Narcissism and Romantic Relationships: The Differential Impact of Narcissistic Admiration and Rivalry

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CITATION
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Narcissism is known to be related to romantic success in short-term contexts (dating, early stage relationships) but also to problems in long-term committed relationships. We propose that these diverging romantic outcomes of narcissism can be explained by differential associations with agentic versus antagonistic dimensions of grandiose narcissism: Narcissistic Admiration and Rivalry. Both dimensions serve the central narcissistic goal of gaining and maintaining a grandiose self-view, but do so by different processes: Admiration is characterized by the tendency to promote the positivity of one’s self-view by seeking social admiration (assertive self-enhancement). Rivalry is characterized by the tendency to protect oneself from a negative self-view by derogating others (antagonistic self-protection). Across 7 studies (total N = 3,560) using diverse measures and methodological approaches (self-, peer, and partner reports, as well as interpersonal perception measures in video-based studies, face-to-face laboratory encounters, and online surveys), we show that the short-term romantic appeal associated with narcissism is primarily attributable to the dimension of Admiration, whereas the long-term romantic problems associated with narcissism are primarily attributable to the dimension of Rivalry. These results highlight the utility of a 2-dimensional reconceptualization of grandiose narcissism for explaining its heterogeneous romantic outcomes. The findings further underscore the idea that different facets of personality traits might impact different aspects of romantic relationship quality, depending on the stage of the relationship. Such a more nuanced view increases the predictive validity of personality traits in social relationship research.

Keywords: grandiose narcissism, romantic relationships, interpersonal attraction, personality-relationship dynamics

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I thought your eyes were fixed on me, but now I know, yourself is all you wanna see.
—Ella Henderson, “Mirror Man”

In her song “Mirror Man,” British singer Ella Henderson describes a romantic relationship with a narcissistic man. Similar content can be found in lyrics, poems, and literature throughout the ages, the most well-known of them probably being the tragic love story of Narcissus and Echo. The impact of narcissism on romantic relationships is not only a popular theme in literature and music, but has garnered considerable scientific attention as well (W. K. Campbell & Miller, 2011; Furnham, Richards, & Paulhus, 2013; Grijalva et al., 2015; J. D. Miller & Campbell, 2010). In that research, grandiose narcissism1 is defined as a personality trait characterized by an inflated and overly positive view of the self, including a strong sense of superiority, specialness, and entitlement (e.g., W. K. Campbell, Brunell, & Finkel, 2006; W. K. Campbell & Campbell, 2009; Morf & Rhodewalt, 2001). Prior research on narcissism and romantic relationships has shown that narcissism is related to romantic appeal and success in dating or short-term romantic relationships, but also to serious problems in long-term romantic relationships (for an overview, see W. K. Campbell et al., 2006). Little is known, however, about the underlying reasons for these diverging interpersonal romantic outcomes of narcissism. In the present article, we propose that two dimensions of narcissism must be distinguished in order to understand the heterogeneous romantic impacts of narcissism. We hypothesize that the diverging romantic outcomes can be explained as a consequence of differential associations with these two dimensions.

Interpersonal Consequences of Narcissism

Narcissism is related to interpersonal strategies and behaviors that are relevant for the initiation and maintenance of social relationships. To achieve their central goal of gaining and maintaining a grandiose self-view, individuals high on narcissism seek admiration from others. This is expressed in self-assured, charming, entertaining, and assertive behaviors (e.g., Back et al., 2013; Back, Schmukle, & Egloff, 2010; W. K. Campbell & Campbell, 2009; Carlsson, Vazire, & Oltmanns, 2011; Küffner, Nestler, & Back, 2013; Paulhus, 1998; R. Raskin & Terry, 1988). At the same time, to defend their own superior status, people high on narcissism tend to derogate others who threaten their grandiose self-views, resulting in socially insensitive, selfish, hostile, and aggressive behaviors (e.g., Back et al., 2013; Bushman & Baumeister, 1998; W. K. Campbell, Bush, Brunell, & Shelton, 2005; Kernis & Sun, 1994; Küffner et al., 2013; Morf & Rhodewalt, 1993; Paulhus, 1998; Twenge & Campbell, 2003). For example, individuals with high scores on narcissism have been found to blame their own failures on others, to react hypersensitively when criticized, and to exploit their social partners (e.g., W. K. Campbell, Reeder, Sedikides, & Elliot, 2000; Morf & Rhodewalt, 2001; R. Raskin & Terry, 1988; Rhodewalt & Morf, 1998; Smalley & Stake, 1996).

This pattern of interpersonal strategies and behaviors leads to a “mixed blessing” (Paulhus, 1998) with respect to relational outcomes, with divergent outcomes depending on the stage of the social relationship. W. K. Campbell and Campbell (2009) summarized this in their contextual reinforcement model: Individuals high on narcissism thrive in the early stages (referred to as emerging zone) of a relationship, as they can take advantage of their charming and entertaining qualities. Therefore, they tend to be liked, are usually successful at initiating new social relationships, and initially receive the social admiration they crave (e.g., Brunell & Campbell, 2011; W. K. Campbell & Campbell, 2009; Dufner et al., 2012; Friedman, Oltmanns, Gleason, & Turkheimer, 2006; Oltmanns, Friedman, Fiedler, & Turkheimer, 2004). As social relationships deepen (referred to as enduring zone), however, narcissism’s more antagonistic characteristics are revealed, triggering interpersonal problems (e.g., conflicts and transgressions) as well as less liking and admiration for the narcissistic social partner (e.g., W. K. Campbell & Campbell, 2009; Carlson et al., 2011; Czarna, Dufner, & Clifton, 2014; McCullough, Emmons, Kilpatrick, & Mooney, 2003; Morf & Rhodewalt, 2001; Paulhus, 1998). Probably as a consequence, individuals high on narcissism often avoid deepening their social relationships and lack a desire for intimate relationships (W. K. Campbell & Campbell, 2009).

Narcissism and Romantic Relationships

The distinct pattern of narcissism’s effects on social relationships seems to be particularly pronounced in romantic relationships. Prior research has shown that narcissism is related to success at attracting romantic partners and to romantic appeal in short-term romantic contexts (e.g., dating, sexual affairs, or early stage romantic relationships), but is also linked to serious relationship problems in the long run (i.e., in committed long-term romantic relationships; e.g., Brunell & Campbell, 2011; W. K. Campbell et al., 2006; W. K. Campbell & Campbell, 2009; Holtzman & Strube, 2011).

In taking a closer look at the aspects that make up narcissism’s appeal in short-term romantic contexts, prior studies have found that narcissism is related to a series of romantically attractive characteristics. These include an appealing and groomed appearance (Back et al., 2010; Gangestad, Garver-Apgar, Simpson, & Cousins, 2007; Vazire, Naumann, Rentfrow, & Gosling, 2008), high confidence, a high capacity for status (W. K. Campbell et al., 2006; Paulhus, 1998; R. Raskin & Terry, 1988), high self-perceived attractiveness (Gabriel, Critelli, & Ee, 1994), as well as little fear of romantic rejection, and thus the tendency to readily and unrestrainedly approach members of the opposite sex (W. K. Campbell et al., 2006). Consequently, individuals with high scores on narcissism are perceived by the opposite sex as likable, physically and sexually attractive, and having high mate appeal (Brunell & Campbell, 2011; Dufner, Rauthmann, Czarna, & Denissen, 2013; Holtzman & Strube, 2010; Jauck et al., in press).

The higher mate appeal associated with narcissism has direct interpersonal consequences. In past studies, people high on narcissism have claimed that they are able to meet romantic partners easily and have received fewer rejections and more phone numbers from the opposite sex than people lower on narcissism (Dufner et al., 2013; Rhodewalt & Eddings, 2002). They furthermore reported having more unrestricted sociosexual orientations (i.e., a greater

1 Throughout the article, the term narcissism refers to a continuous and normally distributed personality trait in the general population (i.e., trait narcissism; e.g., W. K. Campbell, Foster, & Finkel, 2002; R. N. Raskin & Hall, 1979). The present article examines grandiose, not vulnerable, narcissism (for details on the distinction between grandiose and vulnerable narcissism, see J. D. Miller & Maples, 2011; Pincus & Roche, 2011).
desire for casual sex) and engaging more frequently and more successfully in short-term mating (i.e., one-night stands or sexual affairs; Foster, Shrira, & Campbell, 2006; Jonason, Li, Webster, & Schmitt, 2009; Koladich & Atkinson, 2016; Reise & Wright, 1996). Individuals with higher scores on narcissism also reported a larger number of lifetime sexual as well as dating partners (Adams, Luevano, & Jonason, 2014; Jonason et al., 2009; Rholes & Eddings, 2002). Together, all of these findings indicate narcissism’s high romantic appeal and success in short-term acquaintance contexts.

In long-term romantic relationships, on the other hand, prior research has shown that narcissism is related to a series of problems. To begin with, narcissism was found to be associated with dispositional characteristics and identities that adversely influence long-term committed relationships: Besides their lack of interest in forming close relationships (W. K. Campbell, 1999; W. K. Campbell et al., 2006; W. K. Campbell & Campbell, 2009; Carroll, 1987), people scoring high on narcissism have been found to be selfish; to lack respect, tolerance, and empathy in long-term relationships (Brunell & Campbell, 2011; W. K. Campbell, Bonacci, Shelton, Exline, & Bushman, 2004; W. K. Campbell et al., 2006); and to perceive their romantic partners in a less positive light than people lower on narcissism (W. K. Campbell, Rudich, & Sedikides, 2002). Probably as a consequence, the long-term romantic relationships of individuals high on narcissism tend to be characterized by low emotional intimacy, love, and trust (Brunell & Campbell, 2011; W. K. Campbell et al., 2006); a lack of warmth and caring, even to the point of aggression (W. K. Campbell, 1999; W. K. Campbell, Foster, & Finkel, 2002; Keller et al., 2014); and a low relationship satisfaction and low relationship quality experienced by both partners (W. K. Campbell et al., 2006; W. K. Campbell & Campbell, 2009; Foster, 2008; Lamkin, Campbell, vanDellen, & Miller, 2015; Lavner, Lamkin, Miller, Campbell, & Karney, 2016). In past studies, individuals high on narcissism who were involved in long-term romantic relationships showed low levels of commitment and investment, reported a larger number of and higher attention to potential alternative partners, were susceptible to infidelity, and experienced a larger number of divorces than people lower on narcissism (Brewer, Hunt, James, & Abell, 2015; Brunell & Campbell, 2011; Buss & Shackelford, 1997; W. K. Campbell et al., 2006; W. K. Campbell & Foster, 2002; W. K. Campbell, Foster, et al., 2002; Cramer, 2011; Foster, 2008; Foster & Campbell, 2005; Foster et al., 2006). Furthermore, individuals with higher scores on narcissism reported a greater frequency of conflicts with their romantic partners (Horan, Guinn, & Banghart, 2015). After such conflicts or after transgressions by their romantic partners (e.g., being insulted or cheated on), people high on narcissism stated to react with revenge, little forgiveness, and little relationship maintenance behavior (Exline, Baumeister, Bushman, Campbell, & Finkel, 2004; Peterson & DeHart, 2014; Rasmussen & Boon, 2014), which is a dysfunctional dyadic coping style. All of this illustrates that narcissism is associated with quite substantial problems in long-term romantic relationships.

To sum up, the bulk of empirical evidence points to a high romantic appeal and success of narcissism in short-term acquaintance contexts such as dating and early stage relationships, but also indicates that narcissism evokes problems in long-term romantic contexts such as committed relationships. In his chocolate cake model, W. K. Campbell (2005) therefore compared engaging in a romantic relationship with a narcissistic partner to eating a chocolate cake: an initial rush of excitement and positive feelings one cannot resist, followed by long-term costs and regret that outweigh the initial pleasure.

However, an essential question still needs to be answered: How can these diverging romantic effects of narcissism be explained? Most prior research has treated grandiose narcissism as a one-dimensional construct that causes both short-term gains and long-term losses in romantic relationships. Such an explanation is prominent in most theoretical accounts of grandiose narcissism (e.g., Baumeister & Vohs, 2001; W. K. Campbell et al., 2006; W. K. Campbell & Campbell, 2009). For example, in the chocolate cake model (W. K. Campbell, 2005), both the short-term delight and the long-term regret of the cake are explained by its highly caloric nature: Whereas it triggers taste receptors in the short term, it also stimulates fat production and thus leads to regret in the long term. Our position is different in that we propose that different psychological ingredients explain the short-term versus long-term romantic consequences of narcissism.

Specifically, we propose that a two-dimensional distinction of grandiose narcissism is needed to comprehensively understand the diverging romantic effects of narcissism in different stages of relationships. To this end, we introduce a recent theoretical conceptualization of grandiose narcissism—the Narcissistic Admiration and Rivalry Concept (NARC; Back et al., 2013)—to the field of romantic relationships. The NARC differentiates two dimensions of grandiose narcissism (narcissistic Admiration and narcissistic Rivalry) and thus divides the heterogeneous interpersonal strategies associated with narcissism into two subsets that might have different interpersonal outcomes. We argue that the diverging romantic effects of narcissism can be explained as a consequence of differential associations with these two dimensions.

