



## Short Communication

## Humor styles and their relationship to explicit and implicit self-esteem

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## ABSTRACT

Humor is an essential part of our life and an important means to cope with stressful life events. Recent research established that humor is a multi-faceted construct that includes both adaptive and maladaptive humor styles. Whereas self-enhancing and affiliative humor styles seem to be beneficial, aggressive and self-defeating humor styles may be less beneficial or even detrimental to mental health. Self-defeating humor correlates positively with loneliness, shyness, depression, and negatively with explicit (i.e., conscious, deliberate) self-esteem. Furthermore, research has found that individuals possessing “damaged” self-esteem (i.e., a self-esteem discrepancy where individuals exhibit low explicit but high implicit [i.e., unconscious, automatic] self-esteem) have very similar characteristics as individuals using self-defeating humor. We therefore theorized that there is an association between damaged self-esteem and self-defeating humor, which we indeed found. Possible mechanisms and explanations for this link are discussed.

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## 1. Introduction

Humor is an essential part of our daily lives and an important means to cope with stressful life events (e.g., Lefcourt, 2001). In the literature on humor, it is commonly believed that the use of humor is almost exclusively related to positive effects on health and psychological well-being (Kuiper, Grimshaw, Leite, & Kirsh, 2004). However, empirical evidence indicates that this positive correlation between humor and health has often failed to occur (Kuiper et al., 2004). A shift in humor research from nomothetic humor theories to theories that focus more explicitly on individual differences has led to the insight that humor is a multi-faceted construct including both adaptive and maladaptive humor styles (Martin, 2007).

## 1.1. The humor styles

Because most humor measures do not distinguish between different styles, the Humor Styles Questionnaire (HSQ; Martin, Puhlik-Doris, Larsen, Gray, & Weir, 2003) was developed. These styles include two adaptive dimensions of humor that are considered to be beneficial to psychological well-being: *affiliative humor* (e.g., telling jokes to amuse others) which is utilized to enhance group relationships and *self-enhancing humor* (e.g., having a humorous outlook on life) which is utilized to maintain self-esteem and cope with stress. Furthermore, two maladaptive dimensions which are hypothesized to be less advantageous or even detrimental to

well being: *aggressive humor* (e.g., sarcasm, teasing) which is utilized to disparage others and *self-defeating humor* (e.g., amusing others by saying denigrating things about oneself) which is utilized as a defensive denial in order to hide negative feelings.

## 1.2. Explicit and implicit self-esteem

Since the pioneering work of Greenwald and Banaji (1995), the differentiation of self-esteem into explicit (i.e., conscious, deliberate) and implicit (i.e., automatic, habitual) self-esteem has received considerable attention. It is assumed that both forms of self-esteem are largely independent of each other (i.e., people can possess different levels of implicit and explicit self-esteem at the same time). Thus it is possible for self-esteem discrepancies to form: individuals have discrepant self-esteem when they either possess *low* implicit and *high* explicit self-esteem (i.e., defensive or fragile self-esteem) or *high* implicit and *low* explicit self-esteem (i.e., damaged self-esteem). Previous research found that both self-esteem discrepancies are maladaptive and associated with different characteristics.

Individuals with *defensive* self-esteem are more likely to prefer their ingroup members, to exhibit higher narcissism (e.g., Jordan, Spencer, Zanna, Hoshino-Browne, & Coreel, 2003), and to promote more defensive reactions to adverse feedback (e.g., Kernis, 2003) than individuals with both high implicit and explicit self-esteem. In contrast, individuals with *damaged* self-esteem exhibit higher levels of nervousness, anger suppression (i.e., feeling anger but hiding it from the environment; Schröder-Abé, Rudolph, & Schütz, 2007), alexithymia (i.e., difficulty to describe own feelings; Dentale, San Martini, De Coro, & Di Pomponio, 2010), and have

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been frequently found in psychiatric samples that suffer from high psychological distress, such as individuals with depression and suicidal ideation (Franck, De Raedt, Dereu, & Van den Abbeele, 2007), bulimia nervosa (Cockerham, Stopa, Bell, & Gregg, 2009), and borderline personality disorder (Vater, Schröder-Abé, Schütz, Lammers, & Roepke, 2010).

