laughter, but also as bystanders (e.g., Bachorowski & Owren, 2001; Janes & Olson, 2000; Ruch & Proyer, 2008a, 2009a). However, the introduction of gelotophobia, gelotophilia, and katagelasticism as descriptors of stable interindividual differences in how people deal with ridicule and being laughed at contribute to inform research to understand laughter-related experiences on the intraindividual and interindividual level, particularly in the domain of social relationships, which is yet understudied. Based on the notion that laughter has social functions, I theorized that individual differences in the laughter-related dispositions would contribute to understand how people experience close relationships.

1.2.2 Discussing Prior Findings and Open Questions Regarding Gelotophobia, Gelotophilia, and Katagelasticism in Social Relationships

Initial findings support the notion that the three dispositions can be expected to play a role in social life. First, there is robust evidence that gelotophobia relates to self-ascribed loneliness and that the three dispositions relate differentially to indicators of parental attachment, which can be assumed to also affect the perceptions and experiences of close

others and relationships in adult life (e.g., Canestrari et al., 2019, 2021; Führ et al., 2015; C. L. Wu, Huang et al., 2019). In short, gelotophobes are characterized by an insecure attachment style, whereas gelotophiles are inclined toward secure attachment, and katagelasticism is unrelated from attachment. However, no study has yet examined whether the dispositions relate to *romantic* attachment (i.e., toward one's partner) and relationship-related constructs such as relationship satisfaction, neither in data from individuals nor in couples.

Secondly, a well replicated finding is that the fear of being laughed at goes along with a greater likelihood of being single, across all age groups (Forabosco et al., 2009; Führ et al., 2009; Platt & Forabosco, 2012; Platt, Proyer et al., 2009; Platt, Ruch et al., 2010; Ruch & Proyer, 2008a, 2009a). A more pronounced analysis of 148 older-aged (≥ 60 years) participants showed that the highest scores of gelotophobia were found in singles, particularly those who were actively seeking a partner, followed by those who were not seeking a partner. On the contrary, those in long-term relationships showed the lowest expressions in gelotophobia. Thus, the literature suggests that gelotophobia goes along with not entering a relationship although a subset of those singles report to desire establishing a committed romantic relationship. Interestingly, when Proyer, Estoppey, and colleagues (2012) tested the distribution of expressions in fear of being laughed at among a sample of 86 mothers and 68 fathers of adult children, 8.3% of the mothers and 1.5% of the fathers exceeded the gelotophobia cut-off for slight expressions. Hence, the data indicate that some gelotophobes do enter relationships.

Of course, it is unclear why some gelotophobes enter relationships and others do not. Since smiling and laughter are often shown to signal romantic attraction, joy, and positive emotions during dating (e.g., Montoya et al., 2018) one might speculate that gelotophobes might end the dating process when a potential partner smiles and engages in laughter, as they perceive this as ridicule. A similar mechanism has been already reported in the clinical domain, when gelotophobes reported to quit psychotherapy based on their perception of feeling ridiculed by their therapists' supportive smile (Platt et al., 2016). It could be argued that mechanisms such as assortative mating preferences and partner similarity (Luo, 2017) could play a role to buffer such a phenomenon and support gelotophobes in entering a romantic relationship; namely, when those with similar expressions in fear of being laughed at match⁸ and engage similarly as often (or as rarely) in laughing as their partner. While initial

⁸Also, the expressions in children were positively to parents' expressions in gelotophobia, gelotophilia, and katagelasticism (*rs* between .10 and .40). However, no study has yet decomposed the covariances into genetic

findings from Proyer, Estoppey et al. (2012) show a positive correlation among fathers' and mothers' gelotophobia ($r = .28$), no systematic analysis has yet tested the similarity in a well-powered sample of romantic couples. Also, although these findings provide initial support for the existence of partner similarity, the generalizability of these findings is limited by the participants' age, as they entered the study when their children were already adults. Thus, partners might have become similar over the course of their comparatively long-lasting relationships (Luo, 2017) and coefficients might be comparatively inflated. Further, parents with children only reflect a subgroup of relationships and findings of younger couples, non-married, and with or without children should be studied to generalize findings. While gelotophilia and katagelasticism are widely uncorrelated to relationship status, Proyer, Estoppey et al. also found inclinations to similarity among parents in gelotophilia ($r = .14$) and katagelasticism ($r = .24$). While these findings suggest the existence of partner similarity in the three dispositions, it is yet unclear whether similarity extends from the single dispositions to the full *profiles* of the three dispositions toward ridicule and being laughed at. The latter would indicate that partners are similar in the full spectrum of dealing with laughter as described by gelotophobia, gelotophilia, and katagelasticism. Thus, further research on the existence of partner similarity of the dispositions is needed.

In addition, it must be noted that prior research supports the notion that laughter and smiles play an important role for relationships, particularly for partner preferences and possibly assortative mating preferences: Numerous studies across the past 40 years have examined attributes that people desire in a potential partner and have identified “a partner that makes me laugh” as one of the most important qualities in a potential mate (see Brauer & Proyer, 2021c for an overview of the literature). Making someone actively laugh is a frequently used strategy to attract the interest of potential partners (see Montoya et al., 2018 for a meta-analysis) and data support the notion that laughing in response to such approaches signals romantic interest (e.g., Grammer, 1990). Taking the important role of laughter into account, I argue that people might have assortative preferences when it comes to dealing with laughter which reflect in couples' partner similarity in the three dispositions. Also, a frequently addressed question with regard to partner similarity is whether couples' similarity relates to their relationship satisfaction (e.g., Luo, 2017; Weidmann et al., 2016). This has not yet been addressed in the literature and poses an open research question.

Taken together, initial findings on the three laughter-related dispositions suggest that they might play a role for how people experience and engage in their romantic relationships. However, I argue that the domain of romantic life is still understudied with regard to the three dispositions toward ridicule and being laughed at and that standard research questions such as “Are partner similar in how they deal with ridicule and being laughed at?”, “Do the dispositions relate to one’s own and/or one’s partner’s satisfaction?”, “Do people accurately perceive their partner’s dispositions toward ridicule and being laughed at?”, and “Do relationship-specific variables affect the associations between the dispositions and outcomes in romantic relationships?” are yet unanswered to the best of my knowledge.

Thirdly, I argue that it is also important to examine the interpersonal perception of the three dispositions since perceptions of others are the basis for social life (see e.g., Kenny, 2020). At the time of planning and conducting this work, only Proyer, Neukom and colleagues’ (2012) study included ratings of gelotophobia, gelotophilia, and katagelasticism by others; namely, peers and teachers. They tested how the three dispositions relate to experiences of bullying in 386 6-to-9-year-olds and their multi-informant study design allowed to compare the self- and other views of how the students saw themselves when engaging in bullying or being the victim of bullying. In short, they found that gelotophobia goes along with greater experiences of being the victim of bullying and this converged well with teacher perceptions but not peer ratings; gelotophilia was unrelated to engaging in bullying and negatively related to experiences of being a victim of bullying; and katagelasticism was a potent predictor of engaging in bullying. Thus, using multiple sources of information contributed to the understanding of the dispositions in social settings. Their findings showed that self- and other perceptions can differ with regard to the dispositions but also to external variables. This shows the importance and predictive validity self- and other ratings. While research on the description, mechanisms, and effects of accurate perceptions of broad personality traits has received strong interest (see e.g., Kenny, 2020 for an overview), the knowledge on the interpersonal perception of the three dispositions is yet very limited. I argue that testing the accuracy of judgments of gelotophobia, gelotophilia, and katagelasticism is an important research avenue for extending the understanding of the dispositions in social life. Accurate inferences about the three dispositions in others might be an important factor when shaping one’s social life (e.g., Kenny, 2020; Neyer & Asendorpf, 2001). For example, a gelotophobic person might be inclined to spend time with someone who is similarly gelotophobic as them to ensure that both partners in a relationship experience ridicule and being laughed at in similar ways. Such decisions would require to accurately perceive gelotophobia in the social partner. As mentioned, at the time of planning this work,

no studies had hitherto systematically studied whether people can accurately infer expressions in the three laughter-related dispositions and I argue that it is important to begin this line of research by testing inferences among strangers and on basis of minimal information (so-called *thin slices of behavior*; Borkenau et al., 2004; Kenny, 2020). This allows to draw first conclusions on the question whether people can differentiate among perceptions of gelotophobia, gelotophilia, and katagelasticism in others at a minimal level. In case that inferences are accurate at zero-acquaintance the study of interpersonal perception should be extended from strangers to close others, especially romantic partners. The latter would also allow to learn more about their contribution to external variables over and beyond the effects of self-reports.

1.3 The Present Set of Studies and Research Aims

Initiating and maintaining social relationships is amongst the most important desires of humans (e.g., Baumeister & Leary, 1995) and this work seeks to extend the knowledge on the role of the three dispositions toward ridicule and being laughed at in social relationships. Considering that laughter has signal functions that contribute to people's interactions in social relationships and based on the initial findings that showed that the dispositions toward ridicule and being laughed at relate to subjective and objective indicators of relationships, I aimed at extending the study of gelotophobia, gelotophilia, and katagelasticism in relationships. To address this aim I conducted five studies that sought to study two broad domains of social relationships, namely, the interpersonal perception of the dispositions (Studies I and IV) and their role for romantic relationships (Studies II, IIIa, IIIb and IV). Further, I predominantly collected and analyzed dyadic data instead of relying on data collected from individuals to address the statistical and conceptual interdependence of social actors (Kenny et al., 2006). In the following I will give a brief overview on the five studies. Table 1 describes the main ambitions behind each study and their respective research questions.

1.3.1 Interpersonal Perception

As discussed, (accurate) perceptions of others are a prerequisite for social interactions (e.g., Funder, 1995; Kenny, 2020) and initial findings show the importance and differential associations of self- and other views on perceptions of outcomes such as bullying and victimization (Proyer, Neukom et al., 2012). Also, it has been speculated whether mate choices might be partly based on how they enjoy and engage in being laughed at and laughing at others (see e.g., Brauer & Proyer, 2021c; Grammer, 1990; Montoya et al., 2018; Wilbur & Campbell, 2011). Next to applications in the context of school and romantic relationships, one might argue that professional psychotherapists as well as laypeople might benefit from

Table 1*Overview of the Studies and Broader Research Questions Addressed in Each of the Studies*

Study	Main Ambition	Broad Research Questions
I	Interpersonal Perception at Zero-Acquaintance	Can people accurately perceive how people deal with ridicule and being laughed at from short self-descriptions? (1) Are observers' judgments correlated with targets' self-reports? (2) Do judges agree in their perceptions of targets' gelotophobia, gelotophilia, and katagelasticism? (3) Do judgments relate to a <i>behavioral</i> criterion of targets' dispositions? (4) Do linguistic cues relate to targets' self-reports (<i>cue-validity</i>) and judgments (<i>cue-utilization</i>); and do cue validities overlap with cue utilizations?
II	Relationship Satisfaction	(1) How are the dispositions and associated with facets of relationship satisfaction in couples? (2) Are partners similar in their dispositions? (3) Does partner similarity in the dispositions relate to satisfaction?
IIIa	Romantic Attachment and Relationship Status	Sample 1 (Singles and Partnered Individuals): (1) Can the associations between gelotophobia and singlehood from prior literature be replicated? (2) How are the dispositions localized in the dimensions of romantic attachment? (3) Have attachment styles indirect effects on the association between gelotophobia and singlehood? Sample 2 (Couples) (4) Testing associations between the dispositions and attachment intra- and interindividually (5) Testing indirect effects of attachment on the associations between the dispositions and satisfaction
IIIb	Romantic Attachment and Relationship Status (Replication Study)	Replicating findings of Study IIIa with a sample in which singles are oversampled
IV	Romantic Jealousy and Interpersonal Perception in Romantic Couples	(1) Testing whether self- and partner perceptions converge for the dispositions (2) Testing intra- and interindividual associations between the dispositions and romantic jealousy (3) Examining whether partner perceptions of the dispositions incrementally contribute to experiences of jealousy in couples

accurately perceiving how others deal with ridicule and being laughed at to adjust their laughter-related behaviors and expectations to others.

At the time of preparing this work, prior research has not hitherto studied whether the dispositions can be accurately perceived. To narrow this gap in the literature, I systematically analyzed the interpersonal perception of the three dispositions across two studies and three independently collected samples (see Table 1). Study I aimed at testing the accuracy of inferences of the dispositions at zero-acquaintance (i.e., ratee and rater are unknown to each other). Therefore, I conducted a thin slice study, in which targets (i.e., those who are judged by observers) provide *thin slices of behavior* on which basis judges (i.e., those give their impressions of targets) provide their impressions of the targets' impressions. In this type of study, targets provide a limited amount of information that reflects themselves; prior thin slices studies have used photographs of targets or their bedrooms and workplaces, video appearances, e-mail addresses, and creative writings as source of information for inferences on their personality traits (e.g., Back et al., 2008; Borkenau & Liebler, 1993; Gosling et al., 2002; Küfner et al., 2010; for an overview see Kenny, 2020). Prior findings have shown that the appearance of laughter is prevalent in short self-descriptions (e.g., lonely hearts advertisements; Ruch & Proyer, 2009a) and studies showed that self-descriptions allow for comparatively accurate inferences on broad and narrow personality traits (Borkenau et al., 2016; Proyer & Brauer, 2018).

In Study I, I used data from two independently collected target samples who provided self-reports in the standard instrument to assess the dispositions, as well as short textual self-descriptions (\leq five sentences) which were then presented to samples of ten judges respectively. Based on these data I examined Funder and West's (1993) three criteria to assess the accuracy of interpersonal perceptions: *Self-other agreement* informs about the overlap between self- and other views of the three dispositions; *consensus* informs about the degree to which judges agree in their perception of the targets, irrespective of how targets see themselves; and, *accuracy* informs about the association between external judgments and a more objective criterion of the targets' dispositions than self-reports. To address the latter, I collected diary data for consecutive 14 days in Sample 2 of Study I and examined the associations between judgments of the three dispositions and targets' diary data (aggregated across the two weeks). Therefore, I developed a behavioral record that would aim at assessing daily behaviors that are indicative of the three dispositions in line with K. D. Wu and Clark's (2003) approach to making personality traits assessable through daily diary records. This also satisfies the often demanded to examine behavior-related expressions of personality (e.g., Furr, 2009). Funder and West's criteria examine different facets of interpersonal perception

and allow to understand different aspects of perceptions; namely, the degree to which people's self-perceptions overlap with others' perceptions and also how others agree in their perception of a target. Additionally, I examined the existence of potential linguistic markers that might relate to the dispositions with quantitative text analysis (Pennebaker & King, 1999). This could contribute to the understanding of whether individual differences in the dispositions go along with individual differences in language use; as shown for other personality traits (e.g., Tausczik et al., 2010; Proyer & Brauer, 2018). Using Brunswikian lens model analyses (Brunswik, 1956) allows to estimate whether the utilization of potential markers in language use might contribute to understand the existence of accuracy.

Prior studies have shown that personality perceptions at zero-acquaintance are less accurate than amongst peers, partners, colleagues, and family members, but they are nevertheless consistently positive and above chance (e.g., Kenny, 2020). The decision to firstly examine the perception at zero-acquaintance has two merits: First, it allows to standardize the amount of information about the targets across judges and to examine the perceptions under controlled conditions. Secondly, if perceptions are accurate at zero-acquaintance and under minimal information, this would suggest that perceptions might play a role even at short interpersonal encounters that parallel real-life situations (e.g., first contacts among new co-workers, co-eds, and colleagues) and provide a basis for the further study of perceptions of the three dispositions in close relationships.

Study IV extended the research on inferences of dispositions in close relationships, namely, in romantic partners. There, I studied the criterion of self-other agreement and expected to find more accurate impressions than in the zero-acquaintance study. I based this assumption on the acquaintanceship effect, which describes that greater acquaintanceship allows judges to collect more information about targets (in this case one's partner) over time and reflects in more accurate judgments (e.g., Watson et al., 2000). As described in more detail in the following section, I also tested the incremental validity of the partner ratings in relation to outcomes, namely experiences of jealousy.