**Narcissistic Admiration and Rivalry in Romantic Relationships**

According to the NARC, two distinct but positively related trait dimensions of grandiose narcissism need to be distinguished: narcissistic Admiration and narcissistic Rivalry. Both dimensions serve narcissistic persons’ central goal of gaining and maintaining a grandiose self-view but differ markedly in the social strategies used and in their interpersonal consequences. **Admiration** is characterized by the narcissistic tendency to promote the positivity of one’s self-view by seeking social admiration. Individuals high on Admiration strive for uniqueness, engage in thoughts about their own grandiosity, and show self-assured, dominant, expressive, and charming behaviors (assertive self-enhancement). All of these are behaviors that tend to trigger positive social outcomes (e.g., being liked; Back et al., 2013; Lange, Crusiús, & Hagemeyer, in press; Leckelt, Küfner, Nestler, & Back, 2015). **Rivalry**, by contrast, is characterized by the narcissistic tendency to protect oneself from a negative self-view by derogating others. Individuals high on Rivalry strive for supremacy by devaluing others, and they engage in selfish, socially insensitive, arrogant, hostile, and aggressive behaviors that lack interpersonal warmth, trust, and forgiveness (antagonistic self-protection). These behaviors often lead to negative social outcomes (e.g., social conflict; Back et al., 2013; Lange et al., in press; Leckelt et al., 2015).
It should be noted that, according to the NARC, grandiose narcissism is not equated with necessarily having high scores on both dimensions. As the dimensions of Admiration and Rivalry are positively correlated, high levels on both dimensions can be combined within the same individual, but this does not have to be the case (as the correlation between the dimensions is medium in size, i.e., about .30 – .60; Back et al., 2013; Leckelt et al., 2016; Rogoza, Wyszyńska, Maćkiewicz, & Cieciuch, 2016). Moreover, according to the NARC, the respective interpersonal consequences of each dimension occur independently of the level of the other dimension. That is, it is not necessary for both dimensions to be high in order for the respective interpersonal consequences to occur.

We propose that distinguishing between these two narcissistic dimensions might be a crucial point for explaining the diverging interpersonal outcomes of narcissism in short-term versus long-term romantic contexts, as we hypothesize that Admiration and Rivalry should show differential effects on the initiation versus the maintenance of romantic relationships (see Figure 1): During dating and relationship initiation (i.e., short-term romantic contexts), interactions between (potential) romantic partners are mostly noncommittal in nature, focusing on having a good time together and getting to know each other (Finkel et al., 2015; Knapp, 1985; Reese-Weber, 2015). In this context of initiation, it is primarily the entertaining and alluring qualities of a romantic partner that produce attraction, such as physical attractiveness, self-assuredness, charmingness, and likability (e.g., Asendorpf, Penke, & Back, 2011; Back et al., 2011; Houser, Horan, & Furler, 2007; Wood, 1982). As a consequence, the behaviors that characterize Admiration—that is, a charming and likable demeanor as well as a self-assured appearance—should lead to a high romantic appeal in short-term romantic contexts. We therefore propose that Admiration might be the driving force behind the short-term romantic appeal associated with narcissism. Preliminary evidence in support of this hypothesis comes from a study by Dufner et al. (2013), in which in real-life dating situations (i.e., a short-term romantic context), men’s Admiration was associated with being perceived as more attractive by women and receiving more phone numbers.

Once a romantic relationship has reached more committed stages, the mutual interdependence between partners has grown considerably (Finkel et al., 2015; Knapp, 1985; Levinger & Snoek, 1972; Wood, 1982). In these committed stages, mutual valuation, warmth, trust, and unselfish behaviors are an essential part of the relationship. A lack of them usually becomes obvious only after a certain amount of interaction with a romantic partner and is likely to lead to romantic problems, such as reductions in relationship satisfaction and love (Altman & Taylor, 1973; W. K. Campbell, Foster, et al., 2002; Huston & Vangelisti, 1991; Levinger & Snoek, 1972). As a consequence, the behaviors that characterize Rivalry—that is, devaluation of others, revenge-orientation, lack of warmth, trust, and forgiveness, and selfish and aggressive behaviors—should lead to negative romantic outcomes in the long run when the highly interdependent nature of romantic relationships makes insensitive and aggressive social reactions most harmful. We therefore propose that Rivalry might be the driving force behind the long-term romantic problems associated with narcissism.

The Present Research

The aim of the present research was to examine whether the diverging effects of narcissism in different stages of romantic relationships (short-term appeal vs. long-term problems) could be explained by differential effects of Admiration and Rivalry. It should be noted that the main goal of the present research was to uncover which (if any) dimensions of narcissism underlie the diverging outcomes of narcissism in the two distinct stages of a romantic relationship. We did not aim to examine the trajectory of the influence of these dimensions over time.

As explained in the previous section, we hypothesized that narcissism’s short-term romantic appeal would primarily be attributable to the dimension of Admiration, whereas narcissism’s long-term romantic problems would primarily be attributable to the dimension of Rivalry. We tested these hypotheses in seven studies using different methodological approaches, including self-, peer, and partner reports, as well as interpersonal perception measures in video-based studies, face-to-face laboratory encounters, and online surveys (see Table 1 for an overview).

In all of the studies, we implemented the Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013). The NARQ is a self-report narcissism questionnaire that asks participants to indicate how much they agree with each of 18 statements about themselves on a 6-point scale ranging from 1 = “do not agree at all” to 6 = “agree completely.” Half of these items measure narcissistic Admiration (e.g., “I deserve to be seen as a great personality,” “I manage to be the center of attention with my outstanding contributions,” “Being a very special person gives me a lot of strength”), and the other half of the items assess narcissistic Rivalry (e.g., “I want my rivals to fail,” “Most people are somehow losers,” “I react annoyed if another person steals the show from me”).

In addition, we obtained several romantic outcome variables that measured either key indicators of short-term romantic appeal (Studies 1–3) or crucial characteristics of long-term romantic relationship functioning (Studies 4–7). We began with a video-based study (Study 1) to investigate whether the proposed short-term benefits of narcissistic Admiration would be reflected in people’s perceptions of self-introductory videos of potential romantic partners. To further examine narcissism’s short-term romantic impact in a more realistic setting, we conducted two face-to-face laboratory experiments assessing cross-sex interpersonal perceptions.

The results of these analyses largely corresponded with those found with the NARQ (see Appendix A). However, Admiration and Rivalry as measured with the NARQ consistently explained a greater portion of variance than the two NPI facets (mean adj. R² across all outcome measures of this article: NPI .03; NARQ .07).
(Study 2). In addition, we conducted several online surveys asking for self- and peer ratings of dispositions and characteristics relevant for or indicating short-term mating success (Study 3). To study narcissism’s long-term romantic impact, we assessed persons’ perceptions of their long-term romantic partners, using non-dyadic (Study 4) as well as dyadic data (Study 5). In addition, we administered several online surveys assessing indicators of romantic relationship functioning, including relationship characteristics as well as strategies relevant for long-term romantic relationship success, and using self-reports (Study 6) as well as dyadic data that included both self- and partner reports (Study 7). In all studies, we expected short-term romantic appeal to be particularly related to Admiration, whereas long-term romantic problems were expected to be predominantly associated with Rivalry.

In the following, we outline our method of data analysis. We standardized all variables within samples prior to the analyses. If not stated otherwise in the description of the respective study, the analytical strategy that we applied to examine the impacts of Admiration and Rivalry on the short- and long-term romantic outcomes was as follows for all studies. First, we computed zero-order correlations between each outcome variable and narcissistic Admiration and Rivalry, respectively. Second, because Admiration and Rivalry are positively correlated trait dimensions (mean r across all samples in this paper = .32, range = .14–.55), we ran a multiple regression for each outcome variable, entering Admiration and Rivalry simultaneously as predictors to obtain the unique contributions of each dimension.4 To determine the effect sizes of our results, we used standardized regression coefficients (Nestler, Grimm, & Schönbrodt, 2015), interpreting coefficients >.50 as large, coefficients around .30 as medium, and coefficients <.15 as small effects (cf. Cohen, 1992). Power analyses using G*Power (Version 3.1.5; Faul, Erdfelder, Buchner, & Lang, 2009) indicated that we needed sample sizes of at least \( n = 89 \) to detect a medium-sized effect with a power >95% in our analyses. This criterion was met in almost all of our analyses. When it was not met, we explicitly address power. Third, we performed commonality analyses (Nimon, Lewis, Kane, & Haynes, 2008) to estimate the amount of unique variance explained by Admiration as well as by Rivalry in each outcome variable. The detailed results of these analyses can be found in Appendix B. Finally, the descriptive statistics and internal consistencies of Admiration and Rivalry in the different samples are presented in Table 2. This article comes with online supplemental materials in which we present the results of additional analyses.

### Study 1: Self-Introductory Videos

This study was aimed at obtaining initial insights into whether the short-term romantic appeal associated with narcissism is primarily attributable to the dimension of narcissistic Admiration. To do so, we chose the most straightforward way to measure short-term romantic appeal: asking opposite-sex individuals to rate a person’s romantic appeal in a short-term acquaintance context. Prior research has found that individuals high on narcissism are perceived by the opposite sex as likable, physically attractive, and as having a great deal of appeal as a short-term partner (Brunell & Campbell, 2011; Holtzman & Strube, 2010). To investigate whether this short-term appeal is primarily attributable to the specific dimension of Admiration, we assessed the narcissism scores (Admiration and Rivalry) of heterosexual males who were currently looking for a romantic partner and recorded short self-introductory videos of the males. These videos were rated by unacquainted female perceivers on several short-term romantic characteristics (e.g., physical attractiveness, desirability as a short-term partner). We hypothesized that the positive short-term effect of being perceived as appealing by the opposite sex would particularly be related to narcissistic Admiration (and not or to a smaller degree to narcissistic Rivalry).

#### Method

**Participants.** The target persons in the videos were heterosexual males who were currently looking for a romantic partner and took part in a larger dating study conducted at the University
of Munich, Germany (for details, see Dufner et al., 2013, Study 3). As compensation for their participation, the target persons received partial course credit or monetary compensation for their participation. Received partial course credit or monetary compensation for their participation.

Procedure and materials. The male targets first completed the NARQ to assess their narcissistic Admiration and Rivalry. Afterward, they were instructed to introduce themselves for 20 s while being videotaped under standardized setting and lighting conditions. Participants were free to choose what they said or did

Table 1
Study and Method Overview

<table>
<thead>
<tr>
<th>Study</th>
<th>Method</th>
<th>Outcomes</th>
<th>Example operationalizations</th>
</tr>
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<tr>
<td>1</td>
<td>Video study</td>
<td>Interpersonal perceptions (zero-acquaintance) by opposite sex</td>
<td>Physical attractiveness, desirability as short-term partner, likeability</td>
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<td>2</td>
<td>Face-to-face laboratory encounters</td>
<td>Self- &amp; peer-reported dispositions and characteristics relevant for short-term mating success</td>
<td>Attractiveness as mate, approach orientation toward other sex, sexism</td>
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<td>3</td>
<td>Online surveys</td>
<td>Long-term context (all participants involved in committed romantic relationship)</td>
<td>Warmth, intelligence, physical attractiveness, likeability</td>
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Table 2
Sample Overview: Sample Characteristics and Descriptive Statistics for Admiration and Rivalry

<table>
<thead>
<tr>
<th>Sample</th>
<th>Study</th>
<th>n (male/female)</th>
<th>Age (years): M/SD (range)</th>
<th>Descriptive Admiration &amp; Rivalry</th>
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<tr>
<td>Sample</td>
<td></td>
<td></td>
<td></td>
<td>ADM M/SD (range)</td>
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<tr>
<td>A</td>
<td>1</td>
<td>Targets: 36 (all male)</td>
<td>23.97/4.04 (18–34)</td>
<td>3.960/0.83 (2.22–5.56)</td>
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<tr>
<td></td>
<td>1</td>
<td>Perceivers: 62 (all female)</td>
<td>22.74/2.48 (18–29)</td>
<td>2.970/0.79 (1.11–5.00)</td>
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<td>B</td>
<td>2, 3</td>
<td>68 (34/34)</td>
<td>24.50/3.87 (18–36)</td>
<td>3.210/0.73 (1.44–5.00)</td>
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<tr>
<td>C</td>
<td>2, 3</td>
<td>41 (20/21)</td>
<td>24.37/3.91 (20–39)</td>
<td>3.450/0.87 (1.33–5.54)</td>
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<tr>
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<td>27.27/2.96 (22–36)</td>
<td>3.02/1.05 (1.00–6.00)</td>
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<td>28.49/8.90 (16–66)</td>
<td>3.190/0.92 (1.00–5.89)</td>
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<td>3.150/0.82 (1.00–5.54)</td>
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<td>36.20/11.72 (18–65)</td>
<td>3.14/0.77 (1.00–5.22)</td>
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<td>L</td>
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<td>27.22/0.47 (18–72)</td>
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</tbody>
</table>

Note. Some of the samples used in this article have been used in other publications. Sample B is a subset of the participants (cross-sex groups) in Küfner et al. (2013), Study 2. Sample C is a subset of participants (cross-sex groups) in the PILS study (Geukes et al., 2016; Leckelt et al., 2015). Sample E was used in Gerlach, Allemann, Agroskin, and Denissen (2012). Samples E and K were used in Back et al. (2013). Sample N was used in Grosz, Dufner, Back, and Denissen (2015), Study 2; the outcome measures presented in the present article were assessed as an exploratory part of the study by Grosz et al., (2015). However, none of the analyses reported here overlap with any of the previously published analyses, as we used different dependent variables and/or only analyzed the cross-sex (instead of sex-unspecified) data. The videos we used in Study 1 were also used in Dufner et al. (2013), Study 3, but with different perceivers and dependent measures. For Samples E to O, all participants were involved in a long-term committed relationship. In Samples E and I, the short version of the Narcissistic Admiration and Rivalry Questionnaire (Back et al., 2013; Leckelt et al., 2016) was administered. Sample sizes represent the number of participants that could be recruited in the given time when conducting each study. For Sample O, the original sample consisted of 306 romantic couples. We excluded 12 homosexual couples as well as an additional 22 heterosexual couples of which at least one partner had not correctly answered a control item (“If you read the questions attentively, please select ‘2’ here”). ADM = Admiration; RIV = Rivalry.
in these self-introductions. The obtained videos were cut so that they ended after the participants finished their self-introduction, resulting in video durations that ranged from 18 to 29 s (M = 22.81, SD = 2.62). Controlling for video duration in our analyses had no effect on any of our results.

