

Schadenfreude and General Anti-Social Behaviours: The Role of Violent Content Preferences and Life Satisfaction

Edgar DEMETER¹,
Dana RAD²,
Evelina BALAȘ³

¹Assist. Prof. PhD, Aurel Vlaicu University of Arad, Arad, Romania, edgar.demeter@uav.ro

²Assoc. Prof. PhD, Aurel Vlaicu University of Arad, Arad, Romania, dana@xhouse.ro

³Assoc. Prof. PhD, Aurel Vlaicu University of Arad, Arad, Romania, evelinabalas@yahoo.com

Abstract: *In a digitally developed civilization access to different kinds of content and information can be easily acquired. From all the available content, some individuals chose and prefer to consume aggressive or violent content. In this light, the scope of this investigation is to determine the connection between the level of Violent Content Preferences (VC) and the levels of General Antisocial Behaviour (AS) and Schadenfreude (SCH) and the relationship between the intensity of life satisfaction (LS) and the intensity of Violent Content Preferences (VC), General Antisocial Behaviour (AS) and Schadenfreude (SCH). The present investigation is part of a chain of studies with reference to violent behaviours and cognitions. In this study, a number of 81 students ($M = 27.57$ $SD = 9.25$) from Arad, Romania, Aurel Vlaicu University, were investigated. VC and SCH were measured with the explorative affirmations, AS scores were obtained with the help of the How I Think Questionnaire (HIT) and LS was calculated with the help of the Satisfaction with life scale (SWLS). The obtained data illustrates that VC is positively associated with AS and SCH, furthermore, AS is positively related with SCH, and LS was negatively associated with VC, AS and SCH. These outcomes point out the requirement to take into consideration the content we consume in regard to one's satisfaction with life and can offer literature meaningful information in regards to the prevention or reduction of anti-social tendencies or cognitions.*

Keywords: *Global life satisfaction, subjective well-being, schadenfreude, general anti-social behaviour, self-serving cognitive distortions, violent content, aggressive content.*

How to cite: Demeter, E., Rad, D., & Balaș, E. (2021). Schadenfreude and General Anti-Social Behaviours: The Role of Violent Content Preferences and Life Satisfaction. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(2), 98-111.

<https://doi.org/10.18662/brain/12.2/194>

1. Introduction

Being a technologically developed civilization, access to different kinds of content and information can be easily obtained (especially by using the internet through different devices, i.e. smart phones, laptops, personal computers). Individuals consume and prefer to consume various content and information, some of it even being aggressive or violent. Literature indicated that violent or aggressive content has a high frequency in media, on the internet and on other platforms and some of this content can even be accessed by individuals underage (Jahangir et al., 2014; Smith et al., 2003; Thompson & Haninger, 2001; Westerman, & Tamborini, 2010; Wilson et al., 2002). In this light, there are numerous studies in literature that found significant associations between aggressive content consumption and anti-social tendencies (Anderson & Dill, 2000; Anderson et al., 2003; Fischer & Greitemeyer, 2006; Gentile et al., 2004; Greitemeyer & McLatchie, 2011; Zumbach & Bluemke, 2018). These findings do not necessary suggest that all individuals who consume aggressive media will become criminals (Zumbach & Bluemke, 2018). What they can suggest is the fact that individuals who consume aggressive media may develop some anti-social traits or tendencies and can enjoy when something bad happens to others, but this does not necessarily mean that they will commit crimes (Ash et al., 2019; Saleem et al., 2012; Zumbach & Bluemke, 2018). It is also true that some individuals who enjoy aggressive content or enjoy when something bad happens to others can also develop serious behavioral problems, especially if there are pre-existing problems (Kanz, 2016; Greitemeyer & McLatchie, 2011; Greitemeyer, 2014; Wang et al., 2019). Therefore in this investigation we want to examine the link between the level of Violent Content Preferences and the levels of general anti-social behavior (including cognitions and types of behaviors) and Schadenfreude.

