Cooling down or charging up?

Engagement with aggressive entertainment contents as an emotion regulation strategy of

boredom and anger

Heidi Vandebosch & Karolien Poels

University of Antwerp, Belgium

Abstract

In this chapter we argue that the selection of, and engagement with, aggressive entertainment contents can be an emotion regulation strategy, or a way of influencing the nature, expression and intensity of an experienced emotion. We explain this in the context of two, often experienced, negative emotions that have been linked to aggression in the general emotion literature: anger and boredom. By first defining these two emotions and describing their typical action tendencies, we aim to show how the engagement with aggressive media content can be a way of regulating these emotions, sometimes in functional but also in dysfunctional ways. We hereby extend the scope from passively watching aggressive entertainment contents to actively participating and enjoying aggressive acts in the online environment (e.g. online bashing, trolling and cyberbullying).

Cooling down or charging up?

Engagement with aggressive entertainment contents as an emotion regulation strategy of

anger and boredom

The role of emotions and other affective processes in media selection and consumption has been widely studied. Mood Management Theory, for instance, stipulates that people who experience negative moods will try to alleviate these negative affective states by selecting media contents with the right properties (e.g. positive affective valence, no semantic affinity, highly engaging, right level of arousal). For instance, people in a bad mood will select uplifting media contents (e.g. TV comedy or energetic and joyful music)(Zillmann, Hezel & Medoff, 1980; Knobloch & Zillmann, 2002), those in a state of boredom will choose arousing contents, and people who are stressed will prefer relaxing contents (Bryant & Zillmann, 1984). Research on media entertainment, however, has also shown that people not only search for hedonic, merely pleasurable, experiences (such as fun, entertainment or relaxation). People also long for eudaimonic, more meaningful, experiences that often involve mixed (i.e. both positive and negative) and more complex emotions, as well as deeper reflections (Oliver, 2009, Schramm & Wirth, 2008).

In this chapter we will focus on two, often experienced, negative emotions: anger (negative valence, high arousal) and boredom (negative valence, low arousal). We posit that the selection and engagement with aggressive entertainment contents can be an emotion regulation strategy, or a way of influencing the nature, expression and intensity of the experienced anger or boredom. In contrast with Mood Management Theory, we argue that specific media contents are not per se selected to attenuate negative emotions (e.g. sometimes it is functional to remain angry, and to consume aggressive media contents with that aim). Even when the aim is to downregulate negative emotions, this does not necessarily imply the

selection of "positive" contents that directly counter the current state. Aggressive media contents that offer opportunities to further reflect on one's negative emotions, to put them into perspective, and to create "meaningful" experiences might also serve this aim. In sum, we will show that aggressive entertainment can generate hedonic and eudaimonic experiences, and may serve the regulation of anger and boredom in different ways.

With this chapter we answer the call formulated by other researchers to study discrete emotions in communication and media research (Nabi's, 2010) and to broaden our view on affect regulation through media (Schramm & Wirth's, 2008; Oliver, 2009; Reinecke, 2017). Next to passive entertainment media (e.g. horror movies), we extend our scope to interactive media such as videogames and we further focus on the broader and persistent online environment as a place for the selection and even the production of aggressive content (e.g. trolling, bashing, cyberbullying), and discuss how emotion regulation could be an underlying explanatory mechanism (as already initiated in the following studies: Greenwood & Long, 2009; Hormes, Kearns, & Timko, 2014).`

The chapter is structured as follows. We will first define the concepts 'emotion' and 'emotion regulation'. We will then give an overview of how existing media and communication theories have linked media use with emotion regulation. After that, we will focus on the regulation of anger and boredom through exposure to violent contents and through mediated aggression. We will end with a discussion of the opportunities for future research and theorizing in this field.

Emotions and emotion regulation

Based on Cole, Martin, & Dennis (2004, p. 319) we define emotions as "…biologically endowed processes that permit extremely quick appraisals of situations and equally rapid preparedness to act…". Two essential components in this definition are 'appraisal' and 'action preparedness'. Emotions typically begin with an individual's (conscious or unconscious) assessment of the personal meaning of an antecedent event. This appraisal then triggers a range of action tendencies (e.g. facial expressions, cognitive processing, physiological responses, situation-specific instrumental behaviors such as withdrawing or striking). Emotions are often differentiated from 'feelings' (which refer to consciously experienced emotions) and 'moods' (which refer to positive or negative, high or low arousal affective states that are more long-lasting than emotions, and are not a response to a specific situation, as is the case for emotions). The term 'affect' is often used as an umbrella term for these types of experiences (emotions, feelings, moods,…)(Gross, 2015). Negative emotions such as anger, fear, disgust, sadness, … are associated with specific action tendencies that focus on narrow thoughts and actions (to prepare the body for fight or flight). Positive emotions (such as happiness, pride, joy,...), on the other hand, are often associated with broadening approach tendencies (Fredrickson, 1998, 2001). As described by Gross (2015) "emotions can be either helpful or harmful, depending on the context". For instance, anxiety might be adaptive if it helps us to escape from great danger, but it might also be detrimental if it cripples us socially. It is precisely the fact that emotions are so closely tight to goal-directed behavior and corresponding wellbeing, that makes emotion regulation necessary.

