

## Dispositional Envy: A Conceptual Review

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### **Abstract**

We review research on the determinants of dispositional envy and its consequences on the intrapersonal, interpersonal, and societal level. We propose to extend earlier conceptualizations of envy by distinguishing two forms that constitute emotional pathways in responding to status threats. According to this perspective, benign envy is a reaction to a loss of prestige leading to behaviors directed at re-gaining status. Therefore, people who are inclined to experience benign envy make more positive impressions on others, improve their performance, and, ultimately, reach better well-being. Thus, we argue that dispositional benign envy may contribute to societal flourishing. In contrast, malicious envy is a reaction to dominant others leading to behaviors directing at harming their status. Therefore, people who are inclined to experience malicious envy make less positive impressions on others, undermine superior's successes with aggressive strategies, and, ultimately, reach worse well-being. Thus, we argue that dispositional malicious envy may contribute to societal conflict. In sum, dispositional envy appears to be an important personality variable contributing to the regulation of status hierarchies.

*Keywords:* dispositional envy, benign and malicious envy, status, prestige and dominance, social comparison

Humans have a powerful desire for social status (Anderson, Hildreth, & Howland, 2015) that is motivated by an evolved need for respect, admiration, and influence (Kenrick, Griskevicius, Neuberg, & Schaller, 2010). In fact, research indicates that status attainment yields substantial benefits. It fuels self-esteem and lowers depression (Fournier, 2009), raises subjective well-being (Anderson, Kraus, Galinsky, & Keltner, 2012), improves several health indicators such as stress, weight, affectivity, sleep quality, or coping ability (Adler, Epel, Castellazzo, & Ickovics, 2000), and elevates others' perception of a person's competence (Anderson & Kilduff, 2009). In light of these benefits, threats to personal status should elicit strong emotional reactions (see Steckler & Tracy, 2014). Consequently, encountering individuals high in status may give rise to an emotion aimed at attaining others' rank or at decreasing the status of successful competitors—envy (Lange & Crusius, 2015b; Van de Ven, Zeelenberg, & Pieters, 2009). Thus, even though envy is often portrayed as morally reprehensible and maladaptive (Smith & Kim, 2007), an inclination to react with envy could actually prove to be functional. Here, we review approaches to dispositional envy and outline how being prone to experience envy may contribute to the regulation of social hierarchies at the interpersonal and societal level.

### **The Definition, Ontogeny, and Determinants of Envy**

Envy is the painful emotion that can occur when people lack another's superior quality, achievement, or possession, eliciting a desire to also obtain the advantage or a wish that the other loses it (Parrott & Smith, 1993). Therefore, envy is based on an upward social comparison and elicits the motivation to level the difference between the self and the superior standard (Van de Ven et al., 2009). Accordingly, envy is enhanced by variables that foster social comparisons (for research on social comparisons, see Corcoran, Crusius, & Mussweiler, 2011) such as similarity to the envied person (Henniger & Harris, 2015), domain relevance (Salovey & Rodin, 1984), or the thought that “it could have been me” (Van de Ven & Zeelenberg, 2015).

Research suggests that many of the advantages people feel envy about, such as physical attractiveness or financial success (DelPriore, Hill, & Buss, 2012), belong to domains in which self-worth is determined by the interest they garner from others (Santor & Walker, 1999). Put differently, some advantages are envied not necessarily because envious persons personally consider them to be important but because these advantages have high societal value—a general principle characterizing various social emotions (Leary, Raimi, Jongman-Sereno, & Diebels, 2015). This implies that envy results from a threat to social status. More precisely, we argue that, at its core, envy is borne out of the perceived danger to lose respect and social influence in the eyes of others (Crusius & Lange, 2016; Fiske, 2010; Silver & Sabini, 1978). From this perspective, envy's function may be to foster the motivation to regain status or harm the superior position of others.

Can envy be conceptualized as a personality trait? To establish the usefulness of a dispositional construct, it is necessary to describe a certain class of situations that are frequently encountered and to which individuals vary in how they react to it. Based on our reasoning, dispositional envy describes individuals' stable tendency to respond to upward status comparisons with behavior directed at leveling the difference toward these superior others. Therefore, it is crucial to show that (a) humans are in general sensitive to status threats but (b) vary in their inclination to react with negative affect and corresponding behavioral changes to these situations. Evidence corroborates both of these requirements.

Regarding the first point, evidence from diverse areas of the social sciences shows that humans care deeply about social status (Anderson et al., 2015). Notably, already young children are sensitive to hierarchical differentiation as well as unequal distribution of resources. For instance, it has been shown that children use representations of social dominance to predict outcomes of social interactions by the age of 10-13 months (Thomsen, Frankenhuys, Ingold-Smith, & Carey, 2011) and represent dominance hierarchies by the age of 15 months (Mascaro & Csibra, 2014). Moreover, success-related social emotions (e.g.,

pride) are recognized across cultures by the age of 4 years (Tracy & Robins, 2008; Tracy, Robins, & Lagattuta, 2005; Tracy, Shariff, Zhao, & Henrich, 2013). These findings imply that responding to success constitutes an innate human characteristic. Finally, other research indicates that 3-year-olds respond negatively to unequal distributions especially when they receive less than their partner (LoBue, Nishida, Chiong, DeLoache, & Haidt, 2011). Thus, it appears that from early on humans have a strong inclination to attend and react to threats to their own status.

Nevertheless, individuals vary in how much they desire social status (Anderson et al., 2015) and how much they compare their own circumstances to those of others (Gibbons & Buunk, 1999). Therefore, they should also differ in their propensity to experience envy in response to upward status comparisons. Indeed, research supports that the intensity with which children react to status threats varies and changes over time. For example, one study found that children between 7-13 years felt worse after losing a game when their competitor won (i.e., in an envy situation) as opposed to when the competitor also lost (Steinbeis & Singer, 2013). Moreover, their negative affect correlated with a propensity to make unequal decisions in a subsequent resource allocation task, showing the behavioral impact of such situations. These reactions were not constant across participants—the intensity of envious feelings and invidious behavior decreased with age. These findings suggest that even though status threats seem to be a fundamental human motivator, people can develop varying reactions to these threats with increasing age.

Moreover, several other dispositional factors may contribute to individuals' varying reactions to status threats. Specifically, every variable that influences individuals' tendency to compare their own status to that of others should affect the development of dispositional envy. To put it differently, traits associated with the dispositional tendency to compare (Gibbons & Buunk, 1999), traits that relate to generalized comparison concerns (for a review see Garcia,

Tor, & Schiff, 2013), or traits linked to a desire to advance personal standing compared to others (e.g., narcissism; Campbell & Miller, 2011) may shape the envious personality.

One factor linked to comparative inclinations could be inequity aversion (Steinbeis & Singer, 2013). Research supports that inequity aversion develops between 3-8 years, with children changing from selfish behavior to equality based decision making (Fehr, Bernhard, & Rockenbach, 2008). Furthermore, children from the age of 3 were shown to dislike unfair distributions and display negative reactions to inequality especially when they received less than the other person (LoBue et al., 2011). This pattern of results may indicate envy (see also McAuliffe, Blake, Kim, Wrangham, & Warneken, 2013). Therefore, people who are especially sensitive to inequity aversion may also display increased envious reactions.

Justice sensitivity could be another crucial factor. It relates to comparison concerns (Leach, 2008) and may therefore contribute to developing an envious disposition. Furthermore, higher justice sensitivity is correlated with experiencing more negative emotions and increased rumination (Bondü & Elsner, 2015). Individuals who interpret unfair situations as injustices against themselves (i.e., those with high levels of victim sensitivity) were shown to be aggressive toward their peers when they felt unjustly treated (Bondü & Krahé, 2015). As research indicates that situations that elicit envy are often perceived to be subjectively unfair (Smith, Parrott, Ozer, & Moniz, 1994), individuals who are particularly sensitive to justice and victimization should be more prone to envy.