Schadenfreude is a borrowed term from the German language and the literal translation is “harm joy” (Heider, 1958). It is represented by the unusual experience of enjoyment or pleasure caused by the misery or troubles experienced by other individuals (Wang et al., 2019). Schadenfreude is a negative (or dark) emotion, where instead of experiencing compassion towards someone's troubles, schadenfreude involves pleasurable feelings from watching someone else suffer (Erzi, 2020; Wang et al., 2019). In this light, recent studies from literature suggested that schadenfreude can be related to some anti-social tendencies, such as: aggression, anger or vengeance (Erzi, 2020; Sawada & Hayama, 2012). Studies also suggest that individuals who consume content (with aggressive tendencies) can

experience schadenfreude (Westerman & Tamborini, 2010; Wei & Liu, B. 2020; Ash et al., 2019; Ouwerkerk & Van Dijk, 2008). There are other studies that indicated that the consumption of pro-social content (i.e. video games or music) can reduce schadenfreude and anti-social tendencies (Saleem et al, 2012; Greitemeyer et al., 2010; Greitemeyer, 2010).

Anti-social behaviors are described as observable behaviors that can have a negative impact on other individuals (in a direct or indirect manner), by defying significant moral or social norms (Barriga et al., 2001). These types of behaviors can include acts with a high level of violence (i.e. murder, rape or violent assault) and/ or less violent acts of aggression (i.e. shoplifting, lying or stealing) (Barriga et al., 2001). Anti-social behaviors are generally associated with a number of risk factors, both internal and external, such as elevated levels of impulsivity, sadistic personality attributes, illegal substance consumption, social disadvantage, the presence of stressful life events, academic failures and family problems (Bailey & Scott, 2008).

Further in this investigation we want to see the link between the above mentioned variables (i.e. General Anti-social Behaviors, Violent Content Preferences and Schadenfreude) and well-being (life satisfaction). We especially want to see how Violent Content Preferences can affect subjective wellbeing (life satisfaction) in a digitally developed society. In psychology, life satisfaction (or subjective wellbeing) is represented by cognitive-judgmental processes in which individuals manifest their personal interpretations and conclusions in regards to existence in general (Anand, 2016; Shin & Johnson, 1978; Diener et al., 1985). Negative life experiences, such as decreased levels of academic achievement, inadequate parenting, physical abuse, dysfunctional families, low family income, deviant peers and disadvantaged neighborhoods or communities can alter the quality of wellbeing and can associate with anti-social behaviors (Farrington, 2005; MacDonald et al., 2005; Proctor & Linley, 2014; Henry, 1994; Millie, 2009; Zullig et al., 2001).

Technological advancement can improve the quality of life satisfaction or subjective wellbeing through the enhancement of social connections, informational support, access to enjoyment or entertainment services and malleable working experiences (Burke et al., 2010; Ciolfi & Lockley, 2018; Gwinner et al., 2017; Rad & Demeter, 2019). Other studies showed that the influence of content consumption can have a significant impact on wellbeing. In this light, some argue that the consumption of aggressive content may lead to more negative or violent cognitions and behaviors, which in turn can alter the elements of life satisfaction or wellbeing (Huesmann, 2007; Jahangir et al., 2014; Reinecke & Oliver, 2017).

2. Materials and research methods

2.1. Objective and Hypothesis

The objective of this study is to determine the connection between the level of Violent Content Preferences (VC) and the levels of General Antisocial Behavior (AS) and Schadenfreude (SCH) and the relationship between the intensity of life satisfaction (LS) and the intensity of Violent Content Preferences (VC), General Antisocial Behavior (AS) and Schadenfreude (SCH). The present investigation is part of a chain of studies referring to violent behaviors and cognitions (i.e. Demeter & Rad, 2020).

Hypothesis 1: There is a positive relationship between the level of Violent Content Preferences (VC) and the levels of General Antisocial Behavior (AS) and Schadenfreude (SCH).

