

The Tango of Two Deadly Sins: The Social-Functional Relation of Envy and Pride

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Envy stems from a social comparison with a superior standard. Its 2 distinct forms are directed at changing this situation in different ways, either by becoming as successful as the envied person (in benign envy) or by lowering the envied person's advantage (in malicious envy). In essence, envy is thus a social phenomenon. Nevertheless, most previous research has focused on its underlying intrapersonal processes, overlooking envy's interpersonal core. In contrast, we show in 6 studies ($N = 1,513$) that envy and pride are intertwined in a social-functional relationship. Envy and pride often co-occur (Study 1) and pride displays enhance envious feelings (Studies 2 and 3). Specifically, authentic (success attributed to effort) and hubristic pride (success attributed to talent) modulate envious intentions and behavior toward their benign and malicious form (Study 2 to 6). This effect is mediated via liking, perceived prestige, and perceived dominance (Study 4). In accordance with a social-functional approach, the effects emerge only when authentic and hubristic pride are expressed by the superior person and not when the respective information about the superior person's feelings is simply available in the environment (Study 5). These effects are present when participants recall envy situations (Study 1), when they imagine being in a competitive situation (Studies 3, 4, and 5), or when envy is elicited in situ (Studies 2 and 6). Our findings show the value of studying envy as a social phenomenon and open up numerous avenues for research on envy at the interpersonal and intergroup level.

Keywords: benign and malicious envy, authentic and hubristic pride, interpersonal emotion modulation, social-functional approach, competition

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[James Hunt] was among the very few I *liked* and even fewer that I *respected*. He remains the only person I *envied*.

—Formula One driver Niki Lauda about his competitor James Hunt in the dramatization of their rivalry in the movie *Rush* (Fellner et al., 2013)

For better or worse, competition can unleash enormous motivational forces. When Niki Lauda competed against James Hunt as a

top contender for the 1976 Formula One world championship, a fierce and long-lasting rivalry had reached its apex. In the middle of the season, a near-fatal racing accident inflicted severe burns and damaged lungs upon Lauda, barely allowing him to breathe. Nevertheless, merely 6 weeks later and still suffering from pain and injury, he returned to the contest to preserve a small remaining chance of winning the drivers' championship. When does being outperformed propel people to attain and surpass the superior achievements of others? When does it lead to hostile behavior aimed at harming the outcome of others? In the present work, we investigate how the interaction of winners' and losers' social emotions shapes motivation and behavior in competitive situations.

Whether people compete for athletic achievements, the best grade in an exam, or for their dream job, they are readily informed about their competitors' successes based on the emotions these people have. The central emotion people express after success in competitions is pride (Tracy & Matsumoto, 2008). They may show unrestrained joy over the precious gold medal, boast with an excellent grade, or announce a new job on Facebook. Pride has been damned by many and even been called the queen of all Catholic deadly sins (Baasten, 1986). Yet, psychological research (Tracy & Robins, 2007a) supports a more multifaceted view on pride, also finding virtue in this emotion. As sinful as showing off might be, if pride follows from merit, it is an expression of deserved status. Thus, pride can draw attention to a superior person, either as a telltale sign of an exaggerated ego or as an

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admirable expression of accomplished achievement. As such, a pride display should be a powerful signal to the outperformed.

The strongest and most prevalent emotional consequence of perceiving superior competitors is envy (Smith & Kim, 2007). It, too, is often regarded to be a vicious emotion, the deadly and most joyless of all sins (Aquaro, 2004). In parallel to pride, research also attests a more multifaceted nature to envy. On the one hand, envy is a powerful motivator that may cause socially harmful behavior. On the other hand, it may also increase the desire to move upward (Van de Ven, Zeelenberg, & Pieters, 2009). Nevertheless, in stark contrast to its societal recognition and its strong motivational impact, many questions about envy still await empirical scrutiny (Smith & Kim, 2007). Particularly, despite envy's quintessentially social nature, the active role of the envied person in the elicitation of envy has not been investigated yet.

Here, we propose that envy and pride are intertwined in a social-functional relationship. We predict envy to be a pivotal response to a superior individual's pride display. We show how pride and envy shape distinct pathways in responding to victory and defeat—the tango of two deadly sins.

Benign and Malicious Envy

Envy is a negative emotional response to a situation in which someone lacks another's superior quality, achievement, or possession and either desires it or wishes the other lacks it (Parrott & Smith, 1993; Smith & Kim, 2007). Recent research has revealed that envy is not a unitary reaction to such upward social comparisons (Belk, 2011; Crusius & Lange, 2014; Lange & Crusius, 2015; Van de Ven et al., 2009; Van de Ven, Zeelenberg, & Pieters, 2011a, 2011b) but manifests in two distinct forms: *benign* and *malicious* envy. Next to its malicious manifestation, a form of envy exists that spurs the desire to attain the other's advantage (Crusius & Mussweiler, 2012) but does not entail hostility. This dual character of envy is mirrored in the fact that the lexicon of many languages contains two words for envy mapping onto this distinction. For instance, the German words *beneiden* and *missgönnen* both translate into the English (*to*) *envy*. Similar distinctions exist in Dutch (*benijden* and *afgunst*), Arabic (*ghibtah* and *hasad*), or Russian (*white* and *black envy*). Yet, even in languages having only one word for envy, such as English or Spanish, people also recall two different clusters of emotional experiences that correspond to benign and malicious envy (Van de Ven et al., 2009).

How are these forms of envy different from each other? Both are equally negative and frustrating (e.g., Crusius & Lange, 2014; Lange & Crusius, 2015) but involve distinct patterns of cognition and behavior. Benign envy entails more positive thoughts about the envied person (Van de Ven et al., 2009), is associated with increased effort (Lange & Crusius, 2015; Van de Ven et al., 2011a), a desire to get the other's advantage (Crusius & Mussweiler, 2012; Van de Ven, Zeelenberg, & Pieters, 2011b), and an attentional shift toward means to attain the upward goal (Crusius & Lange, 2014). Malicious envy, in contrast, entails negative thoughts about the envied person (Van de Ven et al., 2009), Schadenfreude at the other's suffering (Van de Ven et al., *in press*; see also Smith et al., 1996; Van Dijk, Ouwerkerk, Goslinga, Nieweg, & Gallucci, 2006), and an attentional shift toward the envied person relative to the envy object (Crusius & Lange, 2014;

see also Hill, DelPriore, & Vaughan, 2011). Presumably, it is also the driver of other socially destructive consequences attributed to envy such as hostile and resentful thoughts toward the envied person (Salovey & Rodin, 1984; Smith, Parrott, Ozer, & Moniz, 1994), social undermining in groups (Duffy, Scott, Shaw, Tepper, & Aquino, 2012), and cheating (Moran & Schweitzer, 2008).

The distinct consequences of benign and malicious envy are in line with an evolutionary perspective according to which envy is an adaptive emotional response to an environmental challenge (Hill & Buss, 2008; Hill et al., 2011). Envy not only alerts an envier to another's advantage, it also motivates to level the difference between the self and the superior standard (Van de Ven et al., 2009). To do so, the envier can either try to increase personal effort in order to level up and become as successful as the envied person or the envier can damage the other's success and thereby level the envied person down.¹

When is envy elicited and when will it develop into its benign or malicious form? It has been shown that the envier must perceive the envied person as similar to the self (Schaubroeck & Lam, 2004). In addition, envy typically occurs in domains of high personal relevance (DelPriore, Hill, & Buss, 2012; Salovey & Rodin, 1984). These prerequisites are also found in research on the amplification of social comparisons in general (e.g., Corcoran, Crusius, & Mussweiler, 2011). They determine whether specific individuals may become focal comparison standards for the envier. Such a situation develops into benign envy if the envier appraises the other's advantage as deserved and evaluates control over personal outcomes as high. It develops into malicious envy if the envier appraises the other's advantage as undeserved and evaluates control over personal outcomes as low (Van de Ven, Zeelenberg, & Pieters, 2012). These appraisal patterns fit the notion that benign and malicious envy reflect different adaptive responses to upward comparisons given particular situational affordances.

Reviewing the factors that have been investigated as determinants of envy, it is apparent that they mainly focus on the envier. Perceived similarity, personal relevance, appraised deservingness, and experienced personal control are all constructs highlighting the cognitive and experiential realm of the inferior person. However, envy is—by its very definition—a social emotion. It involves (at least) a dyad of an envier and an envied person. An intrapersonal approach tacitly shifts the research focus away from envy's interpersonal essence. Here we argue that, to understand envy, it is important to take its social nature more directly into account. We think of envy as a social-functional emotion, thus, as a response to

¹ As benign and malicious envy are neither linked to distinct words across all languages nor specific facial expressions, separate physiological changes, or differences in associated affect, their respective motivational tendencies are a key distinction between the two forms. Therefore, measures of benign and malicious envy often refer to motivational proclivities associated with their specific environmental challenge (e.g., Baumeister & Berant, 2015; Crusius & Lange, 2014; Lange & Crusius, 2015; Van de Ven et al., 2009, 2011a). These motivational proclivities are also what distinguishes benign envy from its neighboring emotion of admiration, which is unrelated to increased improvement behavior. Furthermore, the latter does not necessarily entail a comparison to the other person. In addition, even though people who are benignly envious admire the superior other to some extent, pure admiration is a positive emotion (Crusius & Lange, 2014; Immordino-Yang, McColl, Damasio, & Damasio, 2009; Van de Ven et al., 2009).

another person's action. Specifically, we hypothesize that envy is fueled by displays of pride.

The Social-Functional Relation of Envy and Pride

According to social-functional approaches (Fischer & Manstead, 2008; Fischer & Van Kleef, 2010; Keltner & Haidt, 1999; Manstead & Fischer, 2001), emotions have partly evolved to support the formation and maintenance of relationships and to establish and maintain social hierarchies. For instance, anger displays imply aggressive propensities and self-confidence (Hareli & Hess, 2010). In negotiations, such inferences make people believe that the other person has high limits, which leads them to concede more (Van Kleef, De Dreu, & Manstead, 2004, for similar findings with other emotions, see Van Kleef, De Dreu, & Manstead, 2006; Lelieveld, Van Dijk, Van Beest, & Van Kleef, 2013). As another example, expressed embarrassment signals appeasement and prosociality to others, which fosters trust and affiliative tendencies on the side of observers (Feinberg, Willer, & Keltner, 2012; Keltner, 1995). These examples show that emotions affect others by conveying important social information.

In order to infer the social function of a particular emotion, it is crucial to determine the social goal it serves (Roseman, Wiest, & Swartz, 1994). As outlined above, the social goal of envy is to level the difference between the self and the envied person. More specifically, when people experience benign envy, they try to level themselves up, whereas when they experience malicious envy they try to level the other down. If another individual has gained higher status, envy helps to reestablish a similar status for the self or to even surpass the envied person. Given envy's social goal, it follows that envy should be fueled by a superior person's emotional display of higher status.

The most likely emotional communication of status to others in a competitive environment is through pride (Cheng, Tracy, & Henrich, 2010; Martens, Tracy, & Shariff, 2012; Oveis, Horberg, & Keltner, 2010; Shariff & Tracy, 2009; Shariff, Tracy, & Markusoff, 2012; Tracy, Shariff, Zhao, & Henrich, 2013). It occurs if a person attributes a success internally (Horberg, Kraus, & Keltner, 2013; Tracy & Robins, 2004a; Tracy, Shariff, & Cheng, 2010; Williams & DeSteno, 2008). Pride is spontaneously expressed in response to victory (Tracy & Matsumoto, 2008), and has multiple distinctive expressions (verbal and visual; Tracy & Prehn, 2012; Tracy & Robins, 2004b) recognized across cultures (Tracy & Robins, 2008; Tracy et al., 2013).

Depending on how a successful person attributes achievement, pride can develop into one of two forms. Attributing success to internal, unstable, controllable causes leads to authentic pride. Attributing success to internal, stable, uncontrollable causes leads to hubristic pride (Tracy & Robins, 2007a). For instance, after receiving an excellent grade in an exam, a student might be proud because of effort invested into studying (authentic pride) or personal abilities (hubristic pride). Yet, why should these expressions of pride affect envy on the side of the inferior person?

In accordance with a social approach to emotions (Keltner & Haidt, 1999; Van Kleef, 2009; Van Kleef, Van Doorn, Heerdink, & Koning, 2011), pride should convey specific thoughts and intentions to observers. More specifically, it reveals the superiority of the pride displaying individual and signals the relevance of an

achievement, which are requirements for envy (Smith & Kim, 2007). Thus, we hypothesize that pride contributes to the elicitation of envy. In addition, we argue that there are distinct relationships between expressed authentic pride and benign envy as well as expressed hubristic pride and malicious envy.

People expressing authentic pride are perceived as prestigious and respectable individuals from whom others may receive valuable information (Cheng et al., 2010). Authentic pride also increases perceived likability (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013). Therefore, authentic pride expressions should foster benign envy, entailing the motivation to level the difference by increasing effort. This hypothesis is in line with research showing that subjective personal control and appraised deservingness spur benign envy (Lange, Crusius, & Hagemeyer, 2015; Van de Ven et al., 2012). In contrast, people expressing hubristic pride are perceived as individuals who try to secure their status by dominating and controlling others (Cheng et al., 2010). This undermines their likability (Cheng et al., 2013). Therefore, hubristic pride expressions should foster malicious envy, entailing the envier's motivation to harm the superior position of the envied person. This hypothesis is in line with research showing that reduced personal control and decreased appraisals of deservingness spur malicious envy (Lange et al., 2015; Van de Ven et al., 2012).

On the surface, our theoretical account may seem contradictory to research on the effect of dominance displays on perceivers' submissiveness. For example, if individuals expand their posture in interactions, perceivers may show complementary reactions by constricting themselves (Tiedens & Fragale, 2003). Such submissive reactions can be accompanied by depressive feelings (Price, 1998) or shame (Gilbert, 2000). Thus, displays related to pride may sometimes lead to the acceptance of a hierarchy. Nevertheless, these findings do not speak against our hypotheses. The desire for status is a fundamental human motive, yet it varies between situations (Anderson, Hildreth, & Howland, 2015). Competitive situations fulfill certain criteria that lead to the refusal of status differences (Price, 1998; Tiedens & Fragale, 2003). First, the desired object or domain of comparison is of high value to the inferior person. Second, the pursued path to level the difference is under voluntary control. Finally, the hierarchical differences are often not established before the competition starts but are determined by the result of the competition itself. Thus, even if pride displays may foster submissive reactions in noncompetitive situations, such an acceptance of the status quo is unlikely in competitive settings. The latter are the focus of our investigation.

