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Feeling Bad About Feeling Good? How Avengers and Observers Evaluate the Hedonic Pleasure of Taking Revenge

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Supplementary Materials: Data, Materials, Preregistration [see Index of Supplementary Materials]



Abstract

Four pre-registered experiments (N total = 2,039) investigated how people morally evaluate avengers who experience hedonic pleasure (vs. displeasure) after taking revenge and whether avengers themselves pick up on these moral evaluations by third parties. Victims who took revenge were judged as more immoral than victims who did not take revenge, especially when they felt pleasure from doing so (Study 1). Conversely, participants anticipated that others would perceive them as more competent (but not less moral) when imagining them showing visible signs of pleasure (vs. displeasure) about taking revenge (Study 2). Furthermore, showing signs of pleasure from taking revenge (Study 3). On the other hand, feeling good about revenge was attributed to lower morality than feeling bad about taking revenge (Study 4).

Keywords

competence, morality, pleasure, revenge, victim



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Highlights

- Victims who take revenge and feel good afterwards are more morally condemned than victims who take revenge and feel bad afterwards.
- Showing signs of pleasure from taking revenge is attributed to greater competence than showing signs of displeasure from taking revenge.
- Feeling good after taking revenge is attributed to lower morality than feeling bad after taking revenge.

"It wasn't the act of killing Hobbs that got you down, was it?... Did you really feel so bad because killing him felt so good?" - Dr. Hannibal Lecter (Fuller et al., 2013)

Revenge—harming someone in response to the feeling of having been harmed by that person—is a widespread phenomenon (Jackson et al., 2019). Taking revenge can feel "sweet" as it allows victims to reduce the likelihood of future offenses (McCullough et al., 2013), restore a disrupted sense of justice (Fischer et al., 2022), or regain a lost sense of power (Frijda, 1994). Moreover, retaliating can ease the pain of provocation (Verona & Sullivan, 2008) and bring avengers back to emotional balance (Chester & DeWall, 2017). In fact, some authors argue that it is the anticipated hedonic pleasure itself that motivates victims to take revenge against a perpetrator (Chester, 2017; de Quervain et al., 2004; but see Gollwitzer & Bushman, 2012).

Yet, despite its hedonic benefits, revenge is often considered to be socially inappropriate and morally blameworthy (Jackson et al., 2019)—a kind of "wild justice," as Francis Bacon put it (Gollwitzer, 2009). Interview and survey studies show that most people agree that revenge is morally wrong (Boon et al., 2011; Crombag et al., 2003; Tripp et al., 2002). That being said, people also enjoy stories in which the victim takes effective revenge against the perpetrator (Miller, 1998). In a similar vein, research suggests that people's intuitive affective reaction towards revenge is positive: Participants who learned about a victim's quest for revenge experienced more positive emotions under cognitive load than when weighing the pros and cons of revenge deliberately (Gollwitzer et al., 2016). The question we are addressing here is: Is it the vengeful act itself that is morally condemned, or rather the hedonic pleasure that the victim experiences after committing the vengeful act?

The notion that feeling good about taking revenge may make avengers feel bad about themselves rests on the assumption that feeling good about taking revenge is actually considered to be inappropriate—above and beyond the inappropriateness of the vengeful act itself. Feeling good after taking revenge may signal that the original motivation to take revenge was not really a (socially comprehensible) desire to teach the offender a lesson, but rather to experience hedonic pleasure—a more self-centered and morally dubious motivation (see Gollwitzer & Okimoto, 2021). Hence, it is plausible to assume that



not only the act of taking revenge evokes moral condemnation, but also the experience of hedonic pleasure does so.

Emotional Consequences of Revenge: Feeling Bad About Feeling Good

Revenge is an emotionally ambivalent experience. The initial happiness and satisfaction from getting even (described by some authors as "aggressive pleasure"; Chester et al., 2019) can also go hand in hand with feelings of discontent (Eadeh et al., 2017). Getting back at the perpetrator causes avengers to think about the person they had punished, which leaves them with prolonged resentment (Carlsmith et al., 2008). Such self-directed moral concerns can wipe out any positive revenge-related feelings and make avengers eventually feel bad: dejected, irritated, and worried (Eadeh et al., 2017). More specifically, experiencing pleasure after taking revenge may cause avengers to doubt their morals and standards, ultimately making revenge "bitter". Previous research has indeed shown that avengers experience a wide range of emotions after taking revenge including guilt and shame (Boon et al., 2011; Tripp et al., 2002).

"I Shouldn't Feel That Way": Moral Emotions Following the Vengeful Act

Guilt and shame have been conceptualized as "self-conscious emotions"—affective experiences that "...guide individual behavior by compelling us to do things that are socially valued and to avoid doing things that lead to social approbation" (Tracy & Robbins, 2004, p. 107). Such emotions require self-awareness and self-representation and depend on internalized social standards. Specifically, they are elicited by observing one's actions or thoughts vis-à-vis norms. People can feel guilty about doing something that transgresses such norms, thinking something that is socially inappropriate, or feeling something that they "ought not" feel. In the latter sense, guilt represents a "meta-emotion"—a secondary emotion that occurs in response to a primary emotion (Bailen et al., 2019; Norman & Furnes, 2016). Hedonic pleasure after taking revenge can be understood as a primary emotion as research on revenge suggests that it contains an automatic, intuitive (probably evolutionally shaped) aspect (Chester, 2017) as well as a goal-directed aspect geared towards restoring just deserts (Gollwitzer & Bushman, 2012). As such, experiencing hedonic pleasure can give rise to meta-emotions such as guilt or shame.