Hypothesis 2: There is a negative correlation between the level of Life Satisfaction (LS) and the presence of Violent Content Preferences (VC), General Antisocial Behavior (AS) and Schadenfreude (SCH).

2.2. Participants

For this investigation, 81 students from Arad Romania, Aurel Vlaicu University have willingly answered the statements on the basis of informal agreement. The research participants consisted of 55 females and 26 males (f - 67.9; m - 32.1%), with an age mean (M) of 27.57 and a SD (standard deviation) of 9.25. Every participant was enrolled in or at least completed a university period of studies (Bachelor's Degree, Master's Degree or Postgraduate Degree). Convenience sampling has been utilized in this study. Students that participated in this investigation were chosen on a consecutive basis by order of presentation after completing an anonymous questionnaire posted on social media sites in compliance with the easy concept of accessibility. The time period used for data collection was from December 2019 to February 2020. The gender composition illustrates the bulk of the female population of graduates and undergraduates in the Department of Psychology, Social and Educational Sciences at Aurel Vlaicu University in Arad.

2.3. Instruments

2.3.1. The How I Think Questionnaire (HIT) (Barriga et al., 2001)

In this investigation the HIT tool (Barriga et al., 2001) was used for the assessment of general anti-social behavior (AS), developed to determine the intensity of self-serving cognitive distortions (i.e. Blaming Others, Assuming the Worst, Minimizing/Mislabeling and Self-Centered) and the

four categorizations of antisocial actions (i.e. Physical Aggression, Stealing, Opposition-Defiance and Lying). HIT (Barriga et al., 2001) is made of 54 statements, with an answering scale made of 6 points (Likert type scale), stretching from strongly agree (6) to strongly disagreed (1).

From the number of 54 statements, 39 are designed to evaluate the four categorizations of self-serving cognitive distortions and the four styles of antisocial behaviors, 8 are designed to measure the degree of anomalous response (to identify the authenticity of the gathered data) and 7 are designed as positive filters to mask the 39 questions (Barriga et al., 2001). The level of Physical Aggression plus the level of Opposition-Defiance make up the Overt Scale (antisocial phenomenon that specifically affect the casualty) and the level of the Stealing plus the level of Lying make up the Covert Scale (antisocial acts that indirectly include the victim) (Barriga et al., 2001). In this light, the questionnaire consists of a total of 12 scales and subscales and can have a global score (Barriga et al., 2001).

In the previous analysis (Demeter et al., 2018), HIT was validated for Romanian use (linguistic validation) and the present investigation revealed a good internal accuracy, with an Alpha Crombach coefficient varying from.68 to.84, with a global coefficient of.91.

2.3.2. Explorative Affirmations

In this research, we established a set of commonly formulated affirmations, based on literature studies and works (American Psychiatric Association, 2013; Martens & Palermo, 2005; Shoemaker, 2010; Bandura et al., 1963; Bethell et al., 2019; Smith et al., 2009), that seek to analyze the intensity of: violent/ aggressive content (text, audio or video) preferences (VC; e.g. I prefer to read literature or content with an aggressive or violent theme; evaluated by 4 items); perceived positive childhood experiences (e.g. I was feeling secure in my childhood; evaluated by 3 items); control/ domination of others (e.g. I feel good when the people around me do what I say; evaluated by 3 items); perceived superiority (e.g. I consider the people around me to be inferior to me; evaluated by 3 items); perceived loneliness (e.g. I feel alone; evaluated by 1 item); openness (e.g. I easily relate to other people; evaluated by 1 item); self-isolation (e.g. I prefer to spend more time alone; evaluated by 1item); and schadenfreude (SCH; e.g. I feel good when something bad happens to other people; evaluated by 1 item). The 17 statements were introduced with a 6-point response scale (Likert scale), stretching from 5 (it characterizes me to a great extent) to 0 (it doesn't characterize me at all).