The theoretical framework for the (patho) genesis of self-esteem discrepancies is still sparse (e.g., normal attitude change: Jordan et al., 2003; automatic threat defense mechanism: Rudman, Dohn, & Fairchild, 2007), sometimes inconsistent (see meta-analysis on narcissism and self-esteem interaction; Bosson et al., 2008), and still under debate (Gregg & Sedikides, 2010). But in general, it can be assumed that discrepancies between explicit and implicit self-esteem are experienced as unpleasant and associated with painful internal tension (Cockerham et al., 2009) because of problems with self-integration and conflicting thoughts.

### 1.3. The present study

To our knowledge, no study to date has examined humor in the context of implicit self-esteem. The self-defeating humor style is of particular interest because it was found to have a strong negative correlation with explicit self-esteem and positive correlations with depression, anxiety, and a variety of psychiatric and somatic symptoms (Martin et al., 2003) suggesting that this humor style tends to be used by individuals experiencing psychological distress. Thus, individuals using self-defeating humor are expected to have lower explicit self-esteem, to be prone to depression, nervousness and to have a higher probability to suffer from psychiatric disorders, which is also an accurate description of individuals with damaged self-esteem. Moreover, self-defeating humor can be used as a form of defensive denial to hide their negative feelings (Kuiper et al., 2004; Martin et al., 2003) which parallels the high degree of anger suppression and alexithymia of individuals with damaged self-esteem. Furthermore, we hypothesized that individuals with damaged self-esteem should be especially in need for coping strategies, such as self-defeating humor, which is often used to help mask social and personal anxieties (Martin et al., 2003). Finally, the derogatory view of the self expressed by individuals with damaged self-esteem would be highly congruent with the self-disparaging remarks (e.g., about one's own weaknesses) commonly found among those who use self-defeating humor.

## 2. Method

### 2.1. Participants

A total of 111 subjects (54 men; mainly native Austrians: 84%; Germans: 16%) volunteered to participate in the study ( $M_{\text{age}} = 29.9$  years;  $SD = 12.1$ ).

### 2.2. Measures

#### 2.2.1. Humor Styles Questionnaire (HSQ; Martin et al., 2003)

The HSQ is a 32-item instrument (1 = *totally disagree*; 7 = *totally agree*) measuring four styles of humor: affiliative ( $\alpha = .85$ ), self-enhancing ( $\alpha = .73$ ), aggressive ( $\alpha = .72$ ), and self-defeating humor ( $\alpha = .72$ ). A German version was developed, using the parallel blind technique (Behling & Law, 2000).

#### 2.3.1. Rosenberg Self-Esteem Scale (RSES; German form: von Collani & Herzberg, 2003)

The RSES is a 10-item measure of explicit self-esteem (0 = *totally disagree*; 3 = *totally agree*), with higher values reflecting higher explicit self-esteem ( $\alpha = .78$ ).

#### 2.3.2. Initial Preference Task (IPT; Kitayama & Karasawa, 1997)

The IPT is based on the name-letter effect (i.e., individuals prefer name letters over non-name letters) which is strongest for the initial letters and has been proposed as a measure of implicit self-esteem (Greenwald & Banaji, 1995). Participants rated the letters A–Z in randomized order (1 = *I don't like at all*; 7 = *I like*) twice to raise reliability (Rudolph, Schröder-Abé, Schütz, Gregg, & Sedikides, 2008; retest reliability between first and second administration:  $r_{\text{tt,first name}} = .82$ ;  $r_{\text{tt,last name}} = .77$ ). IPT effects were calculated using the *I* algorithm (LeBel & Gawronski, 2009). Furthermore, effects on the first name and last name initials were treated as separate measures (Stieger & Burger, 2010).

### 2.4. Procedure

This study was conducted as part of a larger survey on humor and aggression. Participants were recruited through a snowball sampling technique (i.e., participants from all walks of life) and were not compensated for their participation. In private settings, participants filled in the first administration of the IPT and RSES, performed several cartoon order tasks (which are not part of this study) followed by the second administration of the IPT and basic demographic questions (sex, age, nationality, initial letter of first and last name).

