

Exploring Relations Between Dark Personality Traits, Media Violence Exposure, and Finding Humor in Media Violence

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Abstract

Who finds media violence funny? Psychologists have identified several “dark” personality traits that may have the power to predict this. People with these traits have common features, they have little or no empathy towards others and at some level find pleasure in other people’s pain. These features are similar to what we believe influences people to find humor in media violence. We know that people who are desensitized to media violence normally show little or no empathy towards others. What we do not know is what influences people to find humor in media violence, which is similar to finding pleasure in another person’s pain. If there is a relation between the two variables, desensitization to media violence might be at the foundation of people with “dark” personality traits. We consider dark personality traits to be the dark triad (narcissism, psychopathy, and Machiavellianism), schadenfreude, spitefulness, and sadism. A person that exhibits dark triad traits only has an interest in themselves (narcissism), cruel disregard for others (psychopathy), and can easily manipulate others (Machiavellianism). Similarly, schadenfreude, is a person finding pleasure in another person’s pain. One aspect of spitefulness, a person is willing to incur a cost in order to cause harm towards another person. Using the concept of everyday sadism, a person finds pleasure or sexual gratification out of harming others. We predicted all these traits would have a positive relation with finding humor in media violence because of how people with these traits treat others. We ran a cross-sectional survey at a large Midwestern University. We found that people with the personality traits of sadism and schadenfreude, and who had high exposure to media violence, consistently found humor in different forms of media violence. Future research is needed to determine the causal relation between these variables.

Keywords: Dark Personality Traits, Media Violence, Humor

1. Introduction

Who finds media violence funny? Several “dark” personality traits might predict this. Previous research on dark personality traits have shown that people with these traits typically have little-to-no empathy towards others, and at some level, find pleasure in another person’s pain or suffering. Whether it is physical or psychological pain. Most of the research done on dark personality traits relates to the dark triad. Dark triad research typically examines possible sub traits and how it relates to gender. Since little research has been done on the dark triad and media violence, we were interested in testing how these traits (the dark triad, schadenfreude, spitefulness, and sadism) relate to finding humor in media violence.

1.1. The Dark Triad

The dark triad consists of three personality traits: Machiavellianism, narcissism, and psychopathy. *Psychology Today* defines the dark triad as, “a set of traits that include the tendency to seek out admiration and special treatment (narcissism), to be callous and insensitive (psychopathy), and to manipulate others (Machiavellianism)”¹. Previous research done on the dark triad and the possible sub traits, sparked interest in this study to see whether schadenfreude, spitefulness, and sadism are sub traits of the dark triad.

1.2. Schadenfreude

Schadenfreude is the German word meaning “satisfaction or pleasure felt at someone else’s misfortune”². Schadenfreude and the dark triad have been studied together by various researchers, usually on how empathy or dark behaviors relate to schadenfreude. To measure schadenfreude, Greenier measured hypothetical and live situations³. The results for the hypothetical situations showed that high scores on the dark triad were associated with higher levels of schadenfreude. Low empathy scores were related to higher scores of schadenfreude and the dark triad. This means that people with the personality traits of schadenfreude and the dark triad both had similar characteristics of lower empathy levels. Research done on prosocial video games, found that participants who played violent video games had higher levels of schadenfreude and lower levels of empathy⁴. The opposite pattern was found for prosocial gamers. These results coincide with Anderson et al.’s meta-analysis which found video game violence exposure to be negatively correlated with empathy⁵. If a person feels enjoyment from seeing someone else suffer from a misfortune, this would mean they have little-to-no empathy towards that person. Little-to-no empathy would apply to the dark triad as well. Research done by James et al. concluded that the strong relation between schadenfreude and the dark triad supports the theory that, “a dark core lies at the heart of the dark triad.”⁶. This would mean that other dark traits, such as schadenfreude, help create the foundation of the dark triad. If schadenfreude is a part of the “dark core” and people with this trait little-to-no empathy, then the dark triad would be linked to these traits as well.