The female perceivers watched these videos in a laboratory session. After each video, they rated the male target they had just seen on the following dating-relevant characteristics: physical attractiveness, liking (both answered on a 6-point scale ranging from 1 = not at all to 6 = extremely), desirability as a partner for women in general (mate value, answered on a 10-point scale ranging from 1 = not at all to 10 = extremely), as well as their personal choice regarding the male target’s desirability as someone to have a date with, desirability as a short-term sexual partner for a noncommittal sexual affair or one-night stand, and desirability as a long-term romantic partner for a committed relationship (each answered dichotomously: desirable for me vs. not desirable for me). Ratings for each characteristic were averaged across perceivers (ICC [2, k] values: physical attractiveness, .99; liking, .98; mate value, .99; desirability as a date, .97; desirability as a short-term partner, .97; desirability as a long-term partner, .91). Because of high intercorrelations, these six scales were additionally averaged to form an overall appealing first impression score (α = .97). All scales were standardized prior to averaging.

Female perceivers also rated the male targets on three additional characteristics that are not directly dating-relevant and therefore are not presented in this article. Results for these additional ratings can be found in the online supplemental materials (Tables S6 and S7).

Results and Discussion

The results of the correlation and regression analyses are shown in Table 3. As expected for the short-term romantic acquaintance context of this video study, male targets’ Admiration was positively related to beneficial perceptions by the female perceivers on most of the rated characteristics: Males higher on Admiration were perceived as more physically attractive. They were liked more and were ascribed a higher mate value and desirability as a short-term partner. All effects were medium in size. Thus, males higher on Admiration left an overall more appealing first impression on the female perceivers. By contrast, no such effect was found for male targets’ Rivalry. Rivalry was unrelated to female perceptions on all of the rated dating-relevant characteristics. This confirmed our expectations that Rivalry is less important in short-term romantic contexts. The present findings should be interpreted as preliminary, however, because the power to detect a medium-sized effect in the present study was only 62% because of the small sample size.

All in all, male targets’ Admiration explained more unique variance than their Rivalry in all assessed cross-sex perceptions (see Table B1 in Appendix B for the detailed results of the commonality analyses). The present findings thus provide preliminary evidence that positive romantic short-term effects of male narcissism—such as an appealing first impression on female singles in self-introductory videos—might indeed be particularly associated with Admiration and thus with a specific dimension of grandiose narcissism.

Study 2: Face-to-Face Laboratory Encounters

Study 1 provided first evidence that narcissism’s short-term romantic appeal found in prior research might be attributable to Admiration. We conducted Study 2 to broaden the generalizability of these results in three ways. First, we investigated whether the effects found in Study 1 would hold when examining participants of both sexes, and thus assessed the impact of women’s Admiration and Rivalry on short-term romantic outcomes as well. Second, we recruited a considerably larger number of participants than in Study 1. Third, we created a more realistic experimental setting by studying the first impressions people form in face-to-face encounters. Face-to-face encounters are the most common way people get to know romantic partners (Finkel, Eastwick, Karney, Reis, & Sprecher, 2012) and thereby allow for a stronger test of our hypotheses than the partner-choice setting with no personal encounter used in Study 1. Thus, in Study 2, we asked previously unacquainted participants to meet in small mixed-sex groups in the laboratory. We obtained opposite-sex romantic interpersonal perceptions (attractiveness, likability) after brief self-introductions by each group member (i.e., at short-term acquaintance). On the basis of the results of Study 1, we again hypothesized that it would be narcissistic Admiration that would account for the appealing first impression on the opposite sex.

Method

Participants. Study 2 consisted of two independent samples (Samples B and C; see Table 2 for a sample overview) that summed to a total of 159 participants. Of these participants, 154 (77 female; age = 18–39 years, M = 24.48, SD = 3.90) provided data on the measures used in the present study. Participants from both samples were students at the University of Mainz, Germany, who were recruited via student mailing lists. They received partial course credit or monetary compensation for their participation.

Procedure. After obtaining participants’ demographics and personality measures in an online survey, participants attended a laboratory session. In mixed-sex groups of four to six unac-
quainted participants (mean group size = 4.53; equal sex ratio in 64.71% of the groups, the remaining groups deviated by one person from an equal sex ratio), they completed several tasks to get acquainted with each other. Participants were asked to rate each other group member on various interpersonal perception items (round-robin design; Kenny, Kashy, & Cook, 2006) at several time points in this getting-acquainted process. The detailed procedure for Sample C was as follows: (a) mutual ratings at zero-acquaintance before speaking a single word to each other, (b) reading standardized short text passages aloud, (c) mutual ratings, (d) a brief self-introduction that included their name and area of study, (e) mutual ratings, (f) a more detailed self-introduction that included their personal interests and leisure time activities, and (g) mutual ratings (see Geukes, Hutteman, Nestler, Küfner, & Buck, 2016). In Sample B, the procedure consisted of only parts (d) to (g) (see Küfner et al., 2013, Study 2).

**Measures.** As part of the online survey, participants completed the NARQ (mean α across samples: Admiration, .82; Rivalry, .79). In addition, the following outcome measures were obtained: At each rating time point in the getting-acquainted process, participants rated every other group member on likability (“I like this person”) and physical attractiveness (“This person is physically attractive”); only Sample C. All items were answered on an 11-point (Sample B) or 6-point scale (Sample C), both scales ranging from not at all to extremely. Only the cross-sex ratings were included in the analyses. For each participant, ratings were averaged across all cross-sex perceivers and then across all rating time points (mean α across samples: likability, .87; attractiveness, .96) to form a participant’s likability and attractiveness scores, respectively. In addition, these scores were standardized and then averaged to form an overall opposite sex appeal score (mean α across samples = .68). Participants also rated each other on a third item that was not directly dating-relevant (trustworthiness). Results for this item can be found in the online supplemental materials (Tables S8 to S10).

**Results and Discussion**

The results of the correlation and regression analyses are shown in Table 4. As expected, Admiration was positively related to all interpersonal perception variables, and all effects were medium in size: Individuals higher on Admiration were perceived as more likable and physically attractive by members of the other sex, thus resulting in a higher opposite-sex appeal for participants higher on Admiration. Rivalry, on the other hand, was unrelated to interpersonal perceptions by members of the opposite sex, also confirming our expectations. Again, Admiration explained more unique variance than Rivalry in all assessed interpersonal perception variables (see Table B2 for the detailed results of the commonality analyses). This indicates that positive short-term effects of narcissism such as an appealing first impression on the opposite sex in face-to-face encounters are primarily attributable to Admiration, thus corroborating the results of Study 1.

**Study 3: Online Surveys—Short-Term Context**

After finding support for our hypotheses using interpersonal perception measures in Studies 1 and 2, we shifted our focus to a different kind of important dependent measure in Study 3. In this study, we examined dispositions and characteristics that are relevant for or that indicate short-term mating success. More specifically, we assessed exclusively the success-related dispositions and characteristics that narcissism is usually found to be positively and highly related to, such as self-perceived attractiveness as a mate, desire for casual sex (i.e., sociosexuality), and the tendency to readily and unrestrainedly approach members of the opposite sex (e.g., W. K. Campbell et al., 2006; Gabriel et al., 1994; Jonason et al., 2009). We obtained these data with several large online surveys. Again, we hypothesized that it would predominantly be Admiration that would be related to those dispositions and characteristics that are associated with short-term romantic success.

**Method**

**Participants and procedure.** Study 3 consisted of six independent samples (Samples B to G; see Table 2 for a sample overview) that summed to a total of 1,257 participants. Of these participants, 1,239 (867 female; age = 16–66 years, M = 26.99, SD = 7.64) provided data on the measures used in the present study. All participants were German-speaking Internet users who completed an online survey. They received partial course credit, monetary compensation, or personality feedback for their participation. In Sample C, at least two people who were well-acquainted with each participant (e.g., close friends or family members) also completed an acquaintance-rating version of the self-ratings survey (for three participants, no acquaintance ratings could be obtained; all other participants were rated by an average of 2.32 acquaintances, SD = 0.91, range = 2–9).

**Measures.** In addition to the NARQ (mean α across samples: Admiration, .80; Rivalry, .77), participants completed the following measures. Not all measures were administered in all samples (see the online supplemental materials, Table S1, for an overview of measures in each sample).

*Attractiveness as a mate.* We assessed participants’ self-perceived attractiveness as a mate in different ways in the different samples: In Samples E and G, participants filled out a three-item version of the mate value scale by Landolt, Lalumière, and Quin-

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5 In both samples, the procedure included further tasks and mutual ratings at later time points in the study. We selected the time points presented in the present article because they best represent the context of short-term acquaintance. At the later time points that are not presented in this article, participants had interacted intensely and had thus gotten to know each other quite well. These later time points, therefore, reflect a context that lies somewhere in between short-term and long-term acquaintance and no longer represents pure short-term acquaintance. For the sake of completeness, we also analyzed the effects of Admiration and Rivalry on the mutual ratings at the later time points. The results indicated that the positive effect of Admiration on being liked diminished and vanished at later time points, whereas the influence of Rivalry on being perceived as attractive did not change at later time points. The detailed results of these analyses can be obtained from the first author.

6 The data in Study 2 have a multilevel structure (participants nested in groups). However, there was no significant variance between groups for both outcome measures (var.between = 0.13, p = .12; var.between attractiveness < .01, p = .95), and computing multilevel analyses led to similar results and identical conclusions as the multiple regression that ignored the group structure. To achieve comparability of results across studies, we therefore present the results of the regression that ignored the group structure in the present paper. The results of the multilevel analyses can be obtained from the first author.
Table 4  
Effects of Admiration and Rivalry on Interpersonal Perceptions by the Opposite Sex in Face-to-Face Encounters (Study 2)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>n (F)</th>
<th>r</th>
<th>β [95% CI]</th>
<th>r</th>
<th>β [95% CI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likeability</td>
<td>154 (77)</td>
<td>.31</td>
<td>[.16, .47]</td>
<td>.03</td>
<td>[-.03, -.19, .12]</td>
</tr>
<tr>
<td>Attractiveness*</td>
<td>86 (43)</td>
<td>.32</td>
<td>[.14, .56]</td>
<td>-.03</td>
<td>[-.12, -.33, .09]</td>
</tr>
<tr>
<td>Overall score: Opposite-sex appeal</td>
<td>154 (77)</td>
<td>.33</td>
<td>[.18, .49]</td>
<td>.03</td>
<td>[-.03, -.19, .12]</td>
</tr>
</tbody>
</table>

Note. Significant results (p < .05, two-tailed) are presented in boldface. F = female; ADM = Admiration; RIV = Rivalry; r = Pearson’s product-moment correlation (zero-order correlation); β = standardized regression coefficient from regressing romantic outcomes on Admiration and Rivalry simultaneously (unique regression weights); CI = confidence interval for the β.

* Power to detect a medium-sized effect was 94%, given the sample size of the attractiveness measure.