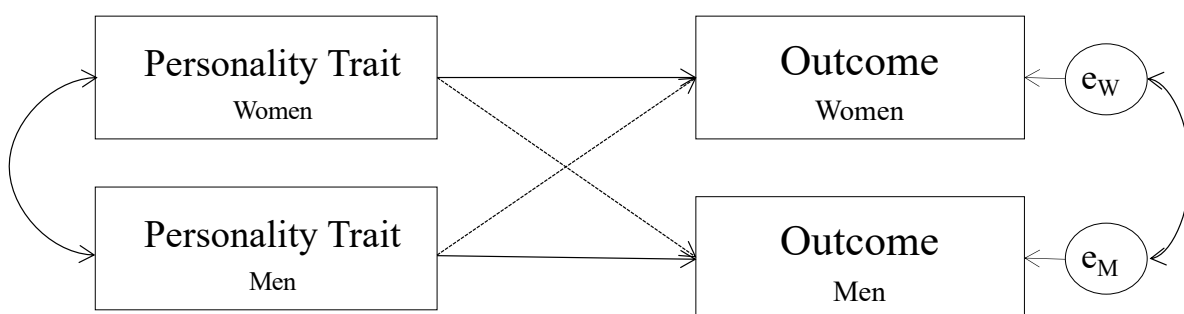
Taken together, testing the interpersonal perception of gelotophobia, gelotophilia, and katagelasticism in diametral types of relationships, in dyads of strangers (Study I) and romantic partners (Study IV), allows to derive initial conclusions on the degrees of accuracy of inferences of the laughter-related dispositions. Using differential approaches to accuracy (i.e., self-other agreement, consensus, and accuracy) and testing the incremental value of other ratings for associations with outcomes will allow to address the question of interpersonal perceptions of the dispositions through different lenses.

1.3.2 Romantic Relationships

The second set of studies (Studies II, IIIa, IIIb, and IV) concerns examining the role of the dispositions in romantic relationships. To address the study of relationships and partners' interdependence, I collected data from both partners of couples and employed dyadic data analyses. For the latter I predominantly used *Actor-Partner Interdependence Model* (APIM; Cook & Kenny, 2005) analyses and its extensions such as the *Actor-Partner Interdependence Mediation Model* (APIMeM; Ledermann et al., 2011) that allows to examine indirect effects of mediator variables. The APIM is a statistical model that simultaneously estimates the associations between both partners' predictor- and outcome variables, as well as their interdependence (i.e., correlations in their predictors and outcomes; Cook & Kenny, 2005). The APIM is illustrated in Figure 1. The model allows to examine two types of effects; namely, *actor effects* that describe the within-person associations (i.e., association between predictor of partner A and A's outcome; same for partner B) and more importantly the between-partner associations, so-called *partner effects* (i.e., association between partner A's predictor and their partner B's outcome). Thus, the APIM allows to examine associations between the dispositions and outcomes of both partners simultaneously.

Figure 2

Actor-Partner Interdependence Model



Note. – Actor effect. -- Partner effect. e = error terms.

1.3.2.1 Partner Similarity and Relationship Satisfaction (Study II). To my knowledge, Study II was the first systematic investigation of the dispositions in romantic couples. There, I collected data on the dispositions and relationship satisfaction (i.e., evaluations of one's relationship; Hassebrauck & Fehr, 2002) from opposite-sex couples and addressed several research questions (see Table 1). First, I examined the expressions of gelotophobia in a sample of couples, which allowed to re-examine whether those with

heightened expressions of gelotophobia indeed enter romantic relationships. If this is the case, this would provide the basis for future studies (cf. Studies IIIa and IIIb) who can examine whether relationship status would be predicted by gelotophobia and potential mediator variables. Secondly, I studied the partner similarity among partners' regarding the three dispositions. Therefore, I examined the trait wise similarity for each of the dispositions and the partner similarity among their full profiles of the dispositions (Furr, 2008). This allowed to describe whether partners in relationships are similar and could help to understand why gelotophobes might enter relationships and provide initial evidence on the notion that people have inclinations to have partners that are on average similar to oneself when it comes to dealing with laughter. Thirdly, I examined whether similarity is associated with relationship satisfaction (i.e., "are similar couples happier than dissimilar couples?"), as prior research found consistently positive but weak effects of similarity in broad personality traits for satisfaction (see Luo, 2017 for an overview). The findings would allow to examine the notion that similarity might relate to satisfaction. Fourthly, I tested the associations between the laughter-related dispositions and facet- and global indicators of relationship satisfaction by testing the actor- and partner effects of the dispositions.

Overall, the findings of Study II would provide initial knowledge on several indicators of interest with regard to romantic life; namely, the existence of partner similarity, associations between similarity and satisfaction, and the question whether the dispositions relate to one's own and one's partner's satisfaction. Considering that relationship satisfaction belongs to the most frequently and one of the most important indicators of well-being in relationships (e.g., Hassebrauck & Fehr, 2002) this would provide first evidence on whether individual differences in dealing with laughter plays a role in romantic relationships.

1.3.2.2 Attachment Styles (Studies IIIa and IIIb). I extended the research of the laughter-related dispositions in romantic relationships by three means in Study IIIa. First, I aimed at localizing the three dispositions in the dimensions of adult attachment styles, also labelled as romantic attachment (Hazan & Shaver, 1987; Mikulincer & Shaver, 2007). Attachment styles are "a constellation of knowledge, expectations, and insecurities that people hold about themselves and their close relationships" (p. 26, Fraley & Roisman, 2019). Attachment styles are also called inner working models of relationships, as these describe convictions about oneself and close others' behaviors and feelings in close relationships. Individual differences in romantic attachment are described among the two dimensions of *anxiety* (i.e., worries about the relationship and being rejected by one's partner) and *avoidance* (i.e., inclinations to avoid close relationships and experiencing unease in close relationships; Fraley et al., 2015). I argue that extending the knowledge on the dispositions in

relation to working models of relationships would contribute to understand how gelotophobes, gelotophiles, and katagelasticians approach and experience close relationships.

I tested the associations in two samples, namely, a sample of individuals consisting of singles and persons in relationships as well as romantic couples to address potential variance restrictions in the couples as those are typically more securely attached (i.e., less anxious and less avoidant) than random samples including singles (e.g., Mikulincer & Shaver, 2007). The couple data were again analyzed with the APIM. Secondly, the data from the sample of individuals was used to estimate the likelihood of being single as a function of gelotophobia to examine whether fear of being laughed at can robustly predict relationship status. Thirdly, I examined whether attachment styles might have indirect effects on the associations between the dispositions and relationship status in the sample of individuals (using parallel mediation logistic regression models) and on the associations between the dispositions and relationship satisfaction in couples (using APIMeMs) since the literature has shown that attachment relates to relationship status and relationship satisfaction (e.g., Butzer & Campbell, 2008; Feeney, 2002). Thus, testing indirect effects might contribute to the understanding of the direct associations between the dispositions and the tested outcomes of relationship status and -satisfaction.

In Study IIIb, I attempted to provide a replication study investigating the associations between gelotophobia and relationship status and the indirect effects of attachment in an independent sample of larger size and with singles oversampled. This allows to re-examine the findings provided in Study IIIa and providing a more robust data basis for the logistic regression analyses testing parallel mediation of attachment anxiety and avoidance.

Overall, Studies IIIa and IIIb allowed to examine the replicability of prior findings on gelotophobia and relationship status and extended the understanding of gelotophobes', gelotophiles', and katagelasticians' experiences in close relationships by addressing the role of internal working models of relationships theoretically, but also empirically by investigating their mediating effects.

1.3.2.3 Romantic Jealousy (Study IV). Finally, I studied the relations between the laughter-related dispositions and romantic jealousy. According to Pfeiffer and Wong (1989), jealousy describes cognitive, emotional, and behavioral reactions to the perceived or real threat to one's relationship. Prior research has shown that engaging in laughter and making others laugh are highly valued attributes that people wish for in long-term partners and that making others laugh attracts romantic interest (e.g., Buss, 1994, 2016; Buss & Barnes, 1986; Montoya et al., 2018). Accordingly, one might argue that one's jealousy relates to their *partners'* engagement in provoking being laughed at or laughing at others, and, thus,

expressions in gelotophobia, gelotophilia, and katagelasticism. Thus, collecting data from couples and using APIM analyses would allow to examine partner effects of the dispositions and jealousy, as well as, whether actors' expressions in the dispositions would relate to jealousy. Partner effects would be of particular interest for the study of the dispositions and jealousy, along with testing whether the dispositions relate to inclinations to romantic jealousy. Moreover, I extended this line of research by collecting partner ratings of the three dispositions (i.e., how one views their partner's gelotophobia, gelotophilia, and katagelasticism), as there is robust evidence that perceptions of one's partner hold incremental validity to partner's actual expressions assessed with self-reports⁹ (e.g., Connelly & Ones, 2010; Luan et al., 2019). Particularly the perceived threat in relationships (e.g., mate poaching) might relate to perceptions of the partner's inclinations to deal with laughter. Therefore, I extended the APIM toward using partner perceptions and examine whether these perceptions relate to jealousy over and above actor- and partner effects of self-ratings of the three dispositions. Also, collecting self- and partner ratings of couples allowed to extend the study of interpersonal perception of the dispositions to close relationships and add to the knowledge collected in Study I when testing the accuracy of judgments of the three dispositions at zero-acquaintance.

Prior research has shown that jealousy relates negatively to relationship satisfaction (e.g., Elphinston et al., 2011). As in Study IIIa, I conducted mediation analyses with the APIMeM (Ledermann et al., 2011) to examine whether jealousy might have indirect effects on the associations between the dispositions and relationship satisfaction. This would further extend whether narrower relationship-related indicators (cf. romantic attachment) could help to explain the associations between the dispositions and relationship satisfaction.

⁹Of course, self-reports are also subject to bias and only approximate true expressions of a person's trait expressions (e.g., Campbell & Fiske, 1959).

Study I

Judging Dispositions Toward Ridicule and Being Laughed at from Short Self-Descriptions at Zero-acquaintance: Testing Self-Other Agreement, Consensus, and Accuracy

Kay Brauer and René T. Proyer

Brauer, K., & Proyer, R. T. (2020). Judging dispositions toward ridicule and being laughed at from short self-descriptions at zero-acquaintance: Testing self-other agreement, consensus, and an accuracy criterion. *Journal of Research in Personality*, 89, 104016. <https://doi.org/10.1016/j.jrp.2020.104016>

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Author retains the right to use the accepted version of the manuscript for their further scientific career and to include the manuscript in their dissertation. In the printed version of the dissertation the article is displayed on pp. 42-81.

Abstract

We examined the accuracy of judgments of three dispositions toward ridicule and being laughed at in two thin slices studies. Participants ($N_{1/2} = 218/132$) provided short written self-descriptions (Study 2 also included diary data across 14 days). In each study, ten judges provided their impressions of the targets' dispositions based on targets' written self-descriptions. Computerized text analyses provided information on the presence and use of linguistic cues. We found robust self-other agreement on the single dispositions ($r \geq .19$) and profiles ($r \geq .18$), robust consensus among judges ($ICC \geq .39$), and the expected low correlations with the behavioral criterion ($r \geq .06$). How people deal with ridicule and being laughed at can be well perceived from minimal personal information.

Keywords: Accuracy; Consensus; Gelotophobia; Gelotophilia; Katagelasticism; Interpersonal perception; Self-other agreement

Study II

To Love and Laugh: Testing Actor-, Partner-, and Similarity Effects of Dispositions Towards Ridicule and Being Laughed at on Relationship Satisfaction

Kay Brauer and René T. Proyer

Brauer, K., & Proyer, R. T. (2018). To love and laugh: Testing actor-, partner-, and similarity effects of dispositions towards ridicule and being laughed at on relationship satisfaction. *Journal of Research in Personality*, 76, 165-176.

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Abstract

People differ in how they deal with ridicule and being laughed at along three individual differences variables; namely, the fear (gelotophobia) and joy (gelotophilia) of being laughed at and joy of laughing at others (katagelasticism). This study examines their associations with facets of relationship satisfaction (RS). Actor-Partner-Interdependence Model analyses of 154 heterosexual couples showed that gelotophobia was negatively associated with RS while gelotophilia (mainly in females) was positively related. Katagelasticism existed independently from RS, except for higher levels of disagreement. Further, romantic partners were robustly similar in their traits and profiles (overall and distinctive). The unique similarity-RS associations were positive but of small size. Overall, our findings support the notion that the dispositions are differentially related with facets of RS.

Keywords: Actor-Partner-Interdependence-Model; Fear of being laughed at; Gelotophobia; Gelotophilia; Katagelasticism; Laughter; Profile Similarity; Relationship Satisfaction

Study IIIa

Extending the Study of Gelotophobia, Gelotophilia, and Katagelasticism in Romantic Life Towards Romantic Attachment

Kay Brauer, René T. Proyer, and Willibald Ruch

Brauer, K., Proyer, R. T., & Ruch, W. (2020). Extending the study of gelotophobia, gelotophilia, and katagelasticism in romantic life towards romantic attachment. *Journal of Individual Differences, 41*, 86-100. <https://doi.org/10.1027/1614-0001/a000307>

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Abstract

Gelotophobia (fear of being laughed at), gelotophilia (joy in being laughed at), and katagelasticism (joy in laughing at others) describe individual differences in how people deal with ridicule and being laughed at. We study their association with romantic attachment styles and romantic outcomes in adults. Study 1 ($N = 247$) shows that gelotophobia goes along with higher expressions in attachment anxiety and -avoidance. This study also provides support for the notion that gelotophobes demonstrate a lower likelihood of entering romantic relationships (Odds Ratio = 0.62/0.64 for past/current relationship status). Gelotophilia goes along with lower avoidance and katagelasticism exists independently from romantic attachment. Study 2 replicates the findings in 154 heterosexual romantic couples using Actor-Partner Interdependence Model analyses. However, katagelasticism was related to greater attachment anxiety in this sample of couples. A mini-meta analysis using data from both studies ($N = 555$) clarified this association and showed that the joy in laughing at others yields a small positive association with attachment anxiety. Further, attachment styles mediate associations between the dispositions and relationship satisfaction in the couples. Overall, the dispositions are distinctively related with romantic attachment styles and our findings contribute to the understanding of the role of dealing with ridicule and laughter in romantic life.

Keywords: Attachment styles; Gelotophobia; Gelotophilia; Katagelasticism; Romantic relationships

Study IIIb**Gelotophobia in Romantic Life: Replicating Associations with Attachment Styles and Their Mediating Role for Relationship Status**

Kay Brauer and René T. Proyer

Brauer, K., & Proyer, R.T. (2020). Gelotophobia in romantic life: Replicating associations with attachment styles and their mediating role for relationship status. *Journal of Social and Personal Relationships*, 37, 2890-2897.

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Abstract

The fear of being laughed at (gelotophobia) plays a detrimental role in courtship (e.g., predicting a lower likelihood of entering a relationship) and romantic relationships (e.g., low relationship satisfaction). Gelotophobia correlates positively with anxious and avoidant romantic attachment. This study aims to replicate (a) the associations between gelotophobia and romantic attachment and (b) the mediating role of attachment in the association between gelotophobia and relationship experience using a sample of $N = 531$ participants ($M = 32.1$ years; 63.7% singles). Previous findings replicated well, as gelotophobia positively relates to avoidant and anxious attachment and lower likelihood of entering a romantic relationship. Contrary to earlier research, only anxiety mediated the association between gelotophobia and relationship status. We discuss the findings regarding the attachment framework of long-term singlehood.

Keywords: Attachment Styles; Gelotophobia; Laughter; Romantic Relationships

Study IV**Testing the associations between dispositions toward ridicule and being laughed at and romantic jealousy in couples: An APIM analysis**

Kay Brauer, Rebekka Sendatzki, and René T. Proyer

Brauer, K., Sendatzki, R., & Proyer, R. T. (2021). Testing the associations between dispositions toward ridicule and being laughed at and romantic jealousy in couples: An APIM analysis. *Journal of Personality*, *89*, 883-898.
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Abstract

Objective: How people deal with ridicule and being laughed at plays a role in romantic life.

We extend the research on the fear of being laughed at (gelotophobia), joy in being laughed at (gelotophilia), and joy in laughing at others (katagelasticism) by testing their associations with romantic jealousy and its consequences for relationship satisfaction (RS).

Method: Our study is based on Actor-Partner Interdependence Model (APIM) analyses of self and partner ratings of the laughter-related dispositions using data from 228 opposite-sex couples. APIM mediation analyses estimated indirect effects of jealousy on the associations between the dispositions and RS.

Results: As expected, gelotophobia related positively to jealousy in actors, whereas gelotophilia and katagelasticism showed differential relationships. The analysis of partner effects showed that the *actual* expressions in the dispositions are unrelated to jealousy but *perceived* expressions account robustly for experiences of jealousy beyond self-ratings. Finally, jealousy had indirect effects on the associations between the dispositions and RS.

Conclusion: These findings contribute to our understanding of the role of dealing with ridicule and laughter in romantic life. We embed the findings into the literature, discuss practical implications, and derive future directions to expand the knowledge on gelotophobia, gelotophilia, and katagelasticism in romantic life.

