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The Significance of Gender, Context, and Contingent Self-Esteem on Feelings of Schadenfreude

Honors Psychology Thesis

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**Abstract**

Schadenfreude, which loosely translates to “taking pleasure in the misery of others,” has been found in previous research to result from situations in which an individual of the same sex as the subject is to blame for his/her hardship. In addition, there is evidence towards the connection between variable self-esteem and high experience of schadenfreude. This study tests the two effects in survey form through vignettes about a “friend” in two different settings: competition in the classroom and social status at a bar. The results show that schadenfreude is mainly a result of deservingness of the subject, but is felt more strongly in certain situations depending on sex of the participant, context of the situation, sex of the protagonist, and level of contingent self-esteem.

## I. Introduction

The German word *schadenfreude*, which loosely translates to “pleasure derived from another’s misfortune,” describes the positive emotion we sometimes find ourselves feeling when things go badly for other people. While English-speaking countries have generally adopted this word, there is no actual equivalent in our language. The closest emotion-related word that we have in English is “gloating,” although this does not capture the inward, often hidden nature of *schadenfreude*. But what leads us to feel this way? And what purpose may it serve? To fully understand, there are several aspects of emotional appraisal that must be examined.

### Appraisal Theory

Appraisal theories of emotions outline what leads us to feel a specific emotion in a certain situation (Lazarus and Smith, 1990). All emotions, but particularly negative ones, help us to understand what is happening in our present state and what needs to be done to maintain or change it. This phenomenon has an adaptive function. Emotions such as anxiety can be warning signs when something is a threat. At the same time emotions such as pride can be positive reinforcers to continue with a certain behavior.

There are two different models that make up appraisal theory: the structural model and the process model. Each model has two components or stages: the primary and secondary stages of the structural model and associative processing and reasoning for the process model (Smith and Kirby, 2000). Primary appraisal in the structural model is the evaluation of well-being. After the initial assessment of potential danger or threat, the secondary appraisal stage determines how the emotion is experienced. Several facets of information including attribution,

coping (both emotional-focused and problem-focused), and expectation can change the way the situation is interpreted, even though the stimuli stay the same.

The process model accounts for the speed at which emotions can appear and/or change. Associative processing requires little attention and explains the use of schema in emotional appraisal. Individuals rely on past experiences to assess new situations and stimuli, thereby creating a “short-cut” to emotions. Reasoning, on the other hand, involves more focus and describes the slower process of building up to an eventual emotion, as can happen when one is unsure of how to react to novel stimuli and is consciously reasoning through past events by which to compare the situation.

### **Appraisal and Schadenfreude**

Several concepts in appraisal theory are relevant to the study of schadenfreude. As previously stated, slight changes in a situation lead to different appraisals and subsequently different emotional experiences (Lazarus and Smith, 1990). For example, when people receive praise for something they have accomplished, they might feel pride, where as when people receive praise due to the help of others, they may experience gratitude. This slight modification in attribution leads to a very different emotion, with different actions and patterns associated with it.

In the context of schadenfreude, blame attribution and deservingness in a situation are leading indicators of whether or not an individual experiences schadenfreude (van Dijk et al., 2005, 2008). Previous research shows that those who are believed to be at fault for or deserving of their misfortunes elicit more schadenfreude from subjects than those who are perceived as being blameless and undeserving. For example, a student who fails a test because he did not

study elicits more schadenfreude than a student who fails a test even though he studied all night. Such change in attribution changes the situation and causes the subject to feel sympathy or empathy towards the “blameless” individual, as opposed to schadenfreude towards the “deserving” one. In general, schadenfreude is primarily appraised as being relevant to the self, but not a threat, and then secondarily appraised as congruent to goals (subjectively positive in internal feeling), accountable to others, and temporary or changeable in future expectancy.

### **Factors affecting Schadenfreude**

An additional aspect of schadenfreude is skill level. Those perceived as being highly skilled in the facet of life in which they fail are more likely to elicit schadenfreude than those who come upon misfortune in an area where they are unprepared (van Dijk, et al., 2006). For instance, an English professor who misspells a word on the chalkboard elicits more schadenfreude than a middle school student who does the same. Again, sympathy as opposed to schadenfreude, is generally the resulting emotion in such situations where the individual is unskilled.

### **Schadenfreude and Gender**

Schadenfreude appears to be tied strongly to gender in a few different aspects. First, it has been observed that more schadenfreude occurs within the same-sex group, as opposed to the opposite sex, when examining a situation of misfortune (van Dijk et al., 2008). In this way, a female feels more schadenfreude in reference to the misfortunes of other females and less in reference to a male colleague in the same situation. Men display the same pattern. Envy also plays a role in terms of gender and schadenfreude. While envy is associated with schadenfreude,

it is only an elicitor when the unfortunate individual is of the same sex as the test subject (van Dijk et al., 2006). These results hint that schadenfreude as a result of envy is only applicable in situations of relative social comparison. Such research shows that it is possible that schadenfreude is caused by different circumstances based on male and female values. Thus, it is likely that women experience schadenfreude in different situations than men, particularly in reference to social versus achievement-based conditions.