Admiration (1995), which measures self-perceived appeal as a mate (mean across samples = .83; e.g., “Members of the opposite sex are attracted to me”). Items were answered on a 5-point scale (1 = disagree to 5 = agree). To measure attractiveness as a mate in Samples B, C, and D, we assessed participants’ estimation of their own physical attractiveness. To do so, we used the four physical attractiveness items from the German Version of the Self Description Questionnaire (Marsh, 1988; Tanzer, 1991) in Sample D (α = .90; e.g., “I am good-looking”; 7-point scales ranging from 1 = strongly disagree to 7 = strongly agree), the physical attractiveness item of the Self Attributes Questionnaire (SAQ; Pelham & Swann, 1989) in Sample B, and a modified version of the SAQ in which self-perceived attractiveness was measured with three items (“physical attractiveness—face,” “physical attractiveness—body,” “physical attractiveness—styling”; α = .79) in Sample C. All items administered to Samples B and C were answered on a 10-point percentile ranking scale. Participants had to indicate whether they perceived themselves as belonging to the upper or lower 50%, 30%, 20%, 10%, or 5% of a normal distribution on the respective item in comparison with same-sex peers.

We opted to combine the physical attractiveness and mate value measures into a single outcome measure (attractiveness as a mate) because the two constructs are conceptually closely related, tend to overlap substantially (e.g., Back et al., 2011; Eastwick & Hunt, 2014; Fisher, Cox, Bennett, & Gavric, 2008), and showed almost identical patterns of results in our data. Separate results for each construct can be found in the online supplemental materials (Tables S11 to S13).

Approach orientation toward the other sex. To measure participants’ tendency to readily and unrestrainedly approach members of the opposite sex, we used three adapted social extraversion items from the Basel Emotional State Scale (Hobi, 1985) in Sample C (α = .84). All items were answered on 5-point bipolar scales and asked for typical approach behaviors when in contact with the opposite sex (“uncommunicative—communicative,” “distanced—outgoing,” “seclusive—sociable”). In Samples F and G, we administered a 12-scenario version of the Rejection Sensitivity Questionnaire (Downey & Feldman, 1996), which measures the readiness to perceive and overreact to rejections in different social situations (and thus not to readily and unrestrainedly approach others). To measure approach orientation toward the other sex in Samples F and G, we averaged participants’ rejection sensitivity scores on three scenarios describing dating-relevant situations (e.g., rejection sensitivity when asking someone out on a date; mean α across samples = .71; all items answered on 6-point scales) and reverse-scored the result. Separate results for the social extraversion and the rejection sensitivity measures can be found in the online supplemental materials (Tables S11 to S13).

Sociosexuality. To assess participants’ disposition toward casual sex, we used the total score of the nine-item Revised Sociosexual Orientation Inventory (SOI-R; Penke & Asendorpf, 2008) in Sample C (α = .88; e.g., “I can imagine myself being comfortable and enjoying ‘casual’ sex with different partners”; all items answered on 9-point scales). To assess sociosexuality in Sample D, participants indicated the number of sexual partners they had had in their lives on a 12-point scale, ranging from zero to more than 20. Separate results for the two different measures (including the results for the three SOI-R facets) can be found in the Supplemental Online Material (Tables S11 to S13).

Peer ratings. In Sample C, acquaintances rated participants’ attractiveness-as-a-mate self-concept (α = .81), participants’ approach orientation toward the other sex (α = .92), and participants’ sociosexuality (α = .78). The peer-rating measures contained the same items as the self-rating measures of Sample C described previously, except for sociosexuality, which was measured with only three items of the SOI-R (one item from each SOI-R facet) in the peer version. All peer ratings (attractiveness-as-a-mate self-concept, approach orientation toward the other sex, sociosexuality) were averaged to form a total score for peer-rated short-term appeal.7 Prior to averaging, each peer-rating measure was standardized. Separate results for each of the three peer ratings can be found in Tables S11 to S13 of the online supplemental materials.

Results and Discussion

The results of the correlation and regression analyses are shown in Table 5. As expected, Admiration was positively related to all dispositions and characteristics associated with short-term romantic success: People higher on Admiration perceived themselves as...
more attractive mates (medium effect size), reported a stronger approach orientation toward members of the opposite sex (medium effect size), and revealed a higher disposition toward casual sex (small to medium effect size).

By contrast, and consistent with the findings from Studies 1 and 2, Rivalry was unrelated or less strongly related than Admiration to the short-term mating-relevant measures that we assessed (see Table 5), and the effect sizes did not exceed the small to medium range. The findings based on the peer ratings supported this general pattern: High scores on Admiration were associated with being judged more positively by one’s peers on mating-related characteristics overall (medium effect size), whereas Rivalry was unrelated to peer-rated short-term appeal.

All in all, Admiration explained more unique variance than Rivalry in all short-term mating-relevant measures of Study 3, including the peer ratings (see Table B3 for the detailed results of the commonality analyses). This further supports the notion that positive romantic short-term effects of narcissism—such as dispositions and characteristics related to short-term mating success—are indeed primarily driven by Admiration, thus further substantiating the findings of Studies 1 and 2.

### Study 4: Partner Perception

Whereas Studies 1 to 3 focused on the short-term romantic context, Study 4 took a first look at the long-term romantic outcomes of narcissism and whether they could be attributed—as proposed—to narcissistic Rivalry. As a first test of this hypothesis, we investigated a central component of long-term romantic relationships that crucially influences the quality of a romantic relationship: a person’s perception of his or her romantic partner. How people perceive their romantic partners colors the way they interact with each other. Consequently, the less favorably romantic partners perceive each other, the lower is, for example, their relationship satisfaction, their love for each other, and the stability of their relationship (e.g., Busby, Holman, & Niehuis, 2009; Fletcher & Kerr, 2010; Luo & Snider, 2009; P. J. Miller, Niehuis, & Huston, 2006; Murray & Holmes, 1997; Murray, Holmes, & Griffin, 1996). Prior research has shown that higher scores on narcissism are associated with perceiving one’s long-term romantic partner in a less favorable way (W. K. Campbell, Rudich, et al., 2002). We hypothesized that the Rivalry dimension would account for these less favorable partner perceptions. This might be expected as a consequence of the generally derogatory interpersonal tendencies that are associated with Rivalry (Back et al., 2013), tendencies that we assume—as outlined in the Introduction of this article—to be especially harmful in the highly interdependent and communally oriented context of long-term romantic relationships. To investigate this, we administered an online survey that asked participants currently involved in a long-term committed relationship to rate their current romantic partners on several characteristics (e.g., warm/understanding, intelligent).

### Method

**Participants and procedure.** Participants were 133 students from the University of Mainz, Germany (113 female; age = 18–56 years, $M = 25.38$, $SD = 7.61$) who took part in an online survey on interpersonal perceptions. All participants were currently involved in a committed romantic relationship. They received partial course credit or monetary compensation for participating.

**Measures.** As part of the online survey, participants completed the NARQ. In addition, participants rated their current romantic partner on 10 characteristics (warm/understanding, intelligent, physically attractive, dependable/self-disciplined, likes intellectual stimulation/deep, extraverted/enthused, even-tempered/emotionally stable, helpful, confident, successful). For control purposes, participants also rated a hypothetical average person on the same 10 characteristics. All characteristics were rated on 6-point scales ranging from $1 = not at all to 6 = extremely$. Furthermore, participants stated how much they liked their current romantic partner and a hypothetical average person (on a scale from 1 to 10, with higher numbers indicating greater liking). Finally, participants indicated how long they had known their romantic partner and a hypothetical average person (on a scale from 1 to 10, with higher numbers indicating a higher degree of acquaintance). Controlling for ac-
quaintance duration or degree of acquaintance had no effect on any results.

Analyses. We aggregated the 11 different partner ratings (10 characteristics and liking) to form a general evaluation factor of partner perception. To do so, a principal component analysis was performed on the 11 items (all scaled so that higher scores indicated a more favorable perception of one’s partner). The scree plot indicated a one-factor solution (explained variance = 35.91%). Therefore, the factor scores on this factor were used to form a general Evaluation Factor of Partner Perception, which was subsequently subjected to the same correlation, regression, and commonality analyses as conducted in the previous studies.8

In addition, we ran a second regression for the Evaluation factor controlling for perceptions of the hypothetical average person to determine whether narcissism could incrementally predict perceptions of romantic partners over and above perceptions of others in general. To do so, a second principal components analysis was performed on the 11 ratings of the hypothetical average person, again extracting one factor (explained variance = 40.87%). The factor scores on this factor were used to form a general evaluation factor of other-perception, which was controlled for in the second Evaluation factor regression.

We also performed correlation, regression, and commonality analyses, as well as the analyses controlling for average-person ratings on each of the single 11 partner ratings. The results of these analyses can be found in Tables S14 and S15 of the online supplemental materials.

Results and Discussion

As expected, participants higher on Rivalry evaluated their romantic partners less favorably than did participants lower on Rivalry (medium effect size), $r_{rev} = -.28, p < .01$; $\beta_{rev} = -.35, p < .01, 95\% CI [-.52, -.18]$. By contrast, Admiration was slightly positively related to the Evaluation factor (small to medium effect size), $r_{adm} = .09, p = .31$; $\beta_{adm} = .21, p = .02, 95\% CI [.04, .38]$. However, Rivalry explained more unique variance than Admiration (see Table B4 for the detailed results of the commonality analyses). Thus, the less favorable way of perceiving one’s romantic partner, that had been associated with narcissism in prior research, was indeed primarily accounted for by Rivalry.9

This pattern of results even held true when controlling for the ratings of the hypothetical average person, $\beta_{rev(contr.)} = -.30, p < .01, 95\% CI [-.47, -.12]$; $\beta_{adm(contr.)} = .20, p = .02, 95\% CI [.03, .38]$. This means that narcissism explained incremental variance in perceptions of romantic partners over and above general perceptions of others. Thus, the pattern of results we found seems to reflect not just narcissistic persons’ general tendency to view others in a less favorable way (Back et al., 2013; Carlson et al., 2011; Wood, Harms, & Vazire, 2010). Instead, our results hint at a relationship-specific effect that warrants further examination.

Finally, the small positive effect of Admiration on the Evaluation factor indicates that participants higher on Admiration perceived their romantic partner more favorably than did participants lower on Admiration. Although no conclusions can be drawn on the basis of this single finding, it is worth mentioning here because it might suggest a potential small adaptive effect of narcissistic Admiration in long-term romantic relationships.

On the whole, however, the negative effect of Rivalry dominated the results. The clear association between unfavorable partner perceptions and Rivalry thus provides preliminary evidence that (at least some) problematic long-term romantic outcomes of narcissism can be attributed to a specific dimension of narcissism as well—but to a different one than narcissism’s short-term romantic appeal.

Study 5: Partner Perception—Dyadic Data

Study 4 provided first evidence that the less favorable perceptions of one’s romantic partner associated with narcissism in prior research might be attributed to Rivalry. We conducted Study 5 to extend these results in two ways. First, we collected interpersonal perception data from both partners in committed romantic couples. This allowed us to examine not only actor effects (i.e., the influence of Admiration and Rivalry on the way one perceives one’s romantic partner, as in Study 4) but also partner effects (i.e., the influence of Admiration and Rivalry on the way one is perceived by one’s romantic partner; see Figure 2), while simultaneously being able to control for mutual dependencies between partners (Kenny et al., 2006). As a second extension to Study 4, we systematically differentiated between positive characteristics that participants rated their romantic partner on (e.g., cordial, intelligent) and negative characteristics that participants rated their romantic partner on (e.g., arrogant, mean) in order to explore whether the valence of the rated characteristics had any influence. We expected the dimension of Rivalry to account for less favorable perceptions of one’s romantic partner (actor effects), as well as for being perceived less favorably by one’s romantic partner (partner effects).

Method

Participants and procedure. Participants were 92 heterosexual romantic couples (females’ age = 17–50 years, $M = 24.35, SD = 5.98$; males’ age = 17–60 years, $M = 26.38, SD = 7.10$) who had been in a long-term committed relationship for at least one year. All participants filled out a survey form as part of a larger laboratory study on romantic relationships conducted at the University of Leipzig, Germany. They received monetary compensation or partial course credit for their participation.

Measures. As part of the survey form, participants completed the short version of the NARQ (Back et al., 2013; Leckelt et al., 2016), which assesses Admiration and Rivalry with three items...
each. In addition, participants rated their current romantic partner on seven positive characteristics (cordial, intelligent, beautiful, honest, mirthful, likable, popular) as well as on five negative characteristics (arrogant, mean, malicious, ugly, cowardly). All characteristics were rated on 6-point scales ranging from 1 = not at all to 6 = extremely.

We aggregated the ratings on the seven positive characteristics to form a general positivity factor of partner perception. To do so, a principal component analysis was performed on the seven items (all scaled so that higher scores indicated a more favorable perception of one’s partner). The scree plot indicated a one-factor solution (explained variance = 32.86%). Therefore, the factor scores on this factor were used to form a general Positivity Factor of Partner Perception. A second principal components analysis was performed on the ratings on the five negative characteristics, again extracting one factor (explained variance = 35.21%). The factor scores on this factor were then used to form a general Negativity Factor of Partner Perception, with higher values indicating less favorable (i.e., more negative) partner perceptions.