As a final example, achievement motivation should also shape individuals' dispositional envy. Children differ in their motivation to master certain tasks or perform better than their peers in school settings. They can do so either by approaching specific standards or avoiding failure (Elliot & McGregor, 2001). Research suggests that, in essence, these motivational processes are intertwined with social comparisons (Régner, Escribe, & Dupeyrat, 2007). Once a specific motivation is activated, children become more likely to seek comparison information (Butler, 1995). As an increased inclination to compare correlates with

dispositional envy (Lange & Crusius, 2015a), achievement motivation should contribute to the development of the envious personality.

In sum, research leads to the prediction that humans are characterized by dispositional envy. First, they have a deeply entrenched sensitivity to status threats. Second, individuals develop varying affective and behavioral reactions to these situations, which are connected to several other personality dimensions. In line with this conclusion, several scholars have independently developed and validated various scales to measure dispositional envy (Belk, 1985; Gold, 1996; Lange & Crusius, 2015a; Rentzsch & Gross, 2015; Smith, Parrott, Diener, Hoyle, & Kim, 1999; Veselka, Giammarco, & Vernon, 2014). These scales differ in whether they focus on dispositional envy in general or manifestations of the envious personality in specific contexts. Furthermore, they conceptualize envy as a uniform emotion or having two forms.

### **Earlier Conceptualizations of Dispositional Envy**

A widely used measure of dispositional envy is the eight-item Dispositional Envy Scale (DES; Smith et al., 1999). It conceptualizes envy as a painful emotion with hostile interpersonal tendencies. Example items are “I feel envy every day” and “Frankly, the success of my neighbors makes me resent them.” The DES has been found to show good internal consistency,  $\alpha = .83 - .86$ , and re-test reliability over a two-week period,  $r = .80$ . Correlates of the DES paint a grim picture of the chronically envious. Research employing the DES suggests that enviers are neurotic, disagreeable, insecure (Smith et al., 1999), ungrateful (McCullough, Emmons, & Tsang, 2002), greedy (Seuntjens, Zeelenberg, Van de Ven, & Breugelmans, 2015), and hostile (Rentzsch, Schröder-Abé, & Schütz, 2015; Smith et al., 1999). Especially vulnerable narcissists—who hide their insecurity behind a veil of grandiosity—tend to indicate higher values on the DES (Krizan & Johar, 2012). Moreover, the DES correlates with enhanced activity in brain regions that are linked to dysfunctional emotion regulation (Xiang, Kong, Wen, Wu, & Mo, in press). Other studies support that this

envious inclination translates into less cooperation (Parks, Rumble, & Posey, 2002) and more schadenfreude when others fail (James, Kavanagh, Jonason, Chonody, & Scrutton, 2014; Krizan & Johar, 2012). Finally, further evidence implies that this pattern of correlates ultimately undermines the envier's life satisfaction (Smith et al., 1999), well-being (Milfont & Valdiney, 2009), personal relations, purpose in life, and personal growth (Schindler, 2014).

Two other scales that have been developed to measure dispositional envy in a manner similar to the DES are the York Enviousness Scale (YES; Gold, 1996) and the envy subscale of the Vices and Virtues Scale (VAVS; Veselka et al., 2014). First, the YES consists of 20 items such as “The better off someone else is the worse I feel” and “I feel angry when others succeed” (the items are displayed in Neufeld, 2012). It showed excellent internal consistency,  $\alpha = .89 - .91$ , and re-test reliability over a two-month period,  $r = .75$ , but it has been used much less frequently than the DES. The YES has been found to correlate with anger and hostility as well as various indicators of psychopathology such as depression, anxiety, phobia, somatization, and obsession (Gold, 1996). Second, the envy subscale of the VAVS consists of 10 items that conceptualize dispositional envy broadly as a facet of subclinical antisocial personality, thereby converging with the DES. Example items include “When I am in competition with someone, I feel a sense of bitterness when they come out on top” and “I am annoyed when I see people who buy things that I cannot have.” It has been shown to have good internal consistency,  $\alpha = .73 - .87$ , but its re-test reliability has not been assessed so far. The VAVS envy scale has only been recently developed but it has been shown to correlate with inclinations to experience other deadly sins as well as the Dark Triad of Machiavellianism, narcissism, and psychopathy (Veselka et al., 2014).

Other envy scales focus on dispositional envy in specific domains. The most prominent measure is the eight-item envy subscale of Belk's (1984, 1985) materialism scale. This instrument focuses on envy as an emotion that can be consumption-related. The scale is one of three subscales developed to jointly measure individuals' inclination towards

materialism, a trait associated with the consumption of preferably high-status products (Eastman, Goldsmith, & Flynn, 1999). Thus, in line with the present framework, Belk regarded envy as a status-related disposition (see also Watson, 2016). Example items are “I am bothered when I see people who buy anything they want” and “People who are very wealthy often feel they are too good to talk to average people.” The scale showed acceptable internal consistency,  $\alpha = .64 - .80$ , and re-test reliability over a two-week period,  $r = .70$  (Belk, 1984, 1985). To address methodological weaknesses of the scale when used outside of the US, it was later refined by modifying and adding some items (Ger & Belk, 1996). The scale also mostly correlated with negative antecedents and consequences. Research using Belk’s scale suggests that envious individuals are neurotic, disagreeable (Watson, 2015a), ungrateful (McCullough et al., 2002), ashamed, arrogant (Watson, 2015b), and greedy (Krekels & Pandelaere, 2015) as well as convinced that external forces control their outcomes (Hunt, Kernan, Chatterjee, & Florsheim, 1990). Other studies indicate that this envious inclination translates into behaviors directed at regaining others’ appreciation such as impulsive (Shoham, Gavish, & Segev, 2015) and compulsive buying (O’Guinn & Faber, 1989) of superfluous products. Finally, further evidence implies that these efforts substantially undermine the envious individuals’ happiness (Belk, 1984, 1985) as well as their satisfaction with their income, standard of living, social situation, and life in general (Ahuvia & Wong, 2002).

Finally, a scale developed recently to measure envy in specific domains is the Domain-Specific Envy Scale (DSES; Rentzsch & Gross, 2015). It consists of 15 items and conceptualizes dispositional envy as the pain felt after upward status comparisons without referring to its consequences. It has three subscales covering the domains of attraction, competence, and wealth with five items for each domain. These domains reflect the most common domains in which envy was experienced by university students. Although the subscales might be used separately, it can also serve as a composite measure. Example items are “It disturbs me when people get along with others better than I do” and “It is hard to bear

when other people are more intelligent than I am.” The DSES has been shown to possess excellent internal consistency,  $\alpha = .91 - .93$ , and re-test reliability over a three month period,  $r = .77$ . It has also been shown to correlate with neuroticism, anger, hostility, aggression, perfectionism, and insecurity as well as lower levels of life satisfaction and poorer mental health in various domains.

In sum, the research that has relied on these scales (the DES, the YES, the VAVS envy scale, the envy subscale of the materialism scale, and the DSES) converges on a dark profile of the envious personality. It suggests that the envious are emotionally unstable, antisocial individuals who aggress against others and undermine these others’ success, ultimately leading to a substantial drop in their well-being and the quality of their relationships. Thus, so far it seems unlikely that dispositional envy has adaptive elements affecting how individuals respond to others with high status in functional ways. To outline how this is possible, we need to broaden our general understanding of the emotion of envy.