The Current Research

In summary, we theorize that there is a social-functional relation between envy and pride. Specifically, pride's social goal of status enhancement should foster an envious response to close the resulting gap in perceived status. However, this can occur via two different routes. Authentic pride should modulate an envier's feelings toward benign envy and its motivational tendency to level up. Hubristic pride should modulate an envier's feelings toward malicious envy and its motivational tendency to harm the other's success. We investigated these predictions in six studies.

Study 1

Study 1 had two goals. First, we investigated how often envy and pride co-occur. Second, we examined the potential relationship between authentic pride and benign envy as well as hubristic pride and malicious envy. For these aims, we asked participants to recall an incident of either benign or malicious envy, to rate the envied person with regard to authentic and hubristic pride, and to indicate whether the envied person had displayed pride.

Method

Participants. One hundred thirty-one² U.S. citizens from Amazon Mechanical Turk (mTurk) participated in Study 1. Based on criteria set a priori, we excluded participants who indicated we should not use their data ($n = 2$; Meade & Craig, 2012) and who did not recall an envy incident ($n = 7$). Thus, the final sample size was $N = 122$ with a mean age of 35.07 years ($SD = 12.55$). Fifty-one of them were male (one missing value).

Materials and procedure. Participants were randomly assigned to one of two conditions: They either recalled an incident of benign ($n = 66$) or malicious envy ($n = 56$). Specifically, participants' task was to recall an incident of envy in which they evaluated the other's advantage as deserved or undeserved. Deservingness is one of the key appraisal dimensions that differentiates between benign and malicious envy (e.g., Crusius & Lange, 2014; Van de Ven et al., 2012). Participants were further instructed to close their eyes and vividly reexperience what happened and how they felt. Then, they should write down the story in as much detail as possible as if they would tell it to a good friend (Roseman et al., 1994).

Afterward, participants answered manipulation check questions adapted from Van de Ven et al. (2009) and validated by Crusius and Lange (2014). We instructed them that we would refer to the envied person as *the person* and to the envied person's advantage as *X*. The manipulation check included seven items related to benign envy (e.g., "I felt inspired to also obtain X"; $\alpha = .64$), seven items related to malicious envy (e.g., "I would have liked to hurt the person"; $\alpha = .91$), three items related to the intensity of negative affect (e.g., "It felt frustrating that I did not have X"; $\alpha = .76$), and three items related to deservingness (e.g., "The person didn't deserve X," reverse coded; $\alpha = .86$). Participants responded by using a scale from 1 (*does not apply at all*) to 7 (*applies very much*). The items can be found in the supplementary data (Table S1).

Then, we instructed participants to indicate how they thought the envied person had felt. They did so on a scale measuring authentic and hubristic pride (Tracy & Robins, 2007a). Participants indicated how strongly the other person appeared to feel accomplished, like he or she is achieving, confident, fulfilled, productive, like he or she has self-worth, and successful (authentic pride; $\alpha = .91$) as well as arrogant, conceited, egotistical, pompous, smug, snobbish, and stuck-up (hubristic pride; $\alpha = .97$). Answers were given on a scale from 1 (*not at all*) to 5 (*extremely*).

Finally, participants responded with *yes* or *no* to the question "Did you notice or hear of any occurrence of pride on the side of the person you envied in relation to his/her advantage?"

Results

Manipulation check. Based on the theoretical conceptualization of benign and malicious envy, we predicted higher values for the benign envy condition than the malicious envy condition on the benign envy scale and the reversed pattern for the malicious envy scale. We expected no differences with regard to the intensity of negative affect. However, in the benign envy condition, the envied person's advantage should be rated as more deserved. We analyzed responses to the manipulation check items in a MANOVA with envy condition (benign vs. malicious) as independent variable and benign envy, malicious envy, intensity of negative affect, and deservingness scales as dependent variables. Descriptive and inferential statistics can be found in Table 1.³

The analysis revealed a multivariate effect of envy condition, $F(4, 117) = 27.57, p < .001, \eta_p^2 = .49$. As predicted, the benign envy condition had higher values on the benign envy scale than the malicious envy condition. For the malicious envy scale, the benign envy condition had lower values than the malicious envy condition. There was no difference between the benign and the malicious envy condition regarding the intensity of negative affect. However, in the former participants appraised the other person's advantage to be more deserved than in the latter. Thus, the manipulation of benign and malicious envy was effective.

Pride. We hypothesized that pride would occur frequently and equally often in benign and malicious envy situations. This is a prerequisite for our more specific predictions. In total, 56% of all participants indicated that the envied person openly displayed pride with no difference between the benign (53%) and the malicious envy conditions (59%), $\chi^2(1) = 0.43, p = .51$.

In addition, authentic pride should be more prevalent in benign than in malicious envy episodes, whereas the reverse should be true for hubristic pride. To test this hypothesis, we conducted a repeated-measures ANOVA with envy condition (benign vs. malicious) and scale (authentic vs. hubristic) as independent variables with repeated-measures on the last factor. The results are depicted in Figure 1. The analysis revealed main effects of envy condition, $F(1, 120) = 7.78, p = .01, \eta_p^2 = .06$, and scale, $F(1, 120) = 120.19, p < .001, \eta_p^2 = .50$, that were qualified by our predicted interaction, $F(1, 120) = 23.22, p < .001, \eta_p^2 = .16$. Although descriptively there was more authentic pride in the benign ($M = 4.09, SD = 0.86$) than in the malicious envy condition ($M = 3.90, SD = 0.88$), this effect was not significant, $F(1, 120) = 1.41, p = .24, \eta_p^2 = .01$. However, hubristic pride was significantly lower in the benign ($M = 2.16, SD = 1.20$) than in the malicious envy condition ($M = 3.15, SD = 1.18$), $F(1, 120) = 21.1, p < .001, \eta_p^2 = .15$.

Discussion

Study 1 provides initial evidence in line with our predictions. More than half of the participants indicated that the envied person

²The sample sizes of all studies were planned with G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) or based on sample size recommendations for mediation analyses (Fritz & MacKinnon, 2007) for a small to medium effect size and the aim to achieve 80% power.

³Correlations among all measures for Studies 1 to 4 and central measures of Study 6 can be found in the supplementary data (Tables S2, S3, S5, S7, and S8).

Table 1
Descriptive and Inferential Statistics for the Manipulation Check of Study 1

Variable	$M_{\text{Benign}} (SD)$	$M_{\text{Malicious}} (SD)$	$F(1, 120)$	p	η_p^2
Benign envy	5.20 (0.95)	4.44 (1.06)	17.25	<.001	.13
Malicious envy	2.22 (1.42)	3.69 (1.54)	29.84	<.001	.20
Intensity of negative affect	4.93 (1.55)	5.30 (1.34)	2	.21	.02
Deservingness	5.27 (1.66)	2.40 (1.49)	99.37	<.001	.45

Note. Answers were given on a scale from 1 (does not apply at all) to 7 (applies very much).

displayed pride independent of the type of envy situation. Thus, as hypothesized, pride and envy frequently co-occur and might therefore affect each other. In accordance with this notion, in the benign envy condition, participants descriptively perceived the envied person's pride to be more authentic. In contrast, in the malicious envy condition, participants perceived the envied person's pride to be more hubristic. Note that benign envy was overall more strongly endorsed than malicious envy and authentic pride more so than hubristic pride. This is likely the case because malicious envy and hubristic pride are more socially undesirable and therefore more difficult to agree to. However, this does not affect the conclusions as our predictions focused on comparisons of authentic and hubristic pride between the two envy conditions.

In sum, pride seems to be relevant in envy situations. But does it also have incremental value in explaining envious reactions? In particular, can a pride display of another person increase envy and modulate it toward its different forms? To answer these questions, we manipulated pride in the following experiments using a diverse set of methodological approaches. In Study 2, we took advantage of the fact that pride displays can be ambiguous with regard to their potential to convey either authentic or hubristic pride (Tracy & Robins, 2007b). This allowed us to test whether such a display would increase envy (compared with a neutral control condition). Furthermore, it allowed to collect correlational evidence on the relationship of the perceived pride forms with benign and malicious envy—depending on how perceivers disambiguated the pride expression spontaneously in a naturalistic situation.

Study 2

In Study 2, we examined whether a superior person's pride display contributes to envious feelings and behavioral intentions

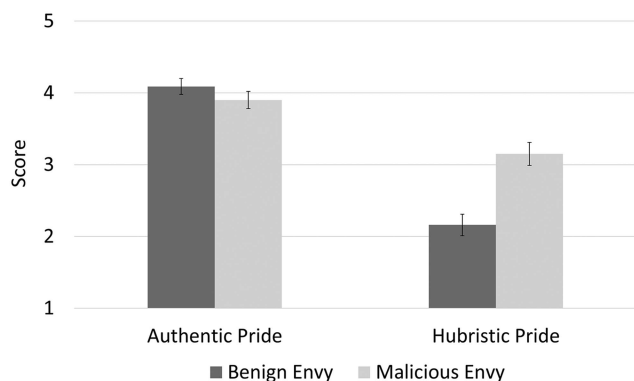


Figure 1. Effects of benign and malicious envy on authentic and hubristic pride ratings in Study 1. Error bars represent one standard error of the mean.

above and beyond mere high achievement. To do so, we manipulated whether a confederate who won a competition with the participant displayed pride or no specific emotion. We confronted participants with an ambiguous pride display that can either be perceived as authentic or hubristic pride. We measured the amount of envy that participants experienced as well as their resulting behavioral intentions. We also asked for the specific type of pride perceived by them to test whether authentic pride modulates envy more toward benign intentions than hubristic pride. We expected the reversed pattern for malicious intentions. Because, objectively, the participants were always outperformed by the confederate in the same way, any difference between the pride and control condition can be attributed only to the presence of pride and not simply to high achievement.

Method

Participants. One hundred twenty-seven university students participated in Study 2. They were compensated with a choice among various snacks. In this study, we did not include several demographic questions less relevant for research with students (e.g., education) and the items for the exclusion criteria (questions from Meade & Craig, 2012) used in the other studies. This was done to keep the study within the narrow time constraints of the research lab. However, we a priori decided to exclude non-native speakers ($n = 7$). Our elicitation of envy relied on a language-based achievement task in which participants had to identify the longest word in an anagram. It was necessary to make this task rather difficult and the best solution hard to find even for native speakers. We therefore suspected that non-native speakers would not see the confederate as a relevant comparison standard, which is a precondition for envy (e.g., Schaubroeck & Lam, 2004). Hence, the final sample included 120 participants with a mean age of 22.4 years ($SD = 3.07$). Forty of them were male.

Materials and procedure. The experimenter approached participants in a crowded hallway inviting them to a study investigating the effect of competitive situations on achievement. After recruiting the participant, the experimenter ostensibly approached another participant who actually was a gender-matched confederate sitting in the hallway looking at her/his smartphone. In total, we had three female and two male confederates. The experimenter was always the same female research assistant. She guided both the participant and the confederate to the lab. The confederate was instructed to not interact with the participant. If the participant would initiate any conversation, the confederate should reply with a neutral tone and short sentences.

In the lab, the experimenter stood behind a lectern and asked the confederate to position her- or himself left to a table in front of her and the participant right to it. Both were then introduced to the

anagram task. In the task, participants had to generate the longest word they could find using all or a subset of the letters from a string (Crusius & Mussweiler, 2011). The string was presented on a sheet of paper attached to a board and they had 30 s to write down their solution on a small sheet of paper on a clipboard. The person with the longest word would receive one point. The person with the highest number of points would win the respective round. Participants expected to play two rounds of the game. This was necessary for the content of the dependent measures, which participants completed after the first round. However, we stopped after the first round.

As an incentive, each person could earn one of several attractive snacks (several fruits and chocolate bars) as a reward, if this person had won one round. The experimenter always asked the participant to choose first what s/he would like to have as a possible reward. To increase the potential intensity of envy, our confederate always chose the same reward as the participant.

Subsequently, there were one practice trial and four critical trials in Round 1. In fact, the competition was rigged. Participants always won the practice trial and the first trial. Afterward, the confederate won the last three trials, and, as a consequence, surpassed the participant in Trial 3 and finally won in Trial 4. This was ensured as follows. The letter strings were rather long. They always allowed multiple solutions of various lengths. However, there was only one solution with all letters, which was extremely difficult to find. For example, one of the letter strings was *tesnhmyhreae*. The corresponding solution including all letters was *Chrysantheme* (chrysanthemum). Nevertheless, there were always more than 32 possible solutions of different lengths, such that each participant would always find a solution.

The experimenter had a list on her lectern enumerating all the possible solutions for each letter string. The list could not be seen from the participants' spot. At the end of each trial, she collected the sheets from the participant and the confederate and then also took them with her to the lectern. Although the confederate was instructed to always write down something on the sheet after a reasonable amount of time, her/his sheet was not considered by the experimenter. Actually, she would look at the participant's solution and quickly browse through her list in order to find a shorter (practice trial and Trial 1) or longer solution (Trials 2 to 4) and finally reading them out aloud. The respective winner was given a point marked on the board. As participants never found the longest word, we always had the opportunity to let the confederate excel them. At the end of Round 1, the confederate took the reward from the table right in front of the participant.

We randomly allocated participants to two different conditions, varying the emotional display of the confederate. In the neutral condition ($n = 61$), the confederate would behave neutrally without emotional change during the competition. In the pride condition ($n = 59$), the confederate expressed pride twice, once after s/he had surpassed the participant in Trial 3 and for a second time after winning in Trial 4. The first pride display was a single fist with the right hand and a bent arm. The second pride display was expressed by raising both arms and fists, expanded posture, head tilted backward, and a slight smile (Tracy & Robins, 2004b). The confederate also strengthened both displays by simultaneously exclaiming "Yes!" (see Figure 2; demonstration videos are available online as supplemental material).