Schadenfreude (SCH) and violent/ aggressive content preferences (VC) will be used in this study. Schadenfreude assesses the way individuals feel about the troubles experienced by other individuals and violent/ aggressive content preferences assesses the way in which individuals chose to consume that type of content, in the form of video, audio or text. The Alpha Cronbach coefficient for violent/ aggressive content preferences was .87, indicating that the chosen scale was reliable in this study.

2.3.3. Satisfaction with life scale (SWLS) (Diener et al., 1985)

SWLS (Diener et al., 1985) was used to measure life satisfaction (subjective wellbeing), which seeks to identify the comprehensive mental interpretations of one's perception with existence. This tool is composed of 5 statements, with a 7-points response scale, stretching strongly agree (7) to strongly disagree (1) (Diener et al., 1985). SWLS (Diener et al., 1985) was linguistically tested in a previous analysis for Romanian utility (Stevens et al., 2012) and demonstrated improved internal accuracy with an Alpha Cronbach coefficient of 0.80 in the current investigation.

2.4. Study Design and Procedure

A non-experimental correlational design will be used for this investigation. For the first hypothesis the dependent variables are: the level of VC and the levels of AS and SCH. For the second hypothesis the dependent variables are: the intensity of LS and the intensity of VC, SCH and AS. For the verification of the two hypotheses non-parametric correlations (Spearman correlation) will be used because the gender distribution is not balanced and the null hypothesis for the normality test was rejected for all the variables (Table 2), meaning that the studied variables are not normally distributed.

The instrument package (HIT, General Affirmations, and SWLS) has been introduced to the participants on a virtual platform (via Google Forms) and an informed consent was given consisting of a study attendance agreement and guarantee on the confidentiality of the data.

For the verification of the participants' attention to the instruments distributed in an online format, the values from the Positive Filters (PF) scale of the HIT tool (Barriga et al., 2001) were used. The statements from the PF scale are not similar with the rest of the statements from HIT. If the participants obtained higher values for PF compared to the general values from HIT, than we can consider that attention was present for the instruments' questions. The mean value for PF was 5.46 (SD = .48), indicating the case that the participants were focused when they responded

to the statements because the mean value for HIT was undoubtedly decreased, i.e. 1.91 (SD = .57) (Table 1).

3. Results and discussion

In addition to analyzing the discussed concepts and variables, the mean value for the Anomalous Responding scale was also identified, for the verification of the integrity of the collected data obtained from the application of the instrument kit (HIT, The General Affirmations and SWLS.). If the obtained mean average of the Anomalous Responding Scale was exciting 4.00, the measurement should be deemed to be interpreted as being doubtful as regards of the credibility of the answers processed; if the measured data was exciting 4.25, then the given responses will not be regarded as accurate (Barriga et al., 2001). The obtained value for the Anomalous Responding Scale in this study (N = 81) was M = 3.81 (SD = 1.12), which displays that most respondents offered truthful responses to the instrument package statements.

Table 1. Standard deviations and means and for Life Satisfaction (LS), Violent Content Preferences (VC), General Antisocial Behavior (AS) and Schadenfreude (SCH)

	LS	VC	AS	SCH
Mean	5.32	.81	1.91	.27
Std. Deviation	.95	.97	.57	.60

Source: Authors' own conception

Table 2. Shapiro-Wilk test for Life Satisfaction (LS), Violent Content Preferences (VC), General Antisocial Behavior (AS) and Schadenfreude (SCH)

	LS	VC	AS	SCH
Statistic	.92	.81	.94	.50
Sig.	p < .01	p < .01	p < .01	p < .01

Source: Authors' own conception

3.1. Hypothesis 1:

There is a positive relationship between the level of Violent Content Preferences (VC) and the levels of General Antisocial Behavior (AS) and Schadenfreude (SCH).

Table 3. Spearman correlation between the level of VC and the levels of AS and SCH

	AS	SCH
VC	.43**	.35**
SCH	.33**	

** - $p < .01$

Source: Authors' own conception

3.2. Hypothesis 2:

There is a negative correlation between the level of Life Satisfaction (LS) and the presence of Violent Content Preferences (VC), General Antisocial Behavior (AS) and Schadenfreude (SCH).