Keywords: Gelotophobia; Jealousy; Laughter; Relationship satisfaction; Ridicule; Romantic relationships

7 General Discussion

The main aim of this research was to extend the knowledge on intra- and interindividual differences in three dispositions toward ridicule and being laughed at, *gelotophobia* (fear of being laughed at), *gelotophilia* (joy in being laughed at), and *katagelasticism* (joy in laughing at others; Ruch & Proyer, 2009a). Therefore, I conducted five studies that addressed two important areas of social life, namely, testing the interpersonal perception of the three dispositions at different degrees of acquaintance (Studies I and IV) and in romantic relationships (Studies II, IIIa, IIIb, and IV).

7.1 Interpersonal Perception

As discussed, how people perceive others affects how they engage with others, how they perceive their motivations, interpret their behaviors, and finally how people interact with each other, irrespective of the degree of acquaintanceship (e.g., Funder, 1995; Kenny, 2020). Prior research has implied that how people perceive others' engagement in dealing with ridicule and being laughed at might be an important component of social interactions (e.g., Platt & Forabosco, 2012; Platt et al., 2009, 2016; Proyer & Neukom, 2013). To the best of my knowledge, Studies I and IV provided the first systematic investigation of interpersonal perceptions of the three dispositions toward ridicule and being laughed at, at the time of planning and conducting this work.

7.1.1 Accuracy at Zero-Acquaintance

I examined Funder and West's (1993) criteria of accurate perceptions for the study of interpersonal perception of the three dispositions, namely, self-other agreement (target-judge agreement), consensus (inter-judge agreement), and the associations between judgments with an accuracy criterion. For the latter, I developed a tentative 36-item behavioral record that assesses daily retrospective ratings that are indicative of gelotophobia, gelotophilia, and katagelasticism (the *PhoPhiKat-BR*) on basis of Wu and Clark's (2003) framework for the assessment of behavioral expressions of personality traits. For a more robust estimation of the behaviors, I collected and aggregated diary data across 14 days in Study I. Pre-studies and the findings from Study I suggest that the *PhoPhiKat-BR* provides a fruitful starting point for the assessment of daily self-reports that capture behaviors indicative of dealing with ridicule and being laughed at.

Study I addressed the question of interpersonal perception at zero-acquaintance and examined whether observers could infer how targets deal with ridicule and being laughed at from their short textual self-descriptions (\leq five sentences) across two independently samples of targets and judges. In short, the findings showed that (i) targets' self-reports systematically

and positively relate to observers' reports above chance and in the range reported for other comparatively narrow traits (e.g., adult playfulness; Proyer & Brauer, 2018), (ii) independent judges converge in their assessment of targets' dispositions, and (iii) observers' ratings are positively related to aggregated diary records (PhoPhiKat-BR), with typical small effect sizes that can be expected when considering the reduction of shared variance by combining informant ratings with behavior-related data (Campbell & Fiske, 1959; K. D. Wu & Clark, 2003). Beyond using dyadic data, the inclusion of a behavioral record also allowed to approximate behavioral expressions of the three dispositions (e.g., Furr, 2009).

Supplementary quantitative text analyses based on the Linguistic Inquiry and Word Count (LIWC; Pennebaker & King, 1999) showed that the dispositions are unrelated to word usage in terms of specific linguistic categories as captured by the LIWC. However, few exceptions existed when examining the usage of trait-related words such as "laugh" and "laughter," which were less prevalent in gelotophobes' self-descriptions, but their usage was positively linked to targets' self-reported gelotophilia. Moreover, judges utilized the occurrence of such linguistic cues for their inferences on the targets' gelotophobia and gelotophilia correctly, whereas they tended to wrongly infer that targets who used "laugh" and "laughter" in self-descriptions would be more katagelastic. Overall, Brunswikian lens model analyses (Brunswik, 1956) revealed that the majority of assessed linguistic cues were correctly utilized by judges (*sensitivity analyses*), again with few exceptions. For example, judges perceived targets as more gelotophobic when they used anxiety-related words (e.g., "worry") in their self-descriptions, although targets' self-reported gelotophobia did not relate to the use of anxiety-related words.

The findings replicated well across two independently collected samples and provided initial evidence that individual differences in the three dispositions (single traits *and* their full profiles even after controlling for the existence of stereotype effects; Furr, 2008) can be accurately perceived above chance even from minimal information. Thus, the findings from Study I suggest that short textual self-descriptions appear as useful thin slices of behavior that can be used for comparatively accurate inferences of how strangers deal with ridicule and being laughed at. Further, the linguistic analyses with the LIWC methodology and subsequent lens model analyses allow first insights into mechanisms that contribute to understanding people's inferences of others' expressions in the three dispositions by how they utilize certain cues. Prior research has shown that people tend to describe themselves with regard to laughter in naturalistic real-life contexts, as, for example, in lonely-hearts-ads (e.g., Ruch & Proyer, 2009a). However, it was hitherto unknown whether individual differences in dealing with

laughter could be accurately inferred from such short descriptions. The present research narrowed this gap in the literature by showing that how people deal with laughter is reflected in self-descriptions and can be perceived comparatively by others.

7.1.2 Accuracy in Couples

Prior research has provided robust evidence for the acquaintanceship effect, which describes that the accuracy of perceptions increases with the level of acquaintance and is highest among dyads comprising close others such as romantic partners, as an increase in time spent together allows judges to collect more information about the targets' traits (e.g., Kenny, 2020; Watson et al., 2000). Therefore, I examined the criterion of self-other agreement among couples in Study IV. This allowed to supplement the findings from Study I which tested the self-other agreement at zero-acquaintance.

As expected, I found the increased accuracy that one would expect due to the increased acquaintanceship showing that self-perceptions in the dispositions robustly align with perceptions by their partner. Also, these findings fit well into comparatively recent findings on the self-other agreement among well-acquainted dyads comprising friends and partners (Brauer & Proyer, 2021a). Thus, the findings support the existence of the acquaintanceship effect (e.g., Watson et al., 2000) for the dispositions. Moreover, and as discussed in the following section "Romantic Relationships," partner perceptions provide incremental value above and beyond self-reports of the three dispositions when predicting experiences of jealousy.

7.1.3 Conclusion

The findings from Studies I and IV on the interpersonal perception of the three dispositions have several important implications. First, the differential findings for the three dispositions again support the notion of the uniqueness of the three dispositions and that these are not redundant or, in the case of gelotophobia and gelotophilia, two opposites of the same dimension.

Secondly, forming accurate perceptions of others is an important prerequisite for social interactions, expectancies, and how people will behave toward others in forthcoming situations, irrespective of the degree of acquaintanceship among rater and ratee (Funder, 1995; Kenny, 2020). Even at low or no acquaintanceship, forming accurate impressions concerning how another person deals with laughter might contribute to romantic interest and the decision to meet a potential friend or partner (cf. Grammer, 1990; Luo, 2017), whereas accurately estimating how a close other such as the romantic partner deals with ridicule and being laughed at could be speculated to contribute to expectancies and actual behaviors that

affect one's own, partner's, and dyadic conflict and relationship climate. For example, by adjusting behaviors that prevent interpersonal conflict; for example, when a katagelastistic person tones down their inclinations to ridicule their partner. Also, recent research has shown that the accuracy of teachers' perceptions related to better performance in second-language learning, and it has been discussed that teachers might adjust their interactions and assignments to the students' preferences (e.g., Barabadi et al., 2021). It has been argued that gelotophobes might seek partners that are similar in their inclinations to not engage in laughter (e.g., Platt & Forabosco, 2012) and the present findings suggest that people can, on average, accurately perceive others' inclinations to gelotophobia, gelotophilia, and katagelasticism. Thus, the prerequisite to this notion is preliminary supported by the data. However, it must be noted that the present work was concerned with how individual differences in *targets'* disposition can be perceived accurately, but an important question that future research should address concerns the question whether interindividual differences in *judges'* expressions of the three dispositions relate to accurate judgments (e.g., Hall et al., 2016; Nestler & Back, 2017). For example, it is feasible that judges' gelotophobia relates to the accuracy of perceiving gelotophobia in others. This question has inspired ongoing research that addresses this question and extends the zero-acquaintance design used in this work by examining whether raters' individual differences in the three dispositions relates to the self-other agreement of gelotophobia, gelotophilia, and katagelasticism (Brauer, Iredale et al., 2022).

Thirdly, prior research has shown that dealing with laughter are also reflected in partner preferences: There is robust evidence that women prefer men that show inclinations to making others laugh, whereas men desire women who laughs at their humorous output (e.g., Hone et al., 2015; Wilbur & Campbell, 2011, for an overview, see Brauer & Proyer, 2021c). Moreover, the study of romantic partners (Study IV) has shown that partner *perceptions* of the dispositions robustly relate to one's jealousy over and above actor- and partner effects of self-reports when it comes to the three laughter-related dispositions, and, thus, highlighting the importance of perceptions of how others deal with ridicule and being laughed at.

I argue that this provides a fruitful starting point for future research that could revisit the study of the dispositions for contexts in which social interactions play an important role, for example, when investigating the role of self- and other-perceptions of the dispositions in relation to bullying-type situations, experiences of bullying and victimization, and nominations of who acts as bully and who is perceived as victim. While initial research has shown that self-, peer, and teacher views contribute differentially to predict roles of bullies,

victims, and bystanders by gelotophobia, gelotophilia, and katagelasticism (e.g., Proyer, Meier et al., 2012; Proyer, Neukom et al., 2012), investigating the relationships with a focus on the consequences of accurate and inaccurate perceptions in relation to experiences of bullying and victimization might provide more insight into the social consequences of the dispositions. The latter might be particularly of interest for gelotophobia and katagelasticism when considering that gelotophobes might perceive being ridiculed sometimes in terms of a “false alarm,” that is not convergent with others’ intentions and actual behaviors (cf. Platt et al., 2016). Also, katagelasticists might not be aware of how they are perceived (i.e., their reputation), which might contribute to understand why they overstep social boundaries to a degree that harms their relationships, by hurting others through their engagement in directing laughter and ridicule at them (e.g., Ruch & Proyer, 2009a). Considering that research has shown that inaccurate perceptions of reputation can have detrimental consequences, particularly by increasing interpersonal conflict (e.g., Carlson et al., 2017; Gallrein et al., 2013, 2016), the study of accurate and inaccurate perceptions might extend the role of the interpersonal perceptions and its consequences regarding gelotophobia, gelotophilia, and katagelasticism.

7.2 Romantic Relationships

The study of gelotophobia, gelotophilia, and katagelasticism in romantic life addressed the examination of partner similarity in the three dispositions and their associations with relationship satisfaction in romantic couples (Study II), before localizing the three dispositions in constructs that play a major role in how people experience and behave in romantic relationships, namely, romantic attachment styles (Studies IIIa and IIIb) and romantic jealousy (Study IV). In extension, Studies IIIa, IIIb, and IV examined whether attachment and jealousy might have indirect effects on relationship-related variables such as relationship status (Studies IIIa and IIIb) and relationship satisfaction (Studies IIIa and IV). To my knowledge, this research was the first to address the role of the three dispositions toward ridicule and being laughed at with regard to romantic life by systematically collecting and analyzing data from couples with dyadic data analyses (Kenny et al., 2006).

7.2.1 Partner Similarity

The findings from couples in Study I showed that there is robust partner similarity when it comes to dealing with ridicule and being laughed at. This applies to similarity in single dispositions (trait wise similarity; variable-centered approach) and profiles of the three dispositions (profile similarity; couple-centered approach), also after controlling for stereotype effects (Furr, 2008). Data from an independently collected sample of couples in

Study IV showed that the similarity coefficients replicated well, with effect sizes that align with reports on broad and narrow traits in couples (e.g., Luo, 2017; Proyer et al., 2019). It must be noted that the effect size for gelotophobia was on the lower end of expectations in Study IV, but this might be affected by the choice of using an abbreviated form of the instrument (PhoPhiKat-30; Ruch & Proyer, 2009a), which assesses the full range of gelotophobia with limitations.

Taken together, people have on average a partner that resembles them in expressions of fear of being laughed at, joy in being laughed at, and joy in laughing at others. As discussed previously, this might have beneficial effects, as it could reduce conflict and help maintain relationships, or even support establishing a relationship in the initial phase of relationship formation. This could be particularly relevant for gelotophobes, who have been speculated to quit the dating process when matching with a dissimilar partner who enjoys engaging in laughing and being laughed at due to their misinterpretations of smiling and laughing as putting them down through ridicule (cf. Platt et al., 2016). The sample contained participants who showed elevated expressions in gelotophobia (according to the cut-offs provided by Ruch, Hofmann et al., 2014), and thus, gelotophobes appear to enter relationships. It might be assumed that similarity plays a role for gelotophobes, but this should be studied more thoroughly in future research.

When testing whether similarity relates to greater satisfaction, I found that partners' similarity in the profiles in the dispositions related to higher self-reported relationship satisfaction over and above actor- and partner effects (main effects). This fits into prior findings showing that shared laughter (and shared non-laughing) in couples is indicative of relationship satisfaction when studying natural interactions of couples (Kurtz & Algoe, 2015). However, the mechanisms and directions of the effects are yet unclear. For example, it is unclear how similarity changes over the course of the relationship and whether there is initial partner similarity, or assortative mating, at the on-set of the relationship, or if partners converge in their inclinations to deal with laughter over time. Longitudinal research is needed to address this issue, since between-couple comparisons on basis of cross-sectional data are not suited to address this question properly (for a discussion see Brauer, Sendatzki, & Proyer, in press).

Finally, the findings on partner similarity might contribute to further expand the knowledge on the genetic component and heritability of the dispositions, which has been suggested in Ruch, Hofmann et al.'s (2014) model describing putative causes of gelotophobia. The initial evidence on the non-random partner similarity concerning the phenotypical

characteristics of dealing with ridicule and being laughed at could contribute to explain the heritability of the traits and initial findings on the similarity correlations among (adult) children and their parents by Proyer and Neukom (2013). Future research might address this research question by using appropriate designs that allow to decompose influences of genetic, environmental, and assortative mating (e.g., Borkenau et al., 2001; Vinkhuyzen et al., 2012).

7.2.2 Relationship Satisfaction

The localization of the three dispositions in indicators of relationship satisfaction, attachment styles, and romantic jealousy showed again differential associations concerning intraindividual- (actor effects) and interindividual (partner effects). In short, Actor-Partner Interdependence Model (APIM; Cook & Kenny, 2005) showed that gelotophobia was negatively associated with indicators of satisfaction, gelotophilia in women related to higher sexual satisfaction and fascination toward the partner, and katagelasticism related robustly to greater conflict in actors. For partners, women's gelotophobia related to less sexual satisfaction of their partner, women's gelotophilia related to higher sexual satisfaction of their partner, and partners of katagelasticians reported more conflict. These initial findings considering both partners' reports highlight that individual differences in dealing with ridicule and being laughed at relate to how people experience their relationship concerning their overall satisfaction with the relationship but also specific aspects such as sexual satisfaction, mistrusting one's partner, and experiencing conflict in couples, as understood in current multi-dimensional models of relationship satisfaction (e.g., Hassebrauck & Fehr, 2002; Siffert & Bodenmann, 2010).

While these findings provide an initial understanding of the associations between the three laughter-related dispositions feeling satisfied in couple relationships, Studies IIIa, IIIb, and IV extended the knowledge by examining internal working models of relationships (romantic attachment; Hazan & Shaver, 1987) and romantic jealousy (Pfeiffer & Wong, 1989) and their indirect effects on the associations between the dispositions and relationship satisfaction.

7.2.3 Attachment Styles

Studies IIIa and IIIb extended the research on the dispositions in romantic life and showed that gelotophobia is characterized by high expressions in attachment anxiety and attachment avoidance. Thus, gelotophobes can be described as insecurely attached (Hazan & Shaver, 1987). This fits well with notions put forward in the putative model of causes, consequences, and antecedents of fear of being laughed at (Ruch, Hofmann et al., 2014), because expectations toward close others and relationships as expressed in attachment styles

are typically formed on basis of experiences during early childhood and throughout adolescence (e.g., Fraley & Roisman, 2019). Ruch, Hofmann et al. (2014) argued that gelotophobes experienced being put down by being ridiculed through attachment figures such as parents, but also peers, and that this contributes to the development of fear of being laughed at. One might also argue that there is some degree of overlap and co-development between the fear of being laughed at and the development of attachment styles through experiences with close others.