Analyses. Because of the dyadic nature of the data, we ran an adapted Actor–Partner Interdependence Model (APIM; Kenny et al., 2006) for each of the two factors. In these APIMs, each participant’s outcome (i.e., his or her perception of his or her partner) was simultaneously predicted by (a) the participant’s Admiration and Rivalry scores, and by (b) his or her partner’s Admiration and Rivalry scores (see Figure 2). We tested for sex differences by constraining the male paths to be equal to the corresponding female paths (see Figure 2) and compared this model to an unrestricted model in which all paths were estimated freely. Constraining the paths did not worsen the model fit for either of the two factors, indicating no sex differences in the effects. We therefore report the results of the model in which male and female paths were constrained to be equal. We standardized all measures across male and female participants prior to analyses (Kenny et al., 2006; Nestler et al., 2015). We also ran the same APIM analysis on each of the single 12 partner characteristics. The results of these analyses can be found in Table S16 in the online supplemental materials.

Results and Discussion

The results of the APIM analyses for the two factors are presented in Table 6. As expected, Rivalry was associated with the evaluative tendency of partner perceptions: Rivalry was related to perceiving one’s romantic partner less favorably on negative characteristics (but not on positive characteristics), and the effect was small to medium in size. This corroborates the results of Study 4 that individuals high on Rivalry perceive their romantic partner in a less favorable way. Differentiating between positive and negative partner characteristics, the present study also allowed insight into the nature of these less favorable partner perceptions: The present results suggest that Rivalry might primarily influence the way one perceives one’s partner on negative characteristics (i.e., arrogant, mean) rather than on positive characteristics (i.e., cordial, intelligent). However, as to our knowledge, the present study is the first to systematically differentiate between positive and negative partner perception characteristics, and as we found an effect using mainly positive partner characteristics in Study 4, no decisive conclusions can be drawn in this regard yet.

Extending Study 4, the dyadic nature of the present data allowed us to also investigate partner effects of Rivalry (see Table 6): Rivalry was associated with being perceived less favorably on positive characteristics (but possibly not on negative characteristics) by one’s partner, and again, the effect was small to medium in size. This indicates that Rivalry also influences the way one is perceived by one’s romantic partner in a detrimental way. In

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10 We did not compute commonality analyses for the APIMs, as we are not aware of a method that can deal with the different proportions of explained variance in the male versus the female outcome measure that exist in an APIM.

11 Please note that we report Bs instead of standardized Bs, because—as a consequence of the different variances of the male and the female variables in an APIM—the standardization of the Bs would have resulted in different values for the male and the female paths, although the respective paths were constrained to be equal (Kenny et al., 2006; Nestler et al., 2015). As we standardized our variables prior to the analyses, however, the reported Bs were very close to the standardized Bs (mean difference across all APIMs in this article (including Study 7): 0.01, SD = 0.01, range = 0.00–0.04).
contrast to the actor effects, the present results furthermore suggest that when regarding partner effects, Rivalry might mainly influence the way one is perceived on positive characteristics—but again, this specific conclusion must remain preliminary until replicated by future research.

Admiration, by contrast, showed no relation to either the way individuals perceived their romantic partner or the way individuals were perceived by their romantic partner, thus not reproducing the small positive influence of Admiration on partner perceptions found in Study 4.

To sum up, Rivalry but not Admiration was associated with perceiving one’s partner less favorably as well as with being perceived less favorably by one’s romantic partner. This corroborated and extended the results of Study 4 by using dyadic data. Study 5 thus provided further support for our notion that the less favorable partner perceptions associated with narcissism in long-term committed romantic relationships are particularly attributable to the specific dimension of Rivalry.

### Study 6: Long-Term Romantic Relationship Properties

Studies 4 and 5 produced first evidence that at least some problematic long-term romantic outcomes of narcissism (i.e., less positive partner perceptions) can be attributed to Rivalry. We conducted Study 6 to examine whether Rivalry might also account for narcissism’s detrimental effects on these indicators of long-term romantic relationship functioning.

#### Method

**Participants and procedure.** Study 6 consisted of seven independent samples (see Table 2 for a sample overview) that summed to a total of 2,139 participants (1,615 female; age = 16–72 years, $M = 28.49, SD = 9.68$) who all provided data on the measures used in the present study. The data were obtained via online surveys. All participants were German Internet users who were currently involved in a committed romantic relationship. For their participation, they received partial course credit, monetary compensation, or personality feedback.

**Measures.** In addition to the NARQ (mean $\alpha$ across samples: Admiration, .82; Rivalry, .77), participants completed the following measures. Not all measures were administered in all samples (see the online supplemental materials, Table S1, for an overview of measures in each sample).

**Perceived relationship properties.** Participants completed the seven items of the Relationship Assessment Scale (RAS; Hendrick, 1988) and a set of 10 additional items measuring central characteristics of their current romantic relationship. All items were answered on 5-point scales. One of these items, relationship satisfaction (“In general, how satisfied are you with your relationship?”), was treated as a single-item measure. Across 14 of the remaining items, we computed the following two aggregates on the basis of theoretical considerations:12 relationship quality (seven items; e.g., “How good is your relationship compared with most?”) and commitment (seven items; e.g., “How much are you focused on the long-term future of your relationship?”). The remaining two items measuring relationship conflict (“How often do you argue or have conflicting interests?” and “How many problems are there in your relationship?”) were used in the computation of an occurrence of conflicts/transgressions measure. To assess the frequency

#### Table 6

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Actor effects (perceiving one’s partner)</th>
<th>Partner effects (being perceived by one’s partner)</th>
<th>Model fit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADM (a)</td>
<td>RIV (b)</td>
<td>ADM (c)</td>
</tr>
<tr>
<td>Positivity factor</td>
<td>.07 [−.10, .23]</td>
<td>.04 [−.21, .12]</td>
<td>.13 [−.04, .30]</td>
</tr>
<tr>
<td>Negativity factor</td>
<td>.10 [−.07, .26]</td>
<td>.22 [.05, .38]</td>
<td>.00 [−.16, .16]</td>
</tr>
</tbody>
</table>

*Note. n = 92 romantic couples for all analyses. The lowercase letters in parentheses indicate the label of the respective Actor–Partner Interdependence Model (APIM) path in Figure 2. The reported values are unstandardized path coefficients (see Footnote 11). Significant results ($p < .05$, two-tailed) are presented in boldface. ADM = Admiration; RIV = Rivalry; CFI = comparative fit index; RMSEA = root mean square error of approximation.*

12 We refrained from computing the RAS score as proposed by Hendrick (1988) to cover a wider array of relationship characteristics with our aggregates. Because we did not administer all items in all samples, however, it was not possible to aggregate items by factor analysis or to present reliability values for our aggregates. The results for all single items as well as for the RAS score can be found in the online supplemental materials (Tables S17 to S19).
of transgressions for this measure, participants reported the occurrence (yes vs. no) of different kinds of transgressions by their romantic partner in the past 4 weeks (24 items; e.g., “My partner took advantage of my trust”; Gerlach & Denissen, 2009). We computed a transgression occurrence score by averaging across the 24 items (mean α across samples = .77) and then aggregated this score with the two conflict items described above to obtain the occurrence of conflicts/transgressions score. The three measures were standardized prior to aggregation. Results for the unaggregated measures can be found in the online supplemental materials (Tables S17 to S19).

Reactions to transgressions. We measured participants’ tendency to show conciliatory reactions after transgressions committed by their romantic partner (mean α across samples = .68) using three items from the Relationship Forgiveness Scale—Dispositional (Fincham & Beach, 2002) that asked for benevolent feelings after partner transgressions (e.g., “I just accept my partner’s humanness, flaws, and failures”), and five items by Gerlach (2016) that asked for conciliatory behavior after partner transgressions (e.g., “I actively approach him/her to recreate closeness”). Furthermore, we assessed participants’ tendency to show dysfunctional reactions to their partners’ transgressions (mean α across samples = .81) using the remaining three items from the Relationship Forgiveness Scale—Dispositional that asked for resentful feelings after partner transgressions (e.g., “I want to see my partner hurt and miserable”), and seven items by Gerlach that asked for retaliatory and aggressive behaviors after partner transgressions (e.g., “I behave aggressively toward him/her”). All items were answered on 6-point scales. Results presented separately for each assessment instrument can be found in the online supplemental materials (Tables S17 to S19).

Results and Discussion

The results of the correlation and regression analyses are shown in Table 7. As expected, Rivalry was associated with problematic relationship characteristics as well as with strategies that pose risks to long-term romantic relationship success. Participants higher on Rivalry were less satisfied with their relationships and perceived their relationships to be of lower quality than participants lower on Rivalry. Furthermore, participants higher on Rivalry reported more conflicts/transgressions and a lower commitment to their relationships. In addition, Rivalry was related to maladaptive reactions to transgressions in participants’ romantic relationships: Higher scores on Rivalry were associated with reacting less conciliatorily as well as more dysfunctionally after transgressions committed by one’s partner. All effects were small in size, with exception of the effect on dysfunctional reactions after transgressions, which was medium in size.

In total, Rivalry explained more unique variance than Admiration in all of the long-term romantic outcomes that we obtained (see Table B5 for the detailed results of the commonality analyses). This indicates that negative long-term effects of narcissism on romantic relationships, such as relationship problems, and strategies that pose risks to relationship success are indeed particularly related to Rivalry. The present results thus further substantiate the findings from Studies 4 and 5.

Interestingly, narcissistic Admiration was associated with positive long-term romantic outcomes again. Although these associations were very small in size, they emerged quite consistently across four of our six outcome measures. Higher Admiration was related to higher perceived relationship satisfaction and relationship quality, as well as to reporting fewer conflicts/transgressions in one’s relationship and to showing more conciliatory reactions after a partner’s transgression. It should be noted that all of these positive long-term romantic outcomes associated with Admiration encompass either positive thinking about one’s relationship (e.g., high relationship satisfaction and perceived relationship quality) or positive coping behaviors (e.g., conciliatory reactions after transgressions by one’s partner). These results are in line with findings by Foster and Campbell (2005) that individuals high on narcissism (compared with individuals low on narcissism) sometimes engage less in negative thoughts about their romantic relationships and therefore might sometimes be buffered from negative relation-

Table 7
Effects of Admiration and Rivalry on Indicators of Long-Term Romantic Relationship Functioning (Study 6)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>ADM</th>
<th>RIV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (F)</td>
<td>r</td>
</tr>
<tr>
<td>Relationship satisfaction</td>
<td>2,001 (1,545)</td>
<td>.08</td>
</tr>
<tr>
<td>Relationship quality</td>
<td>1,382 (1,056)</td>
<td>.06</td>
</tr>
<tr>
<td>Commitment</td>
<td>1,286 (970)</td>
<td>.00</td>
</tr>
<tr>
<td>Conflicts/transgressions</td>
<td>2,002 (1,546)</td>
<td>−.02</td>
</tr>
<tr>
<td>Reactions to transgressions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conciliatory</td>
<td>1,506 (1,114)</td>
<td>.07</td>
</tr>
<tr>
<td>Dysfunctional</td>
<td>1,506 (1,114)</td>
<td>.11</td>
</tr>
<tr>
<td>Overall score: Long-term problems</td>
<td>2,139 (1,615)</td>
<td>−.05</td>
</tr>
</tbody>
</table>

Note. The overall score was computed by averaging across all assessed outcome measures. Prior to averaging, all outcome measures were standardized across samples, and relationship satisfaction, relationship quality, commitment, and conciliatory reactions were reverse scored. The overall score underwent the same correlation and regression analyses as the single outcome measures. Significant results (p < .05 two-tailed) are presented in boldface. F = female; ADM = Admiration; RIV = Rivalry; r = Pearson’s product-moment correlation (zero-order correlation); β = standardized regression coefficient from regressing romantic outcomes on Admiration and Rivalry simultaneously (unique regression weights); CI = confidence interval for the β.
ship outcomes. Together, these findings might again indicate a potential small beneficial influence of Admiration in long-term romantic relationships.

All in all, however, the negative effects of Rivalry dominated our results. Study 6 thus yielded corroborating evidence that the kind of long-term romantic problems that have been associated with narcissism in past research can primarily be attributed to the specific dimension of narcissistic Rivalry.

**Study 7: Long-Term Romantic Relationship Properties—Dyadic Data**

To extend the results of the previous study beyond actor effects, we conducted Study 7. In this study, we collected data from both members of committed romantic couples, which again allowed us to examine partner effects (i.e., the influence of one’s partner’s Admiration and Rivalry on relationship functioning) in addition to actor effects (i.e., the influence of one’s own Admiration and Rivalry on relationship functioning). Both partners of long-term committed romantic couples filled out an online survey and provided information about indicators of their relationship functioning. The indicators assessed in the present study were selected to match the relationship characteristics and strategies assessed in Study 6. Again, we hypothesized that it would predominantly be Rivalry that would be related to deficiencies in long-term romantic relationship functioning—both in actor effects (i.e., impact of one’s own Rivalry) as well as in partner effects (i.e., impact of one’s partner’s Rivalry).