Table 4. Spearman correlation between the level of LS and the levels of VC, AS and SCH

	VC	AS	SCH
LS	-.24*	-.25*	-.29**

** - $p < .01$; * - $p < .05$

Source: Authors' own conception

4. Discussions and conclusion

The current study investigated the connection between the level of Violent Content Preferences (VC) and the levels of General Antisocial Behavior (AS) and Schadenfreude (SCH) and the relationship between the intensity of life satisfaction (LS) and the intensity of Violent Content Preferences (VC), General Antisocial Behavior (AS) and Schadenfreude (SCH). Results confirm the two proposed hypotheses, meaning that VC is positively associated with AS and SCH. Furthermore, AS is positively related with SCH. As for the second hypothesis, LS was negatively associated with VC, AS and SCH, SCH having the strongest association.

These preliminary findings are consistent with literature, meaning that violent or aggressive content consumption can associate with anti-social behaviors and schadenfreude (Anderson et al., 2003; Anderson & Dill, 2000; Ash et al., 2019; Fischer & Greitemeyer, 2006; Greitemeyer & McLatchie, 2011; Kanz, 2016; Westerman & Tamborini, 2010; Wei & Liu, B. 2020). Literature also suggests that schadenfreude is associated with anti-social

behaviors (Erzi, 2020; Sawada & Hayama, 2012; Wang et al., 2019). Furthermore, literature suggests that the consumption of violent or aggressive content can have a significant impact on life satisfaction (Huesmann, 2007; Jahangir et al., 2014; Reinecke & Oliver, 2017). Other studies suggest that low life satisfaction can associate with anti-social behaviors and negative cognitions (Zullig et al., 2001; MacDonald et al., 2005), but increased levels of life satisfaction can associate with pro-social outcomes (Mohamad et al., 2014; Proctor & Linley, 2014).

These results can underline the importance of life satisfaction in a technologically advanced society. The information and content we consume can shape our cognitions and behaviors. If we expose ourselves to negative or violent content, we can experience unpleasant thoughts and there is a chance that we can adopt some negative behaviors from that content and these behaviors and cognitions can alter the quality of subjective wellbeing. Some studies show that exposure to pro-social content can enhance pro-social behaviors (Greitemeyer et al., 2010; Greitemeyer, 2010; Saleem et al., 2012).

The practical of this investigation underlines the necessity to take into consideration the content we consume and can offer literature meaningful information in regards to the prevention or reduction of anti-social tendencies or cognitions. Interventions can focus on the digital aspect, implementing applications or services which can enhance one's life satisfaction and can decrease anti-social tendencies and cognitions.

One of the important limitations of this preliminary investigation could be displayed by the decreased presence of respondents ($N = 81$) and the unequal distribution of gender, which means that the present findings do not qualify a development on specific classifications of age, gender or educational background. Forthcoming research on homogeneous populations may offer more valuable knowledge in the structuring of a more relevant representation of the topic under study in various demographic categories.

In future investigations, the bi-directionality of the variables can be considered. In the current investigation, life satisfaction had a stronger connection with schadenfreude. This can mean that low life satisfaction can associate with schadenfreude, which can associate with violent content consumption and then anti-social behaviors. With this limitation in mind, future studies on a larger population can determine the predictors and causal effects using multiple regression analysis.

As a preliminary analysis, forthcoming studies will be advanced on greater samples, taking into consideration more variables correlated with life

satisfaction and anti-social behavior, thereby providing a clearer picture of maintaining a healthy life satisfaction, particularly in a digitally developed civilizations.

Acknowledgement

The research results that represent the basis of this study, other than those presented in this article, were also published in the article Demeter, E., & Rad, D. (2020). Global Life Satisfaction and General Antisocial Behavior in Young Individuals: The Mediating Role of Perceived Loneliness in Regard to Social Sustainability—A Preliminary Investigation. *Sustainability*, 12(10), 4081.