### **Dispositional Benign and Malicious Envy**

All of the scales reviewed so far have relied on the same theory of envy. In essence, they conceptualize envy as a uniform, immoral emotion comprised of felt inferiority, resentment for the other, and a hostile tendency (Smith & Kim, 2007). The predictive validity of this view of envy has been supported in various settings and has sparked most of the current research on state and trait envy. However, various other findings are at odds with such a unidimensional portrayal of envy. Indeed, mounting evidence suggests that there are also positive outcomes of envy. For instance, other research shows that dispositional envy is associated with admiration (Schindler, 2014), and that state envy relates to an increased desire to also obtain the other’s advantage (Crusius & Mussweiler, 2012) as well as increases in job performance (Schaubroeck & Lam, 2004).

Recent work proposes that to incorporate these conflicting findings into a theory of envy it is necessary to conceptualize envy not as a unidimensional but as a dual construct.

Specifically, recent theorizing about state envy distinguishes between a *benign* form of envy and a *malicious* form of envy (Crusius & Lange, 2014; Falcon, 2015; Lange, Weidman, & Crusius, in prep; Van de Ven, 2016; Van de Ven et al., 2009). Next to malicious envy, which is characterized by hostility toward superior others, there is another form of envy that is also marked by painful feelings of inferiority but motivates individuals to improve themselves instead of eliciting begrudging feelings. Notably, in various languages, two different words relating to envy map onto this distinction. For instance, in German there are the terms *beneiden* and *missgönnen*, in Dutch there are *beneijden* and *afgunst*, in Polish there are *zazdrość* and *zawiść*, and in Thai there are *it-chia* and *rit-yaa*. If participants are asked to report emotional experiences corresponding to these specific terms, they recall situations involving benign and malicious forms of envy (Crusius & Lange, 2014). Complementary results were found with languages in which there is only one word for envy such as English or Spanish (Falcon, 2015; Lange et al., in prep; Van de Ven et al., 2009). If participants in such countries are asked to report envy experiences, they nevertheless describe two qualitatively different kinds of envy. In this research, statistical techniques such as cluster analyses, taxometric analyses, or factor analyses were applied to disentangle benign and malicious envy based on responses to sets of items that should differentiate between the two.

How exactly are these forms of envy different from each other? Research suggests that benign envy is elicited when the envier perceives high control in overcoming the status threat and evaluates the envied person's success as deserved (Lange, Crusius, & Hagemeyer, 2016; Van de Ven, Zeelenberg, & Pieters, 2012). It relates to admiration for the envied person (Van de Ven et al., 2009), an attentional shift toward means to reach the envied advantage (Crusius & Lange, 2014), and actual improvement behavior (Lange & Crusius, 2015b; Van de Ven, Zeelenberg, & Pieters, 2011). In contrast, malicious envy is elicited when the envier perceives low control in overcoming the status threat and evaluates the success of the envied person as undeserved (Lange et al., 2016; Van de Ven et al., 2012). It relates to resentment for

the envied person (Van de Ven et al., 2009), an attentional shift toward the envied person (Crusius & Lange, 2014), and actual harming behavior (Lange & Crusius, 2015b; Van de Ven et al., 2015). These findings suggest that a dual conceptualization of envy is highly useful in capturing the striking diversity in people's responses toward being outperformed by others.

If state envy is better described by a dual conceptualization than by a uniform one, does the same hold for the dispositional level? To investigate this question, we applied the dual theory of envy to dispositional envy and developed the Benign and Malicious Envy Scale (BeMaS; Lange & Crusius, 2015a), measuring both envy forms with five items for each form. Example items for dispositional benign envy are "When I envy others, I focus on how I can become equally successful in the future" and "If I notice that another person is better than me, I try to improve myself." Example items for dispositional malicious envy are "I wish that superior people lose their advantage" and "I feel ill will toward people I envy." Both scales showed good internal consistencies,  $\alpha_{\text{Benign}} = .79 - .90$ ,  $\alpha_{\text{Malicious}} = .83 - .91$ , and re-test reliabilities over a three to four week period,  $r_{\text{Benign}} = .67$ ,  $r_{\text{Malicious}} = .66$ . In line with the idea that previous research may have focused predominantly on dispositional malicious envy, the DES correlated with the dispositional malicious envy scale,  $r = .65$ , but not with the dispositional benign envy scale,  $r = .04$  (Lange & Crusius, 2015a). In unpublished data sets we found virtually identical results with the YES,  $r_{\text{Malicious}} = .75$ ,  $r_{\text{Benign}} = .01$ , the VAVS envy scale,  $r_{\text{Malicious}} = .73$ ,  $r_{\text{Benign}} = .17$ , and the DSES,  $r_{\text{Malicious}} = .66$ ,  $r_{\text{Benign}} = .12$ . Nevertheless, dispositional benign envy and malicious envy were both related to the chronic inclination to compare (as measured with the scale from Gibbons & Buunk, 1999) and to the pain experienced when being confronted with an upward status standard. Moreover, dispositional benign envy was correlated with hope for success, whereas dispositional malicious envy was correlated with fear of failure (Lange & Crusius, 2015a). Collectively, these results support that dispositional benign envy constitutes an emotional trait preparing individuals to optimistically approach the standard of high status set by the envied person, whereas

dispositional malicious envy constitutes an emotional trait preparing individuals to avoid falling short of this standard.

The distinction between dispositional benign and malicious envy can be integrated even more directly into research on status. Although research supports that envy is mainly driven by status comparisons (Crusius & Lange, 2016; Fiske, 2010; Lange & Crusius, 2015b; Silver & Sabini, 1978), previous conceptualizations of dispositional envy did not integrate it with a status approach. We propose that it is useful to take the different pathways to status attainment—prestige and dominance—into account (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013; Henrich & Gil-White, 2001; Maner & Case, 2016). In *prestige*-based hierarchies, status is based on merit and fairness. In such environments, individuals gain respect by sharing skills and know-how, motivating subordinates to emulate their success. If these efforts are successful it is evolutionarily adaptive to develop a chronic prestige strategy. Research suggests that individuals with a tendency to pursue such a strategy are agreeable, emotionally stable people who signal their expertise to others, give advice (Cheng, Tracy, & Henrich, 2010), and overconfidently present their skills (Anderson, Brion, Moore, & Kennedy, 2012). In *dominance*-based hierarchies, status is based on the outcome of zero-sum conflicts. In such environments, individuals advance by intimidating others, fostering subordinates' deference. If these efforts are successful it is evolutionarily adaptive to develop a chronic dominance strategy. Research suggests that individuals with such a strategy are disagreeable, neurotic people who aggressively signal their domination to others (Cheng et al., 2010) and assertively spread their opinion, leading others to perceive them as competent (Anderson & Kilduff, 2009). Despite these different strategies, evidence supports that prestigious and dominant individuals gain social influence to a similar degree, although the former are liked substantially more than the latter (Cheng et al., 2013).

Prestige-based and dominance-based hierarchies create vastly different environments. Therefore, individuals who apply either strategy should also respond in highly

different ways to status threats. In prestige-based hierarchies, subordinates are likely to perceive high levels of control over their ability to attain status, because status attainment is possible for everyone who is willing to learn (Henrich & Gil-White, 2001). Furthermore, as high status depends on invested effort, it should be evaluated as deserved. This is in line with research supporting that individuals consider others' successes as just if they were working hard for them (Feather, 1999). Collectively, appraisals of high levels of personal control and deservingness concerning the success of others may elicit the benign form of envy (Lange et al., 2016; Van de Ven et al., 2012). Moreover, as benign envy predicts the motivation to improve performance partly via emulating others (Lange et al., in prep), dispositional benign envy should foster prestige attainment. Thus, we theorize that benign envy is an emotional response following a threat to a person's prestige that fosters the motivation to re-gain status.

