Soldiers of misfortune: An examination of the Dark Triad and the experience of schadenfreude

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1. Introduction

The popularity of television shows such as American Idol and YouTube videos depicting “fails” indicates that there is a widespread interest in laughing at others’ misfortunes. This common affective experience, in which an observer derives pleasure from another’s misfortune, is schadenfreude (Takahashi et al., 2009). Unlike sadism, which involves deriving pleasure from directly causing the misfortune or pain in another person, schadenfreude is associated with pleasure from a physical and psychological distance. However, both involve a failure to experience empathy (e.g., Cikara, Bruneau, & Saxe, 2011) suggesting that they may not be discrete entities but rather exist on a continuum (Buckels, 2012). Fac- tors that promote schadenfreude include a personal gain of some sort (e.g., watching a fellow employee get demoted), envy (e.g., hearing about a wealthy celebrity’s downfall), and the deservingness of the target (e.g., observing a student who is caught cheating: Feather, Boeckmann, & McKee, 2001; Smith, Powell, Combs, & Schurtz, 2009). Of the three factors, the perception of target deservingness appears to be the most robust factor to elicit schadenfreude (Feather et al., 2001). An example of where the role of deservingness in schadenfreude may feature prominently is in the courtroom, in which the public (and thus, jury members) derive pleasure from observing a (perceived) deserving offender experience harsh sentencing for his/her wrongdoing.

Little research has addressed the observation that some people seem to experience more frequent and intense schadenfreude than others. However, some work has examined individual differences in sadistic interests. For example, psychopathy consistently has been related to sadism (e.g., Porter, Woodworth, Earle, Drugge, & Boer, 2003; Woodworth et al., 2013). Given the profound trait empathy deficit associated with psychopathy and required for the state of schadenfreude, it is possible that they also may be linked. Further, psychopathy has been linked to laughing at others for the purpose of harming them (Proyer, Flisch, Tschupp, Platt, & Ruch, 2012). Related work indicates that psychopaths exhibit negative (e.g., maladaptive, aggressive) humour styles (Veselka, Schermer, Martin, & Vernon, 2010).

Research also has established a link between schadenfreude and the other two Dark Triad traits, Machiavelliamism and narcissism. For example, there is a relationship between each of psychopathy and Machiavelliamism with positive emotions elicited by sad images (Ali, Amorim, & Chamorro-Premuzic, 2009), consistent with the concepts of sadism and schadenfreude. Further, Krizan and Johar (2012) found that vulnerable narcissism (e.g., having a heightened sensitivity to critique and disapproval) was related to schadenfreude and envy. Recently, Buckels (2012) proposed that “everyday sadism” should be included with the Dark Triad constructs to form the “Dark Tetrads”. Everyday sadism can be conceptualized as a nonclinical form of sadism, differing from clinical sadism in that the individual does not harm others out of the need for cruelty but rather for the pleasure derived from the act

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(Buckels, 2012), making it more closely related to the concept of schadenfreude. While Buckels specifically highlighted the importance of examining individual differences, particularly dark personality traits, in the expression of schadenfreude, surprisingly no research has directly examined this relationship.

The current study sought to examine the experiences of schadenfreude and empathy in relation to the Dark Triad. Schadenfreude was assessed through self-report measures coupled with objective coding of smile intensity of observers who viewed an image depicting a primed target experiencing an unfortunate event. It was hypothesized that Dark Triad features, particularly psychopathy, would be related to increased schadenfreude. Further, given the role of deservingness in schadenfreude it was hypothesized that a greater intensity of schadenfreude would be present in response to targets who had engaged in criminal behavior (i.e., legal stimuli; Feather et al., 2001) than those who experienced a non-legal misfortune (i.e., non-legal stimuli). It also was predicted that emotional facial expressions of happiness, as inferred from smile intensity, would indicate that participants experienced more schadenfreude than they self-reported, and that the difference between high Dark Triad scorers’ self-reported and objective schadenfreude would be greater than for lower scorers (given their propensity to use deception and self-enhancement).

2. Methods

2.1. Participants

Participants (“observers”) were 120 undergraduate students at a Canadian university, with a mean age of 20.55 years (SD = 3.90). Of these, 87 were female and 33 male. Participants were granted course credit to compensate for their time.