### **Schadenfreude and Self-Esteem**

An important upcoming area of research on schadenfreude examines its relation to self-esteem. Research shows that self-esteem is a motivator of schadenfreude, but it is dependent on the nature of the self-esteem (van Dijk et al., 2008). Previous studies have shown differences between regular high and low self-esteem and the state-stability of self-esteem (Kernis, Cornell, & Sun, 1993). Among high self-esteem individuals, those who were less state-stable showed more acceptance and positive feelings towards positive feedback and more rejection and defensiveness towards negative feedback than those who were high on state-stability. In low self-esteem individuals, state-stability had no effect on reactions to positive feedback but predicted more acceptance and less defensiveness towards negative feedback. This study shows that it is not just high or low self esteem that predicts reactions to positive or negative events, but state-stability of self-esteem as well.

In reference to schadenfreude, general findings show that threats to self-evaluation elicit more schadenfreude than non-threats (van Dijk et al., 2008). Furthermore, in threatened individuals, schadenfreude is lessened by the presence of an alternative solution of increasing self-image. Lastly, schadenfreude is shown to be associated with enhanced feelings towards the

self. In combination, these studies show that schadenfreude is elicited to help protect self-esteem and does, in fact, have a positive effect to that point. However, prior to this study, there was no exact research examining the effects of contingent (as opposed to general) self-esteem in relation to schadenfreude.

### **Hypotheses and Expected Results**

For this study, I explored three different aspects of schadenfreude in combination with contingent self-esteem. I looked at blame vs. no blame, social situations vs. achievement situations, and male vs. female subjects, both in reference to the protagonist and the participant taking the survey. In addition, I looked at the effects of schadenfreude and relationship to the individual. The study was in survey form, starting with a randomized vignette containing a hypothetical situation about a friend, followed by a series of questions assessing schadenfreude and associated emotions (van Dijk et al., 2008), and concluding with measures of self-esteem including the Rosenberg Self-Esteem scale (Rosenberg, 1965) and the Contingent Self-Esteem scale (Kernis, Cornell, & Sun, 1993). I expected to see results consistent with previous research in the aspects of blame and same-sex versus opposite-sex situations, but I hoped to see a different effect of gender on situational aspects. Namely, I hypothesized that males would feel more schadenfreude in situations of achievement than female subjects, and that females would feel more schadenfreude in social situations than male subjects. In addition, I speculated that the subject of the vignette as a “friend” would yield slightly lower results of schadenfreude for females than for males, due to the preference girls have for in-group belongingness and personal relationships. In terms of self-esteem, I expected to see higher ratings of schadenfreude in individuals who were both high on contingent self-esteem and low in self-esteem in general.

Furthermore, the overarching goal of the study was to confirm the existence and prevalence of schadenfreude in American culture, as almost all of the major studies on this topic have been done in European cities where the term is both better-understood and less “taboo” in nature.



## II. Method

### Participants

Participants in the experiment were Vanderbilt college students ages 18-22. The subjects in the study were compensated with SONA credit in order to complete their requirements for a psychology class or receive extra credit. Participants were not screened for race or SES, but were separated by gender when computing the results.

Participants per variable:

		Value Label	N
protagonist in story male or female	1	male	48
	2	female	62
situational context	1	achievement	51
	2	social	59
blame condition	1	blame	52
	2	no blame	58
participant sex	1	male	49
	2	female	61

Participants per vignette:

	N
1 – B/AC/M	10
2 – NB/AC/M	11
3 – B/S/M	15
4 – NB/S/M	13
5 – B/S/F	14
6 – NB/AC/F	17
7 – B/AC/F	13
8 – NB/S/F	18

### Measures

The experiment was in online survey form, which was completed on the participant's own time on their personal computer. The survey was composed of questions from van Dijk's schadenfreude scale, the Rosenberg Self-Esteem Scale, the LOT-R, the Contingent Self-Esteem

Scale, the Perceived Competence Scale, and the Life Satisfaction Scale (Appendix A-F). The reliabilities are as follows:

The RSE demonstrates a Guttman scale coefficient of reproducibility of .92, indicating excellent internal consistency. Test-retest reliability over a period of 2 weeks reveals correlations of .85 and .88, indicating excellent stability (Rosenberg, 1965).

In the van Dijk Schadenfreude Scale, Cronbach alphas for the four envy items, three dislike items, five Schadenfreude items, three sympathy items, three responsibility items, and four deservingness items were .77, .85, .87, .85, .97, and .94, respectively, indicating high internal consistency for each scale (van Dijk et al., 2005).

The Cronbach alpha for the LOT was 0.82, indicating high consistency (Scheier, Carver, & Bridges, 1994).

The Cronbach alpha for the Perceived Competence Scale was 0.90, indicating high stability (Smith, Wallston, & Smith, 1995).

For the Life Satisfaction Scale, the two-month test-retest correlation coefficient was .82, and coefficient alpha was .87, indicating high reliability (Diener, Emmons, Larsen & Griffin, 1985).

For the Contingent Self-Esteem Scale, the Cronbach alpha was 0.91, indicating high stability (Kernis, Cornell, & Sun, 1993).

A consent form was signed before the experiment and a debriefing sheet was distributed after.

## **Design**

The survey was a 16-cell design (8 possible scenarios separated and compared by gender) and composed of several parts. Potential participants were told that they were signing up for a study on social psychology and emotional reaction, but were not told exactly what the goal of the

study was until the debriefing. Upon signing up, the participant was randomly assigned one of eight possible conditions. Each survey was set up in the same general order, although the actual order of the questionnaire questions were randomized to prevent confound variables.

**Procedure:**

After signing the consent form, the participant was instructed to start the survey. All directions were provided in the survey. Initially, there was a gender question (i.e. “what is your gender?”) followed by an introduction in which participants were informed that they would be reading about a situation involving a “friend” and then would be asked to envision themselves in the scenario as realistically as possible. They were also told that they would be asked to write about the situation, fill out questionnaires about the situation, and rate themselves based on separate survey questions provided.