The Role of Vengeful Pleasure in Moral Evaluation of Self and Others

People often judge others based on the impressions they make (Asch, 1946), prioritizing morality-related information over competence-related information (Abele & Wojciszke, 2007; Wojciszke, 2005). Morality dominates person perception because it reflects qualities that contribute to the welfare of others, including the perceiver, such as fairness, honesty,



or kindness. Competence, on the other hand, prevails in self-perception as it includes characteristics that are bestowed on the perceiver, such as ability, confidence, or efficiency (Wojciszke, 2005). Showing satisfaction from taking revenge can make an avenger look more dominant or efficient (higher competence attributions) as it might indicate success in reaching a retaliatory goal. At the same time, doing so can lead others to question the avenger's empathy or fairness (lower morality attributions) as feeling good about reciprocating harm is considered socially inappropriate. On the other hand, feeling displeasure from taking revenge can be seen as indicative of atonement, which may help the avenger restore his or her public moral image. In this vein, expressing guilt or shame can help revenge-seekers regain a morality-like impression.

Present Research

In Study 1, we asked participants to take the role of observers and to evaluate a victim who did (vs. did not) take revenge and did (vs. did not) feel good about their reaction. We reasoned that feeling good about taking revenge is more strongly frowned upon than the act per se—in other words, we expected feeling good to amplify the negative evaluation of revenge-seekers. In Study 2, we investigated whether avengers pick up upon this social disapproval. Participants were asked to imagine themselves taking revenge and either feeling good or bad about doing so. Here, we examined how avengers (i.e., participants) think they would be judged by others. We reasoned that imagining feeling good about revenge should make avengers think that others would judge them as less moral. Studies 3 and 4 built upon these prior studies and tested actor-observer asymmetries in ascribing moral attributions to the avenger. We expected that feeling good (vs. bad) about taking revenge would moderate these asymmetries. For each study, we report all manipulations, measures, and exclusions.

Study 1

Study 1 tested whether people who took revenge are judged as less moral than people who did not take revenge, especially if they felt pleasure (vs. displeasure) after taking revenge. In an exploratory fashion, we also examined whether participants would presume that victims who took revenge and felt good about it would feel worse the day after than victims who took revenge and felt bad about it. Pre-registration for this study is available (see Dyduch-Hazar & Gollwitzer, 2022a).

Method

Participants

Sample size was computed using G*Power Version 3.1 (Faul et al., 2007). The required sample size to discover a between-subject interaction for a "small" effect size (f = .10)



with .80 power and α = 0.05 (two-tailed) was *N* = 787. We sought to recruit a larger number of participants to account for our strict exclusionary criteria. Participants were 1,149 Polish university undergraduates recruited in exchange for research credits. As pre-registered, we first excluded data from 93 participants who responded incorrectly to an attention check question. Next, we excluded data from 37 participants who completed the study in less than 3 minutes. Finally, we excluded data from 33 participants who completed the study in more than 20 minutes. The final sample consists of *N* = 986 cases (842 female, 144 male; age: *M* = 26.93, *SD* = 7.94, range: 18–57).

Procedure

After consenting, participants reported only their age and gender. They were then presented with a story in which the main character (Kamila or Kamil) was betrayed by their romantic partner. We matched the gender of the character with the gender of the participant: female participants read a story about Kamila, whereas male participants read a story about Kamil. We employed this strategy in each study because gender roles affect the acceptance of aggression as means of punishment (Bettencourt & Miller, 1996). Depending upon random assignment, participants learnt that the main character took revenge against their partner (vs. did not take revenge) and felt good (vs. felt bad) immediately afterwards. Subsequently, participants were asked to indicate to what extent the main character felt various emotions (e.g., guilt or pride) the day after. Participants then evaluated the morality of the main characters' actions and completed the measure of guilt and shame proneness.

Measures

Moral emotions were assessed by asking participants to what extent they thought the main character of the story would feel: guilt (*blameworthy*, *guilty*, *repentant*), shame (*blushing*, *embarrassed*, *self-conscious*), happiness (*glad*, *happy*, *joyful*) and pride (*confident*, *proud*, *self-assured*) when thinking about his or her behavior (based on Fredrickson et al., 2003). The response format ranged from 1 (*not at all*) to 7 (*extremely*).

Moral condemnation was measured by asking participants to evaluate the behavior of the main character of the story: "His/her behavior was wrong", "She/he acted immorally", "She/he acted like a bad person", "She/he did the right thing" (reversed coding), "Her/his reaction is morally justified" (reversed coding), and "What s/he did was morally "good" (reversed coding). The response format ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

Guilt and shame proneness were measured using the Guilt and Shame Proneness Scale (Cohen et al., 2011). We included this measure to examine whether the hypothesized two-way interaction would occur while controlling for disposition to feel guilt and shame across a range of personal transgressions. The response format ranged from 1 (*very unlikely*) to 7 (*very likely*).



Results

Descriptive Statistics and Zero-Order Correlations

Descriptive statistics, internal consistencies of scales, and zero-order correlations between variables are summarized in Supplementary Table 1 in Appendix A (see Dyduch-Hazar & Gollwitzer, 2024).

Main Analyses

All following main analyses were conducted using a 2 (revenge vs. no revenge) \times 2 (pleasure vs. displeasure) between-subjects ANOVA. Main effects are presented in Table 1.

Table 1

| Variable | M (SD) | | | | M (SD) | | | |
|--------------------|-------------|-------------|-----------|------------|-------------|-------------|-----------|------------|
| | Revenge | No Revenge | F | η_p^2 | Pleasure | Displeasure | F | η_p^2 |
| Guilt | 3.47 (1.43) | 2.32 (1.28) | 190.96*** | .164 | 2.41 (1.34) | 3.40 (1.44) | 137.62*** | .124 |
| Shame | 4.72 (1.56) | 3.50 (1.66) | 164.17*** | .144 | 3.37 (1.65) | 4.89 (1.44) | 261.02*** | .211 |
| Pride | 2.90 (1.51) | 3.75 (1.85) | 76.69*** | .073 | 4.22 (1.68) | 2.39 (1.23) | 416.04*** | .299 |
| Happiness | 2.86 (1.50) | 3.63 (1.92) | 61.57*** | .059 | 4.17 (1.69) | 2.28 (1.26) | 424.87*** | .304 |
| Moral condemnation | 3.66 (1.42) | 2.20 (1.24) | 294.73*** | .233 | 2.91 (1.66) | 2.96 (1.35) | 0.020 | .0001 |

Summary of Main Effects From Two-Way ANOVA, Study 1

*****p* < .001.

Moral Emotions – The following moral emotions were assessed:

Guilt and Shame — We observed a significant main effect of revenge on both attributed guilt and shame, showing that victims who took revenge were perceived as experiencing more guilt and more shame than victims who did not take revenge. We also found a significant main effect of pleasure on both guilt and shame, showing that victims who felt good were perceived as experiencing less guilt and less shame than victims who felt bad. We did not observe a significant interaction of revenge and pleasure in predicting either guilt, F(1, 973) = 1.54, p = .215, $\eta_p^2 = .002$, or shame, F(1, 974) = 0.24, p = .624, $\eta_p^2 = .0001$, attributed to the victim.