2.2. Measures

2.2.1. Dark Triad measures

The Dark Triad subcomponents psychopathy, Machiavellianism, and narcissism were measured using well-validated tools including the Self-Report Psychopathy Scale-4 (SRP-4; Paulhus, Neumann, & Hare, in press), the MACH-IV (Christie & Geis, 1970), and the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979), respectively.

2.2.2. Schadenfreude and Empathy Evaluation Form

This measure was created for the current study by expanding on a questionnaire used in a similar study by van Dijk, Goslinga, and Ouwerkerk (2008). Three items were adopted from this measure to evaluate schadenfreude: (a) I enjoy what happened to [the target]; (b) I could not resist a little smile; and (c) I actually had to laugh a bit, and three items were adopted to assess sympathy and empathy: (a) I commiserate with [the target] about what happened; (though “commiserate” was substituted with “empathize”, to better fit the current study); (b) I feel sorry for what happened to [the target]; and (c) I sympathize with [the target]. Additional original items included ratings of the degree of pleasure and pain experienced; how funny he/she found the situation; and how bad he/she felt for the target. All of the items were measured using a 5-point Likert scale ranging from 1(‘strongly disagree’) to 5(‘strongly agree’).

2.2.3. Smile coding

Smiles were coded for intensity using a procedure based on elements of the Facial Action Coding System (FACS; Ekman, Friesen, & Hagar, 2002). The present study made use of a recent adaptation of this approach by Kraus and Chen (2013) who used Action Unit 12, the zygomatic major (ZM) muscle, which upturns the corners of the lips, as the primary indicator of a smile. The intensity coding consisted of rating a smile on the following scale: 0 = neutral or no smile, 1 = smile with moderate contraction of the ZM with closed lips, 2 = smile with major contraction of the ZM with parted lips, teeth visible, and 3 = smile with audible laughter. One undergraduate student conducted the smile coding with a second trained graduate student coding 19 (15%) of the 120 videos. Raters’ scores were correlated between .78 and .88 (p < .05) for each of the four intensity levels and no mean difference was found between raters.

2.3. Procedure

Observers were randomly assigned to one of three priming conditions: empathy, schadenfreude, or neutral (no emotional prime). The condition determined the type of vignette presented to the observer. Each vignette consisted of a description of a person’s current lifestyle characteristics. For example, a vignette in the empathy condition depicted a man who has been diagnosed with cancer, recently lost his job, and lacked a social life. Alternatively, in the vignette intended to elicit schadenfreude, the same man was described as spending a great deal of money and time on his appearance, having a well-paying job, and being a “ladies’ man”. In both scenarios, the man is on his way to meet a date when he is splashed by a car driving through a muddy puddle. In the neutral condition, the man is described as “average”, and most of the information given surrounds the negative event itself, rather than personal information.

Observers read the vignette from a desktop computer and subsequently were exposed to an image portraying the target described in the vignette experiencing a misfortune. Each image was displayed for 5-s, and observers’ faces were video-recorded during this time. Although the vignettes differed across conditions, all observers were shown the same four images. Two images were of a misfortune in a legal context (i.e., an arrest; a court sentence hearing), and two images were misfortunes of a non-legal context (i.e., a man spilling coffee on himself; a man splashed by a car driving through a puddle). Following the presentation of the vignette and corresponding image, observers completed the Schadenfreude and Empathy Evaluation Form. After the observers viewed and rated all four images, they completed the three self-report questionnaires assessing Dark Triad traits (SRP-4, MACH-IV, and NPI). Finally, observers completed a demographics questionnaire, which included an item (item 7) relating to the participant’s frequency of seeking out videos of others getting hurt (i.e., “how often do you watch videos on YouTube of people accidently getting hurt?”).

2.4. Data preparation

The three Dark Triad measures (SRP-4, MACH-IV, and NPI) were scored individually according to their respective scoring requirements before being standardized using z scores and then averaged to create a Dark Triad composite score (Jonason, Li, Webster, & Schmitt, 2009).

3. Results

3.1. Dark Triad measures

The mean score on the SRP-4 for the total sample was 139.65 (SD = 22.47), with total scores ranging from 100 to 212. The mean score on the MACH-IV for the total sample was 86.59 (SD = 10.8), with total scores ranging from 64 to 118. The mean score on the NPI for the total sample was 13.45 (SD = 6.7), with total scores ranging from 1 to 31. The mean score on the Dark Triad composite
measure (a z score) for the total sample was 0 (SD = .79), with total scores ranging from −1.47 to 1.97. Independent-sample t tests revealed that males scored significantly higher than females on Dark Triad composite scores, t(120) = 2.19, p < .05 and on SRP-4 total scores, t(120) = 3.86, p < .001. Results of the Dark Triad measures broken down by gender are presented in Table 1.