The first section of the survey was the first half of a randomized vignette in which the participant was given a description of a “friend.” The vignettes are summarized as follows (full text Appendix G):

Blame-Achievement/Competition-Male: subject is male, deserves blame for going out the night before a presentation which results in a bad grade.

Blame-Achievement/Competition-Female: subject is female, deserves blame for going out the night before a presentation which results in a bad grade.

No Blame-Achievement/Competition-Male: subject is male, does not deserve blame for a seemingly unfair grade on a presentation he worked hard on.

No Blame-Achievement/Competition-Female: subject is female, does not deserve blame for a seemingly unfair grade on a presentation she worked hard on.

Blame-Social-Male: subject is male, deserves friends/love interest being mad at him for making a fool of himself at a bar.

Blame-Social-Female: subject is female, deserves friends/love interest being mad at her for making a fool of herself at a bar.

No Blame-Social-Male: subject is male, does not deserve blame for being sick and accidentally vomiting at the bar.

No Blame-Social-Female: subject is female, does not deserve blame for being sick and accidentally vomiting at the bar.

Each vignette was worded identically to the others in the same category with the exception of the blame change, which was shown later. Additionally, each vignette featured a third person in the story who was openly feeling schadenfreude towards the friend, regardless of whether it was deserved or not. After the participants read and responded to the description of the friend, they rated themselves on a scale from 1-7 (1 being strongly disagree and 7 being strongly agree) in a series of questions concerning how they felt in relation to the friend. These questions came from the van Dijk studies (van Dijk et al., 2008) of schadenfreude and established the level of jealousy (and conversely camaraderie) felt towards the subject of the scenario.

Following these questions, participants read the second half of the scenario in which the friend has misfortune befall them. They were then asked to free-write how they would feel in that situation. After this, they rated themselves on a series of questions concerning how they may have felt about themselves in relation to the friend after the scenario happened. These questions also come from the van Dijk studies (van Dijk et al., 2008) of schadenfreude and

established the level of schadenfreude (and conversely sympathy) felt towards the subject of the scenario.

Next, the subject was asked to rate their feelings towards the third person in the vignette that laughed and suggested that the friend “had it coming.” These questions, based on the Van Dijk studies (van Dijk et al., 2008), were posed to see whether the subject identified with someone who was openly feeling schadenfreude, even if they themselves did not admit to the feeling. This section was added to strengthen the study after a few participants failed to report schadenfreude in the original pilot study.

After this, participants were given the opportunity to think of a time when they experienced a little bit of happiness or satisfaction when something bad happened to a friend of theirs as a result of something the friend did wrong or deserved. This section served to test whether participants could identify the feeling of schadenfreude and come up with a time they had experienced it, even if they did not feel it in response to the vignette.

Finally, the subject was given a series of questions in which they were to rate themselves and their general personality on a scale from 1-7 (1 being strongly disagree and 7 being strongly agree). This questionnaire was made up of the Rosenberg Self-Esteem Scale (Rosenberg, 1965), and the Contingent Self-Esteem Scale (Kernis, Cornell, & Sun, 1993), the LOT (Scheier, Carver, & Bridges, 1994), the Perceived Competence Scale (Smith, Wallston, & Smith, 1995), and the Life Satisfaction scale (Diener, Emmons, Larsen & Griffin, 1985). These measures were used to test for variable self-esteem. Upon completing this final section, the participant was told the purpose and goals of the study through a debriefing sheet.

### III. Results

#### Main Effects

The largest factor affecting schadenfreude came in the form of the blame/no blame condition, which directed the “deservingness” of the protagonist. The significance was greatest when looking at just the blame condition without the addition of the other variable (Table 1.2, 1.3). Contrary to the hypothesis about women admitting less schadenfreude than men, there was no significant difference in reported feelings of schadenfreude between the sexes (Table 1.2). Additionally, while schadenfreude in general was reported slightly more in achievement conditions, the results were not significant (Table 1.2). Lastly, while male protagonists elicited slightly higher means of schadenfreude from participants, the results were again not significant. Thus the only factor in the vignette that significantly affected both sexes regardless of situation was the blame factor (Table 1.2)

**Table 1.1** Descriptives by Variable

		N	Mean	Std. Deviation
Blame	1. B	52	3.519	1.2217
	2. NB	59	2.577	1.0211
	Total	111	3.018	1.2103
Sex	1. M	49	2.915	1.1133
	2. F	61	3.095	1.2949
	Total	110	3.015	1.2153
Context	1. AC	51	3.168	1.2351
	2. S	60	2.892	1.1843
	Total	111	3.018	1.2103
Protag.	1. M	49	3.198	1.1384
	2. F	62	2.877	1.2551
	Total	111	3.018	1.2103

**Table 1.2. ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Blame	Between Groups	24.532	1	24.532	19.577	.000
	Within Groups	136.592	109	1.253		
	Total	161.125	110			
Sex	Between Groups	160.978	109	.878	.592	.443
	Within Groups	160.978	109	1.482		
	Total	160.978	109			
Context	Between Groups	2.100	1	2.100	1.439	.233
	Within Groups	159.025	109	1.459		
	Total	161.125	110			
Protag.	Between Groups	2.826	1	2.826	1.946	.166
	Within Groups	158.298	109	1.452		
	Total	161.125	110			

**Interactions**

Even though blame/no-blame was the dominant variable, the effects were tempered by the interactions with the other variables (protagonist, context, sex) (Table 1.3).