References

- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders, 5th ed.* American Psychiatric Association.
- Anand, P. (2016). *Happiness Explained.* Oxford University Press.
- Anderson, C. A., Carnagey, N. L., & Eubanks, J. (2003). Exposure to violent media: The effects of songs with violent lyrics on aggressive thoughts and feelings. *Journal of Personality and Social Psychology*, 84, 960–971. <https://doi.org/10.1037/0022-3514.84.5.960>
- Anderson, C. A., & Dill, K. E. (2000). Video games and aggressive thoughts, feelings, and behavior in the laboratory and in life. *Journal of Personality and Social Psychology*, 78, 772–790. <https://doi.org/10.1037//O022-3514.78.4.772>
- Ash, S. M., Allen, J. J., & Anderson, C. A. (2019). Exploring Relations Between Dark Personality Traits, Media Violence Exposure, and Finding Humor in Media Violence. *Proceedings of The National Conference On Undergraduate Research (NCUR) 2019 Kennesaw State University Kennesaw, Georgia April 11-13, 2019.* Iowa State University.
- Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive models. *The Journal of Abnormal and Social Psychology*, 66(1), 3–11. <https://doi.org/10.1037/h0048687>
- Barriga, A. Q., Gibbs, J. C., Potter, G., & Liau, A. K. (2001). *How I Think (HIT) Questionnaire Manual.* Research Press.
- Bailey, S., & Scott, S. (2008). Juvenile delinquency. In M. Rutter, D. Bishop, D. Pine, S. Scott, J. Stevenson, E. Taylor, & A. Thapar (Eds.), *Rutter's child and adolescent psychiatry* (pp. 1106–1125). Blackwell Publishing.
- Bethell, C., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive Childhood Experiences and Adult Mental and Relational Health in a

- Statewide Sample. *JAMA Pediatrics*, 173(11), e193007.
<https://doi.org/10.1001/jamapediatrics.2019.3007>
- Burke, M., Marlow, C., & Lento, T. (2010). Social network activity and social well-being. In E. Mynatt (Eds.), *Proceedings of the 28th International Conference on Human Factors in Computing Systems, CHI 2010*, Atlanta, Georgia, USA, April 10-15, 2010 (pp. 1909-1912). <https://doi.org/10.1145/1753326.1753613>
- Ciolfi, L., & Lockley, E. (2018). From Work to Life and back again: Examining the digitally-mediated work/life practices of a group of knowledge workers. *Computer Supported Cooperative Work (CSCW)*, 27(3-6), 803-839.
<https://doi.org/10.1007/s10606-018-9315-3>
- Demeter, E., Balas-Timar, D., Ionescu (Pădurean), A., & Rusu, A. S. (2018). Romanian translation and linguistic validation of the how I think questionnaire. *The European Proceedings of Social & Behavioural Sciences (EpsBS)*, 41, 241-248. <https://doi.org/10.15405/epsbs.2018.06.29>
- Demeter, E., & Rad, D. (2020). Global Life Satisfaction and General Antisocial Behavior in Young Individuals: The Mediating Role of Perceived Loneliness in Regard to Social Sustainability—A Preliminary Investigation. *Sustainability*, 12(10), 4081. <https://doi.org/10.3390/su12104081>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71-75.
https://doi.org/10.1207/s15327752jpa4901_13
- Erzi, S. (2020). Dark Triad and schadenfreude: Mediating role of moral disengagement and relational aggression. *Personality and Individual Differences*, 157, 109827. <https://doi.org/10.1016/j.paid.2020.109827>
- Farrington, D. P. (2005). Childhood Origins of Antisocial Behavior. *Clinical Psychology & Psychotherapy*, 12(3), 177-190. <https://doi.org/10.1002/cpp.448>
- Fischer, P., & Greitemeyer, T. (2006). Music and aggression. The impact of sexual-aggressive song lyrics on aggression-related thoughts, emotions and behavior toward the same and the opposite sex. *Personality and Social Psychology Bulletin*, 32, 1165-1176.
<https://doi.org/10.1177/0146167206288670>
- 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*, 27, 5-22.
<https://doi.org/10.1016/j.adolescence.2003.10.002>
- Greitemeyer, T. (2010). Exposure to music with prosocial lyrics reduces aggression: First evidence and test of the underlying mechanism. *Journal of Experimental Social Psychology*, 47 (1), 28-36. <https://doi.org/10.1016/j.jesp.2010.08.005>
- Greitemeyer, T. (2014). Intense acts of violence during video game play make daily life aggression appear innocuous: A new mechanism why violent video