Correlations between the Dark Triad composite scores, the three subscale scores, and responses to item 7 were examined (see Table 2). The three Dark Triad scales were significantly correlated with one another, but as the highest correlation was .69 it is safe to assume that each is a distinct construct that measures a different aspect of personality (Jonason et al., 2009). Demographic item 7, inquiring about frequency of seeking out videos of misfortune on YouTube, was positively correlated to Dark Triad composite, SRP-4, and MACH-IV scores.

3.2. Manipulation check

A multivariate analysis of variance (MANOVA) was conducted to determine the effect of emotional priming through vignettes (empathy, schadenfreude, neutral) on self-reported schadenfreude scores and smile intensity for legal, non-legal, and both (i.e., legal and non-legal combined) stimuli. The overall MANOVA was significant, Wilks’s lambda = .36, F(8, 224) = 18.60, p < .001. The multivariate η² of .40 was strong, revealing that the priming conditions, or the contents of the vignettes, effectively induced schadenfreude, or conversely, empathy/sympathy, at varying intensities.

3.3. Reliability of The Schadenfreude and Empathy Evaluation Form

Reliability analyses were conducted on the items that measured schadenfreude and empathy. The five total items and the three items adapted from van Dijk et al.’s (2008) measure to assess schadenfreude demonstrated high reliability (α = .86 and .80, respectively). These values are comparable to the Cronbach’s alpha values that have been reported in previous studies using these measures (ranging from .80 to .90; e.g., van Dijk, Ouwerkerk, & Goslinga, 2009; van Dijk, Ouwerkerk, van Koningsbruggen, & Wesseling, 2012; van Dijk et al., 2008). Similarly, the five total items and the three adapted items to measure empathy/sympathy also demonstrated high reliability (α = .90 and .89, respectively). These values are comparable to the Cronbach’s alpha values that have been reported in previous studies using these items (ranging from .74 to .83; e.g., van Dijk et al., 2008, 2009, 2012) but these values are not directly comparable as the researchers revised one of van Dijk’s items for the current study to better assess observer empathy. Finally, the four new items added by the current authors also had high reliability (Cronbach’s alpha = .78).

3.4. The Dark Triad and schadenfreude

Several relationships between the Dark Triad scales and the dependent variables of interest, self-reported schadenfreude and smile intensity, were found (see Table 3). In general, observers reported greater schadenfreude intensity for non-legal (M = 52.33, SE = 1.29) stimuli than for legal stimuli (M = 45.28, SE = 1.22), t(119) = 3.15, p < .001, and exhibited greater smile intensity for non-legal (M = 0.75, SE = 0.85) stimuli than for legal stimuli (M = 0.47, SE = 0.55), t(119) = 3.32, p < .001. More specifically, Dark Triad composite scores were positively correlated with self-reported schadenfreude for both legal and non-legal stimuli (see Table 4 for correlations between Dark Triad composite and subscale scores and presence of schadenfreude). Dark Triad composite scores were only related to smile intensity for legal stimuli. In particular, males exhibited greater smile intensity for legal stimuli, t(118) = 2.27, p = .025.

Similar to the Dark Triad composite scores, SRP-4 scores were positively correlated with self-reported schadenfreude for both legal and non-legal stimuli, and with smile intensity for legal stimuli only. In relation to the other two Dark Triad subscales, MACH-IV scores were positively correlated with self-reported schadenfreude for legal stimuli only, and greater smile intensity for legal stimuli only. NPI scores were not correlated with self-reported schadenfreude, but were positively related to greater smile intensity for legal stimuli only.

Finally, responses to demographic item 7 inquiring about the frequency of seeking out YouTube videos that involve someone being injured was positively correlated with self-reported schadenfreude for both legal and non-legal stimuli only. Similarly, this item was positively correlated with smile intensity for legal stimuli only.