**Table 1.3 Tests of Between-Subjects Effects**

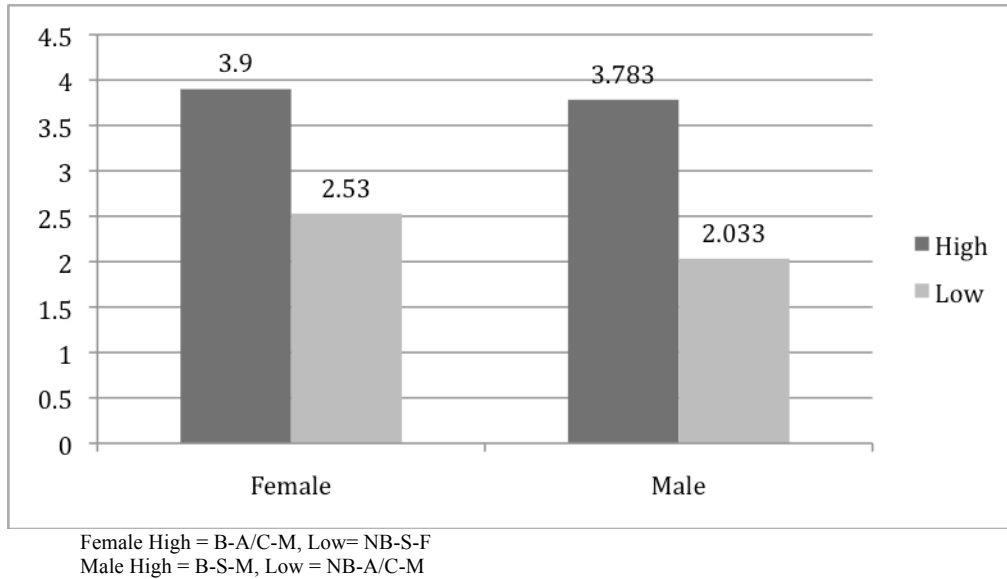
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
BlameCond	19.431	1	19.431	16.217	.000	.147
Protagonist * Context * BlameCond * Sex	4.817	1	4.817	4.020	.048	.041

a. R Squared = .300 (Adjusted R Squared = .189)

Upon further examination of specific vignettes, there were some interesting gender trends between the highest and lowest means. Men reported the least amount of schadenfreude in the No Blame-Achievement/Competition-Male condition, while females reported the least amount of schadenfreude in the No Blame-Social-Female condition (Graph 1.1). Additionally, in a slight twist on the hypothesized results, men reported the highest level of schadenfreude in the Blame-Social-Male condition and females reported the highest levels of schadenfreude almost equally in both the male and female Blame-Achievement/Competition conditions (Graph 1.1). While again, there was no significance overall between the contexts, sex of the participant, or gender of the

protagonist, the combination of the factors in conjunction with blame or no blame created some interesting gender disparities.

**Graph 1.1. Gender Trends**



**Post-Hoc Analyses**

The analysis of the Rosenberg Self-Esteem Test and the Contingent Self Esteem Scale showed correlations in line with the original hypothesis and previous studies. As in previous findings (van Dijk et al., 2008), the results showed that self-esteem was negatively correlated with schadenfreude (Table 1.4). Additionally, as hypothesized, contingent self esteem trended positively with schadenfreude, although the results were just under being significant (Table 1.4). Lastly, Contingent Self-Esteem was most highly correlated to self-enhancement (Table 1.4).

There were also several noteworthy correlations concerning schadenfreude in general. Schadenfreude correlated positively to self-enhancement and to blame and correlated negatively to sympathy and outrage (Table 1.4). Additionally, in the part of the survey in which a third party is involved, there were correlations to schadenfreude, although these results turned out to be unnecessary as participants responded to schadenfreude prompts regardless (Table 1.4)



**Table 1.4 Correlations**

		self_enh_com p	sympathy_comp	blame_comp	outrage_comp	exp_comp	quiet_comp	schaden_co mp
schadenfreud e_comp	Pearson Correlation	.558**	-.551**	.535**	-.464**	.588**	.762**	1
	Sig. (2- tailed)	.000	.000	.000	.000	.000	.000	
	N	111	111	111	111	111	111	111
Contingent_ Comp	Pearson Correlation	.252**	.027	.024	-.037	.052	.106	.184
	Sig. (2- tailed)	.008	.783	.807	.707	.593	.275	.056
	N	108	108	108	108	108	108	108
Rosenberg_Co mp	Pearson Correlation	-1.24	.090	-.023	.101	-.119	-.087	-.233*
	Sig. (2- tailed)	.202	.356	.811	.299	.218	.371	.015
	N	108	108	108	108	108	108	108

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
 \* . Correlation is significant at the 0.05 level (2-tailed).

The LIWC analyses of the first “free-write” section (directly after the vignette) unearthed an interesting correlation between schadenfreude and positive or negative words used. Schadenfreude correlated negatively with negative words and positively with positive words (Table 1.5).

**Table 1.5 Correlations**

		VIG neg_words	VIG pos_words
schadenfreude_comp	Pearson Correlation	-.256**	.230*
	Sig. (2- tailed)	.007	.015
	N	111	111

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
 \* . Correlation is significant at the 0.05 level (2-tailed).

Additionally, both positive and negative words in the vignette free-write were significant across conditions (Table 1.6).