1.3. Spitefulness

Researcher’s describe spitefulness as “the degree to which an individual is willing to incur a cost in order to inflict harm on another individual”⁷. Spitefulness and the dark triad have been researched together across different types of populations. One of the first research projects done on the dark triad and spitefulness found that spitefulness was positively correlated with each trait of the dark triad and aggression⁸. These results held up across two different universities across the country and with a public survey distributed via Amazon.com. Another study was done on people who were clinically diagnosed with psychotic spectrum disorders to test their levels of spitefulness⁹. The researchers were interested in people with psychotic disorders because they usually show higher levels of the dark triad. They did find a relation between spitefulness and the dark triad, implying that if a person has dark triad traits, they are also likely to have spitefulness. With the research provided, the positive relation between spitefulness and the dark triad was consistent over various populations, college students, the general public, and patients with mental illness.

1.4. Sadism

When talking about sadism in research, there are two ways it is used, sadism and everyday sadism. According to the Merriam-Webster Dictionary, sadism is “the derivation of sexual gratification from the infliction of physical pain or humiliation on another person delight in cruelty.”¹⁰ Everyday sadism is considered “the nonclinical version of sadism, the individual does not harm others out of the need for cruelty but rather for the pleasure derived from the act.”¹¹ Everyday sadism could be considered more relatable in the general public because, fewer people show signs of clinical-level sadism. When looking into how sadism relates to violent video game preferences, Greitemeyer used everyday sadism to measure sadistic tendencies¹¹. In a sample of frequent violent video game players, they scored higher on everyday sadism, even when controlling for aggression; compared to less frequent players. The results also showed that physical and verbal sadism had a positive relation with violent video game play. However, when controlling for the big five personality traits and trait aggression, only physical sadism was still significant. The way

video games are designed, most of how the player interacts with the game is physical. The violence they carry out in game is mostly physical. Verbal aggression is an added effect to make the game more violent and realistic. While there is still verbal aggression in the game, a person with sadistic tendencies might be playing the game more for the physical violence the game offers, and a byproduct that comes with that is verbal aggression.

The relation between sadism and the dark triad is complex. Many studies show that sadism is related to the dark triad and even hypothesize that it is a strong sub trait. A study on the dark triad and everyday sadism found that sadism is strongly correlated with Machiavellianism and psychopathy but not narcissism¹². The researchers claim that sadism is less likely to correlate with narcissism because it is a complex trait with positive and negative characteristics. Taking that into consideration, sadism is still likely to have a relation to the dark triad.

1.5. Desensitization to Media Violence

When talking about desensitization to media violence “it is a reduction in emotion-related physiological reactivity to violence.”¹³ Desensitization to media violence is often considered a developed “numbness” to violence. Researchers conducted a study to measure physiological arousal to real life violence after participants played a violent video game or a prosocial video game¹³. The participants that played violent video games had less physiological arousal than the prosocial gamers. This means that they were more used to the violence, showing less empathy towards the victims of violence. In relation to the personality traits, it is possible that people with dark personality traits are desensitized since they show less empathy towards others. When looking into desensitization and humor, violent action comedies cause people to become desensitized quicker than regular violent movies¹⁴. Participants in the research study either watched a violent action comedy or violent movie. The participants that watched the violent action comedy had significantly lower aggression, anxiety, and sadness levels. Each participant viewed the same amount of violent content, however, the participants from the violent action comedy group did not react as much to the violence. This means that the humor from the violent action comedy was masking the violence, causing the person to show less physiological arousal to the violence. If a person watches a lot of violent action comedy movies or shows, they may not realize how quickly they are becoming desensitized to the violence. With the current study, the researchers are taking a different approach than the research study previously mentioned. The overall goal is to have two different measures of finding humor in media violence. The idea is to see how people respond immediately to one example of a violent action comedy and to see if this contrasts with the results for the participants finding humor in the media violence that they generally expose themselves to. If a person finds humor in the media violence they regularly view and in the violent action comedy clips viewed during the study, it is possible they find humor in most forms of media violence.