However, the studies showed that some gelotophobes do enter relationships and while the similarity mechanism discussed in Study II might contribute to them feeling safe in their relationship, adaptations of their attachment style on basis of recent experiences with the romantic partner could also play a role. The literature on attachment styles has provided evidence that attachment styles are malleable and that positive interpersonal experiences can reduce inclinations to avoidance and anxiety in relationships (Fraley & Roisman, 2019). Again, longitudinal studies could examine the co-development and interactions of gelotophobia and attachment styles to gain a further understanding of the development and adjustment of internal working models of close relationships for gelotophobes. Finally, mediation analyses with Actor-Partner Interdependence Mediation Model (APIMeM; Ledermann et al., 2011) showed the indirect effects of attachment styles on the associations between gelotophobia and relationship satisfaction in couples (Study IIIa), with negative indirect effects on both actors' and partners' relationship satisfaction. These indirect effects suggest that attachment models might help us further understanding how gelotophobes experience close relationships. Also, in samples comprising singles as well as participants in relationships, gelotophobia predicted relationship status negatively, currently and over the lifetime (i.e., "have you ever been in a relationship?") in Studies IIIa and IIIb. This aligns very well with prior findings showing that gelotophobia is higher in singles (Ruch & Proyer, 2009a; Platt & Forabosco, 2012; Platt et al., 2010). Moreover, attachment styles yielded indirect effects on the gelotophobia-relationship status association, which replicated well across Studies IIIa and IIIb and highlighted again the role of considering gelotophobes' representations and expectations concerning how they perceive close relationships.

Gelotophilia was characterized by low attachment avoidance and katagelasticism was unrelated to attachment. In couples, attachment avoidance had a minor indirect effect on the association between gelotophilia and relationship satisfaction, as those higher in gelotophilia showed less avoidance, which in turn related to higher satisfaction in their partners. For katagelasticism a minor indirect effect existed for attachment avoidance on the association

with relationship satisfaction for actors. Thus, APIMeM analyses showed the importance of extending the study of the dispositions to narrow and relationship-specific constructs to better understand their associations with relationship satisfaction. Finally, joy in laughing at others and -being laughed at were unrelated to relationship status in the mixed samples.

Taken together, it could be argued that gaining an understanding of how the dispositions relate to internal working models of close relationships contributes how gelotophobes, gelotophiles, and katagelasticists experience, approach, and behave in romantic relationships, as the findings on indirect effects highlighted. Future research utilizing this initial knowledge for testing longitudinal trajectories of developments of attachment and the dispositions and their effects of indicators such as relationship satisfaction and relationship status will hopefully be able to implement this knowledge into potential interventions that might support people in increasing their well-being in relationships. Considering the developmental aspects, such interventions might be effective at different life stages, whether it be at an early age and adolescence during interactions with parents and peers, or in existing relationships in individual and couple-therapeutic interventions alike.

7.2.4 Romantic Jealousy

Study IV examined the role of individual differences in romantic jealousy (i.e., perceived threat to one's relationship; Pfeiffer & Wong, 1989) in connection to the three dispositions toward ridicule and being laughed at. Based on the notion that "making others laugh" and "laughing at others" can be behavioral expressions of communicating romantic interest and are desired traits in potential partners (e.g., Buss, 2016; Montoya et al., 2018), I expected that the laughter-related dispositions would relate to jealousy in partnerships. Thus, of particular interest were the study of partner effects. In addition, I collected ratings on the partner perceptions of the dispositions (i.e., how does one perceive their partner's dispositions) to examine whether such perceptions would relate to jealousy.

A first localization of the dispositions in the dimensions of Pfeiffer and Wong's (1989) dimensions of cognitive, emotional, and behavioral jealousy showed that gelotophobes were characterized by inclinations to all types of jealousy, gelotophiles showed less emotional jealousy but higher cognitive and behavioral jealousy (women), and katagelasticists were characterized by greater cognitive and behavioral types of jealousy. Against expectations, partners' jealousy was unrelated to the dispositions with the exception that men reported greater cognitive jealousy when their partner was high in gelotophilia. However, the inclusion of partner ratings supported the notion that *perceptions* of one's partner's expressions in the laughter-related dispositions relates to jealousy, as men reported stronger jealousy when they

perceived their partner to enjoy being laughed at *and* when enjoying laughing at others. Finally, APIMeM analyses showed indirect effects, with jealousy mediating the gelotophobia-satisfaction associations in actors but also *partners*. For gelotophilia and katagelasticism, cognitive jealousy yielded indirect effects for actors.

Using the same analytic rationale as in the studies of romantic attachment (Studies IIIa and IIIb), Study IV extended the knowledge on how gelotophobes, gelotophiles, and katagelasticists experience and perceive their relationships with the focus on romantic jealousy (i.e., reactions to imagined or real relationship threats; Pfeiffer & Wong, 1989). Analyses of indirect effects of jealousy for the associations between the dispositions and relationship satisfaction expanded the knowledge on what contributes to the fact that dealing with laughter relates to satisfaction in couples. Moreover, the inclusion of partner perceptions which explained individual differences in jealousy after controlling for actor- and partner effects of self-reports of the dispositions highlight the interpersonal nature of the dispositions and that their effects for social relationships are not limited to self-perceptions but also exist for *interpersonal* perceptions. The inclusion of other ratings appears to be a fruitful research avenue for future research on the dispositions in social relationships. This further corroborates the notion put forward in the discussion concerning the role of accurate perceptions when it comes to dealing with ridicule and being laughed at, namely, to investigate how accurate and inaccurate interpersonal perceptions might contribute to interpersonal conflict and other detrimental consequences for their social relationships (e.g., Platt et al., 2016; Proyer & Neukom, 2013; Proyer, Estoppey et al., 2012; Proyer, Neukom et al., 2012). The finding that partner perceptions provide robust effects over and beyond self-reports also could inspire future research that could re-examine the question of partner similarity with regard to *perceived similarity* and *assumed similarity* (e.g., Decuyper et al., 2012). Prior studies have shown that convergence in perceptions of one's partner are oftentimes numerically stronger than similarity in self-reports (often called actual similarity). Moreover, Decuyper et al.'s (2012) findings showed that partner similarity in perceptions has stronger effects on relationship satisfaction than actual similarity.

In conjunction with the findings from interpersonal perception and the relative importance of partner perceptions, future research might extend the study of partner perceptions also toward ideal partner perceptions to account for actor-, partner-, and dyadic effects of self-, partner-, and ideal partner reports when it comes to dealing with ridicule and being laughed at. Thus, one could argue that *ideal* partner perceptions (i.e., how does one desire their partner to deal with ridicule and being laughed at) could enhance the descriptions

and effects of differential parameters of similarity; namely, by testing different indices of similarity, such as the degree to which one's partner resembles one's *desired* ideal partner, the degree to which one *perceives* one's partner to resemble one's desired ideal partner etc. This approach would also allow to examine whether overlap (or similarity and agreement) among those levels of perceptions relate to relationship satisfaction independently from each other. Research addressing the questions of actor-, partner-, and dyadic effects of self-, partner-, and ideal partner perceptions of the three dispositions is underway and I expect that this will shed further light on the role of perceptions of the dispositions in romantic relationships (Brauer, Sendatzki et al., 2021). The findings from these studies and the dyadic methodologies might provide a contribution for future research on perceptions of the dispositions and could inform research on dealing with ridicule and being laughed at to other types of social relationships (e.g., among colleagues, friends, and student-teacher dyads).

7.2.5 Conclusion

Taken together, the set of studies II to IV expanded the knowledge of the dispositions by examining their role in romantic life. To my knowledge, this was the first research systematically collecting and analyzing dyadic data. The findings showed that there is considerable interdependence in single dispositions and their profiles among romantic profiles that should be methodologically and theoretically considered when drawing inferences on their role in relationships. This might also be seen as a first step in further investigating the notion of genetic influences, heritability, and assortative mating put forward in Ruch, Hofmann et al.'s (2014) model of putative causes and antecedents of gelotophobia, as well as considering genetic heritability, but also shared environments of family systems in the development of gelotophilia and katagelasticism. Moreover, the APIM analyses showed not only the existence of dyadic effects as shown in the description of partner similarity and its associations with relationship satisfaction, but also the existence of actor- and partner effects indicating that one's expressions in the dispositions are also related to the *partner's* outcomes. Study IV also supported the notion that not only self-reports yield associations with actors' and partners' relationship variables, but that *perceptions* of one's partner's dispositions contribute to explain how one experiences relationships, as shown with the criterion of jealousy.

Studies IIIa, IIIb, and IV showed that the localization of the dispositions into relationship-related constructs also contributes to identify potential mechanisms that might affect the relations between the dispositions and relationship satisfaction. The present data are limited by their cross-sectional nature, thus, not allowing for causal conclusions, but when

considering the theoretical status of the variables in the proposed mediation models, the findings give preliminary hints to the existence of indirect effects that help to understand how and why gelotophobia, gelotophilia, and katagelasticism are associated with evaluations to relationships and their levels of satisfaction, as well as understanding why gelotophobes might experience difficulties in establishing relationships (cf. Studies IIIa and IIIb). Each of the studies offered new insights and knowledge how the dispositions relate to important indicators of relationships and facets that people value and experience in romantic life.

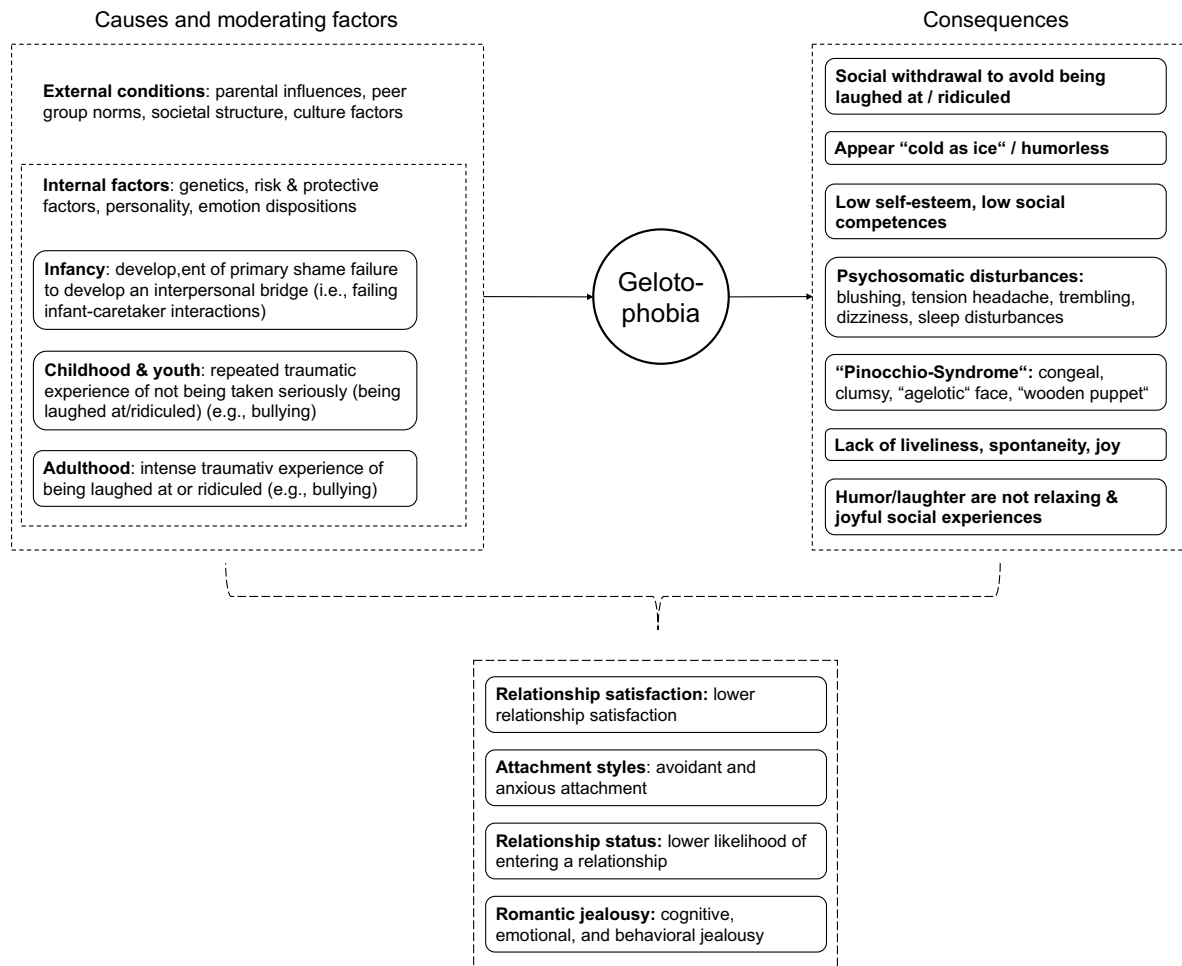
In each study, I discussed and gave outlooks for possible implications for future research and practical applications (e.g., in couple therapy), extensions to interpretations of prior findings such as the robust and well-replicated finding that gelotophobes are more likely to be (and stay) single over long periods of their lives (e.g., Platt & Forabosco, 2012; Platt et al. 2010; Ruch & Proyer, 2009a). Considering the findings from Studies II to IV, I propose to extend the model of the putative causes and consequences of gelotophobia (Ruch, Hofmann et al., 2014) with regard to romantic relationships.

Figure 3 shows the revised model that proposes to consider the links between the putative causes and consequences to the indicators of relationships tested here, namely, their associations with relationship satisfaction, attachment styles, relationship status, and romantic jealousy. For example, as discussed in Studies IIIa and IIIb, this model suggests to consider links between early childhood experiences of being laughed at by close others (e.g., friends and parents), might contribute to shape internal working models of close relationships, and relate to the consequences put forward by Ruch, Hofmann et al. (2014; e.g., low self-esteem and social withdrawal), but also translate into consequences for relationships in adult life (e.g., developing an insecure attachment style) that contributes to experience less relationship satisfaction or, for some gelotophobes, not entering relationships.

Note that the model's relationship components are selected on basis of the studies conducted in this work and, thus, not extensive. Also, the present findings from Studies II to IV are based on data from opposite-sex couples and although the majority of effects were unrelated to gender, future research must establish the invariance of effects for other combinations with regard to gender (e.g., same-sex couples) and types of relationships (e.g., open relationships) to generalize the findings to all kinds of romantic relationships. Also, the notion that the relationship indicators might be "affected" by the causes, moderating factors, and consequences put forward in Ruch, Hofmann et al.'s initial model were not tested empirically because the data collected in this research were of cross-sectional nature and do not allow for causal inferences. Moreover, the analyses of indirect effects in Studies IIIa to IV

Figure 3

An Extension of the Revised Model by Ruch, Hofmann, Platt, and Proyer (2014) Linking Putative Causes, Moderating Factors, and Consequences of Gelotophobia to Indicators of Romantic Life in Opposite-Sex Couples



cannot clarify the theoretical status with regard to causal ordering, and, thus, it is hitherto unclear whether, for example, early childhood experiences form attachment styles that *lead* to decisions regarding entering a relationship would subsequently *affect* one's relationship satisfaction.

Although no theoretical models on the development of gelotophilia and katagelasticism have been suggested yet, I argue that, similarly to gelotophobia, a pattern of genetic and psycho-social environmental relationship variables might explain the development of gelotophilia and katagelasticism that subsequently could also translate into how people experience and engage in relationships. It would be desirable that this tentative model informs future research that examines the longitudinal effects for the suggested

components and considers extensions to relationship-relevant constructs that are yet not studied. For example, one might argue that dealing with ridicule and being laughed at could be related to how people deal with stressors on the individual level as well as on the couple level (e.g., Bodenmann, 2005; Herzberg, 2013). I hope that the present research contributes to initiate and inform further research acknowledging and investigating individual differences in fear of being laughed at, joy in being laughed at, and joy in laughing at others in romantic relationships.

7.3 General Conclusions and Implications

Based on the notion and prior findings showing that laughter has a communicative function, and thereby a social function (e.g., Darwin, 1872/1965; Ekman, 2003), I investigated individual differences in how people deal with ridicule and being laughed at (gelotophobia, gelotophilia, and katagelasticism; Ruch & Proyer, 2008a, 2009a) in two major domains of life that are characterized by social interactions, namely, their interpersonal perception and their role in romantic relationships.

The findings of each study corroborated the notion that intra- and interpersonal differences in dealing with laughter are related to indicators of accurate perceptions and various indicators of experiences of relationships and relationship status. While Studies I to IIIb examined perceptions and couple relationships separately, Study IV integrated both approaches and showed the incremental value by additionally considering *perceptions* of one's partner's dispositions to learn more about the role of the dispositions in relationships. The studies showed that dealing with ridicule and being laughed at is not only related to outcomes within persons but that there is also spillover to one's partner's outcomes (i.e., partner effects in APIM and APIMeM analyses). Moreover, the relationships are characterized by unique dyadic aspects such as partner similarity in dealing with ridicule and being laughed at, which also account for *dyadic* effects (cf. Kenny et al., 2006), here, for relationship satisfaction. The existence of partner- and dyadic effects also indicates that social relationships and interactions comprising dealing with laughter are more than the sum of what each actor contributes to the dyad. In addition, Study IV showed that perceptions of the three dispositions offer incremental contributions beyond actors' and partners' self-reports.