**Table 1.6 Tests of Between-Subjects Effects**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
VIG_Neg	146.959	7	20.994	2.627	.015	.150
VIG_Pos	145.386	7	20.769	2.508	.020	.144

When looking at a comparison of means, positive words were used more often in achievement/competition vignettes, regardless of blame, and negative words were used more often in the social vignettes, again, regardless of blame (Table 1.7).

**Table 1.7 Descriptive Statistics**

experimental condition (8 total)	VIG Pos			VIG Neg		
	Mean	Std. Deviation	N	Mean	Std. Deviation	N
blame achievement male protagonist	4.5920	3.73698	10	2.1530	2.05327	10
no blame achievement male protagonist	4.7836	2.82858	11	3.2964	2.70342	11
blame social male protagonist	2.6380	3.03472	15	4.6880	3.21405	15
no blame social male	3.0831	3.48718	13	5.6515	3.42742	13
blame social female	1.9086	2.27244	14	4.4736	3.44427	14
no blame achievement female	4.0056	3.15510	18	3.6306	2.52131	18
blame achievement female	4.3331	2.96934	13	1.7715	1.73604	13
no blame social female	1.6722	1.50737	18	3.9356	2.82975	18
Total	3.2450	3.01158	112	3.7806	2.96854	112

While the other results point to blame being the main component in feelings of schadenfreude, it appears that when it comes to expression of these feelings, it is the context, rather than any other factor that drives the way the participant describes his/her feelings.

#### IV. Discussion

While there are several components to the results, they all come together to paint a detailed picture of the purpose and structure of schadenfreude. Previous research has pointed to the importance of factors like envy and in-group affiliation as precursors of schadenfreude, but based on my results, it appears the major factor in whether schadenfreude is exhibited or not is deservingness of the recipient. Across all the vignettes the strongest significance came from the blame or no blame variable and was, in fact, slightly less significant when combined with the other variables. I was surprised to find that the effect was not amplified when combined with other factors that contribute to feelings of schadenfreude. I believe this is because some of the factors that usually contribute to schadenfreude are muted in the Vanderbilt community. While participants might be envious of certain people, most students are generally on the same level as far as class standing, intelligence, friend groups, and privilege. Additionally, where in-group affiliation, particularly with gender, has been a major factor in the past, today's college students are more likely to view themselves as gender equals, as women are privileged to all of the same classes, majors, and programs as men.

While the overarching results did not point to major gender differences, the trends over vignette means told a more significant story. The vignettes with the lowest means (N/B-A/C-M for males and N/B-S-F for females) showed which types of situations inspired the least amount of schadenfreude and the most empathy and outrage (as schadenfreude is negatively correlated to empathy and outrage). I interpret these results to mean that these are the situations that most evoke the combined relief and fear of the "I'm so glad that's not me...but it could happen to me" feeling in males and females. Tellingly, this shows what they value the most, as we are most likely to be concerned over situations that are meaningful to us. Men feel the most sympathy and

outrage over no-blame hardships to fellow males in achievement/competition settings and women feel the most sympathy and outrage over no-blame hardships to fellow females in social settings. As hypothesized, men care more about achievement, and women care more about social standing.

The story gets more complicated when looking at the highest vignette means for men and women. Men reported the highest levels of schadenfreude in the blame-social-male situations and women reported high levels almost equally in the blame-achievement/competition-male and the blame-achievement/competition-female situations. At first glance, this would appear contrary to the hypothesis and previous explanation, but upon further speculation, a different explanation becomes clear. Based on the taboo nature of the feeling, people are more likely to admit to schadenfreude when it is more acceptable for them to feel it, thus, they report higher levels in the context they value less. Even when the recipient deserves it, women may still feel slightly sympathetic for someone in a bad social setting because they understand the importance of social connections. But they may feel perfectly fine taking joy from someone's misfortune in an achievement setting, which is less important to them overall. There may also be an aspect of feeling judged by other women for feeling schadenfreude towards a friend who makes a social "faux pas," but other women would understand feeling happy in achievement settings when someone makes a mistake.

The opposite goes for males, who are expected to care less about their standing in their social networks than their ability to achieve. It is likely more acceptable to a man to feel good about another male doing something stupid socially than it is to be happy about a man who failed in a work or school setting. Additionally, the fact that women reported almost equal levels of schadenfreude whether the protagonist was a female or male shows that gender in-group is not a

major concern for Vanderbilt students when in an achievement setting. Again, this goes back to the fact that Vanderbilt women are privileged to all the same academic opportunities, classes, and majors as men, and are therefore competing with them equally. If women consider themselves equal and comparable to men, they are less likely to differentiate in their feelings of schadenfreude and may deem the in-group “Vanderbilt Students” as opposed to “Vanderbilt Females” or “Vanderbilt Males.”

The results concerning self-esteem were relatively straightforward, although not as strong as anticipated. People with high self-esteem were less likely to feel schadenfreude, as schadenfreude is a mechanism for self-enhancement, which is not needed as strongly for people with already high self-esteem. Additionally, people who reported high levels of contingent self-esteem were more likely to feel schadenfreude, as again, more self-enhancement is required for people with contingent self-esteem than stable self-esteem. These results support the previous studies by van Dijk (van Dijk et al., 2008) and Kernis (Kernis, Cornell, & Sun, 1993) on the effects of schadenfreude on self-worth. However, due to the low significance, they also suggest that even people with high or stable self-esteem are still able to benefit from the self-enhancing properties of schadenfreude.