Figure 2. Screenshots from videos of a female actor displaying the single fist pride display (left panel) and a male actor displaying the double fist pride display (right panel) as used in Study 2.

We pretested three pride displays, the two from the main study (single fist, $n = 42$, and double fist, $n = 45$) and a third one with hands in hips (called hands akimbo, $n = 26$), head tilted backward, expanded posture, and a slight smile (Tracy & Robins, 2004b) with native speakers from the same population ($N = 113$). Participants imagined being in the situation from the main study, namely that they participate and lose in a competition regarding vocabulary and creativity. Then, they saw videos of gender-matched research assistants posing each display and indicated what they thought was the displayed emotion: happiness, pride, shame, or no emotion (Tracy & Robins, 2004b). Afterward, they chose among three options whether they thought the person in the video felt accomplished, achieving, confident, fulfilled, productive, had self-worth, and felt successful (authentic pride), arrogant, conceited, egotistical, pompous, smug, snobbish, and stuck-up (hubristic pride), or felt neither of these (Tracy & Prehn, 2012). Finally, participants indicated how realistic and credible they think such a display would be in this situation on a scale from 1 to 4, with high ratings corresponding to high realism and credibility. The latter two ratings were highly correlated, $r(113) = .76$, $p < .001$, and therefore collapsed as a rating of appropriateness. All three displays were rated equally highly as expressing pride, $p(\text{pridelsingle fist}) = .86$, $p(\text{prideldouble fist}) = .80$, $p(\text{pridelhands akimbo}) = .92$, $\chi^2(2) = 1.98$, $p = .37$. However, the single fist, $p(\text{authentic}) = .50$, $p(\text{hubristic}) = .43$, and the double fist, $p(\text{authentic}) = .53$, $p(\text{Hubristic}) = .44$, were equally likely in being perceived as authentic or hubristic pride, whereas hands akimbo was biased toward hubristic pride, $p(\text{authentic}) = .04$, $p(\text{hubristic}) = .89$, $\chi^2(4) = 20.13$, $p < .001$. Additionally, regarding their appropriateness, the single fist ($M = 2.61$, $SD = 0.82$) and the double fist ($M = 2.38$, $SD = 0.77$) were seen as more appropriate than hands akimbo ($M = 1.96$, $SD = 0.63$), both $ps < .08$, whereas the former two did not differ, $p = .34$. This resulted in a main effect of display on appropriateness ratings in a univariate ANOVA, $F(2, 110) = 5.78$, $p = .004$, $\eta_p^2 = .10$. As we were interested in using displays that were perceived as pride expressions and that were equally likely to be interpreted as authentic or hubristic pride and nevertheless appropriate, we chose the single fist and double fist for the main study.

In the main study, after losing against the confederate, the experimenter announced that the participant should now complete a short questionnaire before the alleged second round. The questionnaire measured our focal dependent variables. They were com-

pleted at two separate desks, one for the confederate and one for the participant. Both were separated by a partition. The experimenter stayed behind her lectern. Confederates received a questionnaire stating “For the winner” and participants received a questionnaire stating “For the second winner.” We included two filler questions about the participants’ subjective feelings of time pressure and stress to mask the aim of our study. As dependent variables, participants indicated how they thought the other person felt using the item from the pretest for authentic and hubristic pride. Then, participants reported how envious they were of the confederate. For this item we used the German adjective *neidisch*, which, as its English translation *envious*, encompasses both the benign and the malicious form of envy. Finally, we measured benign and malicious intentions with items capturing the motivational dynamics associated with the two forms. Specifically, we directly adapted all items from Van de Ven, Zeelenberg, and Pieters (2012; Study 2). Two items measured benign envy (“I feel inspired to do my best in Round 2” and “I am motivated to exert more effort in Round 2”; $r_s = .80, p < .001$) and two other items measured malicious envy (“I would like to gossip about the other person” and “I wish that the other person performs worse in round 2”; $r_s = .16, p = .08$). The low correlation among the malicious envy items was unexpected as this was not the case in Van de Ven et al. (2012) and Studies 3 and 4 in which we used similar items. However, based on the conceptualization of envy and our a priori analysis plan, we nevertheless averaged them. To account for their low correlation, we also ran all analyses with the individual items and report when results differ for them. All responses were given on a scale from 1 (*not at all*) to 7 (*very much*).

Finally, participants were debriefed and compensated with the snack they had initially chosen as potential reward. No participant indicated that s/he was suspicious about the veracity of the study.

Results

Manipulation check. We predicted that participants perceived higher authentic and hubristic pride expressed by their competitor in the pride condition compared with the neutral condition. Authentic and hubristic pride should be equally distributed across the pride condition as they were in our pretest. We used a χ^2 -test with display condition (pride vs. neutral) as independent variable and pride perception (authentic pride vs. hubristic pride vs. neutral) as dependent variable to test whether our manipulation was successful.

In the pride condition, authentic pride was perceived in 59% of the cases, hubristic pride was perceived in 19% of the cases, and participants perceived no emotion in 22% of the cases. In the neutral condition, the respective values were 48% for authentic pride, 3% for hubristic pride, and 49% for no emotion. This overall difference was significant, $\chi^2(2) = 13.49, p = .001$. Thus, our manipulation was successful but not ideal. Unexpectedly, some participants interpreted the confederate’s feelings as authentic pride even in the absence of any emotion display. This might have happened because the confederate always won the competition leading participants to infer prestige and correspondingly authentic pride (Cheng et al., 2010) even in the absence of a display. Furthermore, in contrast to the pretest, authentic pride was more frequently perceived than hubristic pride ($p < .001$). One explanation might be that the impersonal situation in the pretest did not

invoke as much social desirability concerns compared to the main study. Nevertheless, and most importantly, pride was perceived more often in the experimental condition than in the neutral condition, which is the crucial prerequisite for testing pride’s effect on envy.

Effect of pride on envy. We reasoned that a pride display upon success represents an expression of status enhancement, which, if perceived by the inferior person, will intensify envy. This was indeed the case. Descriptive and inferential statistics can be found in Table 2. In the pride condition, participants were more envious than in the neutral condition.⁴

Furthermore, we expected pride to spur benignly envious and maliciously envious intentions. In line with this prediction, pride displays elicited more malicious envy compared with the neutral display. However, the pride condition did not result in higher ratings on benign envy than the neutral condition.

When interpreting these effects, it is important to keep in mind that the tests for the effects of display condition on benign and malicious intentions are very conservative. According to our reasoning, authentic pride should modulate envy more toward benignly envious intentions and hubristic pride should modulate envy more toward maliciously envious intentions. At the same time, the pride condition should increase authentic and hubristic pride perceptions compared with the neutral condition and therefore increase both, benign and malicious intentions. Note that these two effects work against each other. Given that the control condition also led to a fair amount of authentic pride perceptions, it was much harder for an effect on benign envy to be revealed. We therefore also tested whether general envy mediates the effects of display condition on benign and malicious envy even in the absence of a direct effect for benign envy. This can occur, if different effects cancel each other out (Hayes, 2009) as was likely the case in our study. Our reasoning was that the general emotion term *envious* can be used with respect to both benign envy and malicious envy. It should therefore link the effect of the display condition to both of their respective motivational tendencies.

In a mediation analysis with 5,000 bootstrap resamples and bias-corrected confidence interval (Preacher & Hayes, 2008), we found a mediation effect of display condition on benign intentions via general envy, $ab = -0.168, 95\% \text{ CI } [-0.457, -0.012]$. The same analysis with malicious envy as dependent variable also revealed a significant mediation effect, $ab = -0.165, 95\% \text{ CI } [-0.362, -0.005]$.⁵ Thus, as predicted, pride displays fostered envy in its benign and malicious form. The mediation effects are depicted in Figure 3.

In addition, we used the manipulation check as independent variable and compared participants who perceived authentic pride in the confederate ($n = 64$) with participants who perceived hubristic pride ($n = 13$). This constitutes a more direct, yet correlational test of our predictions. When participants perceived authentic pride, benignly envious intentions were higher ($M =$

⁴ If participants who did not perceive pride in the pride condition are excluded from the analyses, the pride condition ($M = 2.50, SD = 1.44$) also leads to more envy than the neutral condition ($M = 1.98, SD = 1.07$), $F(1, 105) = 4.52, p = .04, \eta_p^2 = .04$.

⁵ The mediation was not significant for the item related to gossiping, $ab = -0.03, 95\% \text{ CI } [-0.13, 0.03]$ but only for the item related to wishes for worse performance, $ab = -0.31, 95\% \text{ CI } [-0.69, -0.01]$.

4.69, $SD = 1.63$) than when they perceived hubristic pride ($M = 3.62$, $SD = 1.49$), $F(1, 75) = 4.82$, $p = .03$, $\eta_p^2 = .06$. Conversely, when participants perceived authentic pride, they were less likely to have maliciously envious intentions ($M = 2.34$, $SD = 1.07$) than when they perceived hubristic pride in their opponent ($M = 3.42$, $SD = 1.58$), $F(1, 75) = 9.22$, $p = .003$, $\eta_p^2 = .11$.⁶ Thus, again as predicted, authentic pride was associated with more benign intentions and less malicious intentions than hubristic pride.

Discussion

Study 2 shows the effect of pride on envy. Pride displays increased envy, thereby fostering benign and malicious intentions. Furthermore, compared with perceptions of hubristic pride, authentic pride was related to increased benign envy. This effect was reversed for malicious envy. A strength of the study is that we elicited envy in the lab, which is rarely done in envy research. Participants were in direct contact with confederates displaying pride, ostensibly in an actual competition.

However, the study also has limitations. Authentic and hubristic pride were not equally distributed across conditions and participants also perceived a substantial amount of authentic pride in the neutral condition. Presumably, this led to a nonsignificant effect of display condition on benign envy and very low power for testing the effects of authentic and hubristic pride perceptions on benign and malicious envy. Furthermore, the items measuring malicious envy were not strongly correlated. We think this was caused by a floor effect on these items. Although we actively tried to create a neutral relationship of the confederates with participants, they nevertheless seemed to like them. This is mirrored in their overwhelmingly authentic pride perceptions. Thus, only a small number of participants endorsed high values on the malicious items. Finally, the study allowed only a correlational test of the specific links of authentic and hubristic pride with benign and malicious envy.

To address these limitations, we used videos and vignettes in the three subsequent studies to directly manipulate whether actors displayed authentic or hubristic pride. When participants imagine emotional situations, they are less likely to be guided by social desirability concerns, but such studies nevertheless converge with results of real situations (Robinson & Clore, 2001). In Study 3, we tested the effects of authentic and hubristic pride on benign and malicious envy. Extending Study 2, we manipulated authentic and hubristic pride using videos. Drawing on the results of Nelson and Russell (2014) and our pretest of Study 2, we created pride videos depicting the face and the upper body.

Additionally, in Study 3 we included another control condition. The neutral condition in Study 2 evoked quite some inferences of

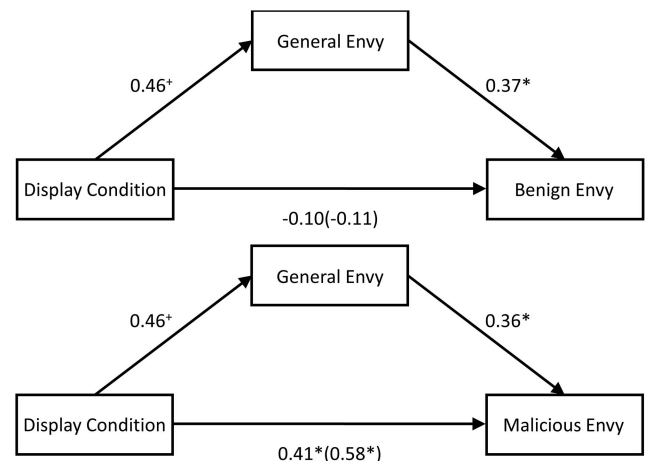


Figure 3. Mediation effects of display condition (1 = neutral, 2 = pride) on benign (upper panel) and malicious envy intentions (lower panel) via general envy feelings in Study 2. ⁺ $p < .10$. ^{*} $p < .05$.

pride on the side of the confederate although pride was never displayed. We think this was caused by the absence of any display, thereby fostering inferences based on the situation (see above). Therefore, in Study 3, we included a frequently expressed emotional display in response to success which reduces perceived status—embarrassment (Shariff & Tracy, 2009).

Study 3

In Study 3, we tested whether authentic and hubristic pride distinctively increase benign and malicious envy. Additionally we hypothesized that, as in Study 2, the pride forms would lead to these effects above and beyond mere high achievement. To investigate this hypothesis, we included another control condition in which the competitor displayed embarrassment following success.

Method

Participants. Three hundred seven students of a large German University participated in Study 3. We excluded participants who indicated that we should not use their data ($n = 6$). The final sample size was $N = 301$ with a mean age of 22.04 years ($SD = 4.27$; one missing value). One hundred thirty participants were male.

Materials and procedure. In the instructions, we asked participants to imagine that they attended a seminar in which they had to take exams repeatedly. They wanted to do well on these exams and they seemed to do a good job in reaching this goal. But, very surprisingly, on their midterm exam, their grade was much worse than they hoped it would be. Furthermore they should imagine that, after all attendees had gotten their grade, they talked to

Table 2

Descriptive and Inferential Statistics for the Effect of Display Condition on Envy in Study 2

Variable	$M_{\text{Pride}} (SD)$	$M_{\text{Neutral}} (SD)$	$F(1, 118)$	p	η_p^2
General envy	2.44 (1.48)	1.98 (1.07)	3.78	.054	.03
Benign envy	4.37 (1.72)	4.48 (1.63)	0.11	.74	.001
Malicious envy	2.69 (1.20)	2.11 (1.03)	8.12	.01	.06

Note. Answers were given on a scale from 1 (not at all) to 7 (very much).