Regression analyses were run to assess the relationships between the Dark Triad composite scores and self-reported schadenfreude (legal and non-legal) and smile intensity (legal only). Non-legal smile intensity was not examined, as this variable was

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Table 1

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<th>Female</th>
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Table 2

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Table 3

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Table 4

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<td>YouTube question (item 7)</td>
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Significant at the p < .05 level.
**Significant at the p < .001 level.
not significantly correlated with Dark Triad composite scores. The linear combination of these measures was significant, $F(3, 119) = 7.54, p < .001$. Both self-reported schadenfreude and smile intensity for legal stimuli predicted Dark Triad scores (self-report $B = .014$, $p = .02$; smile $B = .27$, $p = .002$), whereas self-reported schadenfreude for non-legal stimuli did not ($B = .004$, $p = .50$).

Similarly, a regression analysis was conducted to assess whether self-reported schadenfreude (legal and non-legal) and smile intensity (legal only) could predict SRP-4 scores. Again, the variable for non-legal smile intensity was excluded due to the non-significant correlation with SRP-4 scores. The linear combination of all predictors was significant, $F(3, 119) = 5.99, p = .001$ but when individual predictors were considered, only smile intensity for legal stimuli predicted SRP-4 scores ($B = .28, p = .006$). Regression analyses were run using the same predictors with MACH-IV and NPI scores. The linear combination of predictors was significant for MACH-IV scores, $F(3, 119) = 4.80, p = .003$, and NPI scores, $F(3, 119) = 3.25, p = .02$. Considering individual predictors, both self-reported schadenfreude and smile intensity for legal stimuli only predicted (self-report $B = .011$, $p = .009$; smile $B = .14$, $p = .02$) MACH-IV scores, but only smile intensity in the legal only stimuli condition ($B = .23, p = .03$) predicted NPI scores.

Analyses to examine the relationship between Dark Triad subscale scores and demographic item 7 revealed that only the SRP-4 was a significant predictor of frequency of watching these videos (SRP-4 $B = .39, p = .04$; MACH-IV $B = .067, p = .82$). The linear combination of these two personality measures was significantly related to watching these videos, $F(2, 119) = 5.01, p = .008$. Similarly, the Dark Triad composite score predicted watching these videos ($B = .43, p = .008$), $F(1, 119) = 7.30, p = .008$. When all the Dark Triad subscales (SRP-4, MACH-IV, NPI) were entered simultaneously, only SRP-4 scores were significant predictors of watching these videos (SRP-4 $B = .41, p = .04$; MACH-IV $B = .063, p = .84$; NPI $B = -.026, p = .85$). The linear combination of these three variables was significant $F(3, 119) = 3.33, p = .022$, indicating that these three predictors, when combined, predicted seeking of videos, with SRP-4 scores as the strongest predictor.

3.5. Examining the discrepancy between subjective and objective measures of schadenfreude

Differences between self-reported schadenfreude and smile intensity were examined by grouping each of the individual difference measures (i.e., Dark Triad composite, SRP-4, MACH-IV, and NPI) into “low” and “high” groups using a median split (e.g., high scorers versus low scorers on the Dark Triad). When examining these variables with legal and non-legal stimuli combined (i.e., total self-reported schadenfreude, total smile intensity), no differences were found. Although discrepancies were not found overall, some differences were present when examining scores for legal and non-legal stimuli independently. There were differences between self-report and smile intensity scores for the legal stimuli for participants who scored low on the Dark Triad composite score (median = −0.0073), $t(59) = 3.14, p = .003$, the SRP-4 (median = 137), $t(59) = 3.46, p = .001$, and the MACH-IV (median = 86), $t(59) = −3.15, p = .003$. There were no differences between the outcome measures for participants scoring either high or low on the NPI, nor for the non-legal stimuli.

4. Discussion

This study was the first to investigate the relationship between the Dark Triad and schadenfreude. The collective results indicated that the intensity of subjective (self-report) and objective (smile intensity) measures of schadenfreude predicted Dark Triad composite scores. Dark personalities reported greater schadenfreude for each of legal and non-legal stimuli and smiled more intensely (legal stimuli only), suggesting that such individuals generally experience a greater intensity of schadenfreude than others. Further, this relationship also was evidenced specifically with psychopathy, adding to the results of a previous study that found that psychopaths use laughter to harm others (Proyer et al., 2012). It appears that observers with dark personalities, and psychopathic personalities in particular, engage in negative humour styles, consistent with the findings of Veselka and colleagues (2010).