1.6. Hypotheses

The dark triad personality traits of Machiavellianism, narcissism, and psychopathy were predicted to have a positive (possibly moderate) correlation with finding humor in media violence. Given how people with these personality traits treat others, it seems like they are possibly desensitized to media violence and would find humor in media violence. However, on the personality trait narcissism, previous research has shown that it is a complex trait with positive and negative characteristics. Because of this, the results for narcissism could potentially affect the overall dark triad, making it a weaker correlation than expected.

For schadenfreude, a positive (possibly strong) relation with finding humor in media violence was expected. Because many studies show that schadenfreude should be part of the dark triad, the correlation between schadenfreude and finding humor in media violence should be the same, if not higher than the correlation between the dark triad and finding humor in media violence.

For spitefulness, a positive (possibly moderate) relation with finding humor in media violence was expected. The relation was predicted to be not as strong as schadenfreude because spite tends to depend on certain situations, meaning people with spitefulness might only find certain types of media violence humorous. With research showing that spitefulness should be a part of the dark triad as well, the correlation between spitefulness and finding humor in media violence should be similar to the correlation between the dark triad and finding humor in media violence.

With sadism possibly being the most related to finding humor in media violence, it was predicted to have a positive (possibly moderate to strong) correlation to finding humor in media violence. Since many studies show that sadism is similar to the dark triad, it was predicted that sadism would have a higher correlation between finding humor in media violence compared to the dark triad finding humor in media violence; the narcissism trait might lower the correlation of the dark triad.

For people with high exposure to media violence, a positive (possibly moderate to strong) relation with finding humor in media violence was expected. Because people with high exposure to media violence are usually desensitized to media violence, they have the similar little-to-no empathy characteristics that people with dark personality traits have. If people with high exposure to media violence are similar to people with dark personality traits, there should be a similar relation between people with high exposure to media violence and people with dark personality traits finding humor in media violence.

Overall, with the previous research showing that schadenfreude, spitefulness, and sadism should all be considered a part of the dark triad, we predicted that the three possible sub-traits of the dark triad (schadenfreude, spitefulness, and sadism) and finding humor in media violence would be comparable to the relations between the dark triad and finding humor in media violence. We also predicted that people with high exposure to media violence would find humor in media violence.

2. Methodology

2.1. Participants

At a large Midwestern University, 185 participants were recruited to complete an online questionnaire. For gender, 79% of the participants were female ($N = 146$). The age of the participants ranged from 18-years-old to 24-years-old ($M = 19.15$, $SD = 1.22$).

2.2. Stimuli and Equipment

Participants completed the online questionnaire via the Psychology research program. Five-dollar Amazon.com gift cards were given to participants for their participation in the study. Participants completed the online questionnaire on their own time using their computer or mobile device.

2.3. Procedure

This study was cross-sectional. Participants completed several questionnaires on dark personality traits (Machiavellianism, psychopathy, narcissism, sadism, schadenfreude, and spite), their media usage, if they find humor in the media violence they consume, and on different humor styles. After these questionnaires, they viewed three short clips from the movie *Deadpool* and answered questions regarding their reactions to the clips. For the purpose of this project, our focus was on the dark personality traits, finding humor in the media violence they consume, and their reactions to the movie *Deadpool*.