⁶ The effect was significant for the item related to gossiping ($M_{\text{Authentic}} = 1.19$, $SD = 0.43$; $M_{\text{Hubristic}} = 3.38$, $SD = 2.02$), $t(12.22) = -3.90$, $p = .002$ (Welch t -Test was chosen because of unequal variance correction), but not for the item related to wishes for worse performance ($M_{\text{Authentic}} = 3.50$, $SD = 2.04$; $M_{\text{Hubristic}} = 3.46$, $SD = 2.07$), $F(1, 75) = 0.02$, $p = .95$, $\eta_p^2 < .001$.

another attendee called Tina/Tim (matching the participant's gender). Tina/Tim was among the best on this exam and also generally among the best in the seminar. Participants imagined that s/he was very happy about her/his result and that s/he had a grade that the participant would like to have as well. Then we introduced our manipulation. We varied whether Tina/Tim expressed authentic pride ($n = 102$), hubristic pride ($n = 102$), or embarrassment ($n = 97$) about her/his success. To do so, we showed a video of a gender-matched person who displayed the respective emotion.

The embarrassment display closely followed the expression described and validated by Keltner (1995). Its central components are a controlled smile, downward head tilt followed by movement to the side and finally up again, and touching the face. We integrated findings from Tracy and Robins (2007b); Nelson and Russell (2014), and our own experiences to create dynamic pride displays. The authentic pride display was similar to the single fist expression from Study 2 but with a less aggressive facial display. Important components were the single fist, an expanded posture, a slight smile, a gaze at the fist, and generally faster movement. The hubristic pride display was similar to the hands akimbo expression from Study 2. Important components were hands akimbo, an expanded posture, an asymmetric smile, directed gaze, head tilted back, leaning back, and generally slower movements. None of the videos contained audio information. The videos are available online as supplemental material.

To verify the efficiency of each display to convey the emotion, we conducted a pretest with 107 participants from the same population. After watching the authentic pride ($n = 30$), hubristic pride ($n = 37$), or embarrassment video ($n = 40$), participants indicated whether the displayed emotion was either anger, pride, embarrassment, happiness, disappointment, or no emotion. The authentic pride video, $p(\text{pride}|\text{authentic pride}) = .67$, and the hubristic pride video, $p(\text{pride}|\text{hubristic pride}) = .73$, were equally likely to be perceived as pride, $\chi^2(1) = 0.32, p = .58$. The embarrassment video was also perceived as embarrassment, $p(\text{embarrassment}|\text{embarrassment}) = .95$. The full pattern corresponded to a significant effect, $\chi^2(10) = 109.73, p < .001$. The authentic pride display was sometimes confused with happiness, $p(\text{happiness}|\text{authentic pride}) = .33$. Nevertheless, it was marginally more often perceived as pride, $p = .07$. The hubristic pride display was not confused with one particular other emotion. Subsequently, participants indicated whether the person felt either accomplished, achieving, confident, fulfilled, productive, had self-worth, and felt successful (authentic pride), arrogant, conceited, egotistical, pompous, smug, snobbish, and stuck-up (hubristic pride), embarrassed, shy, abashed, rueful, ashamed, and affected (embarrassment), or neither of these. The options for authentic and hubristic pride were as in the pretest of Study 2. The embarrass-

ment option was created according to the same scheme. The authentic pride video was perceived as authentic pride, $p(\text{authentic pride}) = .94$, the hubristic pride video as hubristic pride, $p(\text{hubristic pride}) = .84$, and the embarrassment video as embarrassment, $p(\text{embarrassment}) = .93$. Other categories were negligible, which is important as the potential confusion of authentic pride with happiness would have resulted in more *neither of these* responses given that it did not convey pride. The present result instead implies that, even though authentic pride has some obvious resemblance to happiness (being a positive emotion), participants were able to identify the emotion in the way we intended. The full pattern corresponded to a significant effect, $\chi^2(6) = 171.34, p < .001$. The videos can be found in the supplemental material.

In the main study, after watching the videos, participants answered items measuring benign ($\alpha = .72$) and malicious envy ($\alpha = .87$) as well as intensity of negative affect ($\alpha = .74$). For a more conservative test of our hypothesis, we decided to exclude items from the benign and malicious envy scales that could be interpreted as having a semantic overlap with a positive attitude toward the envied person. For example, benign envy is associated with a stronger feeling of admiration for the other person than malicious envy. To this end, we included only items that focus on the motivational and behavioral components of benign (e.g., "I try harder to also obtain a good grade in the next exam" and "Tina's/Tim's success encourages me") and malicious envy (e.g., "I wish that Tina/Tim would fail at something" and "I would have liked to hurt Tina/Tim"). This is in line with research on benign and malicious envy, which has identified these distinct motivational tendencies as a crucial difference between the two forms of envy (see Footnote 1). All items can be found in the supplementary data (Table S4).

Results

We hypothesized that authentic pride would foster benign envy and hubristic pride would foster malicious envy. These hypotheses were confirmed. Descriptive and inferential statistics can be found in Table 3. A MANOVA with display condition (authentic pride vs. hubristic pride vs. embarrassment) as independent variable and benign envy, malicious envy, and intensity of negative affect as dependent variable revealed a multivariate effect of display condition, $F(6, 594) = 10.23, p < .001, \eta_p^2 = .09$. Post hoc Tukey's tests indicated that authentic pride led to more benign envy than hubristic pride ($p < .001$) and embarrassment ($p = .001$). The latter two did not differ ($p = .62$). In contrast, hubristic pride led to more malicious envy than authentic pride ($p < .001$) and embarrassment ($p < .001$). The latter two did not differ ($p = .14$).

Table 3
Descriptive and Inferential Statistics for the Effect of Display Condition on Benign Envy, Malicious Envy, and Intensity of Negative Affect in Study 3

Variable	$M_{\text{Authentic}} (SD)$	$M_{\text{Hubristic}} (SD)$	$M_{\text{Embarrass}} (SD)$	$F(2, 298)$	p	η_p^2
Benign envy	4.10 (1.24)	3.35 (1.12)	3.50 (1.08)	12	<.001	.08
Malicious envy	2.19 (1.21)	3.53 (1.65)	2.58 (1.51)	22.6	<.001	.12
Intensity of negative affect	4.21 (1.43)	4.66 (1.41)	4.35 (1.38)	2.27	.07	.02

Note. Answers were given on a scale from 1 (not at all) to 7 (very much).

Unexpectedly, there was also a marginally significant effect of display condition on intensity of negative affect, mostly driven by a marginal effect between authentic and hubristic pride ($p = .06$). However, controlling for negative affect did not alter the level of significance of any finding. As we did not find similar effects in the other studies, this finding should be interpreted only with caution.

Discussion

Study 3 shows the predicted pattern. Authentic pride distinctively increased benign envy, whereas hubristic pride distinctively increased malicious envy. Importantly, when the competitor displayed embarrassment, both envy forms were low. Together with Study 2, this shows that the effect of pride on envy exists above and beyond perceiving others with high achievement.

Study 4

In Study 4, we investigated the underlying mechanisms of the relation of envy and pride. A prominent model that explains effects of emotions on observers is the emotions as social information model (EASI; Van Kleef, 2009; Van Kleef et al., 2011). According to this model, individuals observe another's emotion display, which causes affective reactions toward this person as well as inferences regarding this person's intentions and behavioral inclinations. These two pathways ultimately affect the individual's response. We argue that, in competitive situations, the affective pathway relates to the likability of the pride expressing person and the inferential pathway relates to how status is conveyed by this emotional display.

First, we hypothesize that authentic pride expressions are more likable (Cheng et al., 2013). As liking breeds felt similarity (Collisson & Howell, 2014) and fosters assimilation toward another person (Mussweiler, 2003), authentic pride should therefore spur benign envy. In contrast, we hypothesize that hubristic pride expressions are less likable (Cheng et al., 2013). As less likable others' positive outcomes are rated as undeserved (Feather, 2006), an appraisal that elicits malicious envy (Van de Ven et al., 2012), hubristic pride should spur malicious envy.

Second, we hypothesize that status conferral corresponds to the inferential pathway in the EASI model. As alluded to above, we argue that envy is the emotional response to another's higher status. Importantly, pride's forms differ in how status is conveyed. Perceiving authentic pride is related to inferences of prestige (Cheng et al., 2010). Prestige operates through respect and signals that the individual is willing to share knowledge, skill, and know-how (Cheng et al., 2013). This turns more successful individuals into means to improve performance (Crusius & Lange, 2014; Van de Ven et al., 2009, 2011a) thereby potentially spurring benign envy. Perceiving hubristic pride is related to inferences of dominance (Cheng et al., 2010). Dominance operates through fear and signals that the individual is willing to use force and intimidation in order to maintain the hierarchy (Cheng et al., 2013). This should undermine personal control over outcomes and therefore increase malicious envy (Van de Ven et al., 2012).

In sum, we hypothesized that authentic pride leads to a more likable impression and to inferences of prestige. Via these routes it should modulate envy more toward its benign form. In contrast, we

expected hubristic pride to decrease perceived likability and to cause inferences of dominance. Via these routes it should modulate envy more toward its malicious form. To investigate these hypotheses, we asked participants to imagine being worse-off in a competitive situation and presented them with opponents who expressed either authentic or hubristic pride. Then, we measured liking, prestige, dominance, and benign as well as malicious envy.

Method

Participants. Four hundred two mTurk workers participated in Study 4. We excluded participants who indicated we should not use their data ($n = 2$) and who indicated *neither of these* on the pride manipulation check item ($n = 3$). This was recommended by Tracy and Prehn (2012) as these participants perceived no pride at all. The final sample size was $N = 397$ with a mean age of 34.96 years ($SD = 10.98$; one missing value). Two hundred forty-one were male.

Materials and procedure. We used a similar paradigm as in Study 3. Participants again imagined being worse-off in a personally relevant exam. As we ran the study with U.S. participants, the superior comparison standards were now called Hillary or Joe (gender matched). In comparison to Studies 2 and 3, we employed a more established manipulation of pride relying on pictures from the University of California, Davis, Set of Emotion Expressions (Tracy, Robins, & Schriber, 2009). Specifically, we showed a photograph of a person displaying pride with hands akimbo, expanded posture, head tilted backward, and a slight smile. We used the Caucasian expressers as this was the most frequent ethnicity in our sample. As shown by Tracy and Prehn (2012) the pride display in the photograph does not differentiate between authentic and hubristic pride. However, the expression can be disambiguated by knowledge about the proud person's attribution pattern. For authentic pride, this is the case if the person showing the expression attributes success to unstable, controllable causes (Tracy & Robins, 2007a). To achieve this in our study ($n = 231$), Hillary/Joe said "I did well on this exam because I studied hard." Perceivers will infer hubristic pride, if the person attributes success to stable, uncontrollable causes (Tracy & Robins, 2007a). To achieve this in our study ($n = 166$), Hillary/Joe said "I did well on this exam because I am talented." This text was inserted into a speech bubble accompanying the picture (Tracy & Prehn, 2012). As manipulation check, participants were asked to rate whether they think this person feels authentic pride, hubristic pride, or neither of these, as in the pretests of Studies 2 and 3.

Then, participants answered three items referring to liking of the person (e.g., "I think Hillary/Joe is a very nice person"; $\alpha = .84$) on a scale from 1 (*does not apply at all*) to 7 (*applies very much*). This was followed by nine items measuring prestige (e.g., "Her/his unique talents and abilities are recognized by others in the seminar"; $\alpha = .88$) and eight items measuring dominance (e.g., "S/he is willing to use aggressive tactics to get her/his way"; $\alpha = .91$) taken from Cheng and colleagues (2013, 2010). Participants responded on a scale from 1 (*not at all*) to 4 (*somewhat*) to 7 (*very much*).

Finally, participants answered items measuring benign ($\alpha = .74$) and malicious envy ($\alpha = .89$) as well as intensity of negative affect ($\alpha = .65$). As in Study 3, these scales did not include items that could be interpreted as having a semantic overlap with a

positive attitude toward the envied person and therefore likability and prestige. All items can be found in the supplementary data (Table S6).

Results

Manipulation check. We first checked whether our manipulation of pride was successful. Participants should interpret the person's display as authentic pride in the condition in which s/he attributes success to effort. In contrast, participants should interpret the person's display as hubristic pride in the condition in which s/he attributes success to talent. We used a χ^2 - test with attribution (effort vs. talent) as independent variable and pride (authentic vs. hubristic) as dependent variable. The pride expression combined with an effort attribution was perceived as authentic pride in 67% of the cases (and therefore as hubristic pride in 33% of the cases). The pride expression combined with a talent attribution was perceived as hubristic pride in 70% of the cases (and therefore as authentic pride in 30% of the cases). This pattern corresponded to a significant effect, $\chi^2(1) = 52.89, p < .001$, confirming that participants differentiated between authentic and hubristic pride on the basis of the given expressions. Thus, our manipulation was effective. Henceforth, we refer to the effort condition as authentic pride and the talent condition as hubristic pride.

Effect of pride on envy. As stated above, we argue that authentic pride leads to more benign and less malicious envy compared with hubristic pride. This should be mediated via increased liking and prestige versus dominance inferences. As subsidiary hypotheses, we predicted that there is no difference for the intensity of negative affect. To test this, we first used a MANOVA with pride condition (authentic pride vs. hubristic pride) as independent variable and benign envy, malicious envy, liking, prestige, dominance, and intensity of negative affect as dependent variables. This revealed a significant multivariate effect of pride condition, $F(6, 390) = 7.10, p < .001, \eta_p^2 = .10$. Descriptive and inferential statistics can be found in Table 4. Our predictions were confirmed. Authentic pride compared to hubristic pride led to more benign envy, less malicious envy, increased liking, more inferred prestige, and less inferred dominance. Also in line with our hypotheses, there was no difference in terms of the intensity of negative affect.

