Dissing Oneself versus Dissing Rivals: Effects of Status, Personality, and Sex on the Short-Term and Long-Term Attractiveness of Self-Deprecating and Other-Deprecating Humor

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Abstract: This study explores the adaptive functions and design features of self- and other-deprecating humor. Sixty-four female and 32 male college students participated in a two-part study. In the first part, we examined the relationships among participant demographics, personality traits, and preferences for producing different types of humor. Men report using more other-deprecating humor than women do, and the use of other-deprecating humor decreases with age for both sexes. In the second part of the study, each participant listened to tape recordings of opposite-sex people who were described as having different levels of status, and who produced different types of humor; then participants rated each person's attractiveness as a potential short-term and long-term mate. Humor type and presenter status had no effects on short-term attractiveness, but self-deprecating humor by high-status presenters (but not low-status presenters) increased long-term attractiveness for both sexes. These results are discussed in the light of sexual selection theory and costly signaling theory.

Keywords: Humor; status; sexual selection; mental fitness indicators; costly signaling theory

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Introduction

Humor and laughter seem to have evolved as species-typical psychological adaptations in humans (e.g., Alexander, 1986; Gervais and Wilson, 2005; Miller, 2000; Weisfeld, 1993). They are universal across cultures and across history. Laughter has an early and spontaneous onset in infancy (around four months old), and similar behaviors appear in other social primates such as chimpanzees (Preuschoft and Van-Hooff, 1997; Waller and Dunbar, 2005). Humor produces distinctive emotional, cognitive, and social reactions, and is conspicuous in spontaneous human social behavior among mates, friends, and kin (Kaufman et al., 2008).

Yet, the adaptive functions and design features of humor remain obscure, and research on humor remains fragmentary and inconclusive. For example, no single theory yet can explain the diverse forms and functions of humor and laughter (Derks, 1996; R. Martin, 2007; R.A. Martin, 1998; Schmidt and Williams, 1971). While most humor research concerns jokes (with distinct "set-up lines" and "punch lines"), only about 10% to 15% of laughter in natural social contexts occurs in response to classically-structured jokes that would seem funny when repeated out of context (Provine, 2000). Rather, most laughter occurs in response to short utterances or nonverbal micro-performances during informal conversation. These might seem funny in the immediate social context, but would often seem fairly mundane or stupid if repeated later. Thus, rather than studying humor in general, it may be more productive to focus on specific types of humor used in particular social contexts.

Self-deprecating and other-deprecating humor are two of the most common types. Both seem to be universal human phenomena, present in both traditional and industrialized societies (Apte, 1985). Almost all forms of humor involve ridicule of something – a person, behavior, belief, group, or possession – at some level. Self- and other-deprecating humor is usually directed towards a specific person (oneself or another) (Harvey, 1995; Janes and Olson, 2000) – their behaviors, utterances, personality traits, competencies, social status, or sexual attractiveness. For example, self-deprecating humor often highlights – in a socially pre-emptive way – perceived deficits in one's general intelligence ("Mommy says I'm special"), personality traits ("Saturday has a morning?"), moral virtues ("If it weren't for physics and law enforcement, I'd be unstoppable"), mental health ("Some days it's just not worth gnawing through the straps"), or physical attractiveness ("I'm hung like Einstein and smart as a horse"). Self-deprecating humor often arises between potential mates during courtship, or between established mates during peace-making after relationship tensions and arguments. However, it is a risky form of humor because it can draw attention to one's real faults, diminishing the self-deprecator's status in the eyes of others (Lundy, Tan, and Cunningham, 1998). Based on the idea that verbal humor evolved to function as a fitness indicator, we hypothesize that expert use of self-deprecating humor can be an especially risky, reliable indicator not only of general intelligence and verbal creativity, but also of moral virtues such as humility (Miller, 2007).

Other-deprecating humor – colloquially known as "dissing" (from "disrespecting") – often arises in situations of sexual rivalry, in which one individual pokes fun at the deficiencies in a same-sex rival's fitness indicators, such as their health, intelligence, or status (Miller, 2000). It is also a risky form of humor, because it can be taken as a serious insult rather than a harmless joke (which can lead to physical aggression or even a homicide 'arising from a trivial altercation' – Daly and Wilson, 1988). Many mental illnesses reflect impaired neuro-developmental stability and impaired socio-cognitive functioning (Keller and Miller, 2006), and mental illnesses generally impair verbal creativity and humor production ability (Kaufman et al., 2008; Miller and Tal, 2007; Shaner, Miller, and Mintz, 2008). So, the use of other-deprecating humor by individuals with mental illnesses – even minor personality disorders – probably runs a higher risk of provoking physical or reputational retaliation from the deprecated.