To measure the dark triad personality traits, the Jones and Paulhus scale was used¹⁵. Machiavellianism, narcissism, and psychopathy each had their own nine question scale. Their results found that each scale still accurately predicted the trait without having to answer 35 questions per trait. For each of the three scales, a 5-point Likert scale was used (1 = strongly disagree; 5 = strongly agree). To measure the personality trait schadenfreude, three different scales were used. One scale being used to measure schadenfreude was developed by James et al⁶. This scale is made up of vignettes to assess schadenfreude. Each of the three vignettes provide a situation where another person intentionally upsets the reader to put them into a situation of feeling schadenfreude. The participant rates how they feel for each vignette, rating how amused, satisfied, pleased or sympathetic they feel towards each situation on a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree). The schadenfreude scale created by Greenier designed vignettes for college students to see if demographic-specific vignettes are more successful³. After reading each vignette, participants answered how amused, satisfied, pleased, and sympathetic they felt towards the situation. The answers were recorded on a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree). For the third schadenfreude scale, instead of using vignettes, participants briefly described a situation where a person was better off than them, then answered questions regarding the situation¹⁶. Following the questions, the participants then were asked to imagine that the same person they described in the previous situation suffers a minor misfortune and then answered questions regarding how amused they would be. The answers for both set of questions were rated on a 7-point Likert scale (0 = not at all; 6 = very much). The spite personality trait measurement scale was developed by Marcus, Zeigler-Hill, Mercer, and Norris⁸. These researchers developed a set of questions that only pertained to spite. There were 17 questions in this scale that covered a wide variety of spite related situations: political, financial, social, physical, and inconvenience. The

questions used a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). The scale used to measure sadism was also developed by Paulhus and Jones¹⁷. There were 16 questions used to accurately identify a person with a sadistic personality. The researchers recommend including their filler questions into the sadism questionnaire to prevent participants from feeling guilty while completing the questionnaire. The sadism questionnaire uses a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree).

To measure media violence exposure and finding humor in the media violence that the participants regularly consume, an adaptation of the General Media Habits Questionnaire was used to evaluate television, movie, and video game consumption¹⁸. The participants answered questions on their three favorite television shows, movies, and video games. For each favorite media type, the participant answered how frequently they viewed (or played) the content on a 5-point Likert scale (1 = once a month or less, 2 = 2-3 times per month, 3 = once per month, 4 = 2-4 times per week, 5 = 5 or more times per week). On a 7-point Likert scale (1 = never/not at all; 7 = all the time/very much) participants answered questions regarding each favorite media type: how often violence occurred and how justified they believed the violence was. For measuring media violence exposure, how frequent each favorite media content was consumed and how violent the participants rated the content was used. The frequency of how often they view the content and how violent that content is provides researchers with how much violent exposure the participants have. After evaluating their three favorite shows, movies, and video games, participants rated how often they find humor in each media type overall (television, movies, video games) on a 7-point Likert scale (1 = never/not at all; 7 = all the time/very much). Finding humor in media violence was analyzed using how humorous the participants rated each media type overall instead of each favorite media type.

To see if participants find humor in violent action comedy content, participants viewed three clips from the movie *Deadpool*. The first clip was the opening scene where *Deadpool* is sitting on the interstate drawing a picture and then jumps down into a vehicle to attack the enemies. This clip has both humor and violent content in it. The second clip takes place shortly after the first clip. *Deadpool* has stopped the enemies and is fighting them in the middle of the interstate. This scene was chosen because *Deadpool* is counting down the 10 bullets that he has when killing the enemies, it portrays a lot of humor and violence. The third clip takes place in the middle of the movie where there is a montage of *Deadpool* killing people while trying to find the head boss, Frances. This montage also contains a lot of humor and violence. After viewing approximately ten minutes of the film *Deadpool*, the participants completed a questionnaire regarding their reactions to the movie, answers were rated on a 4-point Likert scale (1 = This is definitely DOES NOT describe my behavior or feelings, 2 = This describes my behavior or feelings TO A SMALL EXTENT, 3 = This describes my behavior or feelings TO A GREAT EXTENT, 4 = This DEFINITELY describes my behavior or feelings). The questions related to six different reactions to the clips: if they believed the clips were humorous overall, if they believed the clips were violent overall, if they thought the violence in the clips was humorous, if they found the content enjoyable, if they viewed the content as inappropriate, and if the clips they viewed made them feel uncomfortable.