In contrast, subordinates in dominance-based hierarchies should perceive low control over their ability to attain status because status attainment is contingent on stable physical characteristics (Henrich & Gil-White, 2001). Furthermore, as dominant individuals are disliked, their status should be evaluated as undeserved. This is in line with research supporting that individuals consider their enemies' successes as unjust (Feather, 1999). Collectively, appraisals of low personal control and low deservingness of the other's success may elicit malicious envy (Lange et al., 2016; Van de Ven et al., 2012). Moreover, as malicious envy predicts the motivation to aggressively get back at others, dispositional malicious envy should foster dominance attainment or help to undermine others' dominance. Thus, we theorize that malicious envy is an emotional response following a threat to a person's dominance that fosters the motivation to re-gain status or downgrade the other person.

Two separate lines of research provide support for this framework. First, superiors' displays of prestige and dominance elicited benign and malicious envy in subordinates, respectively (Lange & Crusius, 2015b). More precisely, if high-status individuals displayed

prestige via authentic pride (success attributed to effort), the perception of prestige and likability jointly fostered benign envy in subordinates. In contrast, if high-status individuals displayed dominance via hubristic pride (success attributed to talent), the perception of dominance and decreased likability jointly fostered malicious envy in subordinates. Second, individuals who tended to pursue a prestige or a dominance strategy had an increased inclination to experience benign or malicious envy, respectively. We provided indirect evidence for this prediction by linking a personality characteristic to envy which is driven by enhanced desire for status—narcissism (Wallace & Baumeister, 2002). Specifically, individuals characterized by narcissistic admiration are theorized to focus on gaining others' approval and therefore promote their own qualities (Back et al., 2013). This dynamic represents a prestige strategy. In line with this idea, narcissistic admiration predicted dispositional benign envy (Lange et al., 2016). In contrast, individuals characterized by narcissistic rivalry are theorized to fear losing the approval of others and therefore devalue and aggressively go against them (Back et al., 2013). This dynamic fits a dominance strategy. In line with this idea, narcissistic rivalry predicted dispositional malicious envy (Lange et al., 2016). More direct evidence for this framework indeed suggests that individuals with an enhanced inclination for a prestige or dominance strategy also indicate increased dispositional benign and malicious envy, respectively (Redford, Lange, & Crusius, 2016).

In sum, dispositional benign envy may be an emotional trait that prepares individuals to re-gain prestige after a threat to their status, whereas dispositional malicious envy may be an emotional trait that prepares individuals to re-gain dominance after a threat to their status. This framework dovetails with the earlier findings. Specifically, the disagreeable, neurotic, and aggressive pattern that emerged in previous research on dispositional envy maps onto the dominance construct. As these earlier scales focused on dispositional malicious envy, this is in line with our predicted relation of dispositional malicious envy and dominance striving. In fact, supporting our argument, Watson (2016) showed that one of the earlier scales—the envy

subscale of Belk's materialism scale—correlates with dominance but not prestige. Moreover, the framework also extends previous conceptualizations of dispositional envy. First, it broadens our understanding of dispositional malicious envy and allows us to derive more precise predictions about its functional value in the regulation of status hierarchies. Second, the framework extends earlier research on dispositional envy by introducing dispositional benign envy—a hitherto entirely neglected form of dispositional envy.

In summary, the present analysis suggests that the envious personality may be described more completely by differentiating between the benign and malicious forms of envy and relating them to prestige and dominance striving. This status framework predicts that dispositional envy is associated with functional consequences as status attainment leads to social influence and societal advancement (Anderson et al., 2015). Do the forms of envy relate to such functional consequences? To put it differently, is dispositional envy indeed functional for the regulation of status hierarchies?

### **Consequences of Dispositional Benign and Malicious Envy**

Placing dispositional benign and malicious envy in the prestige and dominance framework leads to numerous testable predictions. First, status evolves from social consensus (Anderson et al., 2015) and both prestige and dominance lead to social influence (Cheng et al., 2013). This implies that dispositional benign and malicious envy should manifest in observable behaviors that change others' perception of the envier as being successful or being feared, respectively. Second, as we theorize that benign and malicious envy trigger a prestige or dominance motivation, respectively, they should activate diverging behavioral strategies. Dispositional benign envy should be associated with striving to gain prestige. In contrast, dispositional malicious envy should be associated with striving to gain dominance or harm others' status. Finally, changes in individuals' status affect their well-being (Anderson et al., 2015). Therefore, dispositional benign and malicious envy should also correlate with affective dispositions and life satisfaction.

Does dispositional benign and malicious envy predict behavioral tendencies reflecting prestige and dominance strategies that are being picked up by others? We investigated this in a project on the relation of narcissism and envy (Lange et al., 2016). In many ways, narcissists are enigmatic human beings (Back et al., 2013; Küfner, Nestler, & Back, 2013; Leckelt, Küfner, Nestler, & Back, 2015). On the one hand, they are often admired and celebrated. On the other hand, others detest their inflated egos. These seemingly opposing effects can be explained by two distinct, yet positively correlated facets of grandiose narcissism—narcissistic admiration and narcissistic rivalry (Back et al., 2013). As narcissists are driven by their enhanced desire for status (Wallace & Baumeister, 2002), any emotional tendency associated with this struggle may contribute to their paradoxical social consequences. Specifically, if dispositional benign and malicious envy manifest in prestigious or dominant behaviors, they could mediate narcissists' social effects. Thus, we predicted that the effects of narcissistic admiration and rivalry on social perception may be mediated via dispositional benign and malicious envy (Lange et al., 2016). To investigate this possibility, we asked dyad members to rate their own narcissism and dispositional envy and afterwards rate themselves and their fellow participant on dimensions related to prestigious (personal ambition, others' compliments and admiration, being well-received) and dominant social outcomes (likelihood of gossiping and schadenfreude). As predicted, the relation of narcissistic admiration with dispositional benign envy mediated an effect on self- and peer-rated prestige. In contrast, the relation of narcissistic rivalry with dispositional malicious envy mediated an effect on self- and peer-rated dominance. Thus, these findings suggest that dispositional benign and malicious envy manifest in observable behavior relevant to status attainment.

Another line of research supports the notion that benign and malicious envy trigger different strategies to regulate status. Specifically, if benign envy is linked to a prestige-based strategy of status attainment, dispositional benign envy should foster prestige-seeking

behavior. We investigated this hypothesis with marathon runners (Lange & Crusius, 2015a). We reasoned that outstanding comparison standards encountered during training should elicit emulative tendencies that ultimately translate into higher race performance. Indeed, dispositional benign envy was associated with increased goal setting for the race, mediating an effect on race speed. As finishing a marathon in general or even in a high tempo constitute a prestigious success, these efforts may be indicative of the desire for prestige. Interestingly, we found that dispositional malicious envy correlated with the avoidance of a concrete race goal. This could imply that they were afraid of losing their current status, which fits a dominance strategy.

We also investigated whether dispositional malicious envy fosters aggressive strategies to gain status or to undermine the status of others. Even though dispositional malicious envy is linked to various dysfunctional outcomes at the intrapersonal level, it could be functional at the interpersonal level. For instance, dispositional malicious envy (as measured with the DES or the dispositional malicious envy scale from the BeMaS) correlates with an increased tendency to express *schadenfreude* when someone suffered a misfortune as rated by the self and by peers (James et al., 2014; Krizan & Johar, 2012; Lange et al., 2016). Other research supports that *schadenfreude* indeed regulates dominance hierarchies (Lange & Boecker, in prep). More precisely, *schadenfreude* was more likely a response to a misfortune of a person who displayed dominance (hubristic pride) after success. Moreover, once *schadenfreude* was publicly expressed, the initially successful person's perceived dominance decreased as compared to when others' *schadenfreude* was expressed privately (e.g., laughing behind the back) or when there was only awkward silence. This provides at least indirect evidence that dispositional malicious envy contributes to the regulation of status hierarchies via aggressive strategies, such as the public expression of *schadenfreude*, to downregulate others' status.