The frequent use of self- and other-deprecating humor in sexual contexts (with potential mates, established mates, or sexual rivals), plus the sometimes high costs and high failure rates of deprecating humor, suggests that it might be best understood from the

viewpoint of costly signaling theory (Zahavi, 1975; Zahavi and Zahavi, 1997) and sexual selection theory (Buss, 2003). In these regards, humor resembles many other distinctive human capacities, such as language, morality, creativity, art, and music, which may have been favored by sexual selection through mutual mate choice (Miller, 2000). These abilities may function as hard-to-fake mental fitness indicators that reveal genetic quality (Miller, 2000), neurodevelopmental stability (Prokosch, Yeo, and Miller, 2005), intelligence (Miller and Penke, 2007), and mental health (Shaner, Miller, and Mintz, 2008). Humor may have arisen through similar selection pressures to serve a similar sexual-courtship and sexual-competition functions (Kaufman et al., 2008).

Many studies show that sense of humor is sexually attractive, especially to women (e.g., Buss, 1988; Feingold, 1992; Lundy, Tan, and Cunningham, 1998; Sprecher and Regan, 2002). For example, studies on newspaper personal ads show that women are more likely to say they seek a mate with a sense of humor than men are (Smith, Waldorf, and Trembath, 1990). Conversely, men are more likely to tell jokes than women, and women are more likely to smile and laugh during conversations, especially in response to male speakers (Crawford and Gressley, 1991; Provine, 2000). A recent study informed by sexual selection theory also found that, while females prefer a male mate who makes them laugh, males prefer a female mate who appreciates their sense of humor (Bressler, Martin, and Balshine, 2006). This sex difference in humor production versus appreciation has a fairly early onset: McGhee (1976) found that by middle childhood (ages 6-11), boys try significantly more often than girls to initiate humor, both verbally and non-verbally. Further, Fuhr (2001) found that Danish adolescents aged 12-17 who often produce a funny joke or remark were generally rated as having higher status, and the highest-status individual (a boy) among all the boys and girls in a school was the most frequent producer of humor.

Within this mate choice context, self-deprecating humor seems especially attractive under certain conditions. Physically attractive people who used self-deprecating humor were more desirable as mates – especially if they were men (Lundy, Tan, and Cunningham, 1998). Humor also seems to play an important role in human intra-sexual competition. People use humor to derogate, denigrate, insult, embarrass, and ostracize their sexual rivals, while minimizing the risks of physical retaliation.

The status of the humor producer may modulate the sexual and social attractiveness of humor, especially self-deprecating and other-deprecating humor. Since women generally prefer higher-status males (Buss, 2003), they might be especially attentive to humor production by high-status males, and there may be positive interaction effects between status and humor production ability, as there are between status and kindness (Aronson, Willerman, and Floyd, 1966; Jensen-Campbell, Graziano, and West, 1995). A study conducted among psychiatrists and other staff members in a psychiatric hospital supports the notion that high ranked men use humor to retain and reinforce their status and use it against subordinates in (Coser, 1960). However, it is unclear whether high status men use humor more effectively to gain and maintain their status, or if their humor is perceived as funnier because they already have higher status.

This study aims to clarify the roles of self-deprecating and other-deprecating humor in human sexual selection, by investigating their use and influence on attractiveness as a function of the humor producer's sex, status, and personality traits. Since women are generally the choosier sex, we expect them to pay more attention to diverse cues of mate

quality, including both status and humor production ability. Thus, male use of self-deprecating and/or other-deprecating humor may be more sexually attractive to women than vice-versa. We also hypothesize, based on the logic of costly signaling theory, that self-deprecating humor by otherwise high-status potential mates may be more attractive than self-deprecating humor use by otherwise low-status potential mates. Conversely, other-deprecating humor use by high-status potential mates may be less attractive than other-deprecating humor use by low-status potential mates.

Knowledge of the connection between the signaler and the message is imperative to understand why the self-deprecation can only enhance the attractiveness of high-status individuals and not others. Anyone can imitate the phenotypic expression of desirable traits that they think can benefit them. People evaluating these behaviors do not usually separate the signal from the signaler. Thus, the signal itself is embodied not in the message, but in the signaler. Therefore, when people see or hear a person using self-deprecating humor they inevitably interpret it based on their knowledge about that person.