3. Results

To examine the multiple hypotheses the results are divided into sections focusing on the dark triad, schadenfreude, spite, sadism, and media violence exposure.

The correlation between the dark triad and finding humor in media violence they regularly view was positive but weak, $r(185) = .18, p = .015$. This means there was a relatively weak relation between people with high levels of the dark triad and finding humor in the media violence they regularly view. For the dark triad and finding the violent scenes of the violent action comedy *Deadpool* clips humorous, there was also a positive correlation, $r(184) = .14, p = .057$. There was a very weak relation between the two variables. The relation between the dark triad and finding enjoyment in the *Deadpool* was positive, $r(183) = .17, p = .023$. People with high levels of the dark triad found slight enjoyment in the *Deadpool* clips.

The relation between schadenfreude and finding humor in the media violence they regularly consume was positive, $r(184) = .29, p < .001$. People high in schadenfreude found humor in the media violence they regularly view. For schadenfreude and finding humor in the violent scenes of the *Deadpool* clips, there was a positive correlation, $r(183) = .29, p < .001$. This means people high in schadenfreude found humor in the violent scenes of the *Deadpool* clips. The relation between schadenfreude and finding enjoyment from the *Deadpool* clips was also positive, $r(182) = .21, p = .005$. People high in schadenfreude found enjoyment in viewing the *Deadpool* clips.

For spitefulness, the relation between spite and finding humor in media violence they consume was positive, $r(184) = .15, p = .048$. This means there was a relatively weak relation between people with high levels of spite found humor

in the media violence they view regularly. There was no relation between spite and finding humor in the violent scenes of the *Deadpool* clips, $r(183) = .06, p = .444$. There was also no relation between spite and finding enjoyment in the *Deadpool* clips, $r(183) = .05, p = .498$.

For sadism, there was a positive relation between sadism and finding humor in the media violence that they regularly consume, $r(184) = .26, p < .001$. This means people high in sadism found humor in the media violence they regularly view. The relation between sadism and finding the violent scenes from *Deadpool* to be humorous was positive, $r(183) = .23, p = .002$. People with high levels of sadism found humor in the violent scenes of the *Deadpool* clips. For sadism and finding enjoyment in the *Deadpool* clips there was a positive correlation, $r(184) = .32, p < .001$. People high in sadism found enjoyment in watching the *Deadpool* clips.

The relation between media violence exposure and finding humor in media violence the person regularly consumes was positive, $r(184) = .47, p < .001$. This means people with high exposure to media violence found humor in the media violence they regularly view. For media violence exposure and finding humor in the violent scenes of the *Deadpool* clips was positive, $r(184) = .33, p < .001$. People with high exposure to media violence found humor in the violent scenes of the *Deadpool* clips. The relation between media violence exposure and finding enjoyment in the *Deadpool* clips was positive, $r(183) = .31, p < .001$. People with high exposure to media violence found enjoyment in viewing the *Deadpool* clips.

4. Discussion

Looking at the hypotheses, not everyone with dark personality traits found humor in media violence. For the dark triad personality traits, people with the dark triad traits did not find humor in the media violence they regularly consume. People with the dark triad personality traits also did not find humor in the violent scenes from the violent action comedy clips. For both finding humor in media violence aspects, the relations were close to being significant. This means if the sample size was larger, the relation between the dark triad personality traits and finding humor in media violence might have been significant. People high in the dark triad personality traits did find enjoyment in viewing the violent action comedy scenes. This could mean that people with high levels of the dark triad did enjoy the violent action comedy scenes but for other reasons besides the violence.