Pride and Happiness — We found a significant main effect of revenge on both attributed pride and happiness, showing that victims who took revenge were perceived as feeling less proud and less happy than victims who did not take revenge. We also observed a significant main effect of pleasure on both pride and happiness, indicating that victims who felt good were seen as prouder and happier than victims who felt bad. These main effects were qualified by a significant revenge × pleasure interaction both for pride,

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 $F(1, 976) = 50.91, p < .001, \eta_p^2 = .050$, and happiness, $F(1, 975) = 44.15, p < .001, \eta_p^2 = .043$, attributed to the victim.

Simple effects showed that victims who did not take revenge and felt good afterwards were seen as experiencing greater pride than victims who took revenge and felt good afterwards, F(1, 976) = 128.75, p < .001, $\eta_p^2 = .117$, while no simple effect occurred in the "displeasure" condition, F(1, 976) = 1.29, p = .256, $\eta_p^2 = .001$ (see Supplementary Figure 1 in Appendix B, see Dyduch-Hazar & Gollwitzer, 2024). Interestingly, victims who took revenge and felt good afterwards were seen as experiencing less pride than victims who took revenge and felt bad afterwards, F(1, 976) = 89.13, p < .001, $\eta_p^2 = .084$.

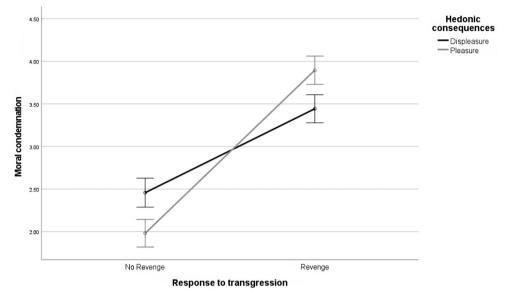
In a similar vein, victims who did not take revenge and felt good afterwards were seen as happier than victims who took revenge and felt good afterwards, F(1, 975) = 107.13, p < .001, $\eta_p^2 = .099$. This was not the case among victims who felt bad afterwards, F(1, 975) = 0.71, p = .400, $\eta_p^2 = .001$ (see Supplementary Figure 2 in Appendix B, Dyduch-Hazar & Gollwitzer, 2024). Also, we observed that victims who took revenge and felt good afterwards were perceived as happier than victims who took revenge and felt bad afterwards, F(1, 976) = 98.56, p < .001, $\eta_p^2 = .092$.

Moral Condemnation — We observed a significant main effect of revenge on moral condemnation, showing that victims who took revenge were more morally condemned than victims who did not take revenge. The main effect of pleasure on moral judgment was not significant, F(1, 971) = 0.02, p = .888, $\eta_p^2 = .0001$. However, the hypothesized revenge × pleasure interaction was, F(1, 971) = 30.25, p < .001, $\eta_p^2 = .030$. Victims who took revenge and felt pleasure afterwards were judged as more immoral than victims who took revenge and felt displeasure afterwards, F(1, 971) = 14.44, p < .001, $\eta_p^2 = .015$. By contrast, victims who did not take revenge and felt good afterwards were seen as less immoral than victims who did not take revenge and felt bad afterwards, F(1, 971) = 15.81, p < .001, $\eta_p^2 = .016$ (see Figure 1). Controlling for guilt and shame proneness did not change the pattern of results (see Supplementary Table 2 in Appendix A, Dyduch-Hazar & Gollwitzer, 2024).

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Figure 1

Interactive Effect of Response to Transgression and its Hedonic Consequences on Moral Condemnation of the Victim, Study 1



Note. Error bars represent the standard error of the mean.

Discussion

As we predicted, victims who took revenge were seen as more immoral than people who did not take revenge, especially when they felt good (vs. bad) after revenge they had taken. In addition, we found that victims who did not take revenge and felt good about it were seen as prouder and happier than victims who took revenge and felt good about it. However, we also observed that victims who took revenge and felt good were assumed to feel prouder and happier than victims who took revenge and felt bad. These results are counterintuitive as feeling bad about the vengeful act is more morally virtuous than feeling good about it. On the other hand, feelings of pride and happiness could also signal that one is satisfied with his or her action. In the next study we sought to examine whether avengers pick up on moral evaluations of revenge-seekers made by third parties.

Study 2

Study 2 tested whether people who feel good about taking revenge anticipate that others would perceive them as less moral than people who feel bad about taking revenge—in other words, Study 2 looks at whether (potential) avengers pick up on the social norm to



curb their hedonic pleasure after taking revenge. In order to reduce demand effects, we decided to measure anticipated social evaluations not with the same (behavior-related) items as in Study 1; rather, we decided to use a more generic measure for anticipated social evaluations: the "Big Two" of person perception, that is, (anticipated perceptions of) morality and (anticipated perceptions of) competence (Abele & Wojciszke, 2007).

The Theory of Planned Behavior (Ajzen, 1991) proposes that behavior is contingent upon one's and others' beliefs about behavior including prevailing social norms. For example, avengers who believe that taking revenge would make them feel good could be keener to seek revenge. However, they might be less likely to do so if they anticipate others would condemn them for their vengeful act. In this vein, we expected fear of negative evaluation—conceptualized as a proxy for the motivation to comply—to moderate the effect of feeling good (vs. bad) about taking revenge on anticipated social evaluations and the probability of taking revenge. We reasoned that people who care about the impression they make upon others will anticipate that others would judge them as more immoral when feeling good about taking revenge.