Taken together, this set of studies highlighted that the laughter-related dispositions do not operate only on the individual level but also in interactions with others and social relationships, as shown in the existence of actor-, partner-, and dyadic effects. Accordingly, I argue that the laughter-related dispositions should also be investigated and understood within the context of social contexts to derive a more comprehensive understanding of the

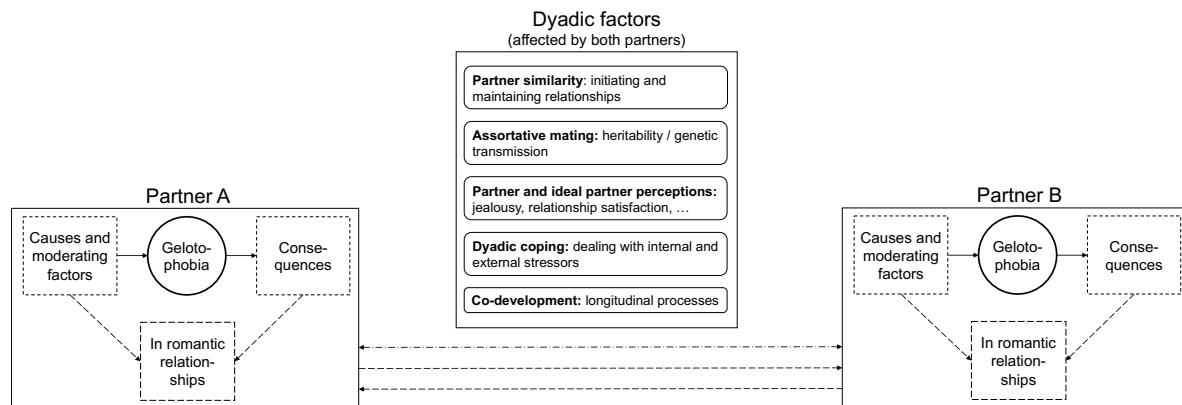
antecedents, putative causes, and consequences of gelotophobia (Figure 3) as well as gelotophilia and katagelasticism alike.

7.3.1 A Dyadic Understanding of Dealing with Ridicule and Being Laughed at

I argue that the individual components suggested by Ruch, Hofmann et al.'s (2014) model describing putative causes and consequences for individuals contribute to dyadic relationships by also shaping dyadic characteristics when it comes to dealing with ridicule and being laughed at. For example, there is robust evidence for the notion of personality×environment interactions and that people tend to select their social environment (e.g., friends and partners) in accordance with their personality traits, and longitudinal findings show that the dyadic interdependence also contributes to shaping personality of both dyad members over time through personality-relationship transactions (e.g., Mund & Neyer, 2014; Neyer & Asendorpf, 2001; Neyer et al., 2014). This has been empirically tested in the framework of the broad big five personality traits, but it is feasible that the theoretical framework could be applied to the narrower traits of gelotophobia, gelotophilia, and katagelasticism.

In line with the notion of personality-relationship transactions, I argue that inclinations to deal with ridicule and being laughed at might also be affected through their relationships. Future research should examine this notion and examine third variables that mediate such transactions that contribute to shape how one deals with ridicule and being laughed at, but also with regard to variables that describe experiences in relationships. For example, attachment styles are malleable and affected by experiences in relationships (e.g., Fraley & Roisman, 2019). Thus, the co-development of the dispositions and relationship traits over time and dyadic transactions could further expand the description of expressions in gelotophobia, gelotophilia, and katagelasticism for individuals under consideration of their social environment.

As noted, dyadic effects describe interactions between actors that are unique to the dyad and are typically more than the mere sum of the parts that each dyad member contributes to the couple. Based on this notion, I argue that a higher-model theoretical model of dealing with ridicule and being laughed at can be proposed, that considers both dyadic partners' causes, moderating factors, and consequences contributing to dyadic factors and relationship characteristics. I suggest a tentative dyadic model of the fear of being laughed at in Figure 4, which considers *dyadic* factors that are unique to their relationship on grounds of both partners' *individual* expressions in gelotophobia, which were developed through shared and non-shared factors throughout each of the actor's personal life history.

Figure 4*A Model of Interactive Effects of the Fear of Being Laughed at (Gelotophobia) in Dyads*

While this proposed model is based on Ruch, Hofmann et al.'s framework of gelotophobia, I argue that the broader idea can be applied to the dispositions of joy in being laughed at and joy in laughing at others as well.

In the tentative dyadic model (Figure 4), I suggest considering dyadic factors that have been investigated and discussed in the present set of studies. For example, while the roles of partner similarity and partner perceptions have been studied empirically, future research on the existence of assortative mating and incremental values of ideal partner perceptions is hitherto missing. Further, the list of the dyadic factors is not exhaustive and should be viewed as an outlook for future research on the role of the dispositions in social relationships. For example, it would be desirable to further examine the role of partner similarity longitudinally. This would allow to address the question whether partners are similar at the beginning of their relationship, which would speak for the existence of assortative mating preferences when it comes to the three dispositions, or whether partners change (e.g., converge) in their similarity over time (e.g., on basis of co-developmental processes). Also, the question of similarity would be connected to neighbor research areas of interest, showing the joint cores of the broader topics of perceptions and relationships studied here: If assortative mating preferences exist, drawing accurate inferences about potential partners' dispositions is a pre-requisite to find a partner with similar expressions in the profiles of the three dispositions. Study I has shown that people can on average draw above chance conclusions about others' dispositions and their profiles from comparatively minimal information, and thus, the interpersonal perceptiveness might support finding a similar partner. Also, Studies II and IV showed that partners are robustly similar in the single dispositions and their profiles. A long-term

consequence of partner similarity (or assortative mating) might relate to the heritability of the dispositions (see e.g., Ruch, Hofmann et al., 2014).

I argue that the individual and social components in which the three dispositions are expressed are intertwined and that extending the knowledge in one of both areas allows to learn more about the other, as, for example, the study of dyadic similarity in parents and individual expressions of their offspring can expand the knowledge on the heritability of the dispositions. Proyer, Estoppey et al. (2012) were paragons in testing the associations between phenotypical expressions of the dispositions among adults, their parents, and siblings, and found positive interdependencies. In the long-term, studies disentangling shared and non-shared environmental factors for the development of the dispositions are desirable for future research.

Another research avenue could extend the study of the role of partner perceptions in conjunction with ideal partner preferences. This could include testing their overlap within and between partners and their associations with outcomes such as relationship satisfaction. Testing all perceptual levels simultaneously in couples would help extending and disentangling the contributions of accurate perceptions, partner preferences, and blind spot biases in perceptions of the dispositions for romantic relationships (e.g., Carlson, 2016; Gallrein et al., 2013, 2016). Also, one could argue that how partners deal with ridicule and being laughed at might relate to how they approach individual and dyadic stressors (e.g., Bodenmann, 2005; Herzberg, 2013). Considering that couples' *shared* laughter (as opposed to only one partner laughing) have been identified as one indicator of relationship satisfaction (Kurtz & Algoe, 2015) and it could be expected that similar ways of dealing with laughter relate to better common coping.

Finally, it must be noted that these considerations are exemplified and described for the case of opposite-sex romantic relationships, but the rationale and assumptions discussed here might be translated to same-sex- and other types of relationships as well. For example, the study of friendships and parent-children relationships should be considered. Also, the relationship-based model might be adapted to more formalized relationships such as between colleagues at work. Taking the role of laughter at the workplace into account (e.g., Lynch, 2010), the model might also be applied and adapted for workplace relationships.

In conclusion, the findings of this research showed the differential associations between gelotophobia, gelotophilia, and katagelasticism with numerous relationship-related outcomes on the level of actor-, partner-, and dyadic effects across five studies and highlighted that the consideration of the three laughter-related dispositions extends the

understanding of social relationships in the domains of interpersonal perceptions of others and how people experience their romantic relationships. It would be desirable that future research further investigates the three dispositions by extending the methodological approaches, considering cross-cultural differences and alternative types of relationships, and continuing to explore the space of interpersonal interactions.

8 German-Language Synopsis **(Deutschsprachige Zusammenfassung)**

8.1 Einleitung und Theoretischer Überblick

Die vorliegende Arbeit untersucht intra- und interindividuelle Unterschiede dreier Dispositionen die den Umgang mit Lachen und ausgelacht werden beschreiben (Ruch & Proyer, 2009a). In fünf Studien wurde die Rolle der drei auf das Lachen bezogener Merkmale insbesondere im Kontext sozialer Beziehungen untersucht, nämlich in Bezug auf die Akkuratheit der interpersonellen Wahrnehmung der drei Dispositionen (Studien I und IV) und deren Rolle in romantischen Beziehungen (Studien II, IIIa, IIIb und IV). Nach meinem Wissen war dieses Forschungsprojekt eine der ersten Untersuchungen, welche die Merkmale in sozialen Kontexten untersuchte und dafür entsprechende dyadische Multi-Akteur Perspektiven berücksichtigte, da jede Studie der vorliegenden Arbeit mit dyadischen Datensätzen und entsprechenden Analysemethoden (z.B. Actor-Partner Interdependence Model; Cook & Kenny, 2005; Kenny et al., 2006) die Fragestellungen adressiert.

8.1.2 Drei Dispositionen im Umgang mit Lachen und Ausgelacht werden

8.1.2.1 Gelotophobie. Das Phänomen des Lachens wird üblicherweise als uneingeschränkt positiv wahrgenommen, so finden sich beispielsweise in Volksweisheiten allgemeingültig geglaubte positiv bewertete Aussagen wie „Lachen ist die beste Medizin“, „Lachen ist die schönste Sprache der Welt“ oder „Wer den Tag mit Lachen beginnt, hat ihn bereits gewonnen“ (zugeschrieben zu *Cicero*). Auch in der wissenschaftlichen Auseinandersetzung mit dem Phänomen des Lachens wurde unkritisch das Lachen als positive Erfahrung betrachtet und Interventionen wie das Lach Yoga unkritisch bzgl. der Wirksamkeit in klinischen und nicht-klinischen Populationen hinsichtlich der Effekte auf das Erleben von positiven Emotionen, geminderter Depressivität und positiven Emotionen oder körperlichen Symptomen untersucht (z.B. Bressington et al., 2018). Jedoch gibt es Menschen, die das Lachen nicht als positiv empfinden, sondern als unangenehme negative Erfahrung, die möglichst gemieden wird: Das Konstrukt der *Gelotophobie* (griech. *gelos* = Lachen; *phobos* = Angst) beschreibt zwischenmenschliche Unterschiede in der Angst, vor dem Ausgelacht werden (Titze, 1995, 2009, Ruch & Proyer, 2008ab, 2009a). Gelotophobie wird als zeitlich und situativ stabiles Merkmal verstanden. Menschen mit hohen Ausprägungen in Gelotophobie (auch: „Gelotophobe“ und „Gelotophobiker:innen“ genannt) empfinden Lachen unabhängig von der Intention und Ausrichtung als *ausgelacht* werden und als Spott, welcher auf sie gerichtet sei. Beispielsweise würde ein:e Gelotophobiker:in das Lachen zweier vorbeigehender Spaziergänger, die sich über einen Witz amüsieren, als auf sie gerichtetes

Auslachen und Verspotten wahrnehmen. Gelotophobe Menschen vermeiden entsprechend Situationen, in denen sie ausgelacht werden könnten und damit soziale Situationen. Die Gelotophobie ist durch eine fast schon paranoid anmutende Angst vor Spott und Lachen charakterisiert und Gelotophobe empfinden sich selbst als lächerlich in ihrer Erscheinung und sie suchen aktiv nach Hinweisen und Anzeichen, die darauf hindeuten, dass Sie ausgelacht werden könnten (Ruch & Proyer, 2008a). Obwohl Gelotophobie ursprünglich als klinisch-relevantes und kategoriales Merkmal (d.h. es wurde unterschieden, ob Gelotophobie vorliegt; ja/nein) verstanden wurde, zeigten frühe Untersuchungen, dass die Angst vor dem Ausgelacht werden am besten als dimensionale Persönlichkeitseigenschaft verstanden werden sollte. Entsprechend variieren Menschen in der Intensität der Gelotophobie, auch in nicht-klinischen Populationen, und können zwischen den Polen *keine* und *extrem* ausgeprägte Gelotophobie lokalisiert werden (Ruch & Proyer, 2008ab, 2009ab).

Die Erfassung interindividueller Unterschiede in Gelotophobie erfolgt mittels des 15 Items umfassenden Standardinstruments *GELOPH<15>*, welches Selbstauskünfte erhebt (Ruch & Proyer, 2008b; 2009a). Gelotophobe Menschen würden darin Aussagen wie „Wenn in meiner Gegenwart gelacht wird, werde ich misstrauisch“ oder „Wenn scherzhafte Bemerkungen über mich gemacht werden, finde ich mich wie gelähmt“ auf einer 4-stufigen Skala von 1 = „trifft gar nicht zu“ bis 4 = „trifft sehr zu“ zustimmen. Es liegen umfangreiche Befunde zur Reliabilität (z.B. Retest-Korrelationen $r_{tt} \geq .80$ im 6-Monats-Intervall; interne Konsistenz $\alpha \geq .90$) und Validität (z.B. Faktorenanalysen; diskriminante, prädiktive und nomologische Validitätskorrelationen; Ruch & Proyer, 2008ab, 2009ab) vor. Das Instrument wurde in eine Vielzahl von Sprachen erfolgreich übersetzt und eingesetzt sowie in ländervergleichenden Studien genutzt (z.B. Proyer, Ruch et al., 2009; siehe Ruch, Hofmann et al., 2014 für einen Überblick).

Wie bereits angesprochen wird die Angst vor dem ausgelacht werden mittlerweile als dimensionales Persönlichkeitsmerkmal verstanden. Dennoch erlauben cut-off scores die Diskrimination von Niedrig- und Hochscorern (Ruch & Proyer, 2008b) und somit die Einteilung von Gruppen, z.B. in experimentellen Studien, sowie die Beschreibung der Verteilung des Merkmals in der Population. Ruch und Proyer (2008b) berichteten, dass etwa 12% der nicht-klinischen Stichprobe den cut-off für erhöhte Werte in der Gelotophobie überschreiten und in etwa 1% der Bevölkerung extreme Ausprägungen in der Angst vor dem Ausgelacht werden aufweisen.

Diverse Studien untersuchten die Frage, ob Gelotophobie von theoretisch nahen Konstrukten wie Soziale Phobie (APA, 2000, 2013) oder Angst vor negativer Bewertung

abgrenzbar ist. Zum einen ist hervorzuheben, dass das Erleben und Verhalten im Rahmen der Gelotophobie von dem der Sozialen Phobie unterschieden werden kann. So ist die Gelotophobie konzeptionell exklusiv auf das Ausgelacht werden fokussiert, während Symptome wie *generelle* Angst vor Bewertung durch Andere und soziale Situationen, wie in der sozialen Phobie beschrieben (APA, 2000, 2013), abwesend sind. Studien, die psychometrische Ansätze zur Diskrimination nutzten zeigten die zu erwartenden positiven Korrelationen mit den genannten Konstrukten, jedoch konnten Konfirmatorische Faktorenanalyse wiederholt zeigen, dass die Konstrukte keinen gemeinsamen Faktor besitzen und getrennt modelliert werden sollten, d.h. das mehrfaktorielle Lösungen stets besseren Modell-Fit zeigen (Carretero-Dios et al., 2010). Kürzlich konnte dieser Befund auch unter zusätzlicher Berücksichtigung von Bekannten-Ratings in Multi-Method Faktorenanalysen repliziert werden (Torres-Marín et al., 2021). Studien zur Lokalisation der Gelotophobie in Persönlichkeitssystemen wie den PEN- (Eysenck & Eysenck, 1987), Fünf-Faktoren- (Costa & McCrae, 2008) und HEXACO-Modellen (Lee & Ashton, 2004) zeigten, dass die Gelotophobie durch Introversion und Neurotizismus/geringe emotionale Stabilität gekennzeichnet ist, jedoch keine Redundanz mit breiten Persönlichkeitsmerkmalen aufweist (z.B. Ďurka & Ruch, 2015; Moya-Garófano et al., 2019; Rawlings et al., 2010; Proyer & Ruch, 2010; Ruch & Proyer, 2009b; Ruch, Harzer et al., 2013; Torres-Marín et al., 2020; Torres-Marín, Proyer, López-Benítez, Brauer et al., 2019; Torres-Marín, Proyer, López-Benítez, Carretero-Dios, 2019). Ebenso konnten Studien zu Modellen enger gefasster Eigenschaften wie maladaptiven Persönlichkeitsmerkmale (Krueger et al., 2012), moralisch positiv bewerteten Eigenschaften (Peterson & Seligman, 2004) und traits der Dunklen Triade keine Redundanzen feststellen (z.B. Brauer et al., 2022; Proyer, Wellenhohn et al., 2014; Torres-Marín, Proyer, López-Benítez, Brauer et al., 2019). Zusammenfassend kann die Gelotophobie gut und zuverlässig von anderen Merkmalen und Eigenschaften diskriminiert werden und die Eigenständigkeit unterstützt werden, insbesondere in Studien, die Unterschiede in diversen Parametern in Reaktion auf die Präsentation von Lachen darstellen als Funktion der Gelotophobie untersuchten (z.B. Papousek et al., 2014, 2016; Platt, 2021).