The current framework also suggests that dispositional benign and malicious envy carry important, but distinct consequences for individuals' well-being. Indeed, upon encountering a high-status comparison standard, dispositional benign and malicious envy are both related to painful feelings (Lange & Crusius, 2015a). This dovetails with theorizing that envy is a fundamentally painful emotion (Lange et al., in prep; Tai, Narayanan, & McAllister, 2012). Yet, a prestige strategy should foster positive affect in the long-run as individuals can advance (Henrich & Gil-White, 2001). Or they may form close relationships with others in environments fostering learning and individual growth, which could satisfy their need to belong (Baumeister & Leary, 1995). In contrast, a dominance strategy should sustain negative affect as the fixed hierarchies probably prevent advancement of individuals low in status (Henrich & Gil-White, 2001). Furthermore, others' dislike of dominant individuals (Cheng et al., 2013) may isolate them. Such isolation could worsen their mood (Baumeister & Leary, 1995). Initial evidence supports these predictions (Lange & Crusius, 2016). Dispositional benign envy was positively correlated with cognitive (Satisfaction with Life Scale; Diener, Emmons, Larsen, & Griffin, 1985) and positive-affective (Positive and Negative Affect Schedule; Thompson, 2007) components of well-being, whereas dispositional malicious envy revealed the opposite pattern. This provides evidence for potential long-term consequences of dispositional benign and malicious envy on individuals' well-being in line with their desire for status.

Collectively, the evidence is consistent with the notion that dispositional benign envy leads to prestige attainment and consequently long-term positive affect. In contrast, dispositional malicious envy leads to strategies aimed at undermining the superior's dominance and consequently long-term negative affect. Our status framework can therefore account for previous findings related to dispositional envy and extends these via its relation to the distinction between prestige and dominance. Furthermore, such a framework may illuminate the complex mutual relationship of envy and adverse clinical outcomes such as

depression. The latter may be fostered by the sense of low control that characterizes dispositional malicious envy. In a similar vein, chronic inferiority and low self-efficacy in depression may make people vulnerable to status threats and veer them into malicious envy (Appel, Crusius, & Gerlach, 2015; Appel, Gerlach, & Crusius, 2016).

The present reasoning further implies that chronic reactions to threatened status are shaped by social environments and have wide-ranging effects on society itself. Status is an inherently social variable as it relies on consensus among peers (Anderson et al., 2015). The social nature of status therefore predicts that dispositional benign and malicious envy should also be determined by societal variables and ultimately also affect societal outcomes.

### **Societal Determinants and Consequences of Envy**

The strategy that people use to attain status may be a characteristic of the social environment (Leung & Bond, 2004). Although different strategies can be successful for attaining status in the same environment (Cheng et al., 2013), some strategies may be more prevalent in certain environments than others. The prevalent strategy that leads to status attainment in a specific society should both shape and be shaped by certain belief systems, that people hold about how status is gained in their society (Kay, Shepherd, Blatz, Chua, & Galinsky, 2010; Leung & Bond, 2004; Ruiu, 2013). If this is the case, then socially shared beliefs could be potent predictors of envy and consequently societal outcomes. Which beliefs may be important in predicting dispositional benign and malicious envy?

Although the characteristics that allow societies to determine certain belief systems are not fully understood (Leung & Bond, 2004), people hold different beliefs about how they can attain status. One such belief is the Protestant Work Ethic (PWE; Weber, 1930). The concept of PWE is characterized by four core components: hard work, no leisure, asceticism, and independence/self-reliance (Modrack, 2008). Research suggests that people who strongly believe in PWE have a stronger internal locus of control (Furnham, 1987; Mirels & Garrett, 1971), greater internal responsibility (Christopher & Schlenker, 2005) and respond to the

fairness of a game by allocating rewards according to equity norms (Greenberg, 1978). Thus, people endorsing PWE attribute status to internal, unstable and controllable sources.

How exactly may this attribution pattern affect envy? Notably, research supports a relationship between dispositional envy and the appraisal of personal control (Lange et al., 2016). High perceptions of personal control are correlated with dispositional benign envy. As the belief in PWE stresses the role of hard work and effort in obtaining status, people who believe that they can control their status should therefore also be prone to dispositional benign envy. We collected preliminary support for these predictions. Correlational evidence suggests that a high belief in PWE predicts benign envy (Crusius, Blatz, & Lange, 2016).

Investigating the relationship between societal beliefs and envy may also help with understanding more distal effects of the emotional pathways from societal beliefs to societal outcomes. Specifically, the hard work and asceticism that characterizes PWE may lead to high societal status and also to the accumulation of capital and economic success (Mirels & Garrett, 1971; Modrack, 2008; Weber, 1930). Accordingly, in previous research PWE has been shown to correlate with job satisfaction, job involvement, organizational commitment, conscientiousness, and job performance (Miller, Woehr, & Hudspeth, 2002). In light of the current framework, the relationship between PWE and economic outcomes may be mediated by benign envy. This is in line with the finding that PWE is linked to benign envy which then motivates people to strive for a prestigious position when confronted with a high-status person. This hypothesis still needs to be tested.

Is there a complementary belief system that should foster the development of dispositional malicious envy? Our own data suggests that dispositional malicious envy is tied to an external locus of control (Crusius et al., 2016). Thus, it should be fostered by any societal belief system that stresses the importance of external forces. Such belief systems are, for instance, fatalism (Esparza, Wiebe, & Quiñones, 2015; Paulhus & Carey, 2011; Ruiu, 2013), belief in genetic determinism (Keller, 2005), or the belief in a controlling God (Kay,

Gaucher, Napier, Callan, & Laurin, 2008; Kay et al., 2010). Moreover, the link between variables such as fatalism and dispositional malicious envy could then also link the latter to societal outcomes. For instance, fatalism correlates with hostility and aggression (Sadowski & Wenzel, 1982). In light of the current framework, this could be an effect of dispositional malicious envy. Thus, we hypothesize that belief systems such as fatalism correlate with dispositional malicious envy, mediating an effect on hostile societal outcomes.

In sum, the status framework of dispositional envy predicts that it is associated with variables at the societal level. This is in line with theoretical considerations by sociologists (Schoeck, 1969) and philosophers (D'Arms, 2013) who argue that envy plays an important role in the development of societal beliefs and political changes. However, these hypotheses require more empirical scrutiny. Our initial evidence links dispositional benign envy to PWE and our framework suggests a relation of dispositional malicious envy and beliefs in fatalism. These correlations could be starting points for investigating the role of envy in society.

### **Conclusion**

The desire for social status and its beneficial outcomes should lead people to react immediately to status threats. We described how a dispositional tendency to react with envy may be one important emotional pathway to overcome this painful situation. Taken together, the evidence supports the notion that dispositional benign envy constitutes an inclination to react to threats to a person's prestige. It motivates behavioral tendencies to re-gain status and leads to increased personal well-being and potentially societal flourishing. In contrast, dispositional malicious envy constitutes an inclination to react to dominant upward standards. It motivates behavioral tendencies to harm the other's status and leads to decreased personal well-being and potentially societal disruptions. Thus, research on dispositional envy may contribute to our understanding of status regulation on individual, interpersonal, and societal levels of analysis.