Finally, we thought that, insofar as the "Big Five" human personality traits may implement different status-seeking and sexual strategies (Nettle, 2006; Penke, Denissen, and Miller, 2007), they may predict differential use of self-deprecating humor, other-deprecating humor, and other forms of humor. We also used the Humor Styles Questionnaire that assesses participants' sense of humor on four different scales (Martin, Puhlik-Doris, Larsen, Gray, and Weir, 2003). These styles include two positive humor styles (affiliative and self-enhancing humor) and two negative ones (other and self-deprecating humor). People's own sense of humor may have an effect on how they perceive others' humor and therefore need to be controlled. In addition, the positive humor styles tend to be positively correlated with extraversion and openness, while the negative styles negatively correlate with agreeableness and conscientiousness and positively correlate with neuroticism (Martin, Puhlik-Doris, Larsen, Gray, and Weir, 2003).

Materials and Methods

Participants

Students from introductory Psychology courses at the University of New Mexico participated in this study. The 64 female participants (mean age = 20.0 years, *SD* = 2.3) and 32 male participants (mean age = 21.2, *SD* = 5.5) received partial course credit for participation.

Procedures

Up to 10 participants sat in a room for each session of the experiment. For the first part of the experiment, the participants completed several questionnaires. These included: (1) a basic demographic inventory, (2) the NEO-FFI-R survey (Costa and McCrae, 1992) of the "Big Five" personality traits (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism), and (3) the Humor Styles Questionnaire (HSQ) (Martin, Puhlik-Doris, Larsen, Gray, and Weir, 2003), which uses 32 Likert-scale items to assess participants' preferences for four types of humor production: affiliative humor (sharing humor to enhance social bonds), self-enhancing humor (using humor to maintain self-esteem and cope with stress), other-deprecating humor (using humor to

disparage others; hostile and offensive humor), and self-deprecating humor (making fun of oneself).

For the second part of the experiment, each participant was given an individual Walkman with ear-covering headphones and a particular cassette tape, depending on their sex and the counter-balanced condition they were in. The separate tapes and headphones were intended to minimize the effects of contagious laughter, which affects people's reactions to humor, and which might confound the results (Provine, 1992). Male participants listened to two successive female presenters, each giving a brief (1-minute) performance; female participants likewise listened to two successive male presenters. (Presenters were drama students from the theatre department at the University of New Mexico). Neither the readers nor the listeners were aware of the hypotheses of the study.

Before the first performance, participants read a brief printed description of the presenter as an opposite-sex college student of either high status (having a high GPA, owning a car, and with parents having high status jobs) or low status (having a low GPA, owning a bicycle, and with parents having low-status jobs) (see Appendix A for full descriptions); this status manipulation was adapted from Weaver, Fisher, Ehney (2002). After reading this description, the participant pressed "play" on his or her Walkman and listened to the first performance.

Each performance consisted of an anecdotal story told by the presenter as if it had happened to him or her. Each story was one of four humor types (see Appendix B for examples): a self-deprecating joke, an other-deprecating joke, a non-deprecating joke, or a non-humorous story about a personal experience with nature. All stories were adopted from the routines of popular stand-up comedians, and were of very similar word-count and time-length. (Before the study, three male and three female judges independently rated each performance for funniness; all three humor types were perceived as equally funny, and funnier than the non-humorous story.)

After listening to the first performance, the participant pressed "stop" on his or her Walkman, and completed 19 Likert-scale items concerning that performance. The first two items were manipulation checks: participants rated the presenter's funniness and status. The middle 15 items concerned other aspects of the presenter's apparent mate value (e.g., intelligence, physical attractiveness). The last two items asked participants to rate how attractive they thought the presenter was as a possible short-term or long-term sexual partner (1 – *not very attractive* to 9 – *very attractive*).

After rating the first presenter, participants read a similar printed description of the second presenter's status, pressed "play", listened to a second performance (also one of four story types), pressed "stop", and completed the same 19 Likert-scale items to rate the second presenter's funniness, status, mate value traits, and attractiveness as a short-term and long-term sexual partner.

Statistically, the study used a 4x2x2x2 between-subject mixed design. The four factors were: (1) type of humor (self-deprecating humor, other-deprecating humor, non-deprecating humor, or non-humorous story); (2) status of the presenter (high or low); (3) sex of the presenter (male or female); (4) the presenter's order (first or second). Humor type, status, and presenter's sex were fixed effects, while the presenter order was a random effect.