## 3. Results

The four humor styles showed expected intercorrelations (see Table 1). Correlations with implicit self-esteem were only found when using the first name initial in the IPT which is in line with recent research (Stieger & Burger, 2010). To test for possible interrelations between implicit and explicit self-esteem, multiple regression analyses were conducted. Explicit and implicit self-esteem scores were centered around their means and the interaction was represented by a cross-product term. Significant main effects of implicit self-esteem and/or interactions of implicit and explicit self-esteem were only revealed for the affiliative and the self-defeating humor style (see Table 2).

In order to investigate whether concordant and discrepant self-esteem types differ significantly from each other, simple slope tests were calculated (to test whether the slopes differ significantly from zero). Participants with secure high self-esteem had the highest scores on affiliative humor style which were, however, not significantly different from scores of participants with damaged ( $B = .14$ ,  $t = .58$ ,  $p = .57$ ) and fragile self-esteem ( $B = .37$ ,  $t = .58$ ,  $p = .56$ ). Participants with secure low self-esteem had the lowest scores which were significantly different from those of participants with damaged ( $B = 1.74$ ,  $t = 2.82$ ,  $p = .006$ ) and fragile self-esteem ( $B = .64$ ,  $t = 2.82$ ,  $p = .004$ ).

Participants high on self-defeating humor showed a different pattern. As expected, participants with damaged self-esteem had higher scores on self-defeating humor than participants with secure high self-esteem ( $B = -.99$ ,  $t = -4.01$ ,  $p < .001$ ; see Fig. 1) and secure low self-esteem ( $B = 1.29$ ,  $t = 2.03$ ,  $p = .045$ ). This is clearly in line with our research hypothesis.

## 4. Discussion

The present study investigated whether there is an association between self-defeating humor and damaged self-esteem (i.e., low explicit and high implicit self-esteem). Indeed, we found that participants preferring a self-defeating humor style had damaged self-esteem.

But what is the mechanism behind this? Due to the present study's correlational nature, the data do not warrant acceptance

**Table 1**  
Intercorrelations of humor styles and their associations with self-esteem (implicit, explicit).

	1	2	3	4	5	6	7
1. HSQ: affiliative							
2. HSQ: self-enhancing	.54***						
3. HSQ: aggressive	.18‡	-.01					
4. HSQ: self-defeating	.27**	.16‡	.16‡				
5. IPT first name	.22*	.10	-.02	-.04			
6. IPT last name	.03	-.02	.08	.02	.35***		
7. RSES	.23*	.29***	.04	-.20*	.05	.02	
Mean (SD)	44.9 (7.90)	35.3 (7.70)	31.9 (8.03)	26.6 (8.20)	1.17 (1.53)	.92 (1.37)	23.2 (4.23)

‡  $p < .10$  (two-tailed).

\*  $p < .05$  (two-tailed).

\*\*  $p < .01$  (two-tailed).

\*\*\*  $p < .001$  (two-tailed).

**Table 2**  
Regression analyses of humor styles and self-esteem (explicit, implicit).

	IPT first name		IPT last name	
	$\beta$	$t$	$\beta$	$t$
<i>Affiliative humor</i>				
Explicit SE	.21	2.27*	.23	2.47*
Implicit SE	.21	2.26*	.03	.31
Explicit $\times$ implicit SE	-.15	-1.6	-.02	-.23
<i>Self-enhancing humor</i>				
Explicit SE	.28	2.99**	.28	3.05**
Implicit SE	.07	.76	-.02	-.21
Explicit $\times$ implicit SE	-.03	-.33	.09	.96
<i>Aggressive humor</i>				
Explicit SE	.04	.41	.03	.33
Implicit SE	-.02	-.24	.08	.84
Explicit $\times$ implicit SE	.04	.37	.05	.47
<i>Self-defeating humor</i>				
Explicit SE	-.23	-2.51*	-.20	-2.06*
Implicit SE	-.04	-.47	.02	.24
Explicit $\times$ implicit SE	-.32	-3.49**	-.09	-.95