Thus, our design consists of two conditions (i.e., half of the participants read a vignette in which they—in the role of victims/avengers—would feel good about taking revenge, whereas the other half learned that they would feel bad about taking revenge; importantly, these emotional experiences were visible to others in the described situation), two dependent variables (anticipated social evaluations regarding communion/morality and agency/competence, and likelihood of taking revenge), and one continuous moderator (fear of negative evaluation). Pre-registration for this study is available (see Dyduch-Hazar & Gollwitzer, 2022b).

Method

Participants

The sample size was based on the interaction effect estimate from Study 1 using G*Power Version 3.1 (Faul et al., 2007). The minimum sample size to discover a population effect of $f^2 = .032$ with a power of .80 and a significance level of .05 in a linear regression model with three predictors (i.e., emotional impression of feeling good vs. bad from taking revenge, fear of negative evaluation, and their interaction term) was N = 264. Participants were 508 Polish University students recruited in exchange for research credits. As pre-registered, we first excluded data from 10 participants who gave an incorrect answer to the attention check question. Next, we excluded data from 177 participants who completed the study in less than 5 minutes. Finally, we excluded data from 11 participants who completed the study in more than 20 minutes. The final sample included N = 310 participants (272 female, 38 male; age: M = 25.66, SD = 8.11, range: 18–52).

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Procedure

After giving their consent, participants reported only their age and gender. First, participants completed the measure of fear of negative evaluation. Next, they were presented with a story and asked to imagine themselves in the described situation. In the story, participants were treated unfairly by a coworker (always the same gender as themselves) and then told their coworkers how badly they wanted to get back at him/her (see Methodological Attachment in Appendix C, Dyduch-Hazar & Gollwitzer, 2024). Depending upon random assignment, the story included information that participants visibly felt good (e.g., feeling excited and having a ruddy face) vs. bad (e.g., feeling uneasy and having a pale face) about their revenge fantasy they shared with coworkers. Participants were subsequently asked to what extent they think their coworkers would perceive them as moral and competent and then stated the likelihood of taking revenge upon their wrongdoer.

Measures

Anticipated social evaluation was measured with the adjective Agency-Communion Scale (Wojciszke & Szlendak, 2010). Participants were asked to what extent they thought their colleagues would see them as possessing morality-related traits (e.g., just) and competence-related traits (e.g., confident). The response format ranged from 1 (*definitely not*) to 7 (*definitely yes*).

Fear of negative evaluation was assessed with the Brief Fear of Negative Evaluation Scale (Leary, 1983). The response format ranged from 1 (*not at all characteristic of me*) to 7 (*entirely characteristic of me*).

Likelihood of taking revenge was measured by asking participants to what extent they would take revenge upon their transgressor the day after. The response format ranged from 1 (*certainly not*) to 7 (*certainly yes*).

Results

Descriptive Statistics and Zero-Order Correlations

Descriptive statistics, internal consistencies of measured scales, and zero-order correlations of all measured variables are summarized in Supplementary Table 3 in Appendix A (see Dyduch-Hazar & Gollwitzer, 2024).

Main Analyses

We did not observe significant differences in anticipated perception of being moral between participants who imagined they made the impression of feeling good vs. bad about their revenge fantasy, F(1, 308) = 0.98, p = .323, $\eta_p^2 = .003$. However, participants who imagined they visibly felt good about their revenge fantasy anticipated that others would see them as more competent than those who visibly felt bad about their revenge fantasy,



 $F(1, 308) = 26.35, p < .001, \eta_p^2 = .079$. We found no significant differences in likelihood of revenge between participants who imagined they made the emotional impression of feeling good vs. bad about taking revenge, $F(1, 304) = 0.77, p = .381, \eta_p^2 = .003$ (see Table 2).

Table 2

Descriptive Statistics for Study Variables in Study 2, by Condition

| Variable | - | ession of feeling aking revenge | Emotional impr bad about ta | | |
|-----------------------|------|------------------------------------|--------------------------------|------|--------|
| | M | SD | М | SD | Þ |
| Morality | 1.80 | .85 | 1.90 | 1.01 | .323 |
| Competence | 4.26 | 1.30 | 3.50 | 1.25 | < .001 |
| Likelihood of revenge | 2.97 | 1.95 | 2.78 | 1.75 | .381 |

Moderation Analyses

We then tested whether fear of negative evaluation moderated the effect of emotional impression of feeling good vs. bad on anticipated perceptions of being moral (our first DV) and competent (our second DV), as well as the probability of taking revenge (our third DV) which, according to the Theory of Planned Behavior, should be the case. Continuous variables were centered prior to the analyses (Model 1, PROCESS 4.2 macro for SPSS; Hayes, 2022). The hypothesized interactions, however, were not significant for any of our DVs: (A) anticipated perception of being moral, b = .10, SE = .08, 95% CI [-.057, .268], p = .204; (B) anticipated perception of being competent, b = -.14, SE = .11, 95% CI [-.377, .077], p = .195; (C) probability of taking revenge, b = -.10, SE = .16, 95% CI [-.435, .228], p = .539 (see Supplementary Tables 4–6 in Appendix A, Dyduch-Hazar & Gollwitzer, 2024).

Discussion

Contrary to our expectations, people who imagined they felt good about taking revenge did not anticipate that others would perceive them as less moral than people who felt bad about doing so. By contrast, we found that avengers who imagined feeling good about taking revenge expected others to see them as more *competent* compared to avengers who imagined feeling bad about taking revenge. We think this is an interesting and important finding, which—if robust—may be interpreted as a form of actor-observer discrepancy: Observers (as in Study 1) may consider avengers who feel good about taking revenge as particularly immoral, but actors (as in Study 2) may view themselves (and think that others view them) as more competent when they imagine that taking revenge



makes them feel good (vs. bad). Study 3 was designed to test such an actor-observer asymmetry more directly in an adult sample.