Results

Sex differences in personality and humor scales

Table 1 shows sex differences in the "Big Five" personality traits and humor scales. These data are consistent with previous studies showing that women score higher than men on openness and neuroticism, while men score higher than women on use of other-deprecating humor (Martin, Puhlik-Doris, Larsen, Gray, and Weir, 2003).

Table 1. *Sex difference in personality and humor scales*

		Mean	*SD*	Median	Scale Range
Big Five Personality Traits					
Openness*	Male	9.59	9.62	11.50	-36 to 36
	Female	13.76	10.26	13.00	-36 to 36
Conscientiousness	Male	12.56	10.36	13.50	-36 to 36
	Female	15.02	11.41	14.50	-36 to 36
Extraversion	Male	13.81	9.89	14.00	-36 to 36
	Female	12.77	11.76	14.00	-36 to 36
Agreeableness	Male	5.34	10.14	4.50	-36 to 36
	Female	7.93	10.73	8.50	-36 to 36
Neuroticism*	Male	-4.94	10.17	-6.00	-36 to 36
	Female	0.21	12.48	0.00	-36 to 36
Humor Styles					
Self-deprecating	Male	27.84	8.84	28.00	8 to 56
	Female	27.20	9.95	25.00	8 to 56
Other-deprecating*	Male	32.09	7.52	32.50	8 to 56
	Female	28.46	8.43	28.50	8 to 56
Affiliate	Male	48.03	4.51	49.00	8 to 56
	Female	46.35	7.28	48.00	8 to 56
Self-enhancing	Male	40.28	6.90	40.50	8 to 56
	Female	38.17	9.40	40.00	8 to 56

* significant sex difference at $p < .05$

Table 2 shows the overall correlations between "Big Five" personality traits and humor scales (See Table 2). The correlations in this table are for all participants, but for the most part, were consistent with the correlations computed for each sex alone. Conscientiousness was positively correlated with use of self-enhancing humor ($r = +.25$, $p < .01$) and negatively correlated with use of self-deprecating humor ($r = -.22$, $p < .05$). Extraversion was positively correlated with affiliative humor ($r = +.52$, $p < .01$) and self-enhancing humor ($r = +.30$, $p < .01$), and negatively with self-deprecating humor ($r = -.29$, $p < .01$). Agreeableness was negatively associated with other-deprecating humor ($r = -.49$, $p < .01$) and self-deprecating humor ($r = -.22$, $p < .01$). Neuroticism was negatively correlated with affiliative humor ($r = -.28$, $p < .01$) and self-enhancing humor ($r = -.40$, $p < .01$), and positively with self-deprecating humor ($+.42$, $p < .01$). Thus, use of other-deprecating humor was associated with lower than average agreeableness, whereas use of self-deprecating humor was associated with lower than average conscientiousness, extraversion, and agreeableness, and higher than average neuroticism. Also, though not indicated in the table, the correlation between other-deprecating humor and age was $-.44$ ($p < .02$) for males, $-.17$ ($p = .17$, ns) for females, and $-.23$ ($p < .05$) for both sexes combined.

Table 2. *Correlations among "Big Five" personality traits and humor scales*

"Big Five" traits	2	3	4	5	6	7	8	9
1. Openness	-.13	+.04	+.02	+.05	+.15	+.03	-.19	+.11
2. Consc'ness		+.23*	+.05	-.19	+.19	+.25**	-.14	-.22*
3. Extraversion			+.09	-.38**	+.52**	+.30**	+.10	-.29**
4. Agreeableness				-.27**	+.01	+.01	-.49**	-.22**
5. Neuroticism					-.28**	-.40**	-.01	+.42**
Humor type								
6. Affiliative						+.42**	+.22*	-.05
7. Self-enhancing							+.12	-.02
8. Other-deprecating								+.21*
9. Self-deprecating								

* significant at $p < .05$
** significant at $p < .01$

Manipulation checks

To see if the manipulations of status and humor type worked, we ran a general linear model with status, humor type, and sex as factors. Results showed that participants rated the presenters described as high status as having higher status than the presenters described as low status (means 6.54, $se = .19$ vs. 4.25, $se = .19$ on the 1-9 scale, $p < .001$). Humor ratings showed that both male and female participants rated the non-humor condition as less funny that the humor conditions (males: means 2.56, $se = .58$ vs. 4.56, $se = 0.58$ on the 1-9 scale, $p < .0001$; females: means 2.56, $se = .58$ vs. 4.76, $se = 0.58$ on the 1-9 scale, $p < .0001$).