Die Angst vor dem Ausgelacht werden wurde mittels zahlreicher methodischer Ansätze seit ihrer Einführung ins Feld untersucht. Analysen von Korrelaten und Reaktionen der Gelotophobie mittels physiologischer Parameter die per Elektroenzephalogramm, Elektrokardiogramm, hirnstruktureller Spezifika in Magnetresonanztomographiestudien, unwillkürliche Aktivierung der Gesichtsmuskulatur mittels des *Facial Action Coding System* (Ekman, 2003) und Erinnerungen und Falscherinnerungen untersucht wurden seien hier

erwähnt (z.B. Brauer & Proyer, in press; Papousek et al., 2014, 2016; Platt et al., 2013; Ruch & Proyer, 2009a; C. L. Wu et al., 2016).

8.1.2.2 Gelotophilie und Katagelastizismus. Während die Gelotophobie die *Angst* beschreibt, Ziel von Spott und Gelächter zu werden, konnten Ruch und Proyer (2009a) in frühen Studien zur Gelotophobie feststellen, dass interindividuelle Unterschiede auch in Bezug des aktiven Suchens von Situationen in denen Menschen ausgelacht werden können oder in dem sie andere auslachen können existieren. Ruch und Proyer führten zur Beschreibung dieser Unterschiede zwei weitere Eigenschaften ein, welche die Freude, ausgelacht zu werden (*Gelotophilie*; griech.: *gelos* = Lachen; *philia* = Liebe) und Freude, andere auszulachen (*Katagelastizismus*; griech.: *katagelao* = verlachen, auslachen) beschreibt. Menschen mit hohen Ausprägungen in Gelotophilie suchen aktiv Situationen auf, in denen sie von anderen Menschen ausgelacht werden können und provozieren, dass sie ausgelacht werden, bspw. in dem sie eigene Erlebnisse mit Übertreibungen bereichert nacherzählen und Peinlichkeiten in Kauf nehmen um sich das Lachen zu „sichern“ (Ruch & Proyer, 2009a). Gelotophile empfinden das Ausgelacht werden als ein Zeichen der Wertschätzung und Anerkennung sowie als äußerst positiv besetzte Erfahrung. Demgegenüber beschreibt Katagelastizismus die Freude, andere auszulachen sowie das Lachen Dritter auf ein Ziel zu richten. Dabei übertreten Menschen mit hohen Ausprägungen in Katagelastizismus auch soziale Grenzen und verletzen ihr Gegenüber unabhängig vom Grad der Vertrautheit oder Bekanntheit, d.h. auch Freunde oder Partner:innen. Katagelastizist:innen sind überzeugt, dass Lachen Teil des Lebens sei und sich Andere einfach entsprechend wehren sollten, wenn diese sich durch Spott und ausgelacht werden herabgesetzt oder verletzt fühlen (Ruch & Proyer, 2009a).

Die Erfassung von Gelotophilie und Katagelastizismus erfolgt mittels jeweils 15 Items, welche typischerweise gemeinsam mit den 15 Items des GELOPH<15> im *PhoPhiKat-45* vorgelegt werden (Ruch & Proyer, 2009a). Beispielitems für Gelotophilie sind „Wenn ich mit anderen Menschen zusammen bin, dann mache ich gerne Witze auf eigene Kosten, um die anderen zum Lachen zu bringen“ und „Wenn mir im Beisein anderer Menschen etwas Peinliches (z. B. Versprecher oder Missgeschicke) passiert, dann freue ich mich mehr darüber als ich mich ärgere und lache gemeinsam mit den anderen darüber“. Items zur Erfassung von Katagelastizismus sind bspw. „Ich habe Freude daran, andere Menschen bloss zu stellen und freue mich, wenn sie ausgelacht werden“ und „Ich merke selbst, dass ich häufig den Bogen überspanne und harmlos beginnende Scherze für andere Menschen verletzend werden (zumindest aus der Sicht zimperlicher Leute)“. Für den *PhoPhiKat-45* konnten hervorragende

Reliabilitäten (z.B. $\alpha \geq .87$; Retest-Korrelationen $\geq .73$ im 6-Monats-Intervall) und Validitätsbelege (z.B. robuste 3-Faktorenstruktur; siehe auch Brauer & Proyer, 2021a). Die Zusammenhänge der drei Dispositionen zeigen, dass Gelotophobie und Gelotophilie negativ korreliert sind in Höhe von etwa $r = -.30$, was dafürspricht, dass beide Dimensionen eigenständig sind und nicht Endpole der gleichen Dimension darstellen. Weiterhin korrelieren Gelotophilie und Katagelastizismus positiv während Gelotophobie unkorreliert von Katagelastizismus ist (Ruch & Proyer, 2009a). Die Korrelationen konnten auch in Sprachadaptationen des PhoPhiKat-45 gefunden werden (z.B. Dursun et al., 2020; Torres-Marín, Proyer, López-Benítez, Carretero-Dios, 2019).

Die Verortung von Gelotophilie und Katagelastizismus in breiten Persönlichkeitssystem (PEN, Big Five und HEXACO) zeigte, dass Gelotophilie durch Extraversion gekennzeichnet ist und Katagelastizismus durch geringe Verträglichkeit charakterisiert ist (Ďurka & Ruch, 2015; Proyer & Ruch, 2010; Ruch, Harzer et al., 2013; Torres-Marín et al., 2020; Torres-Marín, Proyer, López-Benítez, Brauer et al., 2019; Torres-Marín, Proyer, López-Benítez, Carretero-Dios, 2019). Gleichmaßen konnten die beiden Dispositionen nicht durch engere Merkmale wie Charakterstärken, maladaptive traits oder traits der Dunklen Triade erklärt werden (Brauer & Proyer, 2022; Proyer, Wellenzohn et al., 2014; Torres-Marín, Proyer, López-Benítez, Brauer et al., 2019).

8.1.3 Gelotophobie, Gelotophilie und Katagelastizismus in Sozialen Beziehungen

Die Funktion des Lachens wurde bereits von Darwin (1872/1965) im Sinne einer Signalfunktion beschrieben und weitere Forschung konnte unterstützend zeigen, dass Lachen eine sozial kommunikative Funktion erfüllt (z.B. Curran et al., 2018; Ekman & Friesen, 1982; Lynch, 2010; Ruch, 2008). Lachen kann zum einen positive Emotionen und individuelles sowie dyadisch-gemeinschaftliches Wohlbefinden signalisieren (z.B. Kurtz & Algoe, 2015, 2017). Meta-analysen zeigen, dass Lachen und Lächeln auch im Rahmen romantischer Beziehungen romantisches Interesse signalisieren kann (Montoya et al., 2018, vgl. Brauer & Proyer, 2021c). Demgegenüber kann das Lachen auch als soziales Korrektiv fungieren, indem Lachen und Spott eingesetzt wird, um Abweichungen von der Norm zu signalisieren und bestenfalls zu korrigieren (z.B. Lynch, 2010; Ruch & Proyer, 2009a). Aufgrund der Komplexität des Phänomens des Lachens und seiner Funktion in sozialen Beziehungen ist anzunehmen, dass interindividuelle Unterschiede in der Wahrnehmung, dem Engagement und dem Umgang mit Lachen, Spott und Ausgelacht werden, wie mittels Gelotophobie, Gelotophilie und Katagelastizismus beschrieben, eine Rolle für die Wahrnehmung und Gestaltung sozialer Beziehungen spielen würden. Jedoch fand bisher vergleichsweise wenig

Forschung zu den Dispositionen im Rahmen sozialer Kontexte und entsprechenden Analyseansätzen statt.

Erste Befunde zur Rolle der drei Dispositionen in sozialen Kontexten ergaben bereits Hinweise darauf, dass der Umgang mit Lachen und Ausgelacht werden in Zusammenhang mit der Wahrnehmung sozialer Situationen steht. Beispielsweise untersuchten Proyer und Kolleg:innen (z.B. Proyer, Neukom et al., 2012) die Dispositionen in Bezug auf Bullying-Erfahrungen im Schulkontext und berichteten, dass Gelotophobie im Zusammenhang mit Viktimisierungs-Erfahrungen des bullying steht. Demgegenüber ist Katagelastizismus ein robuster Prädiktor für das Einnehmen der aktiven bullying Rolle. Die Befunde konvergieren bei Betrachtung verschiedener Sichtweisen aus Selbst-, Mitschüler:innen- und Lehrer:innenberichten weitgehend, obgleich inkonsistente Befunde für die Rolle der Gelotophobie auftraten. Es wurde spekuliert, dass dies eventuell Ausdruck der Fehlinterpretation des Lachens durch Gelotophobe sein könnte, d.h. dass sie sich als Opfer des bullying durch Spott fühlen, obgleich ihr Gegenüber keinen tatsächlichen, bzw. von außen wahrnehmbaren (i.S.v. Mitschüler:innen- und Lehrer:innenperspektiven), Spott darboten. Ein ähnlicher Effekt wurde bereits von Platt et al. (2016) bzgl. der psychotherapeutischen Behandlung von Gelotophobiker:innen beschrieben, da Gelotophobe berichteten die Therapie typischerweise nach kurzer Zeit abbrechen, und es wurde diskutiert dass diese sich durch Therapeut:innen verspottet fühlen. Genauer, dass Gelotophobiker:innen eventuell das therapeutisch zugewandte Lächeln, welches zum Standardrepertoire der psychotherapeutischen Praxis gehört (z.B. Morrison, 2016), als Spott fehlinterpretierten.

Diese Fehlinterpretation des Lächelns wurde auch bzgl. romantischer Beziehungen diskutiert: Ein gut replizierter Befund beschreibt, dass Gelotophobe eine hohe Wahrscheinlichkeit aufweisen, trotz des Wunsches nach einer romantischen Beziehung, Single zu sein (Platt & Forabosco, 2012; Platt et al., 2010). Es wurde spekuliert, dass das Lächeln und gemeinsame Lachen, welches positive Emotionen und Wohlbefinden des Gegenübers signalisieren soll, als Spott von Gelotophoben fehlinterpretiert wird. Nichtsdestotrotz zeigen Befunde aus Untersuchungen von Familien, dass *einige* gelotophobe Menschen feste Beziehungen eingehen und es wurde diskutiert, dass Gelotophobe ggf. ähnliche Partner:innen finden, welche einen ähnlichen Umgang und Wahrnehmung bzgl. des Lachens pflegen und damit den Prozess des Kennenlernens und das Führen einer Beziehung erleichtern, z.B. wenn zwei hoch-gelotophobe Partner:innen in ihrer Gemeinsamkeit vergleichsweise wenig oder nur unter bestimmten Bedingungen miteinander lachen. Hier könnte also passend zur Theorie des assortativen mating (z.B. Buss, 2016) die

Partnerähnlichkeit eine Rolle spielen. Obgleich bisher vor allem Befunde und Diskussionen um die Rolle von Gelotophobie für soziale Beziehungen geführt wurden, ist auch anzunehmen, dass Gelotophilie und Katagelastizismus in Zusammenhang mit dem Erleben und der Pflege von zwischenmenschlichen Beziehungen stehen. Beispielsweise sei hier genannt, dass frühe Studien zur Untersuchung von wünschenswerten Attributen von Partner:innen ergaben, dass sich viele Menschen ein:e Partner:in wünschen, die „einen zum Lachen bringt“ (mehrheitlich von Frauen erwünscht) und „über das Gesagte gelacht“ (mehrheitlich von Männern erwünscht; für einen Überblick siehe Brauer & Proyer, 2021c; Buss, 2016; Wilbur & Campbell, 2011).

Ausgehend von initialen Befunden zu den Dispositionen und der Literatur zur sozialen Funktion des Lachens wurde in dieser Arbeit die Rolle von Gelotophobie, Gelotophilie und Katagelastizismus im Rahmen sozialer Beziehungen untersucht. Dafür wurden über fünf Studien zwei breite Themenbereiche adressiert: Zum einen wurde die Akkuratheit von Persönlichkeitsurteilen über die drei Dispositionen bei Nullbekanntschaft und romantischen Paaren untersucht und zum anderen wurden die Dispositionen in romantischen Beziehungen untersucht. Es wird argumentiert, dass die akkurate Einschätzung von den drei Dispositionen eine wichtige Voraussetzung für die Einschätzung und anschließende soziale Interaktion darstellt, da nur unter akkurater Einschätzung das Verhalten des Gegenübers langfristig ein- und abschätzbar ist und ggf. das eigene Verhalten und die Wahrnehmung eines Gegenübers beeinflussen kann (vgl. z.B. Funder, 1995; Kenny, 2020). Jedoch lagen hierzu bisher keine Befunde vor und das Ziel der Studien I und IV bestand darin, das Wissen über das Ausmaß der Akkuratheit der Urteile über die drei Dispositionen mittels verschiedener Zugänge und in verschiedenen Formen des Bekanntschaftsgrads zu untersuchen (Funder & West, 1993). Darüber hinaus hatten die Studien II, IIIa, IIIb und IV das Ziel, die Zusammenhänge der Dispositionen mit verschiedenen Indikatoren von romantischen Beziehungen auf Ebene von intraindividuellen, interindividuellen und dyadischen Effekten¹⁰ zu untersuchen. Dafür wurden vornehmlich dyadische Analysemethoden wie das Actor-Partner Interdependence Model (APIM; Cook & Kenny, 2005) genutzt, die die Antworten beider Partner:innen einer Dyade berücksichtigen, um die Abhängigkeiten in Prädiktor- und outcome Variablen zu modellieren.

8.2 Methoden, Ergebnisse und Diskussion der Studien I bis IV

¹⁰Das Wort "Effekt" wird hier im Sinne der Literatur zu dyadischen Analysen verwendet. Da alle Studien auf Querschnittsdaten basieren können nur Zusammenhänge bestimmt werden. Effekte im Sinne kausaler Wirkmechanismen können in dieser Studie nicht geschlussfolgert werden.

8.2.1 Interpersonale Wahrnehmung der Dispositionen (Studien I und IV)

Studie I untersuchte die Akkuratheit von Beurteilungen der drei Dispositionen bei Nullbekanntschaft und auf Basis minimaler Informationen (sog. *thin slices of behavior*; Kenny, 2020). Dafür wurden Zielpersonen (*targets*) gebeten, Selbsteinschätzungen mittels des PhoPhiKat-45 Fragebogens (Ruch & Proyer, 2009a) abzugeben und sich mittels kurzer schriftlicher Selbstbeschreibungen (\leq fünf Sätze) darzustellen. Diese Essays wurden anschließend einer Stichprobe von zehn unabhängigen Beurteiler:innen vorgelegt, welche die *targets* auf Basis ihrer Selbstbeschreibungen mittels der 9 Items umfassenden Kurzform des PhoPhiKat (*PhoPhiKat-9*; Hofmann et al., 2017) einschätzten. Zur Untersuchung der Replizierbarkeit der Ergebnisse wurden zwei unabhängige Stichproben von *targets* ($N = 218$ [Sample 1] und 132 [Sample 2]) erhoben sowie jeweils Stichproben von je zehn Beurteiler:innen (*judges*). Die Bestimmung der Akkuratheit der Beurteilungen erfolgte auf Basis von Funder und West's (1993) Kriterien: Das *self-other agreement* beschreibt die Korrelation zwischen Selbst- und Fremdbeurteilungen, *consensus* ermittelt die Beurteiler:innenübereinstimmung und *accuracy* beschreibt die Korrelation zwischen Fremdbeurteilungen und einem vergleichsweise objektivem Kriterium der Dispositionen. Für letzteres wurde ein Verhaltenstagebuch (PhoPhiKat-Behavioral Record; *PhoPhiKat-BR*) entwickelt, welches typische Verhaltensweisen von Gelotophobie, Gelotophilie und Katagelastizismus erfassen soll. Das PhoPhiKat-BR wurde von den *targets* in Sample 2 über einen Zeitraum von 14 Tagen ausgefüllt und die Antworten über die Zeit aggregiert (vgl. K. D. Wu & Clark, 2003). Die Untersuchung der drei Kriterien erlaubt eine differentielle Analyse der Akkuratheit der Beurteilungen unter Einbezug verschiedener Sichtweisen (*target-judge*, *judge-judge* und *target-behavior-judge*).