Then, we examined our predicted mediation effects with a structural equation model. In the model, pride condition served as independent variable. Benign and malicious envy served as dependent variables. Liking of Hillary/Joe as well as inferences of prestige and dominance served as parallel mediators. We included

paths only from liking and prestige to benign envy (and not from dominance) and from liking and dominance to malicious envy (and not from prestige) given our specific hypotheses. The error terms of the mediators and the error terms of the envy forms were free to covary. We tested for mediation with 5,000 bootstrap resamples and bias-corrected confidence intervals (Preacher & Hayes, 2008). The results of this mediation analysis can be found in Figure 4. The model fit was excellent, $\chi^2(4) = 3.66, p = .45, CFI = 1.00, RMSEA = .000, 95\% CI [.000, .073]$. The total indirect effects of pride condition on benign envy, $ab = 0.36, 95\% CI [0.21, 0.51], p < .001$, and of pride condition on malicious envy were significant, $ab = -0.49, 95\% CI [-0.67, -0.32], p < .001$, as were all individual indirect effects ($ps < .001$).

An alternative model including the direct effects from pride condition on benign envy and malicious envy did not improve model fit $\Delta\chi^2(2) = 1.43, p = .49$. Both direct effects were not significant ($ps > .23$), reflecting the pattern of a full mediation. Furthermore, an alternative model including paths from prestige to malicious envy and dominance to benign envy did also not improve model fit, $\Delta\chi^2(2) = 2.08, p = .35$. Both direct effects were not significant ($ps > .21$), confirming the distinct relations of prestige and dominance inferences with benign and malicious envy.

Discussion

Study 4 supports our contention that authentic pride modulates envy more toward its benign form and hubristic pride modulates envy more toward its malicious form mediated via liking and prestige versus dominance. These processes correspond to the affective (liking) and inferential pathways (status inferences of prestige and dominance) of the EASI model (Van Kleef, 2009). This constitutes strong evidence that pride shapes envious responding.

We argue that the effect of pride on envy is social such that the superior person's pride display affects the inferior person's envy. To manipulate envy in Study 4, we presented photographs with pride expressions and added knowledge about success attributions to it. This procedure is based on the fact that authentic and hubristic pride may share the same ambiguous bodily display but can be differentiated with the help of these attribution patterns (Tracy & Prehn, 2012). However, a potential alternative explanation of these findings could be that this attribution information about the causes of another's success alone may suffice to elicit benign or malicious envy. More specifically, it might be that a person learns that one needs effort to be successful in a particular

Table 4
Descriptive and Inferential Statistics for the Effect of Pride Condition on Benign Envy, Malicious Envy, Liking, Prestige, Dominance, and Intensity of Negative Affect in Study 4

Variable	$M_{\text{Authentic}} (SD)$	$M_{\text{Hubristic}} (SD)$	$F(1, 395)$	p	η_p^2
Benign envy	5.00 (1.13)	4.74 (1.07)	5.40	.02	.01
Malicious envy	2.49 (1.49)	2.96 (1.54)	9.32	.002	.02
Liking	4.27 (1.45)	3.46 (1.36)	31.66	<.001	.07
Prestige	4.84 (0.98)	4.45 (1.01)	14.68	<.001	.04
Dominance	3.83 (1.26)	4.38 (1.23)	19.25	<.001	.05
Intensity of negative affect	4.86 (1.18)	4.90 (1.33)	0.05	.82	<.001

Note. Answers were given on scales from 1 to 7.

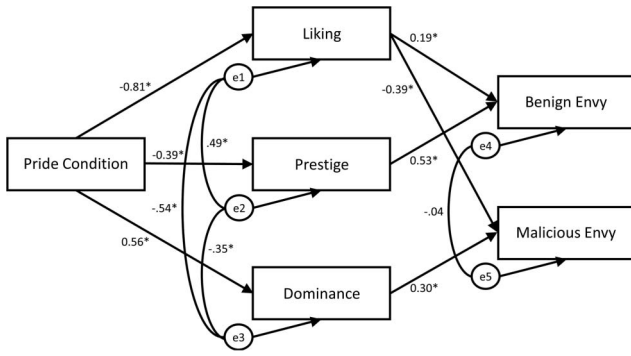


Figure 4. Mediation effect of pride (1 = authentic pride, 2 = hubristic pride) on envy via liking, prestige, and dominance in Study 4. Coefficients constitute unstandardized regression weights and correlation coefficients. * $p < .001$.

situation. This could lead to the impression that success is under personal control and therefore increase benign envy (Van de Ven et al., 2012). Such an effect might happen independently of any authentic pride display, simply via available knowledge in the environment. The same applies to the hubristic pride condition in which participants could learn that success is contingent on ability, thus, cannot be controlled, and then increases malicious envy (Van de Ven et al., 2012). Importantly, however, a social-functional approach predicts that even if this contextual knowledge alone may affect envy (e.g., via appraisals of personal control), a pride display of the superior person should modulate it more strongly. When knowledge about attribution patterns is conveyed by the pride displaying, superior person—as authentic or hubristic pride—this should elicit the specific complementary envious response in the inferior person to manage the increased status of the competitor. Thus, the effect of effort versus ability attributions on the modulation of envy should be greater when conveyed by a pride displaying person compared to when the very same information is conveyed by another source.

Study 5

The aim of Study 5 was to show that our effects are social in nature, thus, that they are based on the superior person displaying either authentic or hubristic pride and not simply caused by impersonal contextual knowledge. Participants were confronted with Hillary/Joe as in Study 4. In all cases, s/he displayed ambiguous pride. However, in one condition s/he also conveyed information about effort and ability requirements, thereby expressing either authentic or hubristic pride. In other conditions, this information was given by an omnipresent narrator (Tracy & Prehn, 2012). We predicted that effort attributions would shift envy more toward its benign form compared to ability attributions. This effect, however, should be stronger when information about the attribution pattern are presented by the person compared with an omnipresent narrator.

Method

Participants. Four hundred six workers from mTurk participated in Study 5. We again excluded participants who indicated we

should not use their data ($n = 10$) or indicated “neither of these” on the pride manipulation check ($n = 10$) as recommended by Tracy and Prehn (2012). Thus, the final sample size was $N = 386$. The mean age was 27.95 years ($SD = 7.96$) and 269 were male.

Materials and procedure. We asked participants to imagine the same situation as they did in Studies 3 and 4. They were randomly assigned to one of four conditions in a 2 (Attribution: effort vs. ability) \times 2 (Source: person vs. narrator) between subjects design. The person conditions were the same as in Study 4. Participants imagined that having gotten their grade, they talked to Hillary/Joe (gender matched) who displayed pride and either said that s/he was successful because s/he studied hard (effort, $n = 88$) or is talented (ability, $n = 103$). In the narrator conditions, Hillary/Joe also displayed pride but there was no speech bubble. Instead, in the main text we either inserted the sentence “S/he did well on this exam because s/he studied hard” (effort, $n = 103$) or “S/he did well on this exam because s/he is talented” (ability, $n = 92$; Tracy & Prehn, 2012).

Afterward, participant indicated whether they perceived authentic pride, hubristic pride, or neither of these in Hillary/Joe as they did in the previous studies. Finally, participants rated their envy. As our predictions refer to modulations of envy between benign and malicious, we decided to simplify our design. Instead of separate scales, participants rated their agreement on a scale from 1 (*does not apply at all*) to 7 (*applies very much*) with seven items measuring the manifestation of envy (e.g., “Hillary/Joe inspires me to also obtain a good grade in the next exam.” “I wish that Hillary/Joe would fail at something” [reverse coded]). Items were recoded such that high values indicate benign envy and low values indicate malicious envy. Using this scale allowed us to more strongly pit the two poles of envy against each other. The resulting scale was reliable ($\alpha = .76$). The items can be found in the supplementary data.

Note that the information is exactly the same in the person and narrator conditions. In all cases Hillary/Joe is proud of her/his success and this either depended on effort or ability. The conditions differ only in who conveys this information, the superior person herself/himself or an omnipresent narrator.

Results

Manipulation check. We hypothesized that effort attributions would lead to perceptions of authentic pride and that ability attributions would lead to perceptions of hubristic pride. This should be more pronounced when they are displayed by the actor as compared with when they are conveyed by an omnipresent narrator. Thus, there should be a stronger effect of the attribution on pride perceptions in the person conditions than in the narrator conditions.

In the person conditions, participants perceived the pride display with effort attributions as authentic pride in 70% of the cases (and therefore as hubristic pride in 30% of the cases). In contrast, participants perceived the pride display with ability attributions as hubristic pride in 69% of the cases (and therefore as authentic pride in 31% of the cases), $\chi^2(1) = 29.45, p < .001$. In the narrator conditions, we found a similar pattern that was considerably weaker. Participants perceived the pride display with accompanying effort attributions by the narrator as authentic pride in 54% of the cases (and therefore as hubristic pride in 46% of the cases) and

with ability attributions they perceived it as hubristic pride in 61% of the cases (and therefore as authentic pride in 39% of the cases), $\chi^2(1) = 4.71, p = .03$. This pattern corresponded to a significant interaction effect of Attribution (effort vs. ability) \times Source (person vs. narrator) in a logistic regression with Pride (0 = authentic pride, 1 = hubristic pride) as criterion, $B = -1.04, SE = 0.43, \chi^2(1) = 5.83, p = .02, OR = 0.35, 95\% CI [0.15, 0.82]$. The interaction qualified main effects of attribution, $B = 2.70, SE = 0.7, \chi^2(1) = 15.09, p < .001, OR = 14.93, 95\% CI [3.82, 58.41]$ and source, $B = 1.45, SE = 0.69, \chi^2(1) = 4.48, p = .03, OR = 4.27, 95\% CI [1.11, 16.4]$.

Thus, our manipulation was effective. When the person displayed pride and indicated that s/he was successful because of invested effort or talent, respective authentic and hubristic pride perceptions were much more pronounced compared to the narrator conditions.

Effect of pride on envy. As the manipulation check showed that participants perceived authentic and hubristic pride when the emotion was expressed by Hillary/Joe, did this also modulate their envious responding? Our main hypothesis was that effort attributions will modulate envy more toward the benign form compared to ability attributions when displayed by the person compared to the narrator. This hypothesis was fully confirmed. The results are depicted in Figure 5.

In the person condition, participants' envy was more benign when Hillary/Joe attributed success to effort ($M = 5.48, SD = 1.11$) compared with when s/he attributed it to ability ($M = 4.86, SD = 1.06$), $F(1, 382) = 14.33, p < .001, \eta_p^2 = .04$. When contextual knowledge was conveyed by an omnipresent narrator, the effort condition ($M = 5.24, SD = 1.17$) did not differ from the ability condition ($M = 5.15, SD = 1.17$), $F(1, 382) = 0.33, p = .57, \eta_p^2 = .001$. In addition, in the effort condition, envy was descriptively more benign when the information was conveyed by the person compared with the narrator while the effect was not significant, $F(1, 382) = 2.10, p = .15, \eta_p^2 = .01$. In contrast, in the ability condition, envy was marginally more malicious when the information was conveyed by the person compared to the narrator, $F(1, 382) = 3.21, p = .07, \eta_p^2 = .01$.

Overall, this pattern corresponded to a significant interaction in an ANOVA with attribution (effort vs. ability) and source (person

vs. narrator) as independent variables and envy as dependent variable, $F(1, 382) = 5.25, p = .02, \eta_p^2 = .01$. The interaction qualified a main effect of attribution, $F(1, 382) = 9.58, p = .002, \eta_p^2 = .02$. The main effect of source was not significant ($F < 1$).

Discussion

Study 5 supports a social-functional view of envy and pride. Effort compared with ability attributions about success modulated envy more toward its benign form but only when they were conveyed by the person. If they were conveyed by an omnipresent narrator, the effect did not occur. Only when the superior person expressed pride via a display in concert with the corresponding attribution pattern—thus, as authentic or hubristic pride—envy was modulated. This implies that envy is intensified as a social response to another person's distinct status display. If the narrator presented the attribution information, participants lacked the respective knowledge to differentiate between authentic and hubristic pride on the side of the superior person and their envious response was not modulated.

So far, the data show that pride fosters envy. More specifically, authentic and hubristic pride affect benignly and maliciously envious intentions. These pathways are mediated via liking and inferred prestige as well as dominance. Nevertheless, we aimed at going beyond Studies 1 to 5 by assessing actual envious behavior. This is rarely done in envy research (Smith & Kim, 2007) and would provide stronger evidence for the motivational effects revealed before. Do enviers actually intensify their effort in the face of an authentic pride expressing competitor? Do hubristic pride expressions really spur harmful behavior? We tested such effects of pride displays on envious behavior in Study 6.

Study 6

In Study 6, participants took part in an ostensible competition with items from the remote associates task (RAT) for a monetary reward and lost against their opponent. We afterward measured maliciously and benignly envious behavior by giving them the chance to select more difficult RAT items for their competitor and by giving them the chance to increase their effort in a second round of RAT items themselves.

Method

Participants. One hundred ninety-eight workers from mTurk participated in Study 6. We again excluded everyone who indicated we should not use their data ($n = 2$). In addition, as participants competed in the RAT, a language-based achievement task, we a priori decided to exclude non-native speakers as we did in Study 2. Finally, as indicated by our log data, one participant used the back button during the second round of RAT items and therefore had more time to solve the task rendering the data meaningless. Thus, the final sample size was $N = 187$ with a mean age of 34.32 years ($SD = 11.38$). Ninety-nine were male.

Materials and procedure. Participants were invited to a study on the effect of competitive situations on personal action. We told them that they would compete against another mTurk worker and therefore had to choose a nickname. Then, we presented an ostensible selection process in which several nicknames

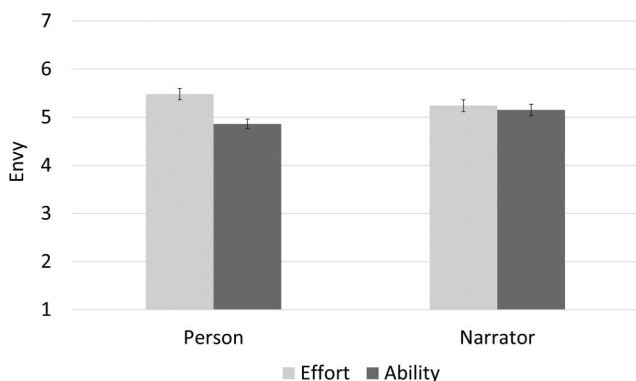


Figure 5. Interaction effect of attribution and source on envy in Study 5. High values on envy correspond to more benign envy, low values correspond to more malicious envy. Error bars represent one standard error of the mean.

of supposed other participants were displayed and denied because of mismatches in age and gender until *Alex14* was selected as competitor. We decided in favor of a gender-neutral name to increase felt similarity of participants and competitor without changing the nickname.