Presenter effects

Variance components analysis was performed for each dependent variable in the mate value questionnaire. A Restricted Maximum Likelihood Estimate analysis was

performed using the Mixed procedure in SAS. The analysis was performed separately for males and females, since each had two different presenters. In all analyses, the estimated variance for the presenter effect was close to zero, meaning it had no effect. Specific male or female presenters did not significantly affect participant responses.

Do humor type and presenter status influence mate attractiveness?

To test whether humor type and presenter status influence mate attractiveness, we ran a general linear model using the mixed procedure in SAS, with humor type, presenter status, and sex as fixed effects, and participants and presenters as random effects. All possible interactions were included in the model as well.

Humor type, presenter status, and presenter sex all had significant main effects on participants' rated interest in developing a long-term relationship with the presenter [humor, $F(3,174) = 12.96$, $p < 0.0001$; status, $F(1,174) = 4.25$, $p < 0.05$; sex, $F(1,174) = 4.63$, $p < 0.05$]. There was an interaction between humor type and presenter status [$F(3,174) = 3.13$, $p < 0.05$]. No effects were found for participants' rated interest in having a short-term sexual relationship with the presenter. Figure 1 shows the mean estimates of long-term attractiveness by humor type and presenter status, across all participants of both sexes.

Figure 1. Mean estimates of long-term attractiveness (on a 0-8 scale) by humor type and presenter status, across all participants.
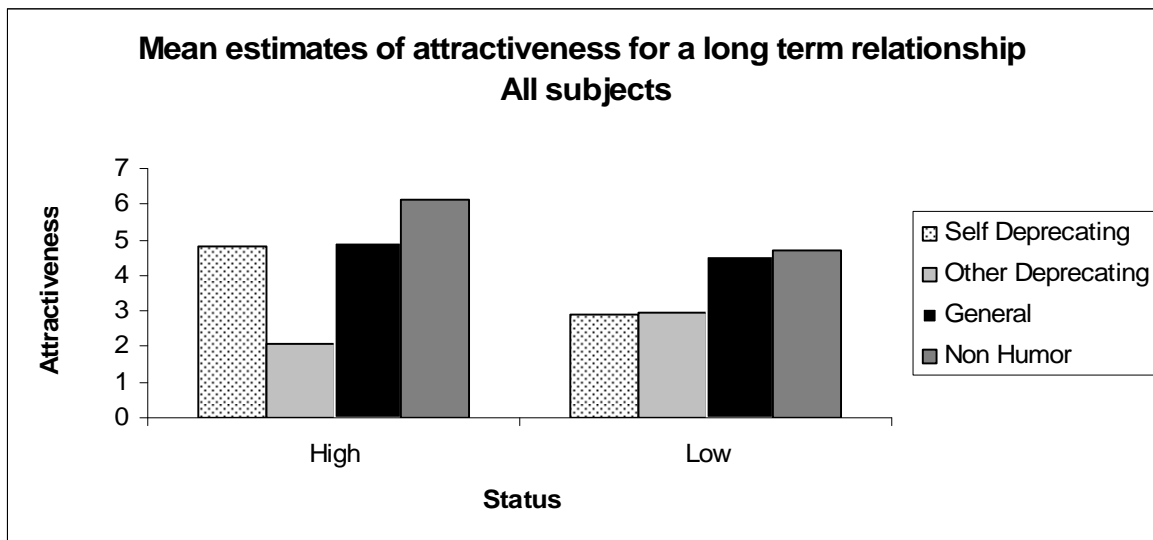

Planned post hoc tests were conducted to determine if there was a difference in long-term attractiveness between self- and other-deprecating humor for each level of presenter status. For high-status presenters, long-term attractiveness was significantly higher when the presenters used self-deprecating humor rather than other-deprecating humor ($t(174) = 3.94$, $p < .0001$). However, for low-status presenters, self-deprecating vs. other-deprecating humor had no significant effect on their long-term attractiveness ($t(174) = -0.04$, $p = .96$).

Since participant sex had a significant main effect on rated long-term attractiveness, we also analyzed the effects of humor type and presenter status separately for male and female participants. We ran the mixed procedure with humor type and presenter status as

fixed effects, and participants and presenters as random effects, and including the interaction between humor type and presenter status.