**Method**

**Participants and procedure.** Study 7 consisted of two independent samples (Samples N and O; see Table 2 for a sample overview) that summed to a total of 367 committed heterosexual romantic couples (females’ age = 16–66 years, $M = 23.74$, $SD = 6.21$; males’ age = 17–65 years, $M = 25.82$, $SD = 6.96$). The data from both samples were obtained via online surveys administered by German universities. The online survey in Sample O used the free survey framework formr (www.formr.org; Arslan & Tata, 2016). Participants were recruited via e-mail distribution lists, online social networks, snowball sampling, and lectures. Participants and their partners filled out the survey independently of each other (in Sample O, participants were even explicitly instructed not to talk to their romantic partners about their answers in the survey until both partners had completed the survey). In both samples, participants received partial course credit or personality feedback for their participation, and, in Sample O, participants could additionally take part in a lottery for a tablet PC or alternatively an event voucher (worth 300 €, i.e., about 330$).

**Measures.** In addition to the NARQ (mean $\alpha$ across samples: Admiration, .82; Rivalry, .81), participants completed the following measures. Not all measures were administered in both samples, and we used slightly different assessment instruments to assess the same outcome measures in the two samples. Results separated by assessment instrument as well as single-item results can be found in the online supplemental materials (Table S20).

**Relationship satisfaction.** In Sample N, we assessed participants’ satisfaction with their romantic relationship with three items (“In total, how satisfied are you with your romantic relationship?”; “How emotionally satisfied are you in your romantic relationship?”; “How sexually satisfied are you in your romantic relationship?”; $\alpha = .83$). All items were answered on 6-point scales ranging from 1 = very dissatisfied to 6 = very satisfied. In Sample O, we used the relationship satisfaction item from the RAS (“In general, how satisfied are you with your relationship?”; Hendrick, 1988; see Study 6), which was answered on a 7-point scale ranging from 1 = not satisfied at all to 7 = very satisfied.

**Relationship quality.** To measure relationship quality in Sample N, participants completed five items by Denissen and Penke (2008) that asked about different aspects of relationship quality ($\alpha = .81$; e.g., “How close do you feel to your partner?”). All items were answered on 6-point scales. To measure relationship quality in Sample O, participants answered a four-item version of the relationship quality scale used in Study 6 ($\alpha = .64$; e.g., “How much do you love your partner?”).

**Commitment.** In Sample O, we administered a four-item version of the commitment scale used in Study 6 ($\alpha = .63$; e.g., “How much are you focused on the long-term future of your relationship?”).

**Faithfulness.** In Sample N, we assessed participants’ faithfulness to their romantic partner with two items (“How hard is it for you to remain emotionally faithful to your romantic partner?” and “How hard is it for you to remain sexually faithful to your romantic partner?”; $\alpha = .68$). Both items were answered on 6-point scales ranging from 1 = very hard to 6 = not hard at all.

**Conflicts/transgressions.** To measure conflicts/transgressions in Sample N, participants were given a list of 10 conflict-prone topics (e.g., “financial resources,” “long-term life plans and life shaping”) and were asked to indicate the number of conflicts, disharmonies, or arguments during the past 30 days that they had had with their romantic partner on each of the 10 topics ($\alpha = .74$; see Burk, Denissen, Van Doorn, Branje, & Laursen, 2009, for another study using this measure). In Sample O, we assessed conflicts/transgressions with the same aggregated score as in Study 6 ($\alpha = .78$), which was composed of the two items measuring relationship conflict and the transgression occurrence score from the items of Gerlach and Denissen (2009). However, the transgression occurrence score in the present sample ($\alpha = .73$) was measured with a 14-item version of the transgression scale used in Study 6.

**Reactions to transgressions—partner reports.** In Sample O, we asked participants to indicate how their partner typically reacts to transgressions committed by the participant. We measured the partner’s tendency to show conciliatory reactions with two items by Gerlach (2016; $\alpha = .67$; “My partner signals me quickly that she/he forgives me” and “My partner does something especially nice or conciliatory so that we can make up with each other quickly”). Furthermore, we assessed the partner’s tendency to show dysfunctional reactions to the participant’s transgression, again using two items by Gerlach ($\alpha = .53$; “My partner does something to get back at me” and “My partner yells at me, insults me, or behaves aggressively toward me”). All items were answered on 6-point scales ranging from 1 = do not agree at all to 6 = agree completely. In addition to these partner reports, we also assessed self-reported reactions to partner transgressions. Details and results for these self-report measures can be found in the online supplemental materials (Table S20).
Analyses. Because of the dyadic nature of the data, we computed APIM analyses. The method of analysis was exactly the same as in Study 5 (see Figure 2). Constraining the paths of the male and the female partner to be equal, however, resulted in an unsatisfactory model fit for one outcome measure (i.e., commitment). For the commitment variable, we therefore also report the results of the model that did allow for sex differences (see Table 8).

Results and Discussion

Results of the APIM analyses are presented in Table 8. As hypothesized, Rivalry was related to deficiencies in long-term romantic relationship functioning. Regarding actor effects, higher scores on Rivalry were associated with being less satisfied with one’s relationship, perceiving one’s relationship to be of lower quality, being less faithful and less committed to one’s partner, reporting more conflicts/ transgressions in one’s relationship, and perceiving one’s partner as reacting more dysfunctionally after transgressions, all effects being small or small to medium in size. Only one of our outcome measures, the conciliatory reactions to transgressions that one perceived in one’s partner, was not influenced by a person’s Rivalry score. The present results thus further backup the findings from Study 6.

An almost identical pattern of results emerged for the partner effects. Higher Rivalry scores of one’s romantic partner were associated with being less satisfied with one’s relationship, perceiving one’s relationship to be of lower quality, being less committed to one’s partner, and reporting more conflicts/ transgressions in one’s relationship—all effects being again small or small to medium in size. Furthermore, partners higher on Rivalry reacted more dysfunctionally after transgressions according to their partners’ reports (small to medium effect size). Thus, the detrimental effects of Rivalry on behavior after transgressions emerged not only in self-reports (see Study 6) but also in partner reports. Only two of our outcome measures were not influenced by the partner’s Rivalry score (i.e., a person’s faithfulness and a person’s report of her/his partner’s conciliatory reactions to transgressions).

Taken together, the present findings indicate that not only one’s own Rivalry but also one’s partner’s Rivalry influence perceived relationship functioning. What is more, across both actor and partner effects, Rivalry showed larger (absolute) path coefficients than Admiration on 13 out of 14 paths. This indicates that negative long-term effects of narcissism on romantic relationship functioning are primarily attributable to Rivalry, thus further corroborating the results of Study 6.

Admiration, by contrast, showed only three associations with long-term romantic outcomes. Participants higher on Admiration reported less faithfulness to their romantic partners (small to medium effect size), but perceived their relationship to be of higher quality (small effect size) and perceived their partner to react more conciliatorily after transgressions (small effect size) than participants lower on Admiration. Thus, although the present findings for Admiration were not as consistent as the findings in Study 6, they nonetheless again hint at a (small) positive impact of Admiration on long-term romantic relationship outcomes. Interestingly, this positive impact of Admiration emerged only in the actor effects (i.e., positive influence of one’s own Admiration on perceptions of one’s relationship and one’s partner’s behaviors) but not in the partner effects (i.e., no influence of one’s partner’s

---

Table 8

<table>
<thead>
<tr>
<th>Outcome</th>
<th>n</th>
<th>ADM (a)</th>
<th>RIV (b)</th>
<th>ADM (c)</th>
<th>RIV (d)</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship satisfaction</td>
<td>367</td>
<td>.06</td>
<td>-.09</td>
<td>.01</td>
<td>-.09</td>
<td>.97</td>
<td>.04</td>
</tr>
<tr>
<td>Relationship quality</td>
<td>367</td>
<td>.10</td>
<td>-.16</td>
<td>.04</td>
<td>-.12</td>
<td>1.00</td>
<td>.01</td>
</tr>
<tr>
<td>Commitment</td>
<td>272</td>
<td>.04</td>
<td>-.11</td>
<td>.01</td>
<td>-.12</td>
<td>.86</td>
<td>.07</td>
</tr>
<tr>
<td>Faithfulness</td>
<td>95</td>
<td>-.16</td>
<td>-.17</td>
<td>.00</td>
<td>-.09</td>
<td>1.00</td>
<td>.00</td>
</tr>
<tr>
<td>Conflicts/transgressions</td>
<td>367</td>
<td>-.04</td>
<td>-.01</td>
<td>-.06</td>
<td>-.03</td>
<td>1.00</td>
<td>.00</td>
</tr>
<tr>
<td>Partner’s reactions to transgressions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Score: Long-term problems</td>
<td>367</td>
<td>-.07</td>
<td>.18</td>
<td>-.04</td>
<td>.17</td>
<td>1.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note. n denotes the number of romantic couples for each analysis. The lowercase letters in parentheses indicate the label of the corresponding Actor−Partner Interdependence Model (APIM) path in Figure 2. The reported values are unstandardized path coefficients (see Footnote 11). The overall score was computed by averaging across all assessed outcome measures. Prior to averaging, all outcome measures were standardized across samples, and relationship satisfaction, relationship quality, commitment, faithfulness, and conciliatory reactions were reverse scored. The overall score underwent the same APIM analysis as the single outcome measures. Significant results (p < .05, two-tailed) are presented in boldface. ADM = Admiration; RIV = Rivalry; CFI = comparative fit index; RMSEA = root mean square error of approximation.

---

Admiration: 0.10 (n = 0.01, 95% CI [0.00, 0.18]). The higher a woman was on Rivalry, the lower her partner’s commitment, whereas no such influence was present for the men’s Rivalry on the women’s commitment, B_RIV (partner female) = .25, p = .12, 95% CI [0.38, 0.13].

Faithfulness: 0.10 (n = 0.01, 95% CI [0.17, 0.11]). The higher a woman was on Rivalry, the lower her partner’s faithfulness, whereas no such influence was present for the men’s Rivalry on the women’s faithfulness, B_RIV (partner female) = -.25, p = .00, 95% CI [-0.28, -0.20].
Admiration on one’s own relationship perceptions). This may indicate that a possible positive impact of Admiration might indeed reflect positive thinking about one’s relationship rather than an actually better relationship.

To sum up, the negative effects of Rivalry dominated our results. This corroborated and extended the results of Study 6 by using dyadic data as well as partner reports. Study 7 thus yielded further fortifying evidence that narcissism’s long-term romantic problems that have been identified in past research can primarily be attributed to the specific dimension of narcissistic Rivalry.

**General Discussion**

Prior research on narcissism and romantic relationships has revealed a rich variety of romantic outcomes associated with grandiose narcissism, including various indicators of both short-term romantic appeal and long-term romantic problems. In this article, we proposed that these diverging romantic impacts of narcissism might be the consequence of two distinct narcissism dimensions that dominate differentially in different relationship stages: Admiration and Rivalry (Back et al., 2013). We hypothesized that narcissism’s short-term romantic appeal would be driven by the Admiration dimension, whereas narcissism’s long-term romantic problems would be driven by the Rivalry dimension. Results across seven studies (total N = 3,560) using different methodological approaches (i.e., online surveys, video ratings, face-to-face laboratory encounters, dyadic assessments of both partners in committed long-term romantic relationships) and diverse measures (i.e., cross-sex interpersonal perceptions at zero-acquaintance and in committed relationships; self-, peer, and partner reports of dispositions, strategies, and characteristics relevant for or indicating short-term mating success as well as long-term romantic problems) corroborated our hypotheses.

We demonstrated that the high mate appeal associated with narcissism in short-term romantic contexts (e.g., dating, sexual affairs, or early stage romantic relationships) is predominantly linked to the agentic Admiration dimension, which encompasses narcissism’s charming, self-assured, and entertaining qualities (Back et al., 2013). The association between Admiration and short-term romantic appeal was present in self-reported characteristics and dispositions relevant to mating success (e.g., high self-perceived attractiveness as a mate, high approach orientation toward the other sex; Study 3). Providing further evidence for the cross-methodological robustness of this pattern, the association between Admiration and short-term mating success also emerged in peer ratings of a person’s short-term appeal (Study 3) and in cross-sex first impressions (after viewing short self-introductory videos, Study 1; as well as after face-to-face encounters, Study 2). In total, all but two effects of Admiration on short-term romantic outcomes in Studies 1 to 3 were significant, and with one exception, the effects were all medium in size. Most important, Admiration explained more unique variance than Rivalry in each short-term romantic outcome measure of Studies 1 to 3. Thus, taken together, our hypothesis that the short-term romantic appeal associated with narcissism would be primarily attributable to the dimension of Admiration was supported by a methodologically diverse set of studies. The meta-analyzed overall effect of Admiration across all short-term romantic outcomes assessed in our studies is depicted in Figure 3.