## References

- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, White women. *Health Psychology, 19*, 586–592. <http://doi.org/10.1037//0278-6133.19.6.586>
- Ahuvia, A. C., & Wong, N. Y. (2002). Personality and values based materialism: Their relationship and origins. *Journal of Consumer Psychology, 12*, 389–402. [http://doi.org/10.1207/S15327663JCP1204\\_10](http://doi.org/10.1207/S15327663JCP1204_10)
- Anderson, C., Brion, S., Moore, D. A., & Kennedy, J. A. (2012). A status-enhancement account of overconfidence. *Journal of Personality and Social Psychology, 103*, 718–735. <http://doi.org/10.1037/a0029395>
- 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://doi.org/10.1037/a0038781>
- Anderson, C., & Kilduff, G. J. (2009). Why do dominant personalities attain influence in face-to-face groups? The competence-signaling effects of trait dominance. *Journal of Personality and Social Psychology, 96*, 491–503. <http://doi.org/10.1037/a0014201>
- Anderson, C., Kraus, M. W., Galinsky, A. D., & Keltner, D. (2012). The local-ladder effect: Social status and subjective well-being. *Psychological Science, 23*, 764–771. <http://doi.org/10.1177/0956797611434537>
- Appel, H., Crusius, J., & Gerlach, A. L. (2015). Social comparison, envy, and depression on Facebook: A study looking at the effects of high comparison standards on depressed individuals. *Journal of Social and Clinical Psychology, 34*, 277–289. <http://doi.org/10.1521/jscp.2015.34.4.277>

- Appel, H., Gerlach, A. L., & Crusius, J. (2016). The interplay between Facebook use, social comparison, envy, and depression. *Current Opinion in Psychology*, *9*, 44–49.  
<http://doi.org/10.1016/j.copsyc.2015.10.006>
- Back, M. D., Küfner, A. C. P., Dufner, M., Gerlach, T. M., Rauthmann, J. F., & Denissen, J. J. A. (2013). Narcissistic admiration and rivalry: Disentangling the bright and dark sides of narcissism. *Journal of Personality and Social Psychology*, *105*, 1013–1037.  
<http://doi.org/10.1037/a0034431>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529. <http://doi.org/10.1037/0033-2909.117.3.497>
- Belk, R. W. (1984). Three scales to measure constructs related to materialism: Reliability, validity, and relationships to measures of happiness. In T. C. Kinnear (Ed.), *Advances in Consumer Research* (pp. 291–297). Provo, UT: Association for Consumer Research.
- Belk, R. W. (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, *12*, 265–280. <http://doi.org/10.1086/208515>
- Bondü, R., & Elsner, B. (2015). Justice sensitivity in childhood and adolescence. *Social Development*, *24*, 420–441. <http://doi.org/10.1111/sode.12098>
- Bondü, R., & Krahé, B. (2015). Links of justice and rejection sensitivity with aggression in childhood and adolescence. *Aggressive Behavior*, *41*, 353–368.  
<http://doi.org/10.1002/ab.21556>
- Butler, R. (1995). Motivational and informational functions and consequences of children's attention to peers' work. *Journal of Educational Psychology*, *87*, 347–360.  
<http://doi.org/10.1037/0022-0663.87.3.347>
- Campbell, W. K., & Miller, J. D. (2011). *The handbook of narcissism and narcissistic personality disorder*. Hoboken, New Jersey: John Wiley & Sons, Inc.

- 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://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://doi.org/10.1016/j.evolhumbehav.2010.02.004>
- Christopher, A. N., & Schlenker, B. R. (2005). The Protestant work ethic and attributions of responsibility: Applications of the Triangle Model. *Journal of Applied Social Psychology, 35*, 1502–1515. <http://doi.org/10.1111/j.1559-1816.2005.tb02181.x>
- 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., Blatz, L., & Lange, J. (2016). How work ethics beliefs are linked to status-related emotions. *Unpublished Data Set*.
- 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://doi.org/10.1016/j.jesp.2014.05.007>
- Crusius, J., & Lange, J. (2016). How do people respond to threatened social status? Moderators of benign versus malicious envy. In R. H. Smith, U. Merlone, & M. K. Duffy (Eds.), *Envy at work and in organizations: Research, theory, and applications* (pp. 85–110). New York, NY: Oxford University Press.
- Crusius, J., & Mussweiler, T. (2012). When people want what others have: The impulsive side of envious desire. *Emotion, 12*, 142–153. <http://doi.org/10.1037/a0023523>
- D'Arms, J. (2013). Envy in The Stanford Encyclopedia of Philosophy. Retrieved from <http://plato.stanford.edu/archives/win2013/entries/envy/>

- 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://doi.org/10.1016/j.paid.2012.03.029>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*, 71–75. [http://doi.org/10.1207/s15327752jpa4901\\_13](http://doi.org/10.1207/s15327752jpa4901_13)
- Eastman, J. K., Goldsmith, R. E., & Flynn, L. R. (1999). Status consumption in consumer behavior: Scale development and validation. *Journal of Marketing Theory and Practice, 7*, 41–52. <http://doi.org/10.1080/10696679.1999.11501839>
- Elliot, A. J., & McGregor, H. A. (2001). A 2 × 2 achievement goal framework. *Journal of Personality and Social Psychology, 80*, 501–519. <http://doi.org/10.1037/0022-3514.80.3.501>
- Esparza, O. A., Wiebe, J. S., & Quiñones, J. (2015). Simultaneous development of a multidimensional fatalism measure in English and Spanish. *Current Psychology, 34*, 597–612. <http://doi.org/10.1007/s12144-014-9272-z>
- Falcon, R. G. (2015). Is envy categorical or dimensional? An empirical investigation using taxometric analysis. *Emotion, 15*, 694–698. <http://doi.org/10.1037/emo0000102>
- Feather, N. T. (1999). Judgments of deservingness: Studies in the psychology of justice and achievement. *Personality and Social Psychology Review, 3*, 86–107. [http://doi.org/10.1207/s15327957pspr0302\\_1](http://doi.org/10.1207/s15327957pspr0302_1)
- Fehr, E., Bernhard, H., & Rockenbach, B. (2008). Egalitarianism in young children. *Nature, 454*, 1079–1083. <http://doi.org/10.1038/nature07155>
- Fiske, S. T. (2010). Envy up, scorn down: How comparison divides us. *American Psychologist, 65*, 698–706. <http://doi.org/10.1037/0003-066X.65.8.698>
- Fournier, M. A. (2009). Adolescent hierarchy formation and the social competition theory of depression. *Journal of Social and Clinical Psychology, 28*, 1144–1172.

- Furnham, A. (1987). Predicting Protestant work ethic beliefs. *European Journal of Personality, 1*, 93–106. <http://doi.org/10.1002/per.2410010204>
- Garcia, S. M., Tor, A., & Schiff, T. M. (2013). The psychology of competition: A social comparison perspective. *Perspectives on Psychological Science, 8*, 634–650. <http://doi.org/10.1177/1745691613504114>
- Ger, G., & Belk, R. W. (1996). Cross-cultural differences in materialism. *Journal of Economic Psychology, 17*, 55–77. [http://doi.org/10.1016/0167-4870\(95\)00035-6](http://doi.org/10.1016/0167-4870(95)00035-6)
- Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison: Development of a scale of social comparison orientation. *Journal of Personality and Social Psychology, 76*, 129–142. <http://doi.org/10.1037/0022-3514.76.1.129>
- Gold, B. T. (1996). Enviousness and its relationship to maladjustment and psychopathology. *Personality and Individual Differences, 21*, 311–321. [http://doi.org/10.1016/0191-8869\(96\)00081-5](http://doi.org/10.1016/0191-8869(96)00081-5)
- Greenberg, J. (1978). Equity, equality, and the Protestant ethic: Allocating rewards following fair and unfair competition. *Journal of Experimental Social Psychology, 14*, 217–226. [http://doi.org/10.1016/0022-1031\(78\)90027-6](http://doi.org/10.1016/0022-1031(78)90027-6)
- Henniger, N. E., & Harris, C. R. (2015). Envy across adulthood: The what and the who. *Basic and Applied Social Psychology, 37*, 303–318. <http://doi.org/10.1080/01973533.2015.1088440>
- Henrich, J., & Gil-White, F. J. (2001). The evolution of prestige: Freely conferred deference as a mechanism for enhancing the benefits of cultural transmission. *Evolution and Human Behavior, 22*, 165–196. [http://doi.org/10.1016/S1090-5138\(00\)00071-4](http://doi.org/10.1016/S1090-5138(00)00071-4)
- Hunt, J. M., Kernan, J. B., Chatterjee, A., & Florsheim, R. A. (1990). Locus of control as a personality correlate of materialism. *Psychological Reports, 67*, 1101–1102. <http://doi.org/10.2466/pr0.1990.67.3f.1101>