For male participants, humor type had a significant main effect on long-term attractiveness ($F(3,54) = 4.64$, $p < .001$), but presenter status had no main effect ($F(1,54) = 0.30$, $p = .59$). The interaction between humor type and presenter status was significant ($F(3,54) = 2.92$, $p < 0.05$). Planned post hoc tests revealed that males gave significant higher long-term attractiveness ratings to high-status female presenters who used self-deprecating rather than other-deprecating humor ($t(54) = 3.37$, $p < .05$). There was no such difference for low-status female presenters ($t(54) = -0.33$, $p = .75$). Figure 2 shows the mean long-term attractiveness ratings by male participants as a function of humor type and (female) presenter status.

Figure 2. Mean estimates of long-term attractiveness (on a 0-8 scale) by humor type and presenter status, for male participants.
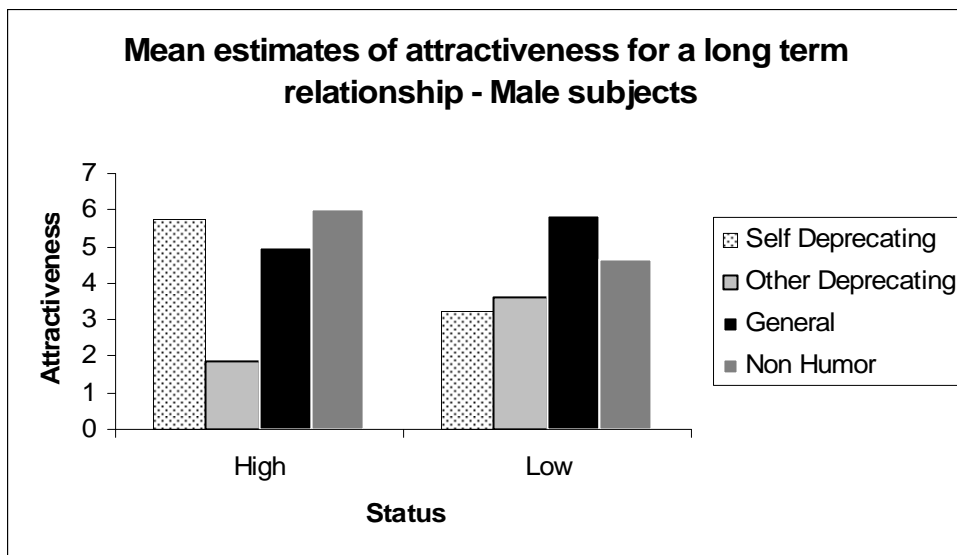
For female participants, humor type had a significant main effect on long-term attractiveness ($F(3,118) = 11.79$, $p < .0001$). Status of the male presenter also had a significant main effect on long-term attractiveness ($F(1,118) = 7.89$, $p < 0.01$). The interaction between humor type and presenter status was not significant overall ($F(3,118) = 0.91$, $p = .44$). However, the planned post hoc comparison did show that female participants gave higher long-term attractiveness ratings to high-status males using self-deprecating humor, compared to high-status males using other-deprecating humor ($t(118) = 2.03$, $p < .05$). Figure 3 shows the mean long-term attractiveness ratings by female participants as a function of humor type and (male) presenter status.

Figure 3. Mean estimates of long-term attractiveness (on a 0-8 scale) by humor type and presenter status, for female participants.
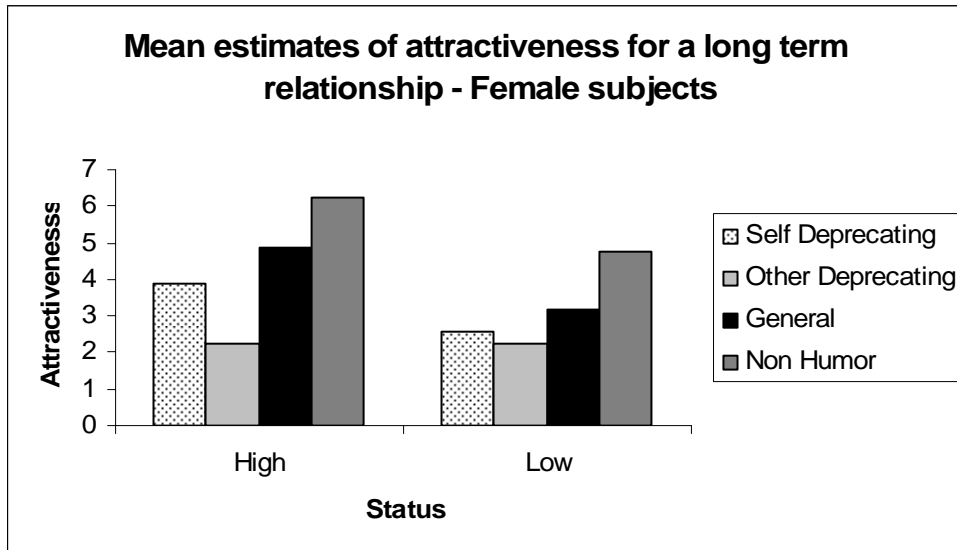
Since people react differently to humor, it may be important to control for how funny the participants perceived the presenter to be. Despite the initial tests finding that people perceived the humor conditions to be funnier than the non-humorous nature story, participants in the main study showed substantial variability in the rated funniness of the different humor types. To investigate whether rated funniness might mediate the results reported above, we ran a mixed model that included humor type, presenter status, participant sex, and rated funniness as fixed variables, and participants and presenters as random variables. We performed the same tests as above with the funniness ratings included. The results were robust, and while there were a few minor differences, the overall trends remain the same: both men and women give higher long-term attractiveness ratings to potential mates who use self-deprecating rather than other-deprecating humor – but only if the potential mate was described as having high status.