In addition, we showed that problems associated with narcissism in long-term romantic contexts (e.g., committed relationships) are linked to a different dimension of narcissism: the antagonistic Rivalry dimension, that is, narcissism’s derogating, exploitative, and insensitive characteristics (Back et al., 2013). Rivalry was the driving force behind strategies that pose risks to romantic relationship success (e.g., dysfunctional coping after transgressions; Studies 6 and 7), behind problematic characteristics in existing long-term romantic relationships (e.g., low perceived relationship quality of both partners, high occurrence of conflicts/transgressions; Studies 6 and 7), as well as behind less favorable perceptions of one’s romantic partner (Studies 4 and 5) and less favorable impressions on one’s romantic partner (Study 5).

In total, 20 of possible 25 effects of Rivalry on the long-term romantic outcomes of Studies 4 to 7 were significant. What is more, Rivalry explained more unique variance than Admiration across all long-term romantic outcomes in Studies 4 and 6. In Studies 5 and 7, in which we could not compute the proportion of explained variance (see Footnote 10), 16 of 18 path coefficients were (in absolute values) larger for Rivalry than for Admiration. Thus, our hypothesis that narcissism’s long-term romantic problems would primarily be attributable to the dimension of Rivalry was supported by a diverse set of different long-term romantic outcomes and across different methodological approaches, including both self- and partner reports as well as dyadic assessments of both partners in committed long-term romantic relationships. It should be noted, however, that—with two exceptions—all effects of Rivalry were small or small to medium in size. The meta-analyzed overall effect of Rivalry across all long-term romantic outcomes assessed in our studies is depicted in Figure 3.
Figure 3 also indicates that in our set of studies, Rivalry was not only associated with problems in the long-term romantic context, but showed a negative overall effect of similar size on short-term romantic success as well. Although this effect was by far smaller than the clearly dominating positive effect of Admiration in the short-term romantic context, it might indicate that Rivalry may not have become significant in most of our short-term romantic outcomes of Studies 1 to 3, as sample sizes in these studies were not huge enough to have the power to reliably detect small effects. Future research is needed to corroborate and examine this potential negative short-term effect of Rivalry more thoroughly.

Implications for the Understanding of Grandiose Narcissism

The present article is the first to show that the seemingly contradictory romantic effects of narcissism in different relationship stages (i.e., short-term appeal vs. long-term problems) might be explained by the diverging effects of different dimensions of narcissism. These dimensions seem to dominate differentially in different relationship stages and are associated with divergent interpersonal strategies and behaviors. Differentiating between these dimensions thus allows for a more sophisticated explanation of the complex heterogeneous romantic consequences of narcissism. The present results hence call for a two-dimensional approach when examining grandiose narcissism rather than treating it as a one-dimensional construct as most prior theoretical conceptualizations have done.

To illustrate this point, recall W. K. Campbell’s (2005) chocolate cake model, which compares engaging in a romantic relationship with a narcissist to eating a chocolate cake. This model suggests that the short-term delight and the long-term regret associated with engaging in a romantic relationship with a partner high on narcissism can be explained by the same mechanism (i.e., the highly caloric nature of the chocolate cake). According to our results, however, this does not seem to be the case. Rather, the short-term romantic successes and long-term romantic problems associated with narcissism seem to be explained by two different psychological ingredients (i.e., two different dimensions of grandiose narcissism). An alternative way to metaphorically picture narcissism’s influence on romantic relationships might therefore be to compare these relationships with smoking a cigarette: a short-term rush of pleasure attributable to one ingredient (i.e., nicotine) and long-term costs associated with a different ingredient (i.e., the health-damaging tar). Moreover, just as tar does not have to be combined with nicotine to have negative long-term health consequences, and nicotine does not have to be combined with tar to provide a short-term rush, high values on Rivalry do not have to be combined with high values on Admiration to lead to long-term relationship problems, and high values on Admiration do not have to be combined with high values on Rivalry to lead to short-term mating success. In fact, in the same way that nicotine and tar do not have to be combined when smoking (e.g., in e-cigarettes) but often are combined (as regular cigarettes contain both), high values on Admiration and high values on Rivalry do not have to be combined within the same individual but nonetheless often are.
short run (e.g., obtaining mates; Glenn et al., 2011; Jonason et al., 2009). It is possible that the explanation for these diverging social outcomes of Machiavellianism and psychopathy in short-term versus long-term acquaintance contexts is similar to the one we have proposed for narcissism. Perhaps in all these dark traits, different facets have to be distinguished in order to comprehensively account for the diverging interpersonal outcomes (for an example of what this might look like for the trait of psychopathy, see Benning, Patrick, Hicks, Blonigen, & Krueger, 2003; Patrick, Edens, Poythress, Lilienfeld, & Benning, 2006).

Implications for the Understanding of Romantic Relationship Development

The results of our set of studies showed that distinct characteristics of narcissism play a role in the initial versus the later stages of romantic relationships. These findings suggest that the romantic partner characteristics that are important for romantic success may change across the phases of a romantic relationship: While initiating a romantic relationship, more aggressive characteristics seem to play a crucial role (e.g., assertiveness, charm, entertaining qualities). Once the relationship becomes more settled, however, the partner characteristics that become increasingly important over the course of a romantic relationship seem to have an impact in both relationship stages.

Such a potential change in the importance of partner characteristics during the course of a romantic relationship poses interesting questions about relationship development and partner choice: Besides the narcissistic dimensions investigated in the present article, are there other partner characteristics that change in importance over the course of a romantic relationship? And if so, what are the partner characteristics that become increasingly important over the course of a romantic relationship, and which characteristics decrease in importance? Such knowledge might be of high practical relevance. For example, individuals who initially choose their romantic partners primarily on the basis of partner characteristics that become important in the long run (e.g., warmth, caring, and support) might develop more successful (i.e., longer lasting and more satisfying) romantic relationships.

Limitations and Future Directions

There are limitations to the work presented in this article. Although we used a variety of different methodological approaches in the present article, it would be desirable in future studies to also obtain objective measures of long-term romantic outcomes such as counts of dysfunctional or derogatory behaviors in couples’ videotaped problem discussions. We would expect these objective long-term measures to show the same pattern of results as found in the present article.

Furthermore, we encourage future researchers to pick up on our findings and further refine the knowledge about the narcissistic lover. For example, it would be interesting to examine whether the findings of the present article could be replicated in clinical samples. In doing so, it might also be interesting to more directly compare the two-dimensional NARC approach (which describes grandiose narcissism) with approaches that also include vulnerable narcissism (e.g., Lamkin et al., 2015; J. D. Miller et al., 2011; Pincus & Roche, 2011), and to dimensional approaches of personality disorders that conceptualize personality disorders as specific combinations of dimensionally more extreme versions of the traits of normal personality (e.g., American Psychiatric Association, 2013; Glover, Miller, Lynam, Crego, & Widiger, 2012; J. D. Miller, 2012; J. D. Miller, Gentile, Wilson, & Campbell, 2013; Trull & Widiger, 2013; Widiger, Livesley, & Clark, 2009; Widiger, Lynam, Miller, & Oltmanns, 2012). This would allow for a more comprehensive understanding of the relation between different theoretical approaches to narcissism. It would also allow insights into whether more extreme, clinically relevant values of Admiration and/or of Rivalry show the same pattern of relations with romantic outcome variables as the present article demonstrated in the general population.

Considering the general, nonclinical population, it would also be interesting for future research to investigate narcissism’s short-term appeal in contexts that allow for a highly fine-grained analysis of the processes that make narcissistic persons romantically appealing. This might include speed-dating contexts, online dating studies, or smartphone-based experience sampling procedures in narcissists’ everyday lives.

Future research should also assess longitudinal data on the influence of the two narcissistic dimensions in the development and maintenance of romantic relationships, as this will allow a series of further crucial questions to be answered (see also Lavner et al., 2016): What happens at the transition from short-term (i.e., dating or early stage relationships) to the committed long-term romantic context? How do the impacts of Admiration and Rivalry change over the course of a developing romantic relationship? Do the positive effects of Admiration wear out over time, or do the negative effects of Rivalry increase over time, or both? What triggers these changes and when exactly do the negative effects of Rivalry start to dominate? Are there individuals high on either dimension of narcissism who are able to remain in satisfactory romantic relationships, and what distinguishes these relationships from other less successful long-term relationships involving a person high on narcissism? The processes between initial attraction and long-term commitment in romantic relationships are generally rarely studied, and hence little is known about them (L. Campbell & Stanton, 2014). Investigating these processes might therefore not only help to advance knowledge about narcissism’s impact on romantic relationships but also contribute to answering unresolved questions in romantic relationship research (e.g., whether there are changes in the importance of other partner characteristics over the course of a romantic relationship). Thus, it seems to be a particularly promising avenue for future research to longitudinally track romantic relationships as they develop, and to examine these dynamic changes, their underlying processes, and their consequences in more detail.

Conclusion

The present article offers an explanation for the seemingly contradictory impacts of grandiose narcissism on romantic rela-
tionships at short-term versus long-term acquaintance. We provided evidence that the diverging romantic correlates of narcissism can be explained by distinct effects of two dimensions of narcissism (i.e., Admiration and Rivalry), which dominate differentially in different relationship stages. Future research might take up this two-dimensional reconceptualization of narcissism to more comprehensively investigate and understand the processes involved in narcissists’ romantic relationships.

References


NARCISSISM AND ROMANTIC RELATIONSHIPS


NARCISSISM AND ROMANTIC RELATIONSHIPS


Appendix A

Results When Using the NPI (L/A and E/E Facet)

Table A1
Descriptive Statistics and Internal Consistencies for L/A and E/E Facet of the Narcissistic Personality Inventory (NPI) in Each Sample

<table>
<thead>
<tr>
<th>Sample</th>
<th>Study</th>
<th>L/A</th>
<th>E/E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>A</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>2, 3</td>
<td>3.63</td>
<td>2.48</td>
</tr>
<tr>
<td>C</td>
<td>2, 3</td>
<td>4.04</td>
<td>2.59</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>4.39</td>
<td>2.73</td>
</tr>
<tr>
<td>E</td>
<td>3, 6</td>
<td>3.84</td>
<td>2.56</td>
</tr>
<tr>
<td>F</td>
<td>3, 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>3, 6</td>
<td>4.22</td>
<td>2.40</td>
</tr>
<tr>
<td>H</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>6</td>
<td>3.76</td>
<td>2.49</td>
</tr>
<tr>
<td>K</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Dashes indicate samples in which the NPI facets could not be computed, as no NPI or the short version of the NPI (Schütz et al., 2004; Samples H, I, and K) was administered. L/A = Leadership/Authority; E/E = Entitlement/Exploitativeness (both according to Ackerman et al., 2011).
Table A2
Effects of L/A and E/E on Interpersonal Perceptions by the Opposite Sex in Face-to-Face Encounters (Study 2)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>n</th>
<th>F</th>
<th>L/A</th>
<th>E/E</th>
<th>Adj. $R^2$ NPI</th>
<th>Adj. $R^2$ NARQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likeability</td>
<td>154</td>
<td>77</td>
<td>.23</td>
<td>.23</td>
<td>.08</td>
<td>.02</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>86</td>
<td>43</td>
<td>.21</td>
<td>.22</td>
<td>.01</td>
<td>.05</td>
</tr>
<tr>
<td>Overall score: Opposite-sex appeal</td>
<td>154</td>
<td>77</td>
<td>.23</td>
<td>.23</td>
<td>.07</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. Significant results ($p < .05$, two-tailed) are presented in boldface. F = female; L/A = Leadership/Authority; E/E = Entitlement/Exploitativeness; $r$ = Pearson’s product-moment correlation (zero-order correlation); $\beta$ = standardized regression coefficient from regressing romantic outcomes on L/A and E/E simultaneously (unique regression weights); CI = confidence interval for the $\beta$; NPI = Narcissistic Personality Inventory; NARQ = Narcissistic Admiration and Rivalry Questionnaire; Adj. $R^2$ NPI = adjusted explained variance by the NPI facets in the regression model; Adj. $R^2$ NARQ = adjusted explained variance by the NARQ dimensions in the corresponding regression model with Admiration and Rivalry (for comparison).