Study 3

Study 3 examined the potential actor-observer asymmetry in social evaluations of victims who feel good (vs. bad) after taking revenge. More specifically, we examined whether actors who imagined taking revenge would perceive themselves as more competent (but not less moral) when they experience pleasure (vs. displeasure) after taking revenge. We also tested whether observers would perceive avengers as less moral (but not as more competent) when these avengers experience pleasure (vs. displeasure) after taking revenge. Pre-registration for this study is available (see Dyduch-Hazar & Gollwitzer, 2022c).

Method

Participants

The sample size was based on the interaction estimate from Study 1 using G*Power Version 3.1 (Faul et al., 2007). The required sample size to discover a population effect of f = .178 with .80 power and a significance level of .05 (two-tailed) was N = 248. Participants were 300 American adults recruited from the Prolific academic website in exchange for £1.10. As pre-registered, we first excluded data from 5 participants who did not respond correctly to an attention check question. Next, we excluded data from 78 participants who completed the study in less than 3 minutes. Subsequently, we excluded data from 4 participants who completed the study in more than 20 minutes. Final participants were N = 213 (108 female, 105 male; age: M = 40.05, SD = 14.50, range: 19–78). Participants were 76.1% White, 13.6% Black, 3.8% Asian and 6.6% "Other".

Procedure

After giving their consent, participants completed a demographic questionnaire including only questions about their gender, ethnicity, and age. Participants were subsequently presented with a story in which either themselves (actor condition) or their colleague (observer condition) took revenge and felt pleasure (vs. displeasure) from doing so. As in previous studies, we matched the characters' gender with participants' own gender. After reading the story, participants indicated to what extent they imagined themselves (actor condition; "To what extent do you perceive yourself as having each of the following characteristics") or perceived their colleague (observer condition; "To what extent do you perceive your colleague Christina/Chris as having each of the following characteristics") as competent and moral, and they then evaluated the morality of their or their colleague's actions.



Measures

Social perceptions were measured as in Study 2 (Abele et al., 2008; Wojciszke & Szlendak, 2010).

Moral condemnation was assessed as in Study 1.

Results

Descriptive Statistics and Zero-Order Correlations

Descriptive statistics, internal consistencies of all scales, and zero-order correlations between measured variables are summarized in Supplementary Table 7 in Appendix A (see Dyduch-Hazar & Gollwitzer, 2024).

Main Analyses

All subsequent main analyses were conducted using a 2 (actor vs. observer) × 2 (pleasure vs. displeasure) between-subjects ANOVA. Main effects are presented in Table 3.

Table 3

Summary of Main Effects from Two-Way ANOVA, Study 3

| Variable | M (SD) | | | | M (SD) | | | |
|--------------------|-------------|-------------|-------|------------|-------------|-------------|--------|------------|
| | Actor | Observer | F | η_p^2 | Pleasure | Displeasure | F | η_p^2 |
| Morality | 3.46 (1.32) | 3.47 (1.17) | 0.001 | .0001 | 3.41 (1.27) | 3.53 (1.21) | 0.43 | .002 |
| Competence | 5.14 (1.01) | 4.96 (1.12) | 1.22 | .006 | 5.25 (1.00) | 4.83 (1.12) | 7.56** | .035 |
| Moral condemnation | 5.25 (1.63) | 4.96 (1.65) | 1.63 | .008 | 5.21 (1.60) | 4.97 (1.69) | 0.85 | .004 |

***p* < .01.

Social Perception – The following social perception measures were assessed:

Morality — We did not find a significant main effect of either pleasure, p = .508, or perspective, p = .997, on ascribed morality. Also, we did not observe a significant interaction effect, F(1, 209) = 0.119, p = .731, $\eta_p^2 = .001$.

Competence — We observed a significant main effect of pleasure from revenge on ascribed competence, showing that victims who imagined feeling good about taking revenge were seen as more competent than victims who imagined feeling bad about taking revenge. Notably, the hypothesized perspective × pleasure interaction effect was not significant, F(1, 209) = 0.19, p = .666, $\eta_p^2 = .001$. In other words, feeling good (vs. bad) about revenge led to higher competence ascriptions—this applied both to actors who evaluated themselves as well as to observers who evaluated their colleagues. Also, we did not observe a main effect of perspective on competence, p = .269.



Moral Condemnation — We did not observe a significant main effect of either pleasure, p = .357, or perspective, p = .203, on moral condemnation of the avenger. Also, we did not find a significant perspective × pleasure interaction effect, *F*(1, 209) = 0.91, p = .340, $\eta_p^2 = .004$.

Discussion

Study 3 showed that feeling good (vs. bad) about taking revenge leads to stronger competence ascriptions, both for actors and for observers. This contradicts the hypothesized actor-observer asymmetry and replicates the effect found in Study 2 (more competence ascriptions to avengers who feel good about taking revenge). Yet, at the same time, Study 3 failed to replicate the effect found in Study 1 (more moral condemnation of avengers who feel good about taking revenge). To rule out the possibility that the statistical power was insufficient to detect any population effects in Study 3, we sought to test Study 3's predictions with a larger sample size and a greater power in Study 4.

Study 4

Study 4 sought to replicate Study 3 and was therefore largely similar (see below). In this study, we used similar descriptions of hedonic pleasure (vs. displeasure) from Study 1 as they focused on inner *emotional experience* following the act of revenge rather than the *visible impression* of feeling pleasure (or displeasure) from taking revenge (see Methodological Attachment in Appendix C, Dyduch-Hazar & Gollwitzer, 2024). Doing so allowed us to more meticulously examine differences between actors and observers in "feeling bad about feeling good" from taking revenge. It also enabled us to further explore how this feeling is related to various moral emotions. Pre-registration for this study is available (see Dyduch-Hazar & Gollwitzer, 2023).

Method

Participants

Participants were 1,065 Polish university undergraduates recruited in exchange for research credits. Following the pre-registration plan, we first excluded data from 83 participants who responded incorrectly to an attention check question. Next, we excluded data from 428 participants who completed the study in less than 5 minutes. Then, we excluded data from 24 participants who completed the study in more than 20 minutes. The final sample comprised N = 530 participants (459 female, 71 male; age: M = 27.57, SD = 9.59, range: 18–58). A sensitivity analysis conducted using G*Power Version 3.1 (Faul et al., 2007) showed that this sample size had sufficient .80 power to detect a small effect of $f \ge .12$ on a significance level of .05 (two-tailed).