Lastly, the LIWC analysis helped shed light on the subjective feeling that schadenfreude inspires. Reports of schadenfreude positively correlated with positive words and negatively correlated with negative words, meaning that people who felt schadenfreude were more likely to describe their feeling towards themselves and the recipient in positive ways, thus showing that even if schadenfreude is considered “bad,” “mean,” or “taboo,” it feels positive to the person experiencing the emotion. Additionally, in an unanticipated side trend, participants were much more likely to use positive words in achievement settings, regardless of blame, and negative

words in social settings, regardless of blame. This suggests that perhaps schadenfreude is more accepted in achievement/competition settings than in social settings overall.

### **Limitations**

While the limitations were few, they still affect whether the results can be generalized. Although I conducted several pilot surveys, the final version of the study consisted of 110 participants, with around 15 subjects per condition. Had I had a larger subject pool in the final survey, my results may have been less variable and more precise. Additionally, all participants came from undergraduate psychology classes at Vanderbilt, making the subjects relatively similar in demographic. While this provided access to a subject pool, it does not necessarily make my results generalizable to greater society or even all people in the age group. Lastly, while the great majority of participants were able to come up with a time in which they felt schadenfreude for the personal free-write section, a very few either did not fill out the section or suggested they had never felt that way. I would venture to call these exceptional cases, but it may mean that schadenfreude is not as universal as I had assumed.

### **Significance and Future Directions**

The overall purpose of this study was to further flesh out the boundaries and contingencies of schadenfreude in order to discover its emotional purpose and better understand our nature as human beings. According to the appraisal model, each emotion serves a purpose in helping us understand our surroundings, and, if necessary, changing them for the better (Lazarus and Smith, 1990). Based on my results, it appears that schadenfreude's purpose is to act as a temporary boost in self-confidence, thereby relieving the subject of feelings of inadequacy.

Additionally, these results provide further evidence towards the priorities and factors that are important to each sex, thereby adding an important contextual element to the research on schadenfreude.

There are several methods with which to continue this line of research in new and different ways. I think it would be extremely interesting to see the results of inducing schadenfreude in a lab setting. One suggested method may be to bring in a participant along with a confederate and have the confederate do something to cause the researcher to reprimand or make fun of him/her. This may, depending on how the experiment is set up, elicit feelings of schadenfreude from the participant. It would also be interesting to look more in depth at some of the “free-write” sections of the survey. I expect there are some interesting trends in the data produced. Lastly, it would be interesting to compare survey results done outside the Vanderbilt population with the results found in my study. I expect they would range depending on age, socio-economic status, and level of intelligence.

Overall I feel I have demonstrated that schadenfreude, despite its taboo nature and lack of usage in normal American conversation, is present and felt in our culture. Although there has not been much research done on it here in America, I hope that this study inspires future researchers to continue fleshing out the unique nature of this emotion in American society.

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## Appendix A

### van Dijk Post-Misfortune Schadenfreude Scale:

Listed below are a number of statements concerning personal attitudes and characteristics. Please read each statement carefully and consider the extent to which you think it is like you. Circle one number on the scale below each statement that best reflects your answer. There are no right or wrong answers, so please answer as honestly as you can.

Rated on a scale of 1-7 (Strongly Disagree [1] to Strongly Agree [7])

**Schadenfreude.** Five statements assessed schadenfreude:

1. I enjoy what happened to [...]
2. I'm satisfied with what happened to [...]
3. I couldn't resist a little smile
4. I actually had to laugh a little bit
5. I feel schadenfreude

**Sympathy.** Three statements assessed sympathy:

1. I commiserate with [...] about what happened
2. I feel sorry for what happened to [...]
3. I sympathize with [...]

**Envy.** Four statements assessed envy toward the target:

1. I would like to be in the same position as [...]
2. I am jealous of [...]
3. I would like to be in the shoes of [...]
4. I feel less good when I compare my results with those of [...]

**Positive feelings.** Four statements assessed positive feelings toward the target:

1. I like [...]
2. I respect [...]
3. I admire [...]
4. I have high regards for [...]

**Dislike.** Three statements assessed dislike toward the target:

1. I hate [...]
2. I have a feeling of contempt for [...]
3. I dislike [...]

**Resentment.** Three statements assessed resentment toward the target:

1. [...] deserves the achievements
2. I think it is deserved that [...] has these prospects
3. I think it is just that [...] is in the current position

**Enhanced feelings about the self.** Participants' enhanced feelings about the self after the described situation occurred were assessed with three statements:

1. I felt stronger
2. I felt better
3. I felt more valuable

## **Appendix B**

### **Rosenberg Self-Esteem**

Below is a list of statements dealing with your general feelings about yourself.

Rated on a scale of 1-7 (Strongly Disagree [1] to Strongly Agree [7])

- 1) On the whole I am satisfied with myself.
- 2) At times I think I am no good at all.
- 3) I feel that I have a number of good qualities.
- 4) I am able to do things as well as most other people
- 5) I feel I do not have much to be proud of.
- 6) I certainly feel useless at times.
- 7) I feel that I am a person of worth, at least on an equal plane with others.
- 8) I wish I could have more respect for myself.
- 9) All in all, I am inclined to feel that I am a failure.
- 10) I take a positive attitude toward myself.

## Appendix C

### LOT-R

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

Rated on a scale of 1-7 (Strongly Disagree [1] to Strongly Agree [7])

- 1) In uncertain times, I usually expect the best.
- 2) If something can go wrong for me, it will.
- 3) I always look on the bright side of things.
- 4) I'm always optimistic about my future.
- 5) I hardly ever expect things to go my way.
- 6) Things never work out the way I want them to.
- 7) I'm a believer in the idea that "every cloud has a silver lining."
- 8) I rarely count on good things happening to me.