Afterward, we introduced the task in which they would compete. The task was based on items of the RAT (McFarlin & Blascovich, 1984). In the RAT participants have to find a semantically related word to three other words. In our study, participants had seven minutes to solve as many of eight items as possible. We told them that, based on the number of correct responses and the pretested difficulty of each item, we would calculate a final score. The competitor with the highest score would receive 50 cents as a bonus payment. Although rather small, such an incentive is higher than the typical average pay for a short task on mTurk. Therefore, we expected them to be highly motivated to win against their opponent.

In fact, the competition was manipulated. We included several very difficult items to ensure that participants would not solve all the items. After a screen asking them to wait for *Alex14*, we gave them the feedback that of 147 points possible, they achieved 26 points. *Alex14*, however, achieved 124 points. Such a difference in performance should elicit envy and would be a realistic result to be proud of for *Alex14* (Williams & DeSteno, 2008).

Afterward, participants were allowed to exchange a chat message with *Alex14*. We pretended to connect them to a chat server and *Alex14* was the first to type in a message. Here we introduced our manipulation of pride. In contrast to the solely visual manipulations in Studies 2 and 3 and the combination of visual and verbal information in Studies 4 and 5, we chose a manipulation of authentic and hubristic pride with only verbal information. In the authentic pride condition ($n = 95$), *Alex14* wrote "My result is awesome! I am very proud of myself that I won the competition and I am happy about the money I get!! Honestly, I really put lots of effort into the task . . ." We purposely included a spelling mistake to make the message more realistic. In addition, by mentioning how great the success felt and how proud *Alex14* was, we aimed at fostering envy on the side of the participant and communicate pride in the absence of a visual display. In the hubristic pride condition ($n = 92$), we changed only the last sentence to "Honestly, I am a natural talent . . ." (adapted from Tracy & Prehn, 2012). Thus, *Alex14* displayed pride in both cases but either attributed success to effort or to ability, thereby expressing either authentic or hubristic pride.

Then, participants first rated *Alex14* and subsequently themselves on the same set of emotion terms. In this set we included several emotions related to victory and defeat to mask the aims of the study. Among them were our critical items measuring perceptions of feelings of authentic (accomplished, productive, achieving; $\alpha = .78$) and hubristic pride (arrogant, pompous, snobbish; $\alpha = .91$) adapted from Tracy and Robins (2007a). We also asked how envious they thought *Alex14* is and how envious they felt. The filler items were ashamed, happy, proud, and sad.

Afterward, we told participants that they would work on a second round of items from the RAT, however this time without any competition. If they achieved 100 points, they would earn an additional bonus of 50 cents. We informed them that *Alex14* would get the same chance and that they would have the opportunity to affect the set of items *Alex14* would have to work on.

Alex14, however, would not have the opportunity to affect the participant's set.

Then, we measured our central dependent variables. First, participants were presented with a choice among different RAT items. We did not present the actual items but provided them with a choice among eight *easy*, eight *average*, and eight *very difficult* items. Participants selected eight items in total that would then be presented to *Alex14*.

Second, participants again worked on eight RAT items for which they had 7 min. Given that we deliberately included several very difficult items among the set of only eight RAT items, we expected to find an effect of pride on persistence but not on performance. This notion is supported by the finding that performance and persistence on the RAT were only moderately correlated, $r(187) = .28, p < .001$. Even if participants put more effort into solving the task, the extreme difficulty of some of the items impeded that this increased effort could be translated into substantial performance gains.

At the end of the study, participants were debriefed that there was no actual competitor and everyone was compensated with an additional dollar, the maximum amount of money they potentially could have earned during the ostensible competition of the study.

Results

Manipulation check. We tested whether participants perceived authentic and hubristic pride in *Alex14* in the respective condition and whether participants were equally envious across the two conditions. First, we hypothesized that, in the authentic pride condition, in which *Alex14* attributed success to effort, authentic pride ratings should be higher compared with the hubristic pride condition in which *Alex14* attributed success to ability. The reversed should be true for the hubristic pride scale. This prediction was confirmed. Descriptive and inferential statistics can be found in Table 5. Participants endorsed more authentic pride in the authentic pride condition than in the hubristic pride condition. Participants endorsed less hubristic pride in the authentic pride condition than in the hubristic pride condition. This corresponded to a significant interaction effect in a mixed ANOVA with pride (authentic pride vs. hubristic pride) and scale (authentic pride vs. hubristic pride) as independent variables with repeated-measures on the last factor, $F(1, 185) = 39.83, p < .001, \eta_p^2 = .18$. The interaction qualified main effects of pride, $F(1, 185) = 15.71, p < .001, \eta_p^2 = .08$, and scale, $F(1, 185) = 16.73, p < .001, \eta_p^2 = .08$. Thus, our manipulation was effective in manipulating pride. Based on the attributions mentioned in the chat message, *Alex14* was either perceived as being authentically proud or hubristically proud.

Table 5
Descriptive and Inferential Statistics for the Manipulation Checks of Study 6

Variable	$M_{\text{Authentic}} (SD)$	$M_{\text{Hubristic}} (SD)$	$F(1, 185)$	p	η_p^2
Authentic pride	3.88 (0.91)	3.57 (0.94)	5.36	.02	.03
Hubristic pride	2.68 (1.24)	3.82 (1.12)	43.59	<.001	.19
General envy	2.37 (1.24)	2.09 (1.29)	2.29	.13	.01

Note. Answers were given on a scale from 1 (*does not apply at all*) to 5 (*applies very much*). One missing value for general envy.

Second, we hypothesized that participants would report envy and that they would feel so equally strongly in both conditions. Although authentic and hubristic pride modulate envious responding more toward benign or malicious envy, they should spur general envy to the same degree. Indeed, in the authentic pride condition and the hubristic pride condition, participants were equally envious.

Effect of pride on envy-driven behavior. Did the perception of authentic and hubristic pride affect behavioral outcomes of benign and malicious envy?

Set difficulty. We first tested whether pride had an effect on the difficulty of the set. To calculate a difficulty score, we assigned a value of 1 for each *easy* item chosen by the participant, a value of 2 for each *average* item, and a 3 for each *very difficult* item, and then summed up all values. Thus, this score can vary from 8 (only *easy* items) to 24 (only *very difficult* items). Thus, higher values imply more assigned set difficulty. As alluded to above, when participants perceived hubristic pride in Alex14 they should feel malicious envy and therefore select more difficult RAT items. The social goal of malicious envy is to harm the position of the envied person. Thus, participants should be motivated to hinder Alex14 to remain a high-achiever and therefore give her/him more difficult items. This hypothesis was confirmed (see Figure 6 left panel). Set difficulty was lower in the authentic pride condition ($M = 17.79$, $SD = 5.70$) than in the hubristic pride condition ($M = 19.46$, $SD = 5.49$). This corresponded to a main effect in an ANOVA with Pride (authentic pride vs. hubristic pride) as independent variable and set difficulty as dependent variable, $F(1, 185) = 4.14$, $p = .04$, $\eta_p^2 = .02$.

RAT. Next, we investigated the hypothesis that perceiving authentic pride would spur benign envy and therefore increase effortful behavior directed at increasing one's own status. Such behavior would fulfill the social goal of the envier. In this case, participants should persist longer in the second round of RAT items. In particular, all RAT items were presented to participants on the same page. Participants were free to proceed to the next page whenever they wanted to. We measured persistence as the total time spent on this page. Our hypothesis was confirmed (see Figure 6 right panel). As we set a maximum value of time spent on the RAT items of 7 min, we examined the effect of pride on persistence in a Kaplan-Meier Survival Analysis. In such a case, an ANOVA is not appropriate (Van de Ven et al., 2011a). As predicted, participants persisted longer in the authentic pride condition ($M = 205$ s, $SE = 13$, $Mdn = 173$ s, $SE = 13$) than in the

hubristic pride condition ($M = 168$ s, $SE = 12$, $Mdn = 129$ s, $SE = 7$), Breslow $\chi^2(1) = 4.78$, $p = .03$.

Although not predicted, we nevertheless checked whether pride had an effect on performance in the RAT. Descriptively, participants solved on average more RAT items in the authentic pride condition ($M = 4.27$, $SD = 1.65$) than in the hubristic pride condition ($M = 4.08$, $SD = 2.05$), yet, this difference was not significant in an ANOVA with pride (authentic pride vs. hubristic pride) as independent variable and performance as dependent variable, $F(1, 185) = 0.53$, $p = .47$, $\eta_p^2 = .003$. Again, this null effect was to be expected given that we deliberately administered a number of very difficult items in a set of only eight RAT items to be able to measure persistence.

Discussion

Study 6 presents behavioral evidence for the relation of authentic and hubristic pride with benign and malicious envy. Authentic pride of the envied person caused participants to select easier RAT items for this person and to persist longer in a second round of RAT items compared with hubristic pride. This extends the findings from Studies 1 to 5 to behavioral outcomes. Together, these results show that enviers set the goal to improve their performance or to harm an envied person following her or his authentic or hubristic pride expression and that they ultimately act on these intentions. This is strong evidence in favor of a social-functional relation of envy and pride.

General Discussion

Six studies provide converging evidence for a social-functional relation of envy and pride in competitive situations. Pride's social goal is status enhancement. In their competitors, the pride of successful people is met with envy, its complementary emotion. The social goal of envy is to level the difference between the self and the upward standard. The six studies reveal that pride displays often co-occur with envy (Study 1) and substantially increase its intensity (Study 2). In particular, pride expressions modulate the specific pathway of envious responding (Study 2 to 6) above and beyond high achievement (Studies 2 and 3). Authentic pride causes a likable impression and leads to perceptions of prestige. Through this pathway, it modulates envy toward its benign form. Hubristic pride causes a less likable impression and leads to perceptions of dominance. Through this pathway, it modulates envy toward its

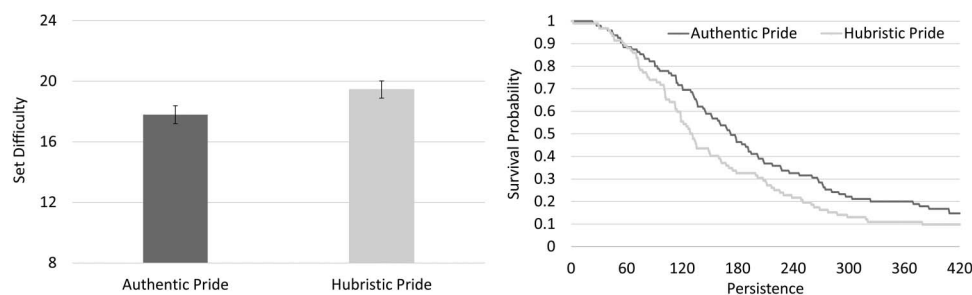


Figure 6. Effects of authentic and hubristic pride on set difficulty (left panel) and persistence on the RAT (right panel) in Study 6. Error bars represent one standard error of the mean.

malicious form (Study 4). In accordance with a social approach to emotions, this effect is based on the person who displays pride and not simply on knowledge about the reasons for success available in the situation (Study 5). Finally, people not only feel more benign or malicious envy upon perceiving authentic or hubristic pride in their competitors, they also act on their goal with behavior that is either directed at moving upward, or aimed at damaging the status of the other (Study 6). These findings converged in a methodologically diverse set of studies. They were conducted with German (Studies 2 and 3) and U.S. participants (Studies 1 and 4 to 6), in the lab (Studies 2 and 3) and online (Studies 1 and 4 to 6). Envy was recalled (Study 1), elicited in situ (Studies 2 and 6) or captured by vignettes (Studies 3 to 5) and pride was either measured (Study 1) or manipulated in a face-to-face interaction (Study 2), via videos (Study 3), in pictures (Studies 4 and 5), or verbally (Study 6).

These results extend research on envy and pride in several important ways. First, they highlight the value of investigating how these two emotions interact in social relationships, instead of investigating them in isolation. In particular, the present studies reveal that the active behavior of the superior person is important to understand how envy is elicited and modulated. Previous research on envy has typically focused on intrapersonal variables. Felt similarity, domain relevance, appraised deservingness and felt personal control (Smith & Kim, 2007; Van de Ven et al., 2012) can shape envy even in the absence of pride. Nevertheless, the current findings underline the importance of taking the interpersonal and interactive nature of envy and pride into account. In particular, as such an approach opens up numerous new avenues for future research.

For instance, a social-functional approach might also be applied to envy and pride on the group level. Many emotions such as anger, guilt, shame, or regret are also felt toward other social groups (MacKie, Silver, & Smith, 2004). We believe that envy might also be a response toward superior status groups and that perceptions of pride may shape envy toward them. Pride's social goal to convey status fosters perceptions of competence (e.g., Martens & Tracy, 2012). Furthermore, authentic and hubristic pride vary in likability (Study 4). Thus, inherent in pride displays is information about both competence and warmth, the two basic dimensions which play an important role in emotional reactions toward social groups, as depicted by the stereotype content model (Fiske, 2010). Previous research has focused exclusively on the malicious form of envy, showing that competent and cold groups elicit envy and that joint effects of high status and competitiveness determine envious reactions (Caprariello, Cuddy, & Fiske, 2009; Eckes, 2002). Given our reasoning, authentic pride should convey both warmth and competence, which should foster benign envy. However, according to the stereotype content model, warm and competent groups should elicit admiration and not envy (Caprariello et al., 2009; Fiske, 2010). Admiration is a noncompetitive emotion (Van de Ven et al., 2011a) that elicits even more positive thoughts about the other person (or group) than benign envy (Crusius & Lange, 2014; Van de Ven et al., 2009). Furthermore, although authentic pride was rated as more likable than hubristic pride (Study 4), its likability was only slightly above the midpoint of the scale. Therefore, it could be that authentic pride elicits medium warmth and high competence (for the existence of such clusters see for instance Eckes, 2002). Thus, benign envy could be

a response located between admiration and malicious envy in the stereotype content model.