Considering the role of deservingness in both schadenfreude and the legal system (Feather et al., 2001), schadenfreude may be increased in legal settings, such as during sentencing, in which the accused is perceived as getting what he/she deserves. In this study, surprisingly, observers in general experienced a greater degree of schadenfreude for non-legal stimuli than legal stimuli. This may be due, in part, to the fact that the non-legal stimuli had relatively minor consequences (i.e., losing a job) whereas the legal stimuli had major consequences (i.e., serving jail time). Individuals may view these legal contexts as more serious than the non-legal contexts, therefore finding it less funny and expressing less positive emotion. However, contrary to the general sample, the results suggested that dark personalities experience increased schadenfreude intensity for legal stimuli than non-legal stimuli. This was evident from the smile coding in particular, as there was a relationship between smiling for legal stimuli and Dark Triad composite scores, and each of the Dark Triad subconstructs individually. Individuals with dark personalities may display greater smiles for legal stimuli in particular because they take greater pleasure in observing misfortunes with more severe consequences.

Item 7, inquiring about watching YouTube videos of others experiencing pain, was added to examine schadenfreude in a real-world setting. The findings suggested that the overall Dark Triad, psychopathy, and Machiavellianism each were associated with seeking out these videos more frequently. This finding is particularly interesting in showing that dark personalities actively seek out stimuli that induce feelings of schadenfreude. As dark personalities are purposely obtaining and viewing incidents of others in pain, this goes beyond inadvertently observing the event. As this item pertained to physical pain specifically, such results potentially relate to previous findings of the relationship between Dark Triad constructs (particularly psychopathy) and sadism (e.g., Bucels, 2012). As the Dark Triad is composed of subclinical constructs and schadenfreude may be a subclinical derivative of sadism (Bucels, 2012), perhaps schadenfreude (rather than sadism) should be considered as a part of the proposed Dark Tetrad. Also interesting was the lack of a relationship between narcissism and seeking out stimuli to induce schadenfreude. As narcissists have the highest degree of emotional intelligence of the three Dark Triad traits (Wai & Tiliopoulos, 2012), and possess the ability to recognize the emotional expressions of others, it is possible that they do not seek out these videos of individuals in pain as they are able to empathize with their suffering and do not derive pleasure from these more serious misfortunes.

Contrary to our hypothesis, it was the individuals scoring lower on measures of psychopathy, Machiavellianism, and the Dark Triad as a whole that had the larger incongruences between the subjective and objective measures of schadenfreude. That is, low scorers reported a high degree of empathy and sympathy for the targets despite displaying emotions characteristic of pleasure and happiness. Individuals scoring low on these measures are likely to possess increased empathy and emotional intelligence. As such, despite deriving pleasure from the images of misfortunes, they were likely cognizant that their reaction was not socially acceptable and reported experiencing little schadenfreude. These low
scoring participants also likely tried to reduce the expression of pleasure on their faces as well, but because it is difficult to conceal felt emotion (see Porter & ten Brinke, 2008), participants leaked their true emotion on their face by smiling. Participants scoring high on measures of the Dark Triad did not display this discrepancy in the experience of schadenfreude. This may be due to their trait lack of empathy for others and emotional intelligence that might dictate that they should not experience pleasure at the emotions of others.

Although the current study enhances our knowledge of schadenfreude and of the Dark Triad in general, some limitations should be considered. First, only four images were used as stimuli. Second, participants were informed of the video camera being used prior to the experiment commencing, which may have inhibited smiling (e.g., due to social desirability). Subsequent studies should code for facial expressions in both the lower and upper face to pinpoint the exact expression of schadenfreude (e.g., possibly a blend of happiness and contempt; Kernberg, 1975). Despite these limitations, robust relationships were found between personality and schadenfreude demonstrating the strength of the results.

While schadenfreude has been examined in terms of situational determinants concerning the target, individual differences in observers have not been thoroughly investigated. The findings here illustrate the importance of taking into account individual differences, specifically the Dark Triad as a whole and each of its subconstructs individually, in the experience and expression of schadenfreude. The current study made use of subjective and objective measures of schadenfreude, capturing greater levels of schadenfreude than may have been concealed had only self-report measures been employed. Results suggest that dark personalities, exhibiting deficits in emotional processing and interpersonal skills, experience a greater intensity of schadenfreude, particularly when exposed to high-stakes, legal situations. Further, dark personalities experience greater schadenfreude even when being primed for empathy and go as far as to actively seek out stimuli to induce feelings of pleasure at the misfortune of others.

Acknowledgements

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References