## **Appendix D**

### **Perceived Competence Scale (Adjusted for relevance)**

Rated on a scale of 1-7 (Strongly Disagree [1] to Strongly Agree [7])

- 1) It is difficult for me to find effective solutions to the problems that come my way.
- 2) I succeed in the projects I undertake.
- 3) Typically, my plans do not work out well.
- 4) I am able to do things as well as most other people.

## Appendix E

### Life Satisfaction Scale

Below are five statements that you may agree or disagree with. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number in the box to the right of the statement. Please be open and honest in your responding.

Rated on a scale of 1-7 (Strongly Disagree [1] to Strongly Agree [7])

- 1) In most ways, my life is close to ideal.
- 2) The conditions of my life are excellent.
- 3) I am satisfied with life.
- 4) So far I have gotten the important things I want in life.
- 5) If I could live my life over, I would change almost nothing.

## Appendix F

### **Kernis and Paradise Contingent Self-esteem Scale**

Listed below are a number of statements concerning personal attitudes and characteristics. Please read each statement carefully and consider the extent to which you think it is like you. Circle one number on the scale below each statement that best reflects your answer. There are no right or wrong answers, so please answer as honestly as you can.

Rated on a scale of 1-7 (Strongly Disagree [1] to Strongly Agree [7])

1. An important measure of my worth is how competently I perform.
2. Even in the face of failure, my feelings of self-worth remain unaffected.
3. A big determinant of how much I like myself is how well I perform up to the standards that I have set for myself.
4. My overall feelings about myself are heavily influenced by how much other people like and accept me.
5. If I get along well with somebody, I feel better about myself overall.
6. An important measure of my worth is how physically attractive I am.
7. My overall feelings about myself are heavily influenced by what I believe other people are saying or thinking about me.
8. If I am told that I look good, I feel better about myself in general.
9. My feelings of self-worth are basically unaffected when other people treat me badly.
10. An important measure of my worth is how well I perform up to the standards that other people have set for me.
11. If I know that someone likes me, I do not let it affect how I feel about myself.
12. When my actions do not live up to my expectations, it makes me feel dissatisfied with myself.
13. Even on a day when I don't look my best, my feelings of self-worth remain unaffected.
14. My overall feelings about myself are heavily influenced by how good I look.
15. Even in the face of rejection, my feelings of self-worth remain unaffected.

## Appendix G

### Full text of the Vignettes

#### **Blame – Achievement/Competition – Male**

Your friend Mike is a good student and naturally smart. He gets mostly A's in his classes and is thinking of double majoring. He works as hard as he needs to in order to keep his grades high, but could probably get by on his brains alone. You have to work twice as hard to get the same grades as Mike, and sometimes you resent it.

You and Mike are in the same class and are assigned to a group project in which you will be partners. The teacher is a hard grader and makes it clear that he will be judging individual performances in the group and will not be willing to give both partners the same grade. You and Mike get to work on the project and finish it easily. The night before the project is due, Mike goes out and gets drunk with some of your mutual friends while you stay in to practice for the presentation. You're sad to miss out on the party, and annoyed at Mike, but know that you need the extra practice. The next day, Mike comes to class hung-over and unprepared. He does not do a good job presenting the project. A week later you receive your grades: you get an A- and Mike receives a C+. A friend in the class laughs when he hears and says, "He had it coming."

#### **Blame – Achievement/Competition – Female**

Your friend Sara is a good student and naturally smart. She gets mostly A's in her classes and is thinking of double majoring. She works as hard as she needs to in order to keep her grades high, but could probably get by on her brains alone. You have to work twice as hard to get the same grades as Sara, and sometimes you resent it.

You and Sara are in the same class and are assigned to a group project in which you will be partners. The teacher is a hard grader and makes it clear that he will be judging individual performances in the group and will not be willing to give both partners the same grade. You and Sara get to work on the project and finish it easily. The night before the project is due, Sara goes out and gets drunk with some of your mutual friends while you stay in to practice for the presentation. You're sad to miss out on the party, and annoyed at Sara, but know that you need the extra practice. The next day, Sara comes to class hung-over and unprepared. She does not do a good job presenting the project. A week later you receive your grades: you get an A- and Sara receives a C+. A friend in the class laughs when she hears and says, "She had it coming."

#### **No Blame – Achievement/Competition - Male**

Your friend Mike is a good student and naturally smart. He gets mostly A's in his classes and is thinking of double majoring. He works as hard as he needs to in order to keep his grades high, but could probably get by on his brains alone. You have to work twice as hard to get the same grades as Mike, and sometimes you resent it.



You and Mike are in the same class and are assigned to a group project in which you will be partners. The teacher is a hard grader and makes it clear that he will be judging individual performances in the group and will not be willing to give both partners the same grade. You and Mike get to work on the project and finish it easily. The night before the project is due, you both stay in to practice the presentation. The next day, you and Mike present the project and feel that you both have done a good job. You and Mike agree that you both deserve a high grade. A week later you receive your grades: for some unknown reason, you get an A- and Mike receives a C+. A friend in the class laughs when he hears and says, "He had it coming."