Table A3
Effects of L/A and E/E on Dispositions and Characteristics Associated With Short-Term Romantic Success (Study 3)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>n</th>
<th>F</th>
<th>L/A</th>
<th>E/E</th>
<th>Adj. $R^2$ NPI</th>
<th>Adj. $R^2$ NARQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractiveness</td>
<td>1,020</td>
<td>723</td>
<td>.27</td>
<td>.29</td>
<td>.04</td>
<td>.06</td>
</tr>
<tr>
<td>Approach orientation toward other sex</td>
<td>305</td>
<td>201</td>
<td>.18</td>
<td>.21</td>
<td>.04</td>
<td>.10</td>
</tr>
<tr>
<td>Sociosexuality</td>
<td>263</td>
<td>165</td>
<td>.14</td>
<td>.12</td>
<td>.10</td>
<td>.09</td>
</tr>
<tr>
<td>Peer-rated short-term appeal</td>
<td>88</td>
<td>43</td>
<td>.21</td>
<td>.23</td>
<td>.01</td>
<td>.07</td>
</tr>
<tr>
<td>Overall score (incl. peer)</td>
<td>1,020</td>
<td>723</td>
<td>.27</td>
<td>.30</td>
<td>.04</td>
<td>.07</td>
</tr>
</tbody>
</table>

Note. n for peer ratings denotes the number of participants for whom peer ratings were available. The overall score was computed by averaging across all assessed outcome measures, including the peer ratings. Prior to averaging, all outcome measures were standardized across samples. The overall score underwent the same correlation and regression analyses as the single outcome measures. Significant results ($p < .05$, two-tailed) are presented in boldface. F = female; L/A = Leadership/Authority; E/E = Entitlement/Exploitativeness; $r$ = Pearson’s product-moment correlation (zero-order correlation); $\beta$ = standardized regression coefficient from regressing romantic outcomes on L/A and E/E simultaneously (unique regression weights); CI = confidence interval for the $\beta$; NPI = Narcissistic Personality Inventory; NARQ = Narcissistic Admiration and Rivalry Questionnaire; Adj. $R^2$ NPI = adjusted explained variance by the NPI facets in the regression model; Adj. $R^2$ NARQ = adjusted explained variance by the NARQ dimensions in the corresponding regression model with Admiration and Rivalry (for comparison).

Table A4
Effects of L/A and E/E on Indicators of Long-Term Romantic Relationship Functioning (Study 6)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>n</th>
<th>F</th>
<th>L/A</th>
<th>E/E</th>
<th>Adj. $R^2$ NPI</th>
<th>Adj. $R^2$ NARQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship satisfaction</td>
<td>1,264</td>
<td>987</td>
<td>.04</td>
<td>.09</td>
<td>-.10</td>
<td>-.14</td>
</tr>
<tr>
<td>Relationship quality</td>
<td>688</td>
<td>523</td>
<td>.03</td>
<td>.07</td>
<td>-.09</td>
<td>-.12</td>
</tr>
<tr>
<td>Commitment</td>
<td>688</td>
<td>523</td>
<td>-.04</td>
<td>-.01</td>
<td>-.07</td>
<td>-.06</td>
</tr>
<tr>
<td>Reactions to transgressions</td>
<td>1,265</td>
<td>988</td>
<td>-.01</td>
<td>-.05</td>
<td>-.09</td>
<td>.10</td>
</tr>
<tr>
<td>Overall score: Long-term problems</td>
<td>1,265</td>
<td>988</td>
<td>-.02</td>
<td>-.07</td>
<td>-.13</td>
<td>.16</td>
</tr>
</tbody>
</table>

Note. The overall score was computed by averaging across all assessed outcome measures. Prior to averaging, all outcome measures were standardized across samples, and relationship satisfaction, relationship quality, commitment, and conciliatory reactions were reverse scored. The overall score underwent the same correlation and regression analyses as the single outcome measures. Significant results ($p < .05$, two-tailed) are presented in boldface. F = female; L/A = Leadership/Authority; E/E = Entitlement/Exploitativeness; $r$ = Pearson’s product-moment correlation (zero-order correlation); $\beta$ = standardized regression coefficient from regressing romantic outcomes on L/A and E/E simultaneously (unique regression weights); CI = confidence interval for the $\beta$; NPI = Narcissistic Personality Inventory; NARQ = Narcissistic Admiration and Rivalry Questionnaire; Adj. $R^2$ NPI = adjusted explained variance by the NPI facets in the regression model; Adj. $R^2$ NARQ = adjusted explained variance by the NARQ dimensions in the corresponding regression model with Admiration and Rivalry (for comparison).

(Appendices continue)
### Appendix B

Results of the Commonality Analyses by Study

**Table B1**  
*Study 1: Explained Variance Unique to Admiration, Unique to Rivalry, and Common to Admiration and Rivalry in Interpersonal Perceptions by the Opposite Sex in Self-Introductory Videos*

<table>
<thead>
<tr>
<th>Outcome</th>
<th>$R^2$</th>
<th>% of $R^2$</th>
<th>Expl. variance</th>
<th>% of $R^2$</th>
<th>Expl. variance</th>
<th>% of $R^2$</th>
<th>Expl. variance</th>
<th>% of $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical attractiveness</td>
<td>.1429</td>
<td>100</td>
<td>.1429</td>
<td>100.00</td>
<td>.0075</td>
<td>5.28</td>
<td>−.0075</td>
<td>−5.28</td>
</tr>
<tr>
<td>Liking</td>
<td>.1342</td>
<td>100</td>
<td>.1331</td>
<td>99.18</td>
<td>.0029</td>
<td>2.13</td>
<td>−.0018</td>
<td>−1.31</td>
</tr>
<tr>
<td>Mate value</td>
<td>.1753</td>
<td>100</td>
<td>.1740</td>
<td>99.26</td>
<td>.0040</td>
<td>2.25</td>
<td>−.0026</td>
<td>−1.51</td>
</tr>
<tr>
<td>Desirability as Date</td>
<td>.0927</td>
<td>100</td>
<td>.0871</td>
<td>93.95</td>
<td>.0075</td>
<td>8.17</td>
<td>−.0014</td>
<td>−1.53</td>
</tr>
<tr>
<td>Short-term partner</td>
<td>.1424</td>
<td>100</td>
<td>.1326</td>
<td>93.14</td>
<td>.0329</td>
<td>23.15</td>
<td>−.0232</td>
<td>−16.29</td>
</tr>
<tr>
<td>Long-term partner</td>
<td>.0318</td>
<td>100</td>
<td>.0318</td>
<td>99.96</td>
<td>.0015</td>
<td>4.61</td>
<td>−.0015</td>
<td>−4.57</td>
</tr>
<tr>
<td>Overall score: Appealing first impression</td>
<td>.1262</td>
<td>100</td>
<td>.1259</td>
<td>99.76</td>
<td>.0101</td>
<td>7.98</td>
<td>−.0098</td>
<td>−7.74</td>
</tr>
</tbody>
</table>

*Note.* A negative value in the common variance indicates a suppression effect in the respective regression model. ADM = Admiration; RIV = Rivalry; $R^2 =$ total explained variance when regressing romantic outcomes on Admiration and Rivalry simultaneously; Expl. variance = explained variance.

**Table B2**  
*Study 2: Explained Variance Unique to Admiration, Unique to Rivalry, and Common to Admiration and Rivalry in Interpersonal Perceptions by the Opposite Sex in Face-to-Face Encounters*

<table>
<thead>
<tr>
<th>Outcome</th>
<th>$R^2$</th>
<th>% of $R^2$</th>
<th>Expl. variance</th>
<th>% of $R^2$</th>
<th>Expl. variance</th>
<th>% of $R^2$</th>
<th>Expl. variance</th>
<th>% of $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likeability</td>
<td>.0960</td>
<td>100</td>
<td>.0950</td>
<td>98.99</td>
<td>.0009</td>
<td>0.96</td>
<td>−.0002</td>
<td>0.04</td>
</tr>
<tr>
<td>Attractiveness</td>
<td>.1171</td>
<td>100</td>
<td>.1160</td>
<td>99.05</td>
<td>.0132</td>
<td>11.27</td>
<td>−.0121</td>
<td>−10.31</td>
</tr>
<tr>
<td>Overall score: Opposite-sex appeal</td>
<td>.1071</td>
<td>100</td>
<td>.1062</td>
<td>99.08</td>
<td>.0011</td>
<td>1.05</td>
<td>−.0001</td>
<td>−0.13</td>
</tr>
</tbody>
</table>

*Note.* A negative value in the common variance indicates a suppression effect in the respective regression model. ADM = Admiration; RIV = Rivalry; $R^2 =$ total explained variance when regressing romantic outcomes on Admiration and Rivalry simultaneously; Expl. variance = explained variance.

**Table B3**  
*Study 3: Explained Variance Unique to Admiration, Unique to Rivalry, and Common to Admiration and Rivalry in Dispositions and Characteristics Associated With Short-Term Romantic Success*

<table>
<thead>
<tr>
<th>Outcome</th>
<th>$R^2$</th>
<th>% of $R^2$</th>
<th>Expl. variance</th>
<th>% of $R^2$</th>
<th>Expl. variance</th>
<th>% of $R^2$</th>
<th>Expl. variance</th>
<th>% of $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractiveness as mate</td>
<td>.1756</td>
<td>100</td>
<td>.1700</td>
<td>96.84</td>
<td>.0356</td>
<td>20.25</td>
<td>−.0300</td>
<td>−17.09</td>
</tr>
<tr>
<td>Approach orient. toward other sex</td>
<td>.1712</td>
<td>100</td>
<td>.1646</td>
<td>96.14</td>
<td>.0408</td>
<td>23.85</td>
<td>−.0342</td>
<td>−19.99</td>
</tr>
<tr>
<td>Sociosexuality</td>
<td>.0529</td>
<td>100</td>
<td>.0457</td>
<td>86.49</td>
<td>.0003</td>
<td>0.58</td>
<td>−.0068</td>
<td>12.93</td>
</tr>
<tr>
<td>Peer-rated short-term appeal</td>
<td>.1125</td>
<td>100</td>
<td>.1036</td>
<td>92.05</td>
<td>.0269</td>
<td>23.92</td>
<td>−.0180</td>
<td>−15.96</td>
</tr>
<tr>
<td>Overall score (incl. peer)</td>
<td>.1933</td>
<td>100</td>
<td>.1897</td>
<td>98.12</td>
<td>.0365</td>
<td>18.90</td>
<td>−.0329</td>
<td>−17.02</td>
</tr>
</tbody>
</table>

*Note.* A negative value in the common variance indicates a suppression effect in the respective regression model. ADM = Admiration; RIV = Rivalry; $R^2 =$ total explained variance when regressing romantic outcomes on Admiration and Rivalry simultaneously; Expl. variance = explained variance.

(Appendices continue)
### Table B4

**Study 4: Explained Variance Unique to Admiration, Unique to Rivalry, and Common to Admiration and Rivalry in Perceptions of One’s Romantic Partner**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>R²</th>
<th>% of R²</th>
<th>Expl. variance</th>
<th>% of R²</th>
<th>Expl. variance</th>
<th>% of R²</th>
<th>Common ADM RIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation factor</td>
<td>.1151</td>
<td>100</td>
<td>.0388</td>
<td>33.68</td>
<td>.1074</td>
<td>93.25</td>
<td>-.0310</td>
</tr>
</tbody>
</table>

*Note.* A negative value in the common variance indicates a suppression effect in the respective regression model. ADM = Admiration; RIV = Rivalry; R² = total explained variance when regressing romantic outcomes on Admiration and Rivalry simultaneously; Expl. variance = explained variance.

### Table B5

**Study 6: Explained Variance Unique to Admiration, Unique to Rivalry, and Common to Admiration and Rivalry in Indicators of Long-Term Romantic Relationship Functioning**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>R²</th>
<th>% of R²</th>
<th>Expl. variance</th>
<th>% of R²</th>
<th>Expl. variance</th>
<th>% of R²</th>
<th>Common ADM RIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship satisfaction</td>
<td>.0197</td>
<td>100</td>
<td>.0130</td>
<td>65.69</td>
<td>.0130</td>
<td>66.12</td>
<td>-.0063</td>
</tr>
<tr>
<td>Relationship quality</td>
<td>.0163</td>
<td>100</td>
<td>.0091</td>
<td>55.65</td>
<td>.0124</td>
<td>76.04</td>
<td>-.0052</td>
</tr>
<tr>
<td>Commitment</td>
<td>.0058</td>
<td>100</td>
<td>.0007</td>
<td>11.31</td>
<td>.0058</td>
<td>99.95</td>
<td>-.0007</td>
</tr>
<tr>
<td>Conflicts/transgressions</td>
<td>.0153</td>
<td>100</td>
<td>.0030</td>
<td>19.88</td>
<td>.0150</td>
<td>98.10</td>
<td>-.0027</td>
</tr>
<tr>
<td>Conciliatory</td>
<td>.0198</td>
<td>100</td>
<td>.0116</td>
<td>58.53</td>
<td>.0146</td>
<td>74.08</td>
<td>-.0064</td>
</tr>
<tr>
<td>Dysfunctional</td>
<td>.0121</td>
<td>100</td>
<td>.0000</td>
<td>0.00</td>
<td>.0908</td>
<td>88.89</td>
<td>.0113</td>
</tr>
<tr>
<td>Overall score: Long-term problems</td>
<td>.0339</td>
<td>100</td>
<td>.0104</td>
<td>30.60</td>
<td>.0317</td>
<td>93.54</td>
<td>-.0082</td>
</tr>
</tbody>
</table>

*Note.* A negative value in the common variance indicates a suppression effect in the respective regression model. ADM = Admiration; RIV = Rivalry; R² = total explained variance when regressing romantic outcomes on Admiration and Rivalry simultaneously; Expl. variance = explained variance.