Die Untersuchung des *self-other agreement* ergab in beiden samples die zu erwartenden positiven Koeffizienten von geringer Effektstärke, für einzelne traits ($r_s \geq .19$) sowie den *Profilen* der Dispositionen, auch nach Kontrolle normativer Effekte ($r_s \geq .18$). Die Untersuchung des *inter-rater agreement* (*consensus*) ergab ebenfalls substantielle Übereinstimmung zwischen den Beurteiler:innen ($ICC[2,1] \geq .39$) in beiden Stichproben. Außerdem konnten numerisch geringe, aber erwartungsgemäß positive *accuracy* Korrelationen in Sample 2 gefunden werden ($r_s \geq .06$).

Zusätzlich zu den Akkuratheitsanalysen wurde mittels quantitativer Textanalyse (*Linguistic Inquiry and Word Count* [LIWC], Pennebaker & King, 1999) untersucht, ob die Nutzung der von den *targets* verwendeten Sprache in den Selbstbeschreibungen mit den Selbst- und Fremdbeurteilungen der drei Dispositionen korrelieren. Diese Art der Analyse im

Sinne Brunswiks Linsenmodell (Brunswik, 1956) ergab, dass das Vorhandensein oder Nicht-Vorhandensein linguistischer Hinweisreize (*cue validity*; z.B. Auftreten des Worts „Lachen“) von Beurteiler:innen korrekt genutzt wurde (*cue utilization*). Die Überlappung der cue Validitäten und Nutzungen fiel mit Ausnahme für Katagelastizismus in Sample 2 ($r = .06$) hoch aus ($.23 \leq r_s \leq .56$) und geben weiteren Aufschluss über das Vorhandensein der akkuraten Einschätzungen.

Die Befunde weisen darauf hin, dass bei der Beurteilung Unbekannter unter Bereitstellung minimaler Informationen bereits vergleichsweise akkurate Urteile über den Umgang von Lachen und ausgelacht werden gefällt werden können, mit Effektstärken die vergleichbar sind für ähnlich enge Merkmale (z.B. Verspieltheit im Erwachsenenalter; Proyer & Brauer, 2017). Es wird argumentiert, dass damit die Voraussetzung geschaffen ist, um Phänomene wie aktive Partner:innenwahl (Luo, 2017) oder Möglichkeiten der Anpassung des Verhaltens auf das Gegenüber mit Blick auf dessen Präferenzen bzgl. des Lachens und Ausgelacht werden besser zu verstehen.

Um das Wissen um die Güte der Wahrnehmungen der Dispositionen zu erweitern, wurde in Studie IV das self-other agreement in romantischen Paaren untersucht. Basierend auf dem *acquaintanceship effect* (z.B. Kenny, 2020; Watson et al., 2000), der beschreibt, dass die Akkuratheit von Persönlichkeitswahrnehmungen mit steigender Bekanntschaft höher ausfällt, wurde erwartet, in dieser Studie höhere self-other agreement Korrelationskoeffizienten zu finden als in Studie I, in der Dyaden durch Nullbekanntschaft gekennzeichnet waren. Die Analysen der $N = 228$ Paare ergab die erwartungsgemäß hohen self-other agreement Korrelationskoeffizienten ($r_s \geq .41$). Wie erwartet zeigen sich also im Vergleich zur Nullbekanntschaft hier substantielle Überlappungen zwischen Selbst- und Partner:innensicht im Einklang mit dem *acquaintanceship effect*.

Die Befunde unterstreichen, dass die Dispositionen gut bei anderen Menschen wahrgenommen werden können, mit dem typischen *acquaintanceship effect*, bei dem gut-bekannte Personen akkuratere Urteile aufweisen als Unbekannte. Dies bildet einen Startpunkt für die weitere Untersuchung der Dispositionen und der Rolle von *Wahrnehmungen* der Disposition für weitere Forschung. Die Integration von Partnerwahrnehmungen für die Beziehungsforschung ergab in Studie IV, dass Partnerwahrnehmungen der Dispositionen einen inkrementellen Beitrag zur Selbsteinschätzung für die Vorhersage von Tendenzen zur Eifersucht leisten. Diese Art der Forschung könnte und sollte weiterverfolgt werden, damit bspw. Effekte der Wahrnehmung in diversen sozialen Kontexten näher beleuchtet werden können. Hier sei bspw. daran zu denken, eine simultane Analyse der Selbst- und

Fremdeinschätzungen der Dispositionen und Indikatoren von Bullying und Viktimisierung vorzunehmen, um die Beiträge von Eigen- und Außenwahrnehmungen aufzuschlüsseln und so zwischenmenschliche Konflikte bestenfalls zu reduzieren. Für letzteres zeigten bspw. Carlson et al. (2016), dass (Meta-)Wahrnehmungen ein robuster Prädiktor für intra-dyadischen Konflikt sind. Es wäre entsprechend wünschenswert zu untersuchen, ob sich Katagelastizist:innen über ihre Wirkung auf Andere bewusst sind. Ebenso könnten zukünftige Studien die Rolle von Wahrnehmungen in Partnerschaften untersuchen. Erste Befunde zeigten bereits die Wichtigkeit der Wahrnehmungen und deren inkrementellen Beitrag über Selbstberichte von Partner:innen hinaus (z.B. Decuyper et al., 2012). Limitationen der Studien betreffen die Generalisierbarkeit der Ergebnisse, da ausschließlich deutschsprachige Dyaden und Selbstbeschreibungen untersucht wurden und weitere Forschung zur Rolle der individuellen Unterschiede in den drei Dispositionen seitens der Beurteiler:innen wurden noch nicht für die Rolle der Akkuratheit untersucht. Weiterhin waren die Informationsquellen in Studie I auf Texte beschränkt und eine Ausweitung auf alternative Informationsquellen (z.B. Videomaterial) sind wünschenswert für die weitere Forschung.

8.2.2 Romantische Beziehungen

Der zweite Themenbereich der vorliegenden Arbeit untersuchte die intraindividuellen, interindividuellen und dyadischen Effekte der drei Dispositionen in romantischen Beziehungen. Ausgehend von früheren Befunden, die bereits nahelegten, dass Lachen eine Signalfunktion für zwischenmenschliche Beziehungen besitzt (z.B., Ekman, 2003; Kurtz & Algoe, 2015; Lynch, 2010), dass das Vorhandensein von Lachen (insbesondere gemeinsamen Lachens mit dem/der Partner:in) von vielen Menschen für ihre Beziehung gewünscht wird und auch ein Indikator der Beziehungszufriedenheit ist (z.B. Kurtz & Algoe, 2015), sowie ausgehend von ersten Befunden, dass die Dispositionen mit dem Erleben und Verhalten in romantischen Beziehungen in Zusammenhang stehen, sollten die Studien II, IIIa, IIIb und IV verschiedene Indikatoren romantischer Beziehungen untersuchen.

8.2.2.1 Ähnlichkeit zwischen Partner:innen und Beziehungszufriedenheit. Proyer, Estoppey et al. (2012) und Proyer und Neukom (2013) untersuchten die Dispositionen in Familien und berichteten, dass Eltern und (erwachsene) Kinder durch Ähnlichkeit in den drei Dispositionen gekennzeichnet sind; jedoch basierten diese Befunde auf einer vergleichsweise kleinen Stichprobe mit Teilnehmer:innen mittleren und höheren Alters. Ebenso wurde in früheren Studien (z.B. Platt et al., 2016) diskutiert, ob die Ähnlichkeit zweier Partner:innen eventuell dazu beitragen könnten, dass Gelotophobe Beziehungen eingehen. Daher war das erste Ziel der Studie II, zu untersuchen, wie hoch die Partnerähnlichkeit in romantischen

ausgeprägt ist. Darüber hinaus wurde untersucht, ob die Ähnlichkeit im Zusammenhang mit der Partnerschaftszufriedenheit, d.h. ob ähnliche Paare glücklicher sind als unähnliche Paare (Luo, 2017). Außerdem wurde mittels APIM Analysen (Cook & Kenny, 2005) untersucht, ob die Dispositionen in Zusammenhang mit der eigenen oder der partnerschaftlichen Beziehungszufriedenheit steht. Dazu wurden Selbstberichte von $N = 154$ ungleichgeschlechtlichen Paaren zu den drei Dispositionen (PhoPhiKat-45; Ruch & Proyer, 2009a) und Maßen der Beziehungszufriedenheit, d.h. der Bewertung und Wahrnehmung der Beziehung (Hassebrauck & Fehr, 2002), ausgewertet. Das APIM erlaubt die Analyse von Actor- und Partner Effekten, welche den intraindividuellen Zusammenhang (*actor effect*) und interindividuellen Zusammenhang (*partner effect*) zwischen Prädiktor (hier: Gelotophobie, Gelotophilie und Katagelastizismus) und outcome (hier: Maße der Beziehungszufriedenheit) beschreiben.

Die Analyse der Ähnlichkeiten ergab, dass romantische Partner:innen positive Ähnlichkeit in den drei Dispositionen aufweisen, mit Ähnlichkeiten von $r_s \geq .19$ für die einzelnen Dispositionen und einer Profilähnlichkeit im Sinne Furrs (2008) in Höhe von $r = .27$. Die APIM Analysen zeigten einen statistisch signifikanten leicht positiven Zusammenhang der Profilähnlichkeit zur Partnerschaftszufriedenheit über die Existenz von Haupteffekten (Actor- und Partner Effekte) hinaus. Zusammengefasst lässt sich also feststellen, dass sich gleich und gleich gerne gesellt, wenn es um den Umgang mit Lachen und ausgelacht werden geht und dass die Partnerähnlichkeit einen leichten Zusammenhang mit der Zufriedenheit der Partner:innen aufklären kann, wenn alle Dispositionen simultan betrachtet werden.

Die APIM Analysen der Actor- und Partner Effekte ergaben, dass die Dispositionen differentielle Zusammenhangsmuster mit den Facetten der Beziehungszufriedenheit aufweisen. Erwartungsgemäß zeigten sich vornehmlich negative Zusammenhänge zwischen Gelotophobie und den Facetten der Zufriedenheit auf Ebene der intraindividuellen Actor Effekte, gelotophile Frauen wiesen höhere Zufriedenheit in den Facetten sexuelle Zufriedenheit, Faszination gegenüber dem Partner auf und Katagelastizismus wies einen robusten Zusammenhang mit Konflikt und Streit in Partnerschaften auf. Vereinzelt ergaben die Analysen auch Partner Effekte, so zeigten Partner gelotophober Frauen weniger sexuelle Zufriedenheit, jedoch höhere sexuelle Zufriedenheit wenn die Frau gelotophil war und Katagelastizismus war auch bei Partner:innen beider Geschlechter mit höherem Streit und Konflikt assoziiert. Insgesamt lagen die Effektstärken im kleinen bis mittleren Bereich, wie üblich für Zusammenhänge zwischen Persönlichkeitsmerkmalen und Indikatoren der

Beziehungszufriedenheit in der Paarforschung (vgl. Weidmann et al., 2016). Die vorliegenden Befunde erlauben damit einen fruchtbaren Startpunkt für die Erforschung und Relevanz der drei Dispositionen im Umgang mit Lachen und ausgelacht werden für enge Beziehungen. Weitere Studien zur Erforschung möglicher Mediatoren werden diskutiert und wurden u.a. in Folgestudien IIIa, IIIb (Bindungsstile) und IV (Eifersucht) untersucht. Limitationen wie das Querschnittsdesign und der ausschließliche Einsatz von Selbstberichtsmaßen werden diskutiert.

8.2.2.2 Bindungsstile. Romantische Bindungsstile beschreiben interne Arbeitsmodelle, die persönliche Erwartungen gegenüber engen Beziehungen repräsentieren (z.B. Hazan & Shaver, 1987). Diese ursprünglich in der frühen Eltern-Kind Interaktion erlernten Modelle sind jedoch durch Bindungserfahrungen veränderlich und werden im Erwachsenenalter vor allem bzgl. der Bindungsrepräsentationen in romantischen Beziehungen und bzgl. des romantischen Partners relevant (z.B. Fraley et al., 2015; Fraley & Roisman, 2019). Die individuellen Unterschiede im Bindungsstil werden mittels der Dimensionen Angst (intensive und häufige Sorgen um die Beziehung und das Verlassenwerden durch den Partner) und Vermeidung (Neigung, enge Beziehungen zu vermeiden und Unwohlsein in engen Beziehungen zu empfinden) beschrieben (Fraley et al., 2015). Die Bindungsstile gehören zu den wichtigsten und meistuntersuchten Merkmalen der Beziehungsforschung, da diese für eine Vielzahl von beziehungsrelevanten Indikatoren prädiktiv ist (z.B. Beziehungsstatus, Beziehungszufriedenheit und Stabilität von Beziehungen; vgl. z.B. Neumann et al., 2007).

Das Ziel der Studien IIIa und IIIb war es, die drei Dispositionen in den Bindungsdimensionen zu verorten und indirekte Effekte der Bindungsdimensionen auf Assoziationen der Dispositionen und Beziehungszufriedenheit (Studie IIIa; Sample 2) sowie Beziehungsstatus (Studie IIIa Sample 1 und Studie IIIb) zu untersuchen. Frühere Studien zeigten bereits, dass Gelotophobie mit einer höheren Wahrscheinlichkeit einhergeht single zu sein (vgl. Ruch, Hofmann et al., 2014). Die Studien sollten außerdem dazu beitragen den Befund zu replizieren und zu untersuchen, ob die Bindungsdimensionen die Assoziation zwischen Gelotophobie und Beziehungsstatus mediiieren.

Studie IIIa untersuchte den Zusammenhang zwischen den Dispositionen und den Bindungsdimensionen in zwei unabhängigen Stichproben: Sample 1 beinhaltete $N = 247$ Teilnehmende, welche in Beziehungen *oder* single waren und Sample 2 bestand aus den $N = 154$ Paaren der Studie II. Die Untersuchung in gemischten und Paar-Stichproben erlaubt die Untersuchung der Bindungsstile und deren Zusammenhänge mit Gelotophobie, Gelotophilie

und Katagelastizismus unter Rücksicht der Tatsache, dass singles häufiger höhere Ausprägungen in Angst und Vermeidung aufweisen als Menschen, die sich in Beziehungen befinden (z.B. Pepping et al., 2018). Die Lokalisation der Dispositionen in den Bindungsdimensionen ergab in beiden Stichproben der Studie IIIa, dass Gelotophobie einen positiven Zusammenhang mit Angst und Vermeidung aufweist ($r_s \geq .23$), Gelotophilie negativ mit Vermeidung in Zusammenhang steht ($r = -.18$) und Katagelastizismus unkorreliert mit den Bindungsdimensionen ist ($r \leq .03$). Die Untersuchung der Partner Effekte mittels des APIM ergab keine substantiellen Beziehungen zwischen den Dispositionen und der Bindung der Partner:innen. In Sample 2 der Studie IIIa wurde mittels des Actor-Partner Interdependence Mediation Model (APIMeM; Ledermann et al., 2011) untersucht, ob die Bindungsdimensionen den Zusammenhang zwischen den Dispositionen und Beziehungszufriedenheit vermitteln. Die APIMeM Analysen ergaben, dass Bindungsangst den Zusammenhang zwischen Gelotophobie und Zufriedenheit auf Ebene der Akteure vermittelt und dass Bindungsvermeidung einen indirekten Zusammenhang mit der Zufriedenheit der Akteure *und* Partner:innen aufweisen. Demgegenüber vermittelte Vermeidung die Zusammenhänge zwischen Gelotophilie und Zufriedenheit positiv für Akteure und Partner:innen. Für Katagelastizismus wurde ein numerisch kleiner indirekter Effekt von Bindungsangst gefunden.