Procedure

After consenting, participants reported only their age and gender. Participants were subsequently presented with a similar story as in Study 3 in which either they (actor condition) or their colleague (observer condition) took revenge against a coworker and felt good (vs. bad) about it. For the purpose of the study, we altered the story in such a way that it described experienced rather than expressed feelings. After reading the story, participants indicated to what extent they themselves (actor condition) or their colleague (observer condition) would feel ashamed, guilty, happy, and proud the day after when thinking back on their behavior. Participants then completed the measure of social perception and evaluated the morality of their (or their colleague's) behavior just as in Study 3.

Measures

Social perception and **moral condemnation** were measured as in Study 3 (Wojciszke & Szlendak, 2010).

Moral emotions were measured as in Study 1 (based on Fredrickson et al., 2003).

Results

Descriptive Statistics and Zero-Order Correlations

Descriptive statistics, internal consistencies, and zero-order correlations between measured variables are summarized in Supplementary Table 8 in Appendix A (see Dyduch-Hazar & Gollwitzer, 2024).

Main Analyses

Main analyses were carried out using a 2 (actor vs. observer) \times 2 (pleasure vs. displeasure) between-subjects ANOVA. All main effects are presented in Table 4.

Table 4

| Variable | M (SD) | | | | M (SD) | | | |
|--------------------|-------------|-------------|----------|------------|-------------|-------------|----------|------------|
| | Actor | Observer | F | η_p^2 | Pleasure | Displeasure | F | η_p^2 |
| Guilt | 4.08 (1.64) | 4.19 (1.52) | 1.15 | .002 | 3.92 (1.61) | 4.39 (1.50) | 10.69*** | .020 |
| Shame | 4.84 (1.67) | 4.90 (1.53) | 0.56 | .001 | 4.57 (1.67) | 5.21 (1.44) | 20.75*** | .038 |
| Pride | 2.48 (1.35) | 2.70 (1.41) | 2.72 | .005 | 2.95 (1.48) | 2.20 (1.15) | 40.25*** | .071 |
| Happiness | 2.80 (1.46) | 3.02 (1.57) | 1.79 | .003 | 3.35 (1.67) | 2.43 (1.15) | 50.63*** | .088 |
| Morality | 1.91 (1.06) | 2.73 (0.96) | 89.41*** | .146 | 2.23 (1.05) | 2.47 (1.11) | 8.47** | .016 |
| Competence | 4.05 (1.36) | 4.47 (1.26) | 13.96*** | .026 | 4.36 (1.31) | 4.18 (1.30) | 2.58 | .005 |
| Moral condemnation | 4.55 (1.37) | 4.42 (1.38) | 1.30 | .002 | 4.48 (1.41) | 4.48 (1.34) | 0.005 | .0001 |

Summary of Main Effects from Two-Way ANOVA, Study 4

p < .01. *p < .001.

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Social Perception — The following social perception measures were assessed:

Morality — We observed a significant main effect of perspective on ascribed morality, showing that participants perceived themselves as less moral than they perceived their colleague after imagining taking revenge. Moreover, we observed a main effect of pleasure, indicating that imagining feeling good after taking revenge led to lower ratings on ascribed morality than imagining feeling bad after taking revenge. The hypothesized perspective × pleasure interaction effect was not significant, F(1, 525) = 0.53, p = .467, $\eta_p^2 = .001$.

Competence — We found a significant main effect of perspective on ascribed competence, showing that participants perceived others taking revenge as more competent than themselves when taking revenge. This analysis neither revealed a main effect of pleasure, p = .108, nor a significant perspective × pleasure interaction effect, F(1, 526) = 0.16, p = .689, $\eta_p^2 = .0001$.

Moral Emotions – The following moral emotions measures were assessed:

Guilt and Shame — We found a significant main effect of hedonic consequences of revenge on both guilt and shame showing that feeling bad after taking revenge led to more experienced/ascribed guilt and shame than feeling good after taking revenge. We did not find a significant main effect of perspective on either guilt, p = .283, or shame, p = .451. However, we observed a significant perspective × pleasure interaction effect, on both experienced/ascribed guilt, F(1, 526) = 15.66, p < .001, $\eta_p^2 = .029$, and shame, F(1, 526) = 13.95, p < .001, $\eta_p^2 = .026$.

The colleague who felt bad after taking revenge was perceived by observers as feeling more guilty afterwards than the colleague who felt good after taking revenge, *F*(1, 526) = 27.83, p < .001, $\eta_p^2 = .050$. No such effect occurred for actors, *F*(1, 526) = 0.22, p = .637, $\eta_p^2 = .0001$ (see Supplementary Figure 3 in Appendix B, Dyduch-Hazar & Gollwitzer, 2024). Relatedly, the colleague who felt bad after taking revenge was assumed to feel more ashamed afterwards than the colleague who felt good after taking revenge, *F*(1, 526) = 36.63, p < .001, $\eta_p^2 = .065$. No such effect occurred for actors, *F*(1, 526) = 0.32, p = .573, $\eta_p^2 = .001$ (see Supplementary Figure 4 in Appendix B, Dyduch-Hazar & Gollwitzer, 2024).

Pride and Happiness — We observed a significant main effect of pleasure on both pride and happiness, showing that feeling good after taking revenge led to more experience/ascribed pride and happiness than feeling bad after taking revenge. We did not find a main effect of perspective on either pride, p = .099, or happiness, p = .181. However, we observed a significant perspective × pleasure interaction effect in predicting both pride, F(1, 525) = 9.51, p = .002, $\eta_p^2 = .018$, and happiness, F(1, 526) = 14.58, p < .001, $\eta_p^2 = .027$.