- games increase aggression. *Journal of Experimental Social Psychology*, 50, 52–56.
<https://doi.org/10.1016/j.jesp.2013.09.004>
- Greitemeyer, T., & McLatchie, N. (2011). Denying Humanness to Others: A Newly Discovered Mechanism by Which Violent Video Games Increase Aggressive Behavior. *Psychological Science*, 20(10), 1–7.
<https://doi.org/10.1177/0956797611403320>
- Greitemeyer, T., Osswald, S., & Brauer, M. (2010). Playing prosocial video games increases empathy and decreases schadenfreude. *Emotion*, 10(6), 796–802.
<https://doi.org/10.1037/a0020194>
- Gwinner, K., Melrose, P., & Moffatt, A. (2017). *Digital wellbeing: Youth engagement consultation project* - Technical Report.
- Heider, F. (1958). *The psychology of interpersonal relations*. Wiley.
- Henry, C. S. (1994). Family system characteristics, parental behaviors, and adolescent family life satisfaction. *Family relations*, 43(4), 447–455.
<https://doi.org/10.2307/585377>
- Huesmann L. R. (2007). The impact of electronic media violence: scientific theory and research. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*, 41(6 Suppl 1), S6–S13.
<https://doi.org/10.1016/j.jadohealth.2007.09.005>
- Jahangir, S. F., Nawaz, N., & Khan, N. (2014). Effects of media (television) on mental health. *FWU Journal of Social Sciences*, 8(1), 97–107.
- Kanz, K.-M. (2016). Mediated and moderated effects of violent media consumption on youth violence. *European Journal of Criminology*, 13(2), 149–168.
<https://doi.org/10.1177/1477370815608882>
- MacDonald, J. M., Piquero, A. R., Valois, R. F., & Zullig, K. J. (2005). The Relationship Between Life Satisfaction, Risk-Taking Behaviors, and Youth Violence. *Journal of Interpersonal Violence*, 20(11), 1495–1518.
<https://doi.org/10.1177/0886260505278718>
- Martens, W. H. J., & Palermo, G. B. (2005). Loneliness and Associated Violent Antisocial Behavior: Analysis of the Case Reports of Jeffrey Dahmer and Dennis Nilsen. *International Journal of Offender Therapy and Comparative Criminology*, 49(3), 298–307. <https://doi.org/10.1177/0306624X05274898>
- Millie, A. (2009). *Anti-Social Behaviour*. Open University Press.
- Mohamad, M., Mohammad, M., Mamat, I., & Mamat, M. (2014). Modelling Positive Development, Life Satisfaction and Problem Behaviour among Youths in Malaysia. *World Applied Sciences Journal*, 32(2), 231–238.
<https://doi.org/10.5829/idosi.wasj.2014.32.02.14486>
- Ouwerkerk, J. W., & Van Dijk, W. W. (2008). Why do we laugh at Idols? Self-evaluation and schadenfreude following another's misfortune in the media. Paper presented at *International Communication Association*, Montreal, Canada.