Discussion

This study aimed to apply sexual selection theory and costly signaling theory to better understand self-deprecating humor and other-deprecating humor. Specifically, we used a questionnaire to investigate how sex and the Big Five personality traits influenced use of self- versus other-deprecating humor. We also used audio recordings to investigate how the described social status of the humor-produced interacts with the type of humor used, to influence rated sexual attractiveness for short-term and long-term relationships.

With regard to sex differences, women showed higher average openness and neuroticism than men – a finding consistent with previous personality research. The only sex difference in self-reported use of the four different humor types (self-deprecating, other-deprecating, afffiliative, and self-enhancing) was that males reported using more other-deprecating humor than women – a finding consistent with Martin et al. (2003).

With regard to the Big Five personality traits, use of self-deprecating humor was associated with lower than average conscientiousness, extraversion, and agreeableness, and higher than average neuroticism. Use of other-deprecating humor was associated with lower than average agreeableness ($r = -.49$, $p < .01$). This substantial correlation between disagreeableness (competitiveness, dominance) and other-deprecating humor, combined with higher average male disagreeableness, might explain the sex difference in use of other-deprecating humor. However, in our sample, the sex difference in agreeableness was not significant, and not sufficient to explain the sex difference in other-deprecating humor. Perhaps males are especially motivated to use other-deprecating humor under conditions of sexual rivalry, especially in young adulthood. Consistent with this view, use of other-deprecating humor declined with age (within the age-range of our participants, 18-30), especially among men. More mature men, especially those of higher status, may learn that other-deprecating humor is too physically risky and insufficiently attractive to women. Younger male use of other-deprecating humor may be a symptom of generally higher risk-taking associated with "young male syndrome" (Buss, 2003). Future studies, with a larger age range are needed to examine the role of age in using humor as an intra-sexual rivalry tactic.

The second part of the study, based on audio recordings, aimed to test how presenter status, humor type, and the status-by-humor-type interaction would influence rated sexual attractiveness. One issue concerns the various types of stories used. The focus of this study was to estimate the differences between self and other deprecating humor. The general humor condition and the non-humor scenario were added as controls. Unfortunately, these controls were less effective than expected, and participants perceived them differently than planned. This is especially true if we look at the differences between all three humor conditions and the neutral story. The humor scenarios consisted of short anecdotes and subsequently may have little connection to real life experiences that participants could relate to. The non-humor condition, on the other hand, consisted of one long story, that was created specifically for the study, and seems to be more realistic in nature. Therefore, participants may appreciate more the novelty or the creativity of it, where in the humor conditions they might have heard some of the jokes before. Although the presenters were instructed to portray all conditions the same, it seems that they unintentionally presented the nature story slowly and more passionately.

We found no main effects or interactions for rated short-term sexual attractiveness. (Our status manipulation focused on college grades, vehicles owned, and parental socio-economic background, so it may have been much more salient for long-term mate choice than for short-term mate choice – see Appendix A). However, there were strong main effects and interactions in predicting long-term sexual attractiveness. In particular, self-deprecating humor was much more attractive than other-deprecating humor when used by high-status potential mates, for both male and female raters. When used by low-status potential mates, there was little difference in long-term attractiveness between self- and other-deprecating humor.