An important implication of the social-functional relation of envy and pride on the group level concerns competitions and conflicts between countries. Countries differ, for instance, in their status when it comes to wealth, economic opportunities, or technological achievements. In addition, many countries explicitly encourage their members to feel national pride and such feelings are often publicly expressed via the media or in direct encounters of political leaders. Might such pride displays in uneven status differences cause envy and thereby explain the escalation of conflicts? We believe that this may be true given that hubristic and authentic pride seem to map onto the distinction between patriotism and nationalism. Patriotism is fostered by temporal comparisons about one's own group (Mummendey, Klink, & Brown, 2001) implying outcome variability and attributions to effort. In contrast, nationalism is a positive evaluation of one's own country derived from downward comparisons to other countries (Mummendey et al., 2001) and it is associated with the view that these should be dominated (Kosterman & Feshbach, 1989). There may be some truth in Pope Francis' assessment that "All wars begin in the human heart—a heart that is jealous and bitter [. . .]" (Glatz, 2014). Nevertheless, the current framework suggests that national pride and envy may also motivate benign collective action, such as when one country serves as a role model for effort directed upward.

A social approach to envy is also important as it may serve as a basis for research on interpersonal emotion regulation. So far, little is known about how people regulate envy. Given that envy is elicited in a social contexts and fueled by pride-displaying individuals, a primary way to alter envious responses should be to engage in interpersonal emotion regulation (Niven, Totterdell, & Holman, 2009; Zaki & Williams, 2013). The superior person could adapt to the envious competitor by inhibiting or changing any emotional display upon success. This would constitute an effect of an envy expression (or the fear of envy) on pride.

The need for such regulatory action should be especially high when people feel distress about being the target of a threatening upward comparison (Exline & Lobel, 1999). Specifically, pride expressions should be particularly likely inhibited when the person cares about others, feels that others could be hurt by the expression, or when competing individuals are from the ingroup (Van Osch, 2012). In light of the current findings, this inhibition may be adaptive in such situations. Pride should increase status in the eye of others. Nevertheless, the expression of pride may elicit envy in observers and may thereby undermine higher status in the long-run. Similarly, other research has revealed that the maliciously envied person is more prosocial toward the envier (Van de Ven, Zeelenberg, & Pieters, 2010), presumably to soothe the situation. However, this is not to say that being envied is uniformly negative. Quite the contrary, people sometimes also enjoy that others desire their advantages (Rodríguez Mosquera, Parrott, & Hurtado de Mendoza, 2010), as this might strengthen their belief in their qualities. All these behaviors eventually assure status, either by protecting the self from being pulled down or by basking in the coveting of others. Future research could investigate such social effects and its boundary conditions in the regulation of envy by the expression or inhibition of pride.

A strength of the present results is that we elicited envy *in situ* and also measured actual behavioral consequences of envy (for a similar methodological approach see also [Crusius & Mussweiler, 2012](#); [Van de Ven et al., 2011a](#)). Unfortunately, it is difficult to elicit envy in the lab as one needs confederates and comparison domains which are of high personal relevance to all participants. In addition, envy is not easily admitted to others ([Smith & Kim, 2007](#)) and might therefore be difficult to detect even if present. One way to counter this can be to deplete participants by taxing their cognitive capacities necessary to control their feelings ([Crusius & Mussweiler, 2012](#)). As an alternative, we suggest to include pride displays as a constant when eliciting envy in the lab. Such a display is believable, ecologically valid (see Study 1), and strengthens envy (Studies 2–6) which might produce enough variance for the effect under investigation.

The present findings also contribute in various ways to recent research on pride. For example, pride displaying individuals' behavior is copied more often than behavior of individuals who express happiness, shame, or are emotionally neutral ([Martens & Tracy, 2012](#)). Our framework suggests that this effect is mediated via benign envy. This fits the finding that the behavior was copied only when participants could earn a financial reward for success ([Martens & Tracy, 2012](#)). Thus, they were probably benignly envious of the money potentially earned by the pride displaying individual. In this line of research, however, pride displays were not presented together with contextual knowledge regarding attributions for success. If the person would have expressed hubristic pride, we would predict that malicious envy could lead to even less copying as envious would try to distance themselves from the disliked, dominant individual.

In addition, our results also contribute to the emerging conclusion that bodily displays can convey pride in diverse ways. Specifically, sometimes pride displays are ambiguous with respect to their potential to convey authentic or hubristic pride ([Tracy & Robins, 2007b](#)), yet other displays allow to distinguish them ([Nelson & Russell, 2014](#)). We showed that authentic and hubristic pride can be manipulated in videos of the face and the upper body (Study 3). Furthermore we confirm, that the same can be achieved with an ambiguous pride display accompanied by attribution information (Studies 4 and 5). Especially the videos in Study 3 are valuable as they circumvent the objection that any manipulation of the pride forms is based on the combination of visual and verbal information (see discussion of Study 4). As we used a combination of bodily cues potentially associated with authentic and hubristic pride, future research should systematically investigate which of them are sufficient to foster the perception of the respective emotion.

The EASI model proposes that the effects of one person's emotion display on observer's behavior mediated via affective and inferential pathways are moderated by social-contextual factors and observers' information processing ([Van Kleef, 2009](#); [Van Kleef et al., 2011](#); see [Keltner & Haidt, 1999](#) for a similar conceptualization). The research presented here is silent with regard to these moderators. However, we would predict that they play an important role that could be investigated in future research. In particular cases, these moderators could even reverse the distinct links between authentic and hubristic pride with benign and malicious envy. In the present research, affective and inferential pathways had additive effects in explaining the relation of envy

and pride (see Study 4). Therefore, even if one pathway contradicts the effect of the other pathway, the specific pride form may still spur the respective envy form. However, the moderators predicted by the EASI model might change the weighting of the paths in predicting the response. Then, the situation can change entirely.

Two examples might help to illustrate this point. First, if the inferior person dislikes the superior person, authentic pride might foster malicious envy as long as the inferior person's behavior is mostly determined by the affective pathway. The latter may be possible, for instance, if the emotion display of the superior person is seen as inappropriate such as when the inferior person has a high need for social harmony ([Van Kleef et al., 2011](#)). Second, if the inferior person perceives the superior person's hubristic pride display as intentional or even humorous, this could decrease dominance perceptions or even increase prestige perceptions. This should spur benign envy as long as the inferior person's behavior is mostly determined by the inferential pathway. The latter may be possible, for instance, when the individual has a higher need for cognition or when the individual is held accountable ([Van Kleef et al., 2011](#)).

An interesting application of the aforementioned dynamics occurs in the case of rivalry. Rivalry has been shown to increase motivation and performance (e.g., [Kilduff, 2014](#)). We think that such effects may be partly driven by benign envy. By definition, rivals compete for the same personally relevant resource, for instance a gold medal among athletes. Rivals' history and repetitive competitions should also increase felt similarity. These are central contributors to envy ([Smith & Kim, 2007](#)). As long as rivals like and respect each other, the success of one rival might spur benign envy and therefore increase performance (Study 4). However, if the superior rival displays hubristic pride, the above results would predict that performance decreases. This occurs frequently, for instance, when competitors proudly express that they think they are the best in their profession. Furthermore, in light of the arguments presented above, authentic pride could also decrease performance in rivals once the superior rival shows pride in an inappropriate situation. For instance, when s/he wins but the inferior rival got hurt during the competition, authentic pride displays should foster disliking. An increased need for social harmony in the inferior rival would shift the focus on the affective pathway and therefore spur malicious envy.

Conclusion

The studies presented here highlight the value of investigating how the complementary emotions pertaining to victory and defeat—pride and envy—interact. They show how the tango of two deadly sins might be capable of explaining the enormous motivational forces sparked in competitive interactions. Furthermore, the findings confirm the value of studying the social emotions of pride and envy as a social-functional unit. Such an endeavor might, ultimately, help to understand and to control competitive relationships and their multifaceted outcomes such as in the long-term rivalry of Niki Lauda and James Hunt.

References

- Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature.

- Psychological Bulletin*, 141, 574–601. <http://dx.doi.org/10.1037/a0038781>
- Aquaro, G. R. A. (2004). *Death by envy: The evil eye and envy in the Christian tradition*. Lincoln, NE: Universe.
- Baasten, M. (1986). *Pride according to Pope Gregory the Great: A study of the Moralia*. Lewinston, NY: Edwin Mellen Press.
- Baumel, A., & Berant, E. (2015). The role of attachment styles in malicious envy. *Journal of Research in Personality*, 55, 1–9. <http://dx.doi.org/10.1016/j.jrp.2014.11.001>
- Belk, R. (2011). Benign envy. *AMS Review*, 1, 117–134. <http://dx.doi.org/10.1007/s13162-011-0018-x>
- Caprariello, P. A., Cuddy, A. J. C., & Fiske, S. T. (2009). Social structure shapes cultural stereotypes and emotions: A causal test of the Stereotype Content Model. *Group Processes & Intergroup Relations*, 12, 147–155. <http://dx.doi.org/10.1177/1368430208101053>
- Cheng, J. T., Tracy, J. L., Foulsham, T., Kingstone, A., & Henrich, J. (2013). Two ways to the top: Evidence that dominance and prestige are distinct yet viable avenues to social rank and influence. *Journal of Personality and Social Psychology*, 104, 103–125. <http://dx.doi.org/10.1037/a0030398>
- Cheng, J. T., Tracy, J. L., & Henrich, J. (2010). Pride, personality, and the evolutionary foundations of human social status. *Evolution and Human Behavior*, 31, 334–347. <http://dx.doi.org/10.1016/j.evolhumbehav.2010.02.004>
- Collisson, B., & Howell, J. L. (2014). The liking-similarity effect: Perceptions of similarity as a function of liking. *The Journal of Social Psychology*, 154, 384–400. <http://dx.doi.org/10.1080/00224545.2014.914882>
- Corcoran, K., Crusius, J., & Mussweiler, T. (2011). Social comparison: Motives, standards, and mechanisms. In D. Chadee (Ed.), *Theories in social psychology* (pp. 119–139). Oxford, UK: Wiley-Blackwell.
- Crusius, J., & Lange, J. (2014). What catches the envious eye? Attentional biases within malicious and benign envy. *Journal of Experimental Social Psychology*, 55, 1–11. <http://dx.doi.org/10.1016/j.jesp.2014.05.007>
- Crusius, J., & Mussweiler, T. (2011). To achieve or not to achieve? Comparative mindsets elicit assimilation and contrast in goal priming. *European Journal of Social Psychology*, 42, 780–788. <http://dx.doi.org/10.1002/ejsp.873>
- Crusius, J., & Mussweiler, T. (2012). When people want what others have: The impulsive side of envious desire. *Emotion*, 12, 142–153. <http://dx.doi.org/10.1037/a0023523>
- DelPriore, D. J., Hill, S. E., & Buss, D. M. (2012). Envy: Functional specificity and sex-differentiated design features. *Personality and Individual Differences*, 53, 317–322. <http://dx.doi.org/10.1016/j.paid.2012.03.029>
- Duffy, M. K., Scott, K. L., Shaw, J. D., Tepper, B. J., & Aquino, K. (2012). A social context model of envy and social undermining. *Academy of Management Journal*, 55, 643–666. <http://dx.doi.org/10.5465/amj.2009.0804>
- Eckes, T. (2002). Paternalistic and envious gender stereotypes: Testing predictions from the Stereotype Content Model. *Sex Roles*, 47, 99–114. <http://dx.doi.org/10.1023/A:1021020920715>
- Exline, J. J., & Lobel, M. (1999). The perils of outperformance: Sensitivity about being the target of a threatening upward comparison. *Psychological Bulletin*, 125, 307–337. <http://dx.doi.org/10.1037/0033-2909.125.3.307>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191. <http://dx.doi.org/10.3758/BF03193146>
- Feather, N. T. (2006). Deservingness and emotions: Applying the structural model of deservingness to the analysis of affective reactions to outcomes. *European Review of Social Psychology*, 17, 38–73. <http://dx.doi.org/10.1080/10463280600662321>
- Feinberg, M., Willer, R., & Keltner, D. (2012). Flustered and faithful: Embarrassment as a signal of prosociality. *Journal of Personality and Social Psychology*, 102, 81–97. <http://dx.doi.org/10.1037/a0025403>
- Fellner, E. (Producer), Grazer, B. (Producer), Eaton, A. (Producer), Oliver, B. (Producer), Morgan, P. (Producer), & Howard, R. (Producer and Director). (2013). *Rush* [Motion picture]. Hamburg, Germany: Film- und Medienstiftung NRW & M. F. G. Filmförderung Baden-Württemberg.
- Fischer, A. H., & Manstead, A. S. R. (2008). Social functions of emotion. In M. Lewis, J. Haviland, & L. Feldman Barrett (Eds.), *Handbook of emotion* (pp. 456–470). New York, NY: Guilford Press.
- Fischer, A. H., & Van Kleef, G. A. (2010). Where have all the people gone? A plea for including social interaction in emotion research. *Emotion Review*, 2, 208–211. <http://dx.doi.org/10.1177/1754073910361980>
- Fiske, S. T. (2010). Envy up, scorn down: How comparison divides us. *American Psychologist*, 65, 698–706. <http://dx.doi.org/10.1037/0003-066X.65.8.698>
- Fritz, M. S., & Mackinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science*, 18, 233–239. <http://dx.doi.org/10.1111/j.1467-9280.2007.01882.x>
- Gilbert, P. (2000). The relationship of shame, social anxiety and depression: The role of the evaluation of social rank. *Clinical Psychology & Psychotherapy*, 7, 174–189. [http://dx.doi.org/10.1002/1099-0879\(200007\)7:3<174::AID-CPP236>3.0.CO;2-U](http://dx.doi.org/10.1002/1099-0879(200007)7:3<174::AID-CPP236>3.0.CO;2-U)
- Glatz, C. (2014). *All wars begin in a jealous heart; let go of pride, envy, pope says*. Retrieved from <http://www.thebostonpilot.com/article.asp?ID=172308>
- Hareli, S., & Hess, U. (2010). What emotional reactions can tell us about the nature of others: An appraisal perspective on person perception. *Cognition and Emotion*, 24, 128–140. <http://dx.doi.org/10.1080/02699930802613828>
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76, 408–420. <http://dx.doi.org/10.1080/03637750903310360>
- Hill, S. E., & Buss, D. M. (2008). The evolutionary psychology of envy. In R. H. Smith (Ed.), *Envy: Theory and research* (pp. 60–70). New York, NY: Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780195327953.003.0004>
- Hill, S. E., DelPriore, D. J., & Vaughan, P. W. (2011). The cognitive consequences of envy: Attention, memory, and self-regulatory depletion. *Journal of Personality and Social Psychology*, 101, 653–666. <http://dx.doi.org/10.1037/a0023904>
- Horberg, E. J., Kraus, M. W., & Keltner, D. (2013). Pride displays communicate self-interest and support for meritocracy. *Journal of Personality and Social Psychology*, 105, 24–37. <http://dx.doi.org/10.1037/a0032849>
- Immordino-Yang, M. H., McColl, A., Damasio, H., & Damasio, A. (2009). Neural correlates of admiration and compassion. *Proceedings of the National Academy of Sciences of the United States of America*, 106, 8021–8026. <http://dx.doi.org/10.1073/pnas.0810363106>
- Keltner, D. (1995). Signs of appeasement: Evidence for the distinct displays of embarrassment, amusement, and shame. *Journal of Personality and Social Psychology*, 68, 441–454. <http://dx.doi.org/10.1037/0022-3514.68.3.441>
- Keltner, D., & Haidt, J. (1999). Social functions of emotions at four levels of analysis. *Cognition and Emotion*, 13, 505–521. <http://dx.doi.org/10.1080/026999399379168>
- Kilduff, G. J. (2014). Driven to win: Rivalry, motivation, and performance. *Social Psychological & Personality Science*, 5, 944–952. <http://dx.doi.org/10.1177/1948550614539770>
- Kosterman, R., & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology*, 10, 257–274. <http://dx.doi.org/10.2307/3791647>