- Proctor, C., & Linley, P.A. (2014). Life satisfaction in youth. In G. Fava & C. Ruini (Eds.), *Increasing psychological well-being in clinical and educational settings*, Vol. 8 (pp. 199-215). Springer.
- Rad, D., & Demeter, E. (2019). Youth Sustainable Digital Wellbeing. *Postmodern Openings*, 10(4), 104-115. <https://doi.org/10.18662/po/96>
- Reinecke, L., & Oliver, M. B. (Eds.), (2017). *The Routledge handbook of media use and well-being: International perspectives on theory and research on positive media effects*. Routledge/Taylor & Francis Group.
- Shin, D., & Johnson, D. M. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research*, 5, 475-492. <https://doi.org/10.1007/BF00352944>
- Saleem, M., Anderson, C. A., & Gentile, D. A. (2012). Effects of prosocial, neutral, and violent video games on college students' affect. *Aggressive Behavior*, 38(4), 263-71. <https://doi.org/10.1002/ab.21427>
- Sawada, M., & Hayama, D. (2012). Dispositional Vengeance and Anger on Schadenfreude. *Psychological Reports*, 111(1), 322-334. <https://doi.org/10.2466/16.07.21.PR0.111.4.322-334>
- Shoemaker, J. D. (2010). *Theories of Delinquency: An Examination of Explanations of Delinquent Behavior*, 6th Edition. Oxford University Press.
- Smith, S. L., Lachlan, K., & Tamborini, R. (2003). Popular video games: Quantifying the presentation of violence and its context. *Journal of Broadcasting & Electronic Media*, 47, 58-76. https://doi.org/10.1207/s15506878jobem4701_4
- Smith, R. H., Powell, C. A. J., Combs, D. J. Y., & Schurtz, D. R. (2009). Exploring the when and why of Schadenfreude. *Social and Personality Psychology Compass*, 3(4), 530-546. <https://doi.org/10.1111/j.1751-9004.2009.00181.x>
- Stevens, M. J., Lambru, I., Sandu, C. G., Constantinescu, P.-M., Butucescu, A., & Uscatescu, L. (2012). Romanian adaptation of the Satisfaction with Life Scale. *Journal of Psychological and Educational Research (JPER)*, 20(1), 17-33.
- Thompson, K.M., & Haninger, K. (2001). Violence in e-rated video games. *Journal of the American Medical Association*, 268, 591-598. <https://doi.org/10.1001/jama.286.5.591>
- Wang, S., Lilienfeld, S. O., & Rochat, P. (2019). Schadenfreude deconstructed and reconstructed: A tripartite motivational model. *New Ideas in Psychology*, 52, 1-11. <https://doi.org/10.1016/j.newideapsych.2018.09.002>
- Wei, L., & Liu, B. (2020). Reactions to others' misfortune on social media: Effects of homophily and publicness on schadenfreude, empathy, and perceived deservingness. *Computers in Human Behavior*, 102, 1-13. <https://doi.org/10.1016/j.chb.2019.08.002>

- Westerman, D., & Tamborini, R. (2010). Scriptedness and televised sports: Violent consumption and viewer enjoyment. *Journal of Language and Social Psychology*, 29(3), 321–337. <https://doi.org/10.1177/0261927X10368835>
- Wilson, B. J., Smith, S. L., Potter, W. J., Kunkel, D., Linz, D., Colvin, C. M., & Donnerstein, E. (2002). Violence in children's television programming: Assessing the risks. *Journal of Communication*, 52, 5–35. <https://doi.org/10.1111/j.1460-2466.2002.tb02531.x>
- Zullig, K. J., Valois, R. F., Huebner, E. S., Oeltmann, J. E., & Drane, J. W. (2001). Relationship between perceived life satisfaction and adolescents' substance abuse. *Journal of Adolescent Health*, 29(4), 279-288. [https://doi.org/10.1016/s1054-139x\(01\)00269-5](https://doi.org/10.1016/s1054-139x(01)00269-5)
- Zumbach, J., & Bluemke, M. (2018). Violence in Computer Games and Implicit Aggressiveness: Lessons Learned from the Media Comparison Paradigm. in *Advances in Psychology Research* (S. 97-126). NOVA.