For schadenfreude, people with the personality trait of schadenfreude found humor in the media violence that they regularly view. People with high levels of schadenfreude also thought the violent scenes in the violent action comedy were humorous. In addition, people high in schadenfreude also found the violent action comedy clips to be enjoyable. This means people with high levels of schadenfreude consistently found humor in violence across different situations. They found humor in the content that they choose to regularly view and found humor in violent content when provided to watch it. For the hypotheses predicted for schadenfreude, the relation between schadenfreude and finding humor in media violence was not as strong as predicted. Although, this relation was stronger than the relation between the dark triad and finding humor in media violence.

For spite, spiteful people did find humor in the media violence they regularly view. However, people with the personality trait of spite did not find humor in the violent scenes from the violent action comedy, nor did they find enjoyment from the violent action comedy clips. This may mean that they only find humor in the media violence that they choose to view. Because spite is situational it could be that people with the personality trait of spite only find humor in certain types of media violence. This would explain why they did not find humor in the violence or enjoyment from the violent action comedy scenes. Spite did not have as strong a relation to finding humor in media violence as hypothesized. However, the relation between spite and finding humor in the media violence they consume and the dark triad finding humor in the media violence they consume, the relations were similar.

For sadism, sadistic people found humor in the media violence they regularly view. People with the personality trait of sadism also found humor in the violent content from the violent action comedy. In addition, people high in sadism also found enjoyment from viewing the violent action comedy. This means that people with high levels of sadism consistently found humor in media violence across different situations. People with the sadism personality trait had the strongest relation to finding humor in media violence that they regularly view and finding enjoyment in the violent action comedy clips. The relation between sadism and finding humor in media violence was not as strong as predicted, but it still had a stronger relation than the dark triad personality traits and finding humor in media violence.

For media violence exposure, people with high exposure to media violence found humor in the media violence they regularly view. People with high exposure to media violence also found humor in the violent scenes when viewing the violent action comedy clips. In addition, people with high exposure to media violence found enjoyment from viewing the violent action comedy clips. This means that people with high exposure to media violence consistently

found humor in different forms of media violence. This may mean people who are more desensitized to media violence are more likely to find humor in media violence.

A main limitation to the study is that participants were not asked if they had seen the movie *Deadpool* before. It is possible that viewing the movie before the study could influence how humorous they rated the movie. With the study being correlational, results are not able to explain why people with certain dark personality traits find humor in media violence. The results are also not able to determine if sadism, schadenfreude, and spite are a part of the dark triad.

For future research, having participants view different genres of movies instead of only violent action comedy content could possibly be beneficial. This would allow researchers to know if people who find humor in media violence consistently find it through different portrayals of violence. Testing the big five personality traits to see how people high in these personality traits react to violent action comedy scenes or if they find humor in media violence would be beneficial. Making this study experimental would help determine what causes the relations between the personality traits, media exposure, and finding humor in media violence.

Overall, the results found that people with the personality traits of sadism and schadenfreude consistently found humor in different forms of media violence. People who also had high exposure to media violence consistently found humor in different forms of media violence. People with the personality trait of spite found humor in the media violence they chose to regularly consume. Unexpectedly, people with the dark triad personality traits did not find humor in media violence. More research is needed to understand why people with certain dark personality traits find humor in media violence over others.