- James, S., Kavanagh, P. S., Jonason, P. K., Chonody, J. M., & Scrutton, H. E. (2014). The Dark Triad, schadenfreude, and sensational interests: Dark personalities, dark emotions, and dark behaviors. *Personality and Individual Differences, 68*, 211–216. <http://doi.org/10.1016/j.paid.2014.04.020>
- Kay, A. C., Gaucher, D., Napier, J. L., Callan, M. J., & Laurin, K. (2008). God and the government: Testing a compensatory control mechanism for the support of external systems. *Journal of Personality and Social Psychology, 95*, 18–35. <http://doi.org/10.1037/0022-3514.95.1.18>
- Kay, A. C., Shepherd, S., Blatz, C. W., Chua, S. N., & Galinsky, A. D. (2010). For God (or) country: The hydraulic relation between government instability and belief in religious sources of control. *Journal of Personality and Social Psychology, 99*, 725–739. <http://doi.org/10.1037/a0021140>
- Keller, J. (2005). In genes we trust: The biological component of psychological essentialism and its relationship to mechanisms of motivated social cognition. *Journal of Personality and Social Psychology, 88*, 686–702. <http://doi.org/10.1037/0022-3514.88.4.686>
- Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science, 5*, 292–314. <http://doi.org/10.1177/1745691610369469>
- Krekels, G., & Pandelaere, M. (2015). Dispositional greed. *Personality and Individual Differences, 74*, 225–230. <http://doi.org/10.1016/j.paid.2014.10.036>
- Krizan, Z., & Johar, O. (2012). Envy divides the two faces of narcissism. *Journal of Personality, 80*, 1415–1451. <http://doi.org/10.1111/j.1467-6494.2012.00767.x>

- Küfner, A. C. P., Nestler, S., & Back, M. D. (2013). The two pathways to being an (un-)popular narcissist. *Journal of Personality*, *81*, 184–195. <http://doi.org/10.1111/j.1467-6494.2012.00795.x>
- Lange, J., & Boecker, L. (in prep). Having a devilishly good laugh: Schadenfreude as social-functional status regulator. *Manuscript in Preparation*.
- Lange, J., & Crusius, J. (2015a). Dispositional envy revisited: Unraveling the motivational dynamics of benign and malicious envy. *Personality and Social Psychology Bulletin*, *41*, 284–294. <http://doi.org/10.1177/0146167214564959>
- Lange, J., & Crusius, J. (2015b). The tango of two deadly sins: The social-functional relation of envy and pride. *Journal of Personality and Social Psychology*, *109*, 453–472. <http://doi.org/10.1037/pspi0000026>
- Lange, J., & Crusius, J. (2016). Envy and well-being. *Unpublished Data Set*.
- Lange, J., Crusius, J., & Hagemeyer, B. (2016). The Evil Queen's dilemma: Linking narcissistic admiration and rivalry to benign and malicious envy. *European Journal of Personality*, *30*, 168–188. <http://doi.org/10.1002/per.2047>
- Lange, J., Weidman, A. C., & Crusius, J. (in prep). The painful duality of envy: Evidence for an integrative theory and a meta-analysis on the relation of envy and schadenfreude. *Manuscript in Preparation*.
- Leach, C. W. (2008). Envy, inferiority, and injustice: Three bases of anger about inequality. In R. H. Smith (Ed.), *Envy: Theory and research* (pp. 94–116). New York, NY: Oxford University Press.
- Leary, M. R., Raimi, K. T., Jongman-Sereno, K. P., & Diebels, K. J. (2015). Distinguishing intrapsychic from interpersonal motives in psychological theory and research. *Perspectives on Psychological Science*, *10*, 497–517. <http://doi.org/10.1177/1745691615583132>

- Leckelt, M., Küfner, A. C. P., Nestler, S., & Back, M. D. (2015). Behavioral processes underlying the decline of narcissists' popularity over time. *Journal of Personality and Social Psychology, 109*, 856–871. <http://doi.org/10.1037/pspp0000057>
- Leung, K., & Bond, M. H. (2004). Social axioms: A model for social beliefs in multicultural perspective. *Advances in Experimental Social Psychology, 36*, 119–197.
- LoBue, V., Nishida, T., Chiong, C., DeLoache, J. S., & Haidt, J. (2011). When getting something good is bad: Even three-year-olds react to inequality. *Social Development, 20*, 154–170. <http://doi.org/10.1111/j.1467-9507.2009.00560.x>
- Maner, J. K., & Case, C. R. (2016). Dominance and prestige: Dual strategies for navigating social hierarchies. In J. M. Olson & M. P. Zanna (Eds.), *Advances in Experimental Social Psychology* (Vol. 54, pp. 129–180). Elsevier. Retrieved from <http://linkinghub.elsevier.com/retrieve/pii/S0065260116300144>
- Mascaro, O., & Csibra, G. (2014). Human infants' learning of social structures the case of dominance hierarchy. *Psychological Science, 25*, 250–255. <http://doi.org/10.1177/0956797613500509>
- McAuliffe, K., Blake, P. R., Kim, G., Wrangham, R. W., & Warneken, F. (2013). Social influences on inequity aversion in children. *PLOS ONE, 8*, e80966. <http://doi.org/10.1371/journal.pone.0080966>
- McCullough, M. E., Emmons, R. A., & Tsang, J.-A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology, 82*, 112–127. <http://doi.org/10.1037//0022-3514.82.1.112>
- Milfont, T. L., & Valdiney, V. G. (2009). A capital sin: Dispositional envy and its relations to wellbeing. *Revista Interamericana de Psicología, 43*, 547–551.
- Miller, M. J., Woehr, D. J., & Hudspeth, N. (2002). The meaning and measurement of work ethic: Construction and initial validation of a multidimensional inventory. *Journal of Vocational Behavior, 60*, 451–489. <http://doi.org/10.1006/jvbe.2001.1838>

- Mirels, H. L., & Garrett, J. B. (1971). The Protestant ethic as a personality variable. *Journal of Consulting and Clinical Psychology, 36*, 40–44. <http://doi.org/10.1037/h0030477>
- Modrack, S. (2008). *The Protestant work ethic revisited: A promising concept or an outdated idea?* WZB Discussion Paper. Retrieved from <http://www.econstor.eu/handle/10419/43972>
- Neufeld, D. C. (2012). *Who is the most envious of them all? Examining how 3 narcissistic subtypes relate to dispositional and episodic envy.* University of Manitoba.
- O'Guinn, T. C., & Faber, R. J. (1989). Compulsive buying: A phenomenological exploration. *Journal of Consumer Research, 16*, 147–157. <http://doi.org/10.1086/209204>
- Parks, C. D., Rumble, A. C., & Posey, D. C. (2002). The effects of envy on reciprocation in a social dilemma. *Personality and Social Psychology Bulletin, 28*, 509–520. <http://doi.org/10.1177/0146167202287008>
- Parrott, W. G., & Smith, R. H. (1993). Distinguishing the experiences of envy and jealousy. *Journal of Personality and Social Psychology, 64*, 906–920. <http://doi.org/10.1037/0022-3514.64.6.906>
- Paulhus, D. L., & Carey, J. M. (2011). The FAD-Plus: Measuring lay beliefs regarding free will and related constructs. *Journal of Personality Assessment, 93*, 96–104. <http://doi.org/10.1080/00223891.2010.528483>
- Redford, L., Lange, J., & Crusius, J. (2016). Entitlement promotes envy via prestige and dominance motivation. *Unpublished Data Set.*
- Régner, I., Escribe, C., & Dupeyrat, C. (2007). Evidence of social comparison in mastery goals in natural academic settings. *Journal of Educational Psychology, 99*, 575–583. <http://doi.org/10.1037/0022-0663.99.3.575>
- Rentzsch, K., & Gross, J. J. (2015). Who turns green with envy? Conceptual and empirical perspectives on dispositional envy. *European Journal of Personality, 29*, 530–547. <http://doi.org/10.1002/per.2012>