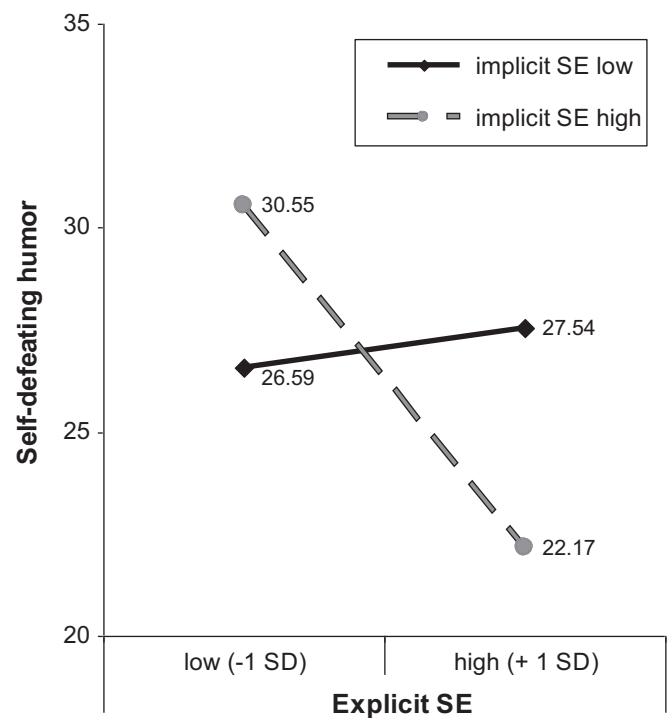
SE = self-esteem.

\*  $p < .05$  (two-tailed).

\*\*  $p < .01$  (two-tailed).

of causal inferences. It could be that the frequent use of self-defeating humor may cause individuals to develop damaged self-esteem (e.g., the use of self-defeating humor might result in a downward spiral of social rejection, resulting in lower social self-esteem; Kuiper & McHale, 2009; and thus reducing explicit self-esteem)—but it is equally possible that people use self-defeating humor as a consequence of possessing damaged self-esteem (e.g., the uncomplimentary view of self that individuals with damaged self-esteem display may foster the increased use of humor that is self-disparaging; Kuiper & McHale, 2009). A third variant could be that both self-defeating humor and damaged self-esteem are not causally connected, but may result from the influence of a third variable (Martin, 2007), such as neuroticism or alexithymia.

Furthermore, Puhlik-Doris (2004) found in a longitudinal study that self-defeating humor might exert positive stress-moderating effects and therefore help individuals with damaged self-esteem to cope with stressful life events in the short run, but might turn out to be disadvantageous in the long run (see Kuiper & McHale, 2009). This could be the reason why individuals apply another coping strategy by (unconsciously) increasing their implicit self-esteem as a form of automatic threat defense (Rudman et al., 2007). Some support for this strategy has been found for depression. Patients currently suffering from depression but *without* suicidal ideation had secure low self-esteem whereas patients with depression and suicidal ideation had damaged self-esteem (Franck



**Fig. 1.** Predicted values for affiliative and self-defeating humor styles as a function of explicit and implicit self-esteem (only first name initial).

et al., 2007). Thus, patients might have increased their implicit self-esteem as a coping strategy to deal with suicidal ideation.

Although not the focus of the present study, we found that implicit self-esteem correlated positively with the affiliative humor style constituting a main effect not an interaction effect. Participants high on the affiliative humor style had *in general* a higher implicit self-esteem independent of their level of explicit self-esteem. Thus, it remains unclear why implicit self-esteem had an additive effect on affiliative humor and an interaction effect on self-defeating humor.

The present study is certainly not without limitations. One limitation is that implicit self-esteem was measured only with a single method of measurement, the Initial Preference Task. Future research should check the robustness of our results by using other measures of implicit self-esteem. The causality of the correlations found in the present study should be examined in further research that not only uses process-oriented approaches and longitudinal designs, but also incorporates experimental manipulations to untangle how implicit self-esteem is connected to coping

strategies and humor styles. In conclusion, individual differences in humor research would greatly profit from integrating measures to assess implicit aspects of personality as has been done in the current study.

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