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6. References

1. Whitbourne, S. K., (2013), Shedding Light on Psychology's Dark Triad. Psychology Today, *Sussex Publishers*, www.psychologytoday.com/us/blog/fulfillment-any-age/201301/shedding-light-psychology-s-dark-triad.
2. "Schadenfreude." *Dictionary.com*, www.dictionary.com/browse/schadenfreude.
3. Greenier, K. D., (2018). The Relationship Between Personality and Schadenfreude in Hypothetical Versus Live Situations. *Psychological Reports*, 121(3), 445-458. <https://doi.org/10.1177%2F0033294117745562>
4. Greitemeyer, T., Osswald, S., Brauer, M., (2010). Playing Prosocial Video Games Increases Empathy and Decreased Schadenfreude. *Emotion*, 10(6), 796-802. doi:10.1037/a0020194
5. Anderson, C. A., Shibuya, A., Ihori, N., Swing, E. L., Bushman, B. J., Sakamoto, A., Rothstein, H. R., Saleem, M., (2010). Violent Video Game Effects on Aggression, Empathy, and Prosocial Behavior in Eastern and Western Countries: A Meta-analytic Review. *Psychological Bulletin*, 136(2) 151-173. <http://dx.doi.org/10.1037/a0018251>
6. James, S., Phillip, S., Kavanagh, P. K., Jonason, J. M., Chonody, Scrutton, H. E., (2014). The Dark Triad, Schadenfreude, and Sensational Interests: Dark Personalities, Dark Emotions, and Dark Behaviors. *Personality and Individual Differences* 68, (10, 2014): 211-216, <https://doi-org.proxy.lib.iastate.edu/10.1016/j.paid.2014.04.020>
7. Vrabel, J. K., Zeigler-Hill, V., Shango, R. G. (2016). "Spitefulness and humor styles". *Personality and Individual Differences: Vol. 105*, pp 238-243. <https://doi.org/10.1016/j.paid.2016.10.001>
8. Marcus, D. K., Zeigler-Hill, V., Mercer, S. H., & Norris, A. L. (2014). The psychology of spite and the measurement of spitefulness. *Psychological Assessment*, 26(2), 563-574. <http://dx.doi.org/10.1037/a0036039>
9. Moyer, K. H., McEvoy, J. P., Mabe, A. P., Buchanan, E., Venkatesan, A., & Buckley, P. F. (2017). Prioritizing Harm, *Journal of Personality Assessment*, 99:1, 78-82, DOI: 10.1080/00223891.2016.1180625
10. "Sadism." *Merriam-Webster Dictionary*, <https://www.merriam-webster.com/dictionary/sadism>

11. Greitemeyer, T. (2015). Everyday sadism predicts violent video game preferences. *Personality and Individual Differences*, 75, 19-23. <https://search.proquest.com/docview/1650983385?accountid=10906>
12. Meere, M., Egan, V. (2017). Everyday sadism, the dark triad, personality, and disgust sensitivity. *Personality and Individual Differences*, 112:1, 157-161, <https://doi-org.proxy.lib.iastate.edu/10.1016/j.paid.2017.02.056>
13. Carnagey, N. L., Anderson, C. A., & Bushman, B. J. (2007). The effect of video game violence on physiological desensitization to real-life violence. *Journal of Experimental Social Psychology* 43 (3): 489-496, <https://search-proquest-com.proxy.lib.iastate.edu/docview/621699720?accountid=10906>
14. Heil, S. K. (2001). Does humor mediate the effects of film violence? Affective consequences of viewing the violent action comedy. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 62, 7-B, 3420-3558.
15. Jones, D. N., & Paulhus, D. L. (2014). Introducing the short dark triad (SD3): A brief measure of dark personality traits. *Assessment*, 21(1), 28-41. DOI:10.1177/1073191113514105
16. Van de Ven, N., Hoogland, C. H., Smith, R. H., Van Dijk, W. W., Breugelmans, S. M., & Zeelenberg, M. (2015). When envy leads to schadenfreude, *Cognition and Emotion*, 29:6, 1007-1025, DOI: 10.1080/02699931.2014.961903
17. Paulhus, D. L., & Jones, D. N. (2015). Measuring dark personalities via questionnaire. *Measures of Personality and Social Psychology Constructs*, 562-594. <https://doi.org/10.1016/B978-0-12-386915-9.00020-6>
18. Gentile, D. A., Lynch, P. J., Linder, J. R., & Walsh, D. A. (2004). The effects of violent video game habits on adolescent hostility, aggressive behaviors, and school performance. *Journal of Adolescence*, 21(1), 5-22. <http://dx.doi.org.proxy.lib.iastate.edu/10.1016/j.adolescence.2003.10.002>