Feeling good after taking revenge was attributed to greater pride experienced by a colleague than an actor, F(1, 525) = 11.82, p < .001, $\eta_p^2 = .022$. No such effect occurred in the "displeasure" condition, F(1, 525) = 0.97, p = .324, $\eta_p^2 = .002$ (see Supplementary Figure 5 in Appendix B, Dyduch-Hazar & Gollwitzer, 2024). Analogically, feeling good after taking revenge was attributed to greater happiness experienced by a colleague than an actor, F(1, 526) = 14.06, p < .001, $\eta_p^2 = .026$. No such effect occurred in the "displeasure" condition, F(1, 526) = 14.06, p < .001, $\eta_p^2 = .026$. No such effect occurred in the "displeasure" condition, F(1, 526) = 2.91, p = .088, $\eta_p^2 = .006$ (see Supplementary Figure 6 in Appendix B, Dyduch-Hazar & Gollwitzer, 2024).

Moral Condemnation — We did not observe a significant main effect of either pleasure, p = .942, or of perspective, p = .253. Also, the perspective × pleasure interaction effect was not significant, F(1, 525) = 0.05, p = .818, $\eta_p^2 = .0001$.

Discussion

Unlike in previous studies, feeling pleasure (vs. displeasure) from imagining taking revenge did not lead to higher competence experiences (for actors) or ascriptions (for observers), but rather to lower morality experiences/ascriptions. This replicates the findings from Study 1. However, unlike in Study 1, moral condemnation did not differ between conditions. On average, participants rated their (and their co-worker's behavior) as immoral at levels above the scale midpoint. Taken together, these findings show that pursuing revenge (unlike giving up seeking revenge) is seen as a dishonorable response both from an actor and observer perspective.

General Discussion

Revenge is a socially decried response to transgressions often seen as inferior to forgiveness (Worthington, 2006). However, people intuitively approve of revenge taken by victims (Gollwitzer et al., 2016) and sometimes revenge may even enable victims to leave transgressions behind (Strelan et al., 2017). As such, do people actually condemn vengeance or rather denounce feeling good about taking revenge? In a series of studies, we sought to answer this question by examining discrepancies between actors and observers of revenge in the social evaluation of hedonic pleasure from taking revenge.

In Study 1, participants judged victims who took revenge as more immoral than victims who did not take revenge. This was especially the case when victims felt good (vs. bad) about their vengeful act. It would be important to investigate possible mediators of these relationships including, for example, lack of remorse attributed to the victim. These results might have important implications for prospective research on punishment warrant and severity (Greenawalt, 1983). In Study 4, we observed that participants attributed fewer moral characteristics to avengers who experienced pleasure (vs. displeasure) following the act of revenge—irrespective of whether they were the actors themselves

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or merely observers of a vengeful act. Notably, these effects could not be replicated across the board. In Study 3, participants ascribed moral features at levels below the midpoint to both pleasure and displeasure following a vengeful act. This was the case for actors and observers. It is noteworthy that vignettes used across studies described various wrongdoings (betrayal or theft) committed by different individuals (partners or coworkers). This variance could possibly affect our results as relationship weights varied across our vignettes. Different cultural contexts could also affect our results: Study 3 was conducted with American adults whereas other studies were conducted with Polish undergraduates.

Although participants morally condemned victims who felt good after punishing their transgressors, they themselves did not anticipate that others would see them as less moral when showing visible signs of vengeful pleasure. Instead, they expected that others would think of them as *more competent* when making an impression of feeling good (e.g., ruddy face) vs. bad (e.g., pale face) about seeking revenge (Study 2). Even more, participants attributed more competence-related characteristics to others than to themselves after revenge. This pattern of results indicates that avengers do not pick up on social evaluations people make about hedonic pleasure from taking revenge: Retaliators miscalibrate what others would think of them when they imagine expressing vengeful pleasure. For future research, it would be interesting to examine why avengers mispredict how others would judge them.

Participants attributed greater competence to both actors and observers who made the impression of feeling pleasure from revenge than to actors and observers who made the impression of feeling displeasure after revenge (Study 3). These results were not replicated in Study 4, in which feeling good after taking revenge was attributed to lower morality both among actors and observers of revenge. Vignettes used in Studies 2 and 3 focused on visible signs of experiencing pleasure (or displeasure) from taking revenge, whereas the latter emphasized internal feelings accompanying individuals during retaliation. These findings suggest that showing pleasure from taking revenge is attributed to greater competence yet feeling pleasure after a vengeful act is attributed to lower morality. This applies to both actors and observers. Showing satisfaction from taking revenge can be attributed to greater competence as it indicates, for example, an ability to achieve a retaliatory goal or being successful in getting what one longed for. Conversely, feeling pleasure after taking revenge might signal that the original motivation was not to teach the offender a moral lesson, but rather to feel good—a self-oriented and morally questionable motive (see Gollwitzer & Okimoto, 2021).

In addition, we observed that the impression of feeling good (vs. bad) about pursuing revenge did not influence the likelihood of taking revenge. On average, participants declared they would not have punished their transgressor (Study 2). However, it needs to be stressed that we merely assessed the probability of revenge-seeking rather than the act of revenge itself. Unexpectedly, we also found that the fear of being negatively



evaluated (Leary, 1983) did not moderate the effect of impression from taking revenge on likelihood of retaliating. More work is needed to better understand how anticipatory social judgments shape one's punitive responses. Cultural factors possibly play an important role in the social evaluation of revenge-seekers. For instance, revenge is considered to be more appropriate (and, actually, expectable) in cultures of honor, which is why taking revenge may restore the victim's sense of significance in these cultures (Kruglanski et al., 2023). Correspondingly, avengers are judged less harshly in these cultures.

Our research also offers a closer insight into predicting emotional responses after revenge. For instance, participants assumed that victims who took revenge and felt good about it would feel less joyful and less confident the day after than victims who did not pursue revenge and felt good about the fact they did not do so. Future works would do well to take these findings further and investigate whether restraining oneself from pursuing revenge factually makes victims feel better in the long run. Participants also presumed that victims who took revenge and felt good about it would feel prouder and happier the day after but not more ashamed or more repentant. In reality, revenge is not necessarily an emotionally purgative experience. It can be rewarding (Chester & DeWall, 2017), but the vengeful pleasure is usually brief as it is swiftly followed by feelings of anger or even sadness (Eadeh et al., 2017). It appears that participants overestimated the duration of positive affective reactions following revenge which fits with previous works showing that people fail to recognize emotional consequences of enacting revenge (Carlsmith et al., 2008; Lambert et al., 2014). Research on affective forecasting indeed shows that people make a multitude of errors when predicting emotional states (Wilson & Gilbert, 2003).