We theorize that high-status individuals can more easily afford to make fun of themselves. Self-deprecating humor for them may be a form of self-handicapping, following the logic of costly signaling theory (Zahavi, 1975; Zahavi and Zahavi, 1997). All else being equal, use of self-deprecating humor is associated with lower conscientiousness, extraversion, agreeableness, and emotional stability (the opposite of neuroticism), and

lower levels of these traits are normally considered unattractive. Thus, the use of self-deprecating humor by low-status individuals may be counter-productive, suggesting depression, defeatism, subordination, low self-esteem, and/or low mate value. On the other hand, if an individual has achieved high social status, they are unlikely to have truly low conscientiousness, extraversion, or emotional stability, and they must show reasonable agreeableness often enough to make friends and win support. Thus, self-deprecating humor may be a way of transiently faking inferior personally traits, to highlight the discrepancy between the faked traits (e.g., introversion, neuroticism) and the traits actually required to win high status. Also, the use of other-deprecating humor by high-status individuals may be perceived as unjust ridicule or egocentric gloating, and hence less attractive. Those with high status can lose status when they mock their inferiors, whereas those with low status can gain status when they mock their superiors.

These interactions between status and humor type seem especially strong when males are rating females. High-status women are especially attractive as long-term mates when they use self-deprecating humor, and are especially unattractive when they use other-deprecating humor. In general, males do not pay much attention to female status in mate choice (Buss, 2003), but the interaction of female status and female use of humor seems quite salient to males, and deserving of further research.

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Appendix A. Status manipulation

High status condition: male (female) versions

The person that you are about to listen to is a law student. His (her) grade point average is 3.8, and he (she) is the president of the pre-law association and is an honor student. He (she) lives in his own apartment and owns his (her) own car that he (she) uses to commute to and from school. His (her) father is a successful CEO in a Fortune 500 company, and his (her) mother is a lawyer.

Low status condition: male (female) versions

The person that you are about to listen to is a college student with an undecided major. His (her) grade point average is 2.1. For some time he (she) thought of joining the military to support his (her) studies, but he (she) decided to apply for financial aid to help pay his tuition. He (she) rents a house with two other roommates. He (she) doesn't have a car, and rides a bike to school every day. He (she) works as a cashier in a grocery store. His(her) father works as a mechanic, and his (her) mother works as a waitress.

Appendix B. Sample anecdotes

Sample self-deprecating humor items

When I was born, I was the ugliest child in the world! Oh, please! The doctor looked at me and slapped my mother... My parents hated me. They said why can't you be like the girl next door? We lived next door to a cemetery.

I hate this "to be continued" on TV. I was watching this show with a friend of mine the other day and I felt it was coming. We were into the story and when there was 5 minutes left you realize they can't make it! There is no way to wrap it up in 5 minutes. The whole reason to watch a TV show is because it ends. If I wanted a long, boring story with no point to it I got my life.

Other-deprecating humor items

I have a friend that is so ugly, when she was born, she was the ugliest child in the world! Oh, please! The doctor looked at her and slapped her mother... Her parents hated her. They always asked her, "Why can't you be like the girl next door?" They lived next door to a cemetery.

I hate this "to be continued" on TV. I was watching this show with a friend of mine the other day and I felt it was coming. We were into the story and when there was 5 minutes left you realize they can't make it! There is no way to wrap it up in 5 minutes. The whole reason to watch a TV show is because it ends. I told my friend that if I wanted a long, boring story with no point to it I got his life.

General (non-deprecating) humor items

Buying clothes is always tricky, but when there's loud music playing, it really throws your judgment. You look at stuff like, "Hey, if there was a cool party and I was a cool guy, this

might be a cool shirt." You get it home, there is no music, there's no party, and you're not a cool guy. You're the same chump, 75 bucks lighter.

Talking about clothes, I once had a leather jacket that got ruined in the rain. Now why does moisture ruin leather? Aren't cows outside a lot of the time? When it's raining, do cows go up to the farmhouse, "Let us in! We're all wearing leather! Open the door! We are going to ruin the whole outfit here!

Non-Humor Item
I thought I wanted to be alone in the quiet of nature. I left camp and walked around these woods for 15 minutes searching for the perfect spot, but when I finally stopped and looked around, I could see all the plants and trees and insects and animals. There was a little stream nearby. I didn't know how far it stretched in either direction, and it wasn't moving very fast, but I knew there must have been thousands of creatures living in it.