- Rentzsch, K., Schröder-Abé, M., & Schütz, A. (2015). Envy mediates the relation between low academic self-esteem and hostile tendencies. *Journal of Research in Personality*, 58, 143–153. <http://doi.org/10.1016/j.jrp.2015.08.001>
- Ruiu, G. (2013). The origin of fatalistic tendencies: An empirical investigation. *Economics & Sociology*, 6, 103–125. <http://doi.org/10.14254/2071-789X.2013/6-2/10>
- Sadowski, C. J., & Wenzel, D. M. (1982). The relationship of locus of control dimensions to reported hostility and aggression. *Journal of Psychology*, 112, 227–230. <http://doi.org/10.1080/00223980.1982.9915378>
- Salovey, P., & Rodin, J. (1984). Some antecedents and consequences of social-comparison jealousy. *Journal of Personality and Social Psychology*, 47, 780–792. <http://doi.org/10.1037/0022-3514.47.4.780>
- Santor, D. A., & Walker, J. (1999). Garnering the interest of others: Mediating the effects among physical attractiveness, self-worth and dominance. *British Journal of Social Psychology*, 38, 461–477. <http://doi.org/10.1348/014466699164275>
- 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://doi.org/10.1016/j.obhdp.2004.01.001>
- Schindler, I. (2014). Relations of admiration and adoration with other emotions and well-being. *Psychology of Well-Being*, 4. <http://doi.org/10.1186/s13612-014-0014-7>
- Schoeck, H. (1969). *Envy: A theory of social behavior*. New York: Harcourt, Brace & World.
- Seuntjens, T. G., Zeelenberg, M., Van de Ven, N., & Breugelmans, S. M. (2015). Dispositional greed. *Journal of Personality and Social Psychology*, 108, 917–933. <http://doi.org/10.1037/pspp0000031>
- Shoham, A., Gavish, Y., & Segev, S. (2015). A cross-cultural analysis of impulsive and compulsive buying behaviors among Israeli and U.S. consumers: The influence of

- personal traits and cultural values. *Journal of International Consumer Marketing*, 27, 187–206. <http://doi.org/10.1080/08961530.2014.1000507>
- Silver, M., & Sabini, J. (1978). The perception of envy. *Social Psychology*, 41, 105–117. <http://doi.org/10.2307/3033570>
- Smith, R. H., & Kim, S. H. (2007). Comprehending envy. *Psychological Bulletin*, 133, 46–64. <http://doi.org/10.1037/0033-2909.133.1.46>
- Smith, R. H., Parrott, W. G., Diener, E. F., Hoyle, R. H., & Kim, S. H. (1999). Dispositional envy. *Personality and Social Psychology Bulletin*, 25, 1007–1020. <http://doi.org/10.1177/01461672992511008>
- 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://doi.org/10.1177/0146167294206008>
- Steckler, C. M., & Tracy, J. L. (2014). The emotional underpinnings of social status. In J. T. Cheng, J. L. Tracy, & C. Anderson (Eds.), *The psychology of social status* (pp. 201–224). New York: Springer.
- Steinbeis, N., & Singer, T. (2013). The effects of social comparison on social emotions and behavior during childhood: The ontogeny of envy and Schadenfreude predicts developmental changes in equity-related decisions. *Journal of Experimental Child Psychology*, 115, 198–209. <http://doi.org/10.1016/j.jecp.2012.11.009>
- Tai, K., Narayanan, J., & McAllister, D. J. (2012). Envy as pain: Rethinking the nature of envy and its implications for employees and organizations. *Academy of Management Review*, 37, 107–129. <http://doi.org/10.5465/amr.2009.0484>
- Thompson, E. R. (2007). Development and validation of an internationally reliable short-form of the Positive and Negative Affect Schedule (PANAS). *Journal of Cross-Cultural Psychology*, 38, 227–242. <http://doi.org/10.1177/0022022106297301>

- Thomsen, L., Frankenhuys, W. E., Ingold-Smith, M., & Carey, S. (2011). Big and mighty: Preverbal infants mentally represent social dominance. *Science*, *331*, 477–480.  
<http://doi.org/10.1126/science.1199198>
- 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://doi.org/10.1037/0022-3514.94.3.516>
- Tracy, J. L., Robins, R. W., & Lagattuta, K. H. (2005). Can children recognize pride? *Emotion*, *5*, 251–257. <http://doi.org/10.1037/1528-3542.5.3.251>
- 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. <http://doi.org/10.1037/a0028412>
- Van de Ven, N. (2016). Envy and its consequences: Why it is useful to distinguish between benign and malicious envy. *Social and Personality Psychology Compass*, *10*, 337–349. <http://doi.org/10.1111/spc3.12253>
- Van de Ven, N., Hoogland, C. E., Smith, R. H., van Dijk, W. W., Breugelmans, S. M., & Zeelenberg, M. (2015). When envy leads to schadenfreude. *Cognition and Emotion*, *29*, 1007–1025. <http://doi.org/10.1080/02699931.2014.961903>
- Van de Ven, N., & Zeelenberg, M. (2015). On the counterfactual nature of envy: “It could have been me.” *Cognition and Emotion*, *29*, 954–971.  
<http://doi.org/10.1080/02699931.2014.957657>
- 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://doi.org/10.1037/a0015669>
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2011). Why envy outperforms admiration. *Personality and Social Psychology Bulletin*, *37*, 784–795.  
<http://doi.org/10.1177/0146167211400421>

- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2012). Appraisal patterns of envy and related emotions. *Motivation and Emotion, 36*, 195–204. <http://doi.org/10.1007/s11031-011-9235-8>
- Veselka, L., Giammarco, E. A., & Vernon, P. A. (2014). The Dark Triad and the seven deadly sins. *Personality and Individual Differences, 67*, 75–80.  
<http://doi.org/10.1016/j.paid.2014.01.055>
- Wallace, H. M., & Baumeister, R. F. (2002). The performance of narcissists rises and falls with perceived opportunity for glory. *Journal of Personality and Social Psychology, 82*, 819–834. <http://doi.org/10.1037//0022-3514.82.5.819>
- Watson, D. C. (2015a). Materialism and the five-factor model of personality: A facet-level analysis. *North American Journal of Psychology, 17*, 133–150.
- Watson, D. C. (2015b). Self-conscious emotions and materialism. *Imagination, Cognition and Personality, 35*, 190–210. <http://doi.org/10.1177/0276236615587492>
- Watson, D. C. (2016). Dominance and prestige in materialism. *North American Journal of Psychology, 18*, 359–375.
- Weber, M. (1930). *The Protestant ethic and the spirit of capitalism*. London; New York: Routledge.
- Xiang, Y., Kong, F., Wen, X., Wu, Q., & Mo, L. (in press). Neural correlates of envy: Regional homogeneity of resting-state brain activity predicts dispositional envy. *NeuroImage*. <http://doi.org/10.1016/j.neuroimage.2016.08.003>