Weiterhin konnte der Befund repliziert werden, dass Gelotophobie den aktuellen sowie über die Lebenszeit andauernden single-Status positiv vorhersagt und das Angst und Vermeidung den Gelotophobie-Beziehungsstatus Zusammenhang vermitteln (Studie IIIa, Sample 1). Gelotophilie und Katagelastizismus standen in keinem Zusammenhang mit dem Beziehungsstatus. Da die zugrundeliegenden Substichprobengrößen der singles und in Beziehung befindlichen Teilnehmenden aus Sample 1 eine Replikation der Befunde in größerem Umfang wünschenswert machten, war das Ziel der Studie IIIb die Analysen in einer größeren Stichprobe zu wiederholen. Dafür wurden Daten von $N = 531$ Teilnehmenden erhoben und mit der gleichen Methode analysiert. Erneut korrelierte Gelotophobie substantiell mit Angst und Vermeidung ($r_s \geq .28$) und konnte den Beziehungsstatus vorhersagen. In der Mediationsanalyse zeigte sich jedoch, dass vornehmlich Vermeidung diesen Zusammenhang mediiert.

Zusammenfassend konnten die Ergebnisse der Studie IIIa das Wissen um die Dispositionen in romantischen Beziehungen erweitern, indem sie im Modell der Bindungsrepräsentationen verortet wurden und vor allem substantielle indirekte Effekte auf wichtige Indikatoren von Beziehungen, nämlich Beziehungsstatus (Studie IIIa, Sample 1 und

Studie IIIb) und Beziehungszufriedenheit (Studie IIIa, Sample 2), aufwiesen. Die Befunde unterstützen die Annahme, dass Gelotophobie Bindungsrepräsentationen aufweisen, welche es ihnen erschwert Nähe und enge Bindungen zuzulassen und romantische Beziehungen einzugehen. Mögliche Mechanismen wie das Überschreiben älterer Bindungserfahrungen durch neue, positive Erfahrungen in Beziehungen (Fraley et al., 2015) sowie die Möglichkeit, dass Partnerähnlichkeit einen Beitrag bei der Entstehung von Beziehungen leisten könnten, werden diskutiert. Limitationen wie das Querschnittsdesign, exklusive Analyse von Selbstberichten, ungleichgeschlechtlichen Paaren und deutschsprachigen Teilnehmer:innen werden diskutiert.

8.2.2.3 Eifersucht. Romantische Eifersucht beschreibt die erhöhte Neigung zur Wahrnehmung einer realen oder wahrgenommenen Bedrohung der Beziehung und äußert sich nach Pfeiffer und Wong (1989) auf drei Ebenen: Kognitiv (d.h. Gedanken über die potentielle Bedrohung), Emotional (d.h. verminderter Affekt in Reaktion auf die Bedrohung) und im Verhalten (d.h. detektivistisches Verhalten zur Prüfung auf Anzeichen der Bedrohung, z.B. heimliches Durchsuchen der Dinge der Partner:innen). Ziel der Studie IV war es, die Dispositionen im Umgang mit Lachen und ausgelacht werden in den drei Dimensionen der Eifersucht in romantischen Paaren zu lokalisieren: Actor-Effekte von Selbstberichten beschreiben die Neigung zur Eifersucht in Abhängigkeit der drei Dispositionen und Partner-Effekte und geben darüber Auskunft, ob die Ausprägungen in den Dispositionen ggf. Eifersucht im Zusammenhang mit der Eifersucht von Partner:innen steht. Unter Rücksicht der Neigung zu Unsicherheit in Beziehungen (vgl. Studie IIIa und IIIb) wurden insbesondere positive Zusammenhänge mit Gelotophobie erwartet. Die Untersuchung der Partner Effekte beruhte auf der Annahme, dass das aktive Engagement zum Hervorrufen des Lachens bei anderen, wie in Gelotophilie und Katagelastizismus beschrieben, eine gewünschte Eigenschaft in potentiellen Partner:innen darstellt (vgl. Brauer & Proyer, 2021c) und diese ggf. auch von "konkurrierenden" Partner:innen gewollt sein könnten und damit die Partnerin/den Partner attraktiver machen und dadurch die Beziehung als bedroht wahrgenommen werden könnte. Darüber hinaus wurde angenommen, dass nicht nur die selbstberichtete Ausprägung in den Dispositionen eine Rolle für die Eifersucht spielen könnte, sondern dass die *Wahrnehmungen* der Ausprägung in den Dispositionen der Partner:innen einen Beitrag leisten könnten. Frühere Studien zeigten, dass in Beziehungen häufig die Wahrnehmung eines Partners inkrementelle Beiträge leistet und eine ebenso gewichtige Rolle spielt wie die tatsächlichen Selbstbeschreibungen des Partners. Entsprechend wurden zusätzlich die Partnerwahrnehmungen mit Bezug auf die Eifersucht untersucht.

Schlussendlich sollte auch in dieser Studie geprüft werden, ob eine beziehungsrelevante Variable wie Eifersucht einen indirekten Effekt auf die Zusammenhänge zwischen den Dispositionen und Beziehungszufriedenheit aufweisen könnte, da Eifersucht in vorherigen Studien als robuster Prädiktor der Beziehungszufriedenheit identifiziert wurde (z.B. Elphinston et al., 2011). Die Analysen wurden erneut mittels APIM und APIMeM durchgeführt in einer Stichprobe von $N = 228$ ungleichgeschlechtlichen romantischen Paaren.

Die Analyse der Actor Effekte ergab, dass Gelotophobie wie erwartet positiv in Zusammenhang mit allen Arten der Eifersucht steht. Gelotophilie stand positiv mit kognitiven und behavioralen (nur Frauen) Aspekten der Eifersucht in Zusammenhang, jedoch negativ mit emotionalen Aspekten der Eifersucht. Katagelastizismus war positiv mit kognitiven und behavioralen Aspekten der Eifersucht assoziiert. Entgegen den Erwartungen waren die Partner Effekte weitgehend unbedeutsam, mit der Ausnahme, dass Männer höhere kognitive Eifersucht aufweisen, je höher die Partnerin Freude im ausgelacht werden empfindet. Robuste Effekte über die Existenz der Actor- und Partner Effekte der Selbstberichte hinaus zeigten die Partnerwahrnehmungen: Je stärker Männer ihre Partnerin als gelotophil wahrnahmen, desto höher war ihre kognitive und behaviorale Eifersucht ausgeprägt; gleiches gilt für die Wahrnehmungen von Katagelastizismus (Ausnahme: beide Partner:innen zeigen erhöhte behaviorale Aspekte der Eifersucht bei Wahrnehmung von Katagelastizismus). Wahrnehmungen der Gelotophobie waren numerisch schwach mit Eifersucht assoziiert. Schlussendlich wurden APIMeMs berechnet zur Testung indirekter Effekte von Eifersucht auf die Zusammenhänge zwischen den Dispositionen und Beziehungszufriedenheit berechnet. Hier zeigten sich differentielle Effekte: Kognitive Elemente der Eifersucht mediieren die Beziehungszufriedenheit auf Ebene der Akteure wohingegen höhere Eifersucht in allen Typen positiv (i.S.v. höheren Werten) auf die Eifersucht der *Partner:innen* wirkt. Demgegenüber konnte für Gelotophilie und kognitive Eifersucht gefunden werden, dass Akteure geringere Eifersucht aufweisen. Dennoch zeigte sich für Partner:innen ein komplexeres Bild, da höhere Gelotophilie des Partners/der Partnerin mit höherer eigener kognitiver Eifersucht in Zusammenhang stand und diese negativ auf die Beziehungszufriedenheit „wirkt“. Für Katagelastizismus ergab sich ein intraindividuell negativer indirekter der kognitiven Eifersucht im Zusammenhang mit der Zufriedenheit. Zusätzlich wurde für Frauen ein negativer indirekter Effekt der emotionalen Eifersucht festgestellt.

Die Befunde von Studie IV haben die Untersuchung der Dispositionen zum Umgang mit Lachen und ausgelacht werden um den Einbezug des Konstrukts Eifersucht und dessen indirekte Effekte für die Beziehungszufriedenheit erweitert. Darüber hinaus konnte das

Design der vorliegenden Studie im Vergleich zu vorherigen Studien um die Komponente der Partnerwahrnehmungen erweitert werden, welche einen eigenständigen Beitrag über die Existenz von Actor- und Partner Effekten der Selbstberichte hinaus leisten konnte. Die Befunde werden mit Bezug auf die Bedeutung der Dispositionen für enge und romantische Beziehungen diskutiert und unter dem Fokus vorheriger Befunde zur Akkuratheit und interpersonalen Wahrnehmung der Dispositionen diskutiert. Limitationen wie das Querschnittsdesign und Begrenzung auf deutschsprachige und ungleichgeschlechtliche Teilnehmer:innen werden diskutiert.

8.3 Integration der Befunde, Implikationen und zukünftige Forschung

Die vorliegende Arbeit hatte es zum Ziel drei Dispositionen, die interindividuelle Unterschiede im Umgang mit Lachen und ausgelacht werden beschreiben (Gelotophobie, Gelotophilie und Katagelastizismus; Ruch & Proyer, 2009a) im Kontext sozialer Beziehungen zu untersuchen. Dafür wurden fünf Studien durchgeführt, die zwei Themenbereiche sozialer Beziehungen adressieren in welcher die intra- und interindividuellen Unterschiede in den drei Dispositionen eine Rolle spielen könnten, nämlich die Frage nach der akkuraten Wahrnehmung der Dispositionen bei anderen Menschen sowie deren Rolle in romantischen Beziehungen. Zur Modellierung der komplexen dyadischen Beziehungen wurden Daten von Dyaden (Beurteilte und Beurteilende; romantische Paare) erhoben und mit entsprechenden Modellen wie dem Actor-Partner Interdependence Model (APIM; Cook & Kenny, 2005) ausgewertet.

Die vorliegende Studie erweitert das Wissen und die Befundlage um die Dispositionen im sozialen Kontext. Bereits frühere Forschung betrachtete die soziale Funktion des Lachens (z.B. Darwin, 1872/1965) und wie erwartet zeigte sich, dass zwischenmenschliche Unterschiede in ihrem Umgang mit Lachen vergleichsweise akkurat wahrgenommen werden können und mit Indikatoren enger Beziehungen, bspw. Zufriedenheit mit der Beziehung, Erwartungen und Verhalten in engen Beziehungen (Bindungsstile) und Wahrnehmungen von Bedrohungen der Beziehung (Eifersucht), assoziiert sind. Darüber hinaus zeigten Mediationsanalysen in den Studien IIIa, IIIb und IV die Wichtigkeit der Berücksichtigung der hier untersuchten engen beziehungsrelevanten Variablen, da sie konsistent indirekte Effekte für outcomes wie Beziehungsstatus (Studien IIIa und IIIb) sowie Beziehungszufriedenheit (Studien IIIa und IV) aufwiesen und das Verständnis um die direkten Assoziationen zwischen den drei Dispositionen und Beziehungszufriedenheit (vgl. Studie II) erweitern. Die Dispositionen zeigten in allen Studien differentielle Zusammenhänge mit Außenkriterien, was erneut deren Eigenständigkeit unterstreicht. Die Ergebnisse der vorliegenden Arbeit

unterstreichen die Wichtigkeit des bisher in der Psychologie vergleichsweise weniger beachteten Phänomens des Lachens und Auslachens und bieten einen ersten systematischen Einblick in die Lokalisation der Dispositionen zum Umgang mit Lachen und ausgelacht werden in sozialen Beziehungen und bilden die Grundlage für die weitere Erforschung der Dispositionen unter Rücksicht des sozialen Kontexts. Beispielsweise sei hier genannt, dass die Erkenntnisse um die akkurate Wahrnehmung der Dispositionen und der inkrementelle Beitrag der Partnerwahrnehmungen zukünftige Studien informiert, in denen u.a. die Selbst- und Bekanntenwahrnehmung *maladaptiver* Persönlichkeitseigenschaften untersucht wurde und die Dispositionen als Funktion der Diskrepanz zwischen Selbst- und Bekanntenwahrnehmung näher analysiert wurde (Brauer et al., 2022). Darüber hinaus wurden Erkenntnisse der Wahrnehmung mit Forschung zu den Dispositionen in Beziehungen kombiniert, in dem die differentiellen Zusammenhänge zwischen Selbst-, Partner- und Ideal-Partnerwahrnehmungen beschrieben und mit Bezug auf die Beziehungszufriedenheit in romantischen Paaren untersucht werden (Brauer et al., 2021).

Die Arbeit diskutiert auch Vorschläge zu Erweiterungen des Modells der putativen Ursprünge und Antezedenzen zur Beschreibung der Entwicklung der Angst vor dem Ausgelacht werden, welches zuletzt von Ruch, Hofmann et al. (2014) revidiert wurde. Und zwar wird diskutiert, dass die Aufrechterhaltung und Entwicklung der Gelotophobie wahrscheinlich nicht auf intraindividuelle Faktoren beschränkt ist, wie bereits auch in Ruch, Hofmann et al., 2014 beschrieben, sondern in Interaktion mit der sozialen Umwelt steht und sich diese vermutlich wechselseitig beeinflussen (vgl. z.B. Neyer & Asendorpf, 2001; Neyer et al., 2014). Entsprechend wurde das Modell um Komponenten zur Beschreibung der romantischen Beziehungen erweitert, sowie ein dyadisches Modell vorgeschlagen, welches sowohl individuelle als auch dyadische Aspekte und deren Wechselseitigkeit berücksichtigt. Längsschnittliche Studien sind für die Beantwortung von Fragestellungen der Ko-Entwicklung und zeitüberdauernden Wechselseitigkeit notwendig. So wäre es wünschenswert zu untersuchen, ob Gelotophobiker:innen tatsächlich durch die Ähnlichkeit zu ihren Partner:innen profitieren und damit den Weg für eine erfüllende romantische Beziehung ebnen können und dies ggf. auch Modulationen im Bindungsstil erlaubt, welcher sich in Richtung Sicherheit (d.h. geringe Angst und Vermeidung) verändern könnte. Diese Überlegungen werden auch auf die Dispositionen Gelotophilie und Katagelastizismus übertragen. Für beide Dispositionen wären longitudinale Entwicklungen und partnerschaftliche Co-Entwicklungen ebenso ein wichtiger Ausblick und Ansatzpunkt für zukünftige Forschung, um bspw. zu untersuchen, ob sich ggf. auch hier Adjustierungen an

Partner:innen ergeben. Speziell unter Rücksicht der Katagelastizismus-Konflikt Zusammenhänge scheint es hier einen wichtigen Ansatzpunkt zur weiteren Forschung zu geben.

Schlussendlich unterstreichen die Ergebnisse der vorliegenden Studien die Annahme, dass intra- und interindividuelle Unterschiede im Umgang mit Lachen und ausgelacht werden eine Rolle für die Gestaltung und das Erleben von zwischenmenschlichen Beziehungen spielen. Die differentiellen Zusammenhänge von Gelotophobie, Gelophilie und Katagelastizismus mit zahlreichen beziehungsrelevanten Merkmalen im Sinne von Actor-, Partner- und dyadischen Effekten weisen darauf hin, dass die Dispositionen einen Beitrag zum Verständnis des Erlebens und Verhaltens in Beziehungen leisten. Es wäre wünschenswert, dass die vorliegenden Studien den Anfang der systematischen Erforschung vom Umgang mit Lachen und ausgelacht werden in sozialen Beziehungen darstellen und der Forschungszweig weiter ausgebaut wird.

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(General Introduction, General Discussion, and German Synopsis)

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Hiermit erkläre ich an Eides statt, die Dissertation selbstständig und nur unter Verwendung der angegebenen Quellen, Hilfen und Hilfsmittel angefertigt zu haben und die den benutzten Werken wörtlich oder inhaltlich entnommenen Stellen kenntlich gemacht zu haben. Ich habe mich anderwärts nicht um einen Doktorgrad beworben und besitze keinen entsprechenden Doktorgrad. Ich erkläre, dass ich die Dissertation oder Teile davon nicht bereits bei einer anderen wissenschaftlichen Einrichtung eingereicht habe und dass sie dort weder angenommen noch abgelehnt wurde. Ich erkläre die Kenntnisnahme der dem Verfahren zugrunde liegenden Promotionsordnung der Philosophischen Fakultät I der Martin-Luther-Universität Halle-Wittenberg vom 13. Juni 2018. Weiterhin erkläre ich, dass keine Zusammenarbeit mit gewerblichen Promotionsbearbeiterinnen/ Promotionsberatern stattgefunden hat.

I hereby declare in lieu of an oath that I have written this dissertation independently and only with the help of the sources, aids, and resources indicated, and that I have indicated the passages taken verbatim or in substance from the works used. I have not applied for a doctoral degree elsewhere and do not hold a corresponding doctoral degree. I declare that I have not already submitted the dissertation or parts thereof to another scientific institution and that it has neither been accepted nor rejected there. I declare that I have taken note of the doctoral regulations of the Faculty of Philosophy I of the Martin Luther University Halle-Wittenberg dated June 13, 2018, on which the procedure is based. Furthermore, I declare that no cooperation with commercial doctoral advisors has taken place.

Kay Brauer