### **No Blame – Achievement/Competition – Female**

Your friend Sara is a good student and naturally smart. She gets mostly A's in her classes and is thinking of double majoring. She works as hard as she needs to in order to keep her grades high, but could probably get by on her brains alone. You have to work twice as hard to get the same grades as Sara, and sometimes you resent it.

You and Sara are in the same class and are assigned to a group project in which you will be partners. The teacher is a hard grader and makes it clear that he will be judging individual performances in the group and will not be willing to give both partners the same grade. You and Sara get to work on the project and finish it easily. The night before the project is due, you both stay in to practice the presentation. The next day, you and Sara present the project and feel that you both have done a good job. You and Sara agree that you both deserve a high grade. A week later you receive your grades: for some unknown reason, you get an A- and Sara receives a C+. A friend in the class laughs when she hears and says, "She had it coming."

### **Blame – Social – Male**

Your friend Mike is a fun, nice guy. Girls find him attractive and he has a lot of friends of both sexes. People like Mike, but sometimes you feel he is sort of fake, and you don't understand why other people don't see that. When Mike goes out, he usually stays in control. He'll have a few drinks but he is rarely, if ever, sloppy.

One Saturday night, you and Mike go out to a bar. You both start taking shots but you stop once you start feeling sufficiently drunk. Mike keeps going, even though you've told him that he's probably had enough. You think his continued drinking is a bad idea and that he is being stupid. When he drinks this much, it becomes clear how superficial he can be. You leave him for 20 minutes to go talk to some of your friends but when you come back you realize immediately that he is wasted. He is stumbling around and Sara, the girl he likes, is trying to help him. Suddenly, Mike leans over and vomits on Sara's shoes. Your friends around you are all annoyed and Sara is disgusted. She storms away and Mike is kicked out of the bar. You and a couple friends leave with him to help. The next day Sara won't take Mike's phone calls and some of your friends are thinking twice before going out with Mike again next weekend. A friend who hears about it laughs when he hears and mentions that Mike "deserved what he got."

### **Blame – Social – Female**

Your friend Sara is a fun, nice girl. Guys find her attractive and she has a lot of friends of both sexes. People like Sara, but sometimes you feel she is sort of fake, and you don't understand why other people don't see that. When Sara goes out, she usually stays in control. She'll have a few drinks but she is rarely, if ever, sloppy.

One Saturday night, you and Sara go out to a bar. You both start taking shots but you stop once you start feeling sufficiently drunk. Sara keeps going, even though you've told her that she's probably had enough. You think her continued drinking is a bad idea and that she is being stupid. When she drinks this much, it becomes clear how superficial she can be. You leave her for 20 minutes to go talk to some of your friends but when you come back you realize immediately that she is wasted. She is stumbling around and Mike, the guy she likes, is trying to help her. Suddenly, Sara leans over and vomits on Mike's shoes. Your friends around you are all annoyed and Mike is disgusted. He storms away and Sara is kicked out of the bar. You and a couple friends leave with her to help. The next day Mike won't take Sara's phone calls and some of your friends are thinking twice before going out with Sara again next weekend. A friend who hears about it laughs when she hears and mentions that Sara "deserved what she got."

### **No Blame – Social – Male**

Your friend Mike is a fun, nice guy. Girls find him attractive and he has a lot of friends of both sexes. People like Mike, but sometimes you feel he is sort of fake, and you don't understand why other people don't see that. When Mike goes out, he usually stays in control. He'll have a few drinks but he is rarely, if ever, sloppy.

One Saturday night, you want to go out to a bar and ask Mike to come with you. He's not feeling well and thinks he may be coming down with the flu, but he is easily convinced to come out anyway, although "just for an hour." You head to the bar and start taking shots, but Mike turns them down because he doesn't want to get sicker. You leave him for 20 minutes to go talk to some of your friends but when you come back you realize immediately that something is wrong. He is looking pale green and Sara, the girl he likes, is trying to help him. You ask if he had too much to drink and she says he hasn't had anything. You realize he must be sicker than you thought. Suddenly, Mike leans over and vomits on Sara's shoes. Your friends around you are all annoyed and Sara is disgusted. She storms away and Mike is kicked out of the bar. You and a couple friends leave with him to help. The next day Sara won't take Mike's phone calls and some of your friends are thinking twice before going out with Mike again next weekend. A friend who hears about it laughs when he hears and mentions that Mike "deserved what he got."

### **No Blame – Social – Female**

Your friend Sara is a fun, nice girl. Guys find her attractive and she has a lot of friends of both sexes. People like Sara, but sometimes you feel she is sort of fake, and you don't understand why other people don't see that. When Sara goes out, she usually stays in control. She'll have a few drinks but she is rarely, if ever, sloppy.

One Saturday night, you want to go out to a bar and ask Sara to come with you. She's not feeling well and thinks she may be coming down with the flu, but she is easily convinced to

come out anyway, although “just for an hour.” You head to the bar and start taking shots, but Sara turns them down because she doesn’t want to get sicker. You leave her for 20 minutes to go talk to some of your friends but when you come back you realize immediately that something is wrong. She is looking pale green and Mike, the guy she likes, is trying to help her. You ask if she had too much to drink and he says she hasn’t had anything. You realize she must be sicker than you thought. Suddenly, Sara leans over and vomits on Mike’s shoes. Your friends around you are all annoyed and Mike is disgusted. He storms away and Sara is kicked out of the bar. You and a couple friends leave with her to help. The next day Mike won’t take Sara’s phone calls and some of your friends are thinking twice before going out with Sara again next weekend. A friend who hears about it laughs when she hears and mentions that Sara “deserved what she got.”