Last but not least, we found some interesting differences between actors and observers in ascribed morality and competence following an act of revenge. That is, actors perceived themselves as less moral than they perceived their colleague after imagining taking revenge. By contrast, participants perceived their colleague taking revenge as more competent than themselves when committing vengeful act. These results stand in contrast to previous findings showing that other people are primarily judged with regard to their morality, while self-judgments are primarily made with regard to competence (Wojciszke, 2005). In addition, we observed that revenge-seekers who felt bad after revenge were perceived by observers as feeling more guilty and more ashamed than revenge-seekers who felt good after revenge. Analogically, colleagues who felt good after revenge were perceived by observers as feeling prouder and happier than colleagues who felt bad after enacting revenge. Yet no such effects occurred for actors (i.e., participants imagining taking revenge). Future research would do well to investigate these asymmetries more comprehensively.



Limitations and Future Research Directions

Our research has several limitations. Most importantly, all studies relied heavily on vignettes, which limits the generalizability of results. Participants were exposed to hypothetical scenarios rather than engaged in, for example, interactions with a provocative individual (Chester & DeWall, 2017). In addition, vignettes across studies used different stories (betrayal by a romantic partner or idea theft at a workplace) and people may evaluate avengers differently depending on the context. Prospective works would do well to replicate our findings using a lab-based measurement of revenge (Suris et al., 2004).

Furthermore, we did not include a neutral condition alongside hedonic pleasure and hedonic displeasure conditions in any of our studies. As such, we cannot tell whether observed effects occurred due to feeling/expressing pleasure or due to feeling/expressing displeasure or, perhaps, due to both. Future works would benefit from taking our findings forward and examining the consequences of vengeful pleasure (and displeasure) more comprehensively. For instance, use of a laboratory setting would create an opportunity to employ a less direct and more valid assessment of emotional states following revenge (see Mitschke & Eder, 2021).

In addition, three out of four studies were carried out among undergraduate students, who often possess features that are uncommon in the general population. Although we collected data in the alternative population of American adults, both samples are still considered WEIRD ("White Educated Industrialized Rich and Democratic"; Henrich et al., 2010) and previous works found that people from WEIRD and non-WEIRD populations tend to make different moral judgments. For instance, poor individuals make harsher moral judgments than rich ones as having limited resources makes people more vulnerable (Pitesa & Thau, 2014).

Moreover, samples of students were not gender-balanced, with male participants being severely underrepresented. This undermines the generalizability of our findings as previous research found gender differences in moral judgments (Atari et al., 2020; Capraro & Sippel, 2017). Also, participants' age differed with some participants being about 60 years old despite most being in their twenties. Research has shown that moral judgments vary across age (Margoni et al., 2018; McNair et al., 2019), which may influence the generalizability of our findings.

Finally, our research raises questions about the quality of data in online research, particularly among students. Across the board, we excluded hundreds of participants who completed studies below the minimum time necessary to thoughtfully complete each. Employing such strict exclusionary criteria presumably enabled us to better detect so-called "low effort participants" (e.g., Buchanan & Scofield, 2018). We therefore recommend researchers to employ more conservative exclusionary criteria for prospective online studies.



Conclusions

Avengers mispredict how others would see them when they imagine themself showing visible signs of pleasure from taking revenge. They expect others to see them as more competent when making the impression of feeling pleasure from taking revenge yet seeing someone feeling good about taking revenge is attributed to lower morality.

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Data Availability: For this article, all datasets and codebooks are publicly available (see Dyduch-Hazar & Gollwitzer, 2022d).

Supplementary Materials

For this article, the following Supplementary Materials are available:

- Pre-registration for Study 1 (see Dyduch-Hazar & Gollwitzer, 2022a), Study 2 (see Dyduch-Hazar & Gollwitzer, 2022b), Study 3 (see Dyduch-Hazar & Gollwitzer, 2022c), and Study 4 (see Dyduch-Hazar & Gollwitzer, 2023)
- · All datasets, codebooks, and research materials (see Dyduch-Hazar & Gollwitzer, 2022d)
- Appendix A (Supplementary Tables), Appendix B (Supplementary Figures), and Appendix C (Methodological Attachment) (see Dyduch-Hazar & Gollwitzer, 2024)

Index of Supplementary Materials

- Dyduch-Hazar, K., & Gollwitzer, M. (2022a). Role of revenge related pleasure in moral evaluation of revenge seeker [Pre-registration Study 1]. OSF Registries. https://doi.org/10.17605/osf.io/zvg4j
- Dyduch-Hazar, K., & Gollwitzer, M. (2022b). Role of impression from taking revenge in anticipated moral perception of revenge seeker [Pre-registration Study 2]. OSF Registries. https://doi.org/10.17605/osf.io/akr34
- Dyduch-Hazar, K., & Gollwitzer, M. (2022c). Actor observer asymmetry in moral evaluation of feeling pleasure from taking revenge [Pre-registration Study 3]. OSF Registries. https://doi.org/10.17605/osf.io/sw2pe



- Dyduch-Hazar, K., & Gollwitzer, M. (2022d). *Revenge paradox: Feeling good from revenge makes people feel bad about themselves* [Datasets, codebooks, materials]. OSF. https://osf.io/hp5yz/
- Dyduch-Hazar, K., & Gollwitzer, M. (2023). Actor observer asymmetry in moral judgment of feeling pleasure from taking revenge [Pre-registration Study 4]. OSF Registries. https://doi.org/10.17605/osf.io/vh7cp
- Dyduch-Hazar, K., & Gollwitzer, M. (2024). Supplementary materials to "Feeling bad about feeling good? how avengers and observers evaluate the hedonic pleasure of taking revenge" [Appendices A, B, C]. PsychOpen GOLD. https://doi.org/10.23668/psycharchives.14249

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