- Lange, J., & Crusius, J. (2015). Dispositional envy revisited: Unraveling the motivational dynamics of benign and malicious envy. *Personality and Social Psychology Bulletin*, *41*, 284–294. <http://dx.doi.org/10.1177/0146167214564959>
- Lange, J., Crusius, J., & Hagemeyer, B. (2015). *The Evil Queen's dilemma: Linking narcissistic admiration and rivalry to benign and malicious envy*.
- Lelieveld, G.-J., Van Dijk, E., Van Beest, I., & Van Kleef, G. A. (2013). Does communicating disappointment in negotiations help or hurt? Solving an apparent inconsistency in the social-functional approach to emotions. *Journal of Personality and Social Psychology*, *105*, 605–620. <http://dx.doi.org/10.1037/a0033345>
- MacKie, D. M., Silver, L. A., & Smith, E. R. (2004). Intergroup emotions. In L. Z. Tiedens & C. W. Leach (Eds.), *The social life of emotions* (pp. 227–245). Cambridge, UK: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511819568.013>
- Manstead, A. S. R., & Fischer, A. H. (2001). Social appraisal: The social world as object of and influence on appraisal processes. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, research, application* (pp. 221–232). New York, NY: Oxford University Press.
- Martens, J. P., & Tracy, J. L. (2013). The emotional origins of a social learning bias: Does the pride expression cue copying? *Social Psychological & Personality Science*, *4*, 492–499. <http://dx.doi.org/10.1177/1948550612457958>
- Martens, J. P., Tracy, J. L., & Shariff, A. F. (2012). Status signals: Adaptive benefits of displaying and observing the nonverbal expressions of pride and shame. *Cognition and Emotion*, *26*, 390–406. <http://dx.doi.org/10.1080/02699931.2011.645281>
- McFarlin, D. B., & Blascovich, J. (1984). On the Remote Associates Test (RAT) as an alternative to illusory performance feedback: A methodological note. *Basic and Applied Social Psychology*, *5*, 223–229. http://dx.doi.org/10.1207/s15324834basp0503_5
- Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods*, *17*, 437–455. <http://dx.doi.org/10.1037/a0028085>
- Moran, S., & Schweitzer, M. E. (2008). When better is worse: Envy and the use of deception. *Negotiation and Conflict Management Research*, *1*, 3–29. <http://dx.doi.org/10.1111/j.1750-4716.2007.00002.x>
- Mummendey, A., Klink, A., & Brown, R. (2001). Nationalism and patriotism: National identification and out-group rejection. *British Journal of Social Psychology*, *40*, 159–172. <http://dx.doi.org/10.1348/014466601164740>
- Mussweiler, T. (2003). Comparison processes in social judgment: Mechanisms and consequences. *Psychological Review*, *110*, 472–489.
- Nelson, N. L., & Russell, J. A. (2014). Dynamic facial expressions allow differentiation of displays intended to convey positive and hubristic pride. *Emotion*, *14*, 857–864. <http://dx.doi.org/10.1037/a0036789>
- Niven, K., Totterdell, P., & Holman, D. (2009). A classification of controlled interpersonal affect regulation strategies. *Emotion*, *9*, 498–509. <http://dx.doi.org/10.1037/a0015962>
- Oveis, C., Horberg, E. J., & Keltner, D. (2010). Compassion, pride, and social intuitions of self-other similarity. *Journal of Personality and Social Psychology*, *98*, 618–630. <http://dx.doi.org/10.1037/a0017628>
- Parrott, W. G., & Smith, R. H. (1993). Distinguishing the experiences of envy and jealousy. *Journal of Personality and Social Psychology*, *64*, 906–920. <http://dx.doi.org/10.1037/0022-3514.64.6.906>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*, 879–891. <http://dx.doi.org/10.3758/BRM.40.3.879>
- Price, J. (1998). The adaptive function of mood change. *British Journal of Medical Psychology*, *71*, 465–477. <http://dx.doi.org/10.1111/j.2044-8341.1998.tb01003.x>
- Robinson, M. D., & Clore, G. L. (2001). Simulation, scenarios, and emotional appraisal: Testing the convergence of real and imagined reactions to emotional stimuli. *Personality and Social Psychology Bulletin*, *27*, 1520–1532. <http://dx.doi.org/10.1177/01461672012711012>
- Rodriguez Mosquera, P. M., Parrott, W. G., & Hurtado de Mendoza, A. (2010). I fear your envy, I rejoice in your coveting: On the ambivalent experience of being envied by others. *Journal of Personality and Social Psychology*, *99*, 842–854. <http://dx.doi.org/10.1037/a0020965>
- Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of Personality and Social Psychology*, *67*, 206–221. <http://dx.doi.org/10.1037/0022-3514.67.2.206>
- Salovey, P., & Rodin, J. (1984). Some antecedents and consequences of social-comparison jealousy. *Journal of Personality and Social Psychology*, *47*, 780–792. <http://dx.doi.org/10.1037/0022-3514.47.4.780>
- Schaubroeck, J., & Lam, S. S. K. (2004). Comparing lots before and after: Promotion rejectees' invidious reactions to promotees. *Organizational Behavior and Human Decision Processes*, *94*, 33–47. <http://dx.doi.org/10.1016/j.obhdp.2004.01.001>
- Shariff, A. F., & Tracy, J. L. (2009). Knowing who's boss: Implicit perceptions of status from the nonverbal expression of pride. *Emotion*, *9*, 631–639. <http://dx.doi.org/10.1037/a0017089>
- Shariff, A. F., Tracy, J. L., & Markusoff, J. L. (2012). (Implicitly) judging a book by its cover: The power of pride and shame expressions in shaping judgments of social status. *Personality and Social Psychology Bulletin*, *38*, 1178–1193. <http://dx.doi.org/10.1177/0146167212446834>
- Smith, R. H., & Kim, S. H. (2007). Comprehending envy. *Psychological Bulletin*, *133*, 46–64. <http://dx.doi.org/10.1037/0033-2909.133.1.46>
- Smith, R. H., Parrott, W. G., Ozer, D., & Moniz, A. (1994). Subjective injustice and inferiority as predictors of hostile and depressive feelings in envy. *Personality and Social Psychology Bulletin*, *20*, 705–711. <http://dx.doi.org/10.1177/0146167294206008>
- Smith, R. H., Turner, T. J., Garonzik, R., Leach, C. W., Urch-Druskat, V., & Weston, C. M. (1996). Envy and Schadenfreude. *Personality and Social Psychology Bulletin*, *22*, 158–168. <http://dx.doi.org/10.1177/0146167296222005>
- Tiedens, L. Z., & Fragale, A. R. (2003). Power moves: Complementarity in dominant and submissive nonverbal behavior. *Journal of Personality and Social Psychology*, *84*, 558–568.
- Tracy, J. L., & Matsumoto, D. (2008). The spontaneous expression of pride and shame: Evidence for biologically innate nonverbal displays. *Proceedings of the National Academy of Sciences of the United States of America*, *105*, 11655–11660. <http://dx.doi.org/10.1073/pnas.0802686105>
- Tracy, J. L., & Prehn, C. (2012). Arrogant or self-confident? The use of contextual knowledge to differentiate hubristic and authentic pride from a single nonverbal expression. *Cognition and Emotion*, *26*, 14–24. <http://dx.doi.org/10.1080/02699931.2011.561298>
- Tracy, J. L., & Robins, R. W. (2004a). Putting the self into self-conscious emotions: A theoretical model. *Psychological Inquiry*, *15*, 103–125. http://dx.doi.org/10.1207/s15327965pli1502_01
- Tracy, J. L., & Robins, R. W. (2004b). Show your pride: Evidence for a discrete emotion expression. *Psychological Science*, *15*, 194–197. <http://dx.doi.org/10.1111/j.0956-7976.2004.01503008.x>
- Tracy, J. L., & Robins, R. W. (2007a). The psychological structure of pride: A tale of two facets. *Journal of Personality and Social Psychology*, *92*, 506–525. <http://dx.doi.org/10.1037/0022-3514.92.3.506>
- Tracy, J. L., & Robins, R. W. (2007b). The prototypical pride expression: Development of a nonverbal behavior coding system. *Emotion*, *7*, 789–801. <http://dx.doi.org/10.1037/1528-3542.7.4.789>
- Tracy, J. L., & Robins, R. W. (2008). The nonverbal expression of pride: Evidence for cross-cultural recognition. *Journal of Personality and Social Psychology*, *94*, 516–530. <http://dx.doi.org/10.1037/0022-3514.94.3.516>

- Tracy, J. L., Robins, R. W., & Schriber, R. A. (2009). Development of a FACS-verified set of basic and self-conscious emotion expressions. *Emotion, 9*, 554–559. <http://dx.doi.org/10.1037/a0015766>
- Tracy, J. L., Shariff, A. F., & Cheng, J. T. (2010). A naturalist's view of pride. *Emotion Review, 2*, 163–177. <http://dx.doi.org/10.1177/1754073909354627>
- Tracy, J. L., Shariff, A. F., Zhao, W., & Henrich, J. (2013). Cross-cultural evidence that the nonverbal expression of pride is an automatic status signal. *Journal of Experimental Psychology: General, 142*, 163–180.
- Van de Ven, N., Hoogland, C. E., Smith, R. H., Van Dijk, W. W., Breugelmans, S. M., & Zeelenberg, M. (in press). When envy leads to Schadenfreude. *Cognition and Emotion*.
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2009). Leveling up and down: The experiences of benign and malicious envy. *Emotion, 9*, 419–429. <http://dx.doi.org/10.1037/a0015669>
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2010). Warding off the evil eye: When the fear of being envied increases prosocial behavior. *Psychological Science, 21*, 1671–1677. <http://dx.doi.org/10.1177/0956797610385352>
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2011a). Why envy outperforms admiration. *Personality and Social Psychology Bulletin, 37*, 784–795. <http://dx.doi.org/10.1177/0146167211400421>
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2011b). The envy premium in product evaluation. *Journal of Consumer Research, 37*, 984–998. <http://dx.doi.org/10.1086/657239>
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2012). Appraisal patterns of envy and related emotions. *Motivation and Emotion, 36*, 195–204. <http://dx.doi.org/10.1007/s11031-011-9235-8>
- Van Dijk, W. W., Ouwerkerk, J. W., Goslinga, S., Nieweg, M., & Gallucci, M. (2006). When people fall from grace: Reconsidering the role of envy in Schadenfreude. *Emotion, 6*, 156–160. <http://dx.doi.org/10.1037/1528-3542.6.1.156>
- Van Kleef, G. A. (2009). How emotions regulate social life: The emotions as social information (EASI) model. *Current Directions in Psychological Science, 18*, 184–188. <http://dx.doi.org/10.1111/j.1467-8721.2009.01633.x>
- Van Kleef, G. A., De Dreu, C. K. W., & Manstead, A. S. R. (2004). The interpersonal effects of anger and happiness in negotiations. *Journal of Personality and Social Psychology, 86*, 57–76. <http://dx.doi.org/10.1037/0022-3514.86.1.57>
- Van Kleef, G. A., De Dreu, C. K. W., & Manstead, A. S. R. (2006). Supplication and appeasement in conflict and negotiation: The interpersonal effects of disappointment, worry, guilt, and regret. *Journal of Personality and Social Psychology, 91*, 124–142.
- Van Kleef, G. A., Van Doorn, E. A., Heerdink, M. W., & Koning, L. F. (2011). Emotion is for influence. *European Review of Social Psychology, 22*, 114–163. <http://dx.doi.org/10.1080/10463283.2011.627192>
- Van Osch, Y. (2012). *Show or hide your pride*. Tilburg, The Netherlands: University of Tilburg.
- Williams, L. A., & DeSteno, D. (2008). Pride and perseverance: The motivational role of pride. *Journal of Personality and Social Psychology, 94*, 1007–1017. <http://dx.doi.org/10.1037/0022-3514.94.6.1007>
- Zaki, J., & Williams, W. C. (2013). Interpersonal emotion regulation. *Emotion, 13*, 803–810. <http://dx.doi.org/10.1037/a0033839>

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