According to Thompson (1994: 27-28) ''emotion regulation consists of the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals.'' Quite similarly, Gross (1998: 275) defines emotion regulation as "the processes by which individuals influence

which emotions they have, when they have them, and how they experience and express these emotions". As these definitions indicate, emotion regulation processes not only occur after an emotion is already being experienced, they can also be adopted before the emotion response tendencies have become fully activated (Gross, 2015). For instance, 'cognitive reappraisal' (i.e. redefining a potentially emotion eliciting situation) can be considered an antecedent-focused emotion regulation strategy, while 'emotion suppression' (i.e. inhibiting the ongoing emotion-expressive behavior) can be considered a response-focused emotion regulation strategy (Gullone & Taffe, 2012). Regulation strategies can be used either consciously or unconsciously, for negative as well as for positive emotions, to regulate one's own emotions (intrinsic emotion regulation) or even someone else's (extrinsic emotion regulation). They ultimately aim at downregulating, upregulating or maintaining an emotion. In the case of negative emotions, downregulation is more common (e.g. decreasing the experiential and behavioral aspects of anger, sadness, and anxiety); while in the case of positive emotions people are more likely to strive to maintain or even upregulate their emotions (e.g. extending their feelings of happiness). Several concrete emotion regulation strategies have been distinguished. Strauss et al. (2016) mention strategies such as distraction, suppression, venting, cognitive reappraisal, downward social comparison, problem-directed action, self-reward, physical manipulations and withdrawal for negative emotions; while they associate positive emotions with strategies such as: showing gratitude, helping others, and expressing positive emotions in a variety of ways. There are, however, also strategies that can be used for both types of emotion. For instance, suppression might be a (socially adequate) strategy to use when experiencing anger and when experiencing pride. While the success of an emotion regulation strategy may vary depending on the individual, the emotion and the context, overall some strategies are found to be more adaptive or maladaptive than others (i.e. because they are associated with less/more internalizing or externalizing problems in the long run). For instance, emotion suppression is

considered less adaptive than cognitive reappraisal, because the latter provides better opportunities to really change the emotion at hand. However, some authors (Lougheed & Hollenstein, 2012) have argued that the beneficial effects of emotion regulation have less to do with the use of a singular, 'adaptive' strategy, but rather with being able to use a range of strategies and adapting the strategies according to the specific situation.

Media consumption as an emotion regulation strategy

Communication theories and research show that the media environment provides people with ample of opportunities to regulate their emotions. The Uses and Gratifications paradigm, for instance, suggests that people use (online) media to fulfill their needs for information and surveillance, entertainment and diversion, social contacts, identity formation and expression, among others (for an overview see: Ruggiero, 2000). On the one hand, these needs can already be linked with emotion regulation strategies: information, for example, may support 'cognitive reappraisal' strategies, entertainment may provide help with 'distraction' and 'withdrawal' strategies, social contacts offer opportunities for 'downward social comparison regulation strategies' and 'social sharing of emotions'. The gratifications stemming from emotion regulation may result from exposure to specific content (e.g. being distracted by watching an action movie), the media activity as such (e.g. playing a casual game to combat boredom), or the (social) context in which the media activity takes place (e.g. watching television with family and friends).

'Mood Management Theory', initially referred to as the 'theory of affect dependent stimulus arrangement' (Zillmann & Bryant, 1985), shows most affinity with the field of emotion regulation (see Luong & Knobloch-Westerwick, this volume). The basic assumption of this theory is that individuals are motivated to terminate or alleviate negative affective states and to preserve and intensify positive affect. To serve these goals, individuals rearrange their

stimulus environments. Media use is one among many options for stimulus rearrangement, yet a highly convenient one, as it often does not require the same amount of effort or energy as other activities (e.g. watching a comic movie might be an uplifting activity, which takes less planning and energy than going out with friends). Research that considers the media choices of individuals in a positive or a negative mood, however, does not always provide evidence that is in line with the hypotheses based on the Mood Management Theory (i.e. that people in a positive mood would like to sustain that mood by selecting less absorbing, semantically affinitive positive contents, while those in a negative mood would like to alter their mood by engaging in highly absorbing, semantically not affinitive positive media contents). Specifically, it appears that both happy and sad people sometimes prefer to consume sad media contents (instead of the hypothesized positive contents). This implies that pleasure as positive affect, or hedonic states, are not the only main driver of media selection (Oliver, 2009). These findings also contradict the so-called "Mood Congruency" hypothesis, which posits that happy people would choose happy contents and sad people sad contents (Krohne, Pieper, Knoll, & Breimer, 2002).

The key explanation behind these findings seems to be that the type of content people in a certain mood select actually depends on their mood regulation strategy (Krohne et al., 2002; Minnebo & Eggermont, 2012; Stevens & Dillman Carpentier, 2017). While the Mood Management Theory departs from the idea that people in a negative mood would opt for avoidance or distraction strategies, this not always seems to be the case. For instance, studies have shown that elderly people who feel lonely turn to negatively valenced media portrayals of old age (Mares & Cantor, 1992), and people who are in a (experimentally induced) bad mood (Johnson & Knobloch-Westerwick, 2014) turn to social networking profiles of less 'hot' and 'successful' people, because these allow them to compare themselves with others who are in an even worse situation (i.e., the downward social comparison emotion regulation strategy).

Moreover, tuning into media content that is semantically close to one's own problems and affective state might actually also suggest ways to cope with one's own situation (Minnebo & Eggermont, 2012; Nabi, Finnerty, Domschke, & Hull, 2006). On the other hand, people who are in a good mood sometimes seem to expose themselves to negative contents (such as sad movies). This might indicate that they not necessarily strive to maintain their current positive feelings (and hedonistic gratifications), but actually aim for eudaimonic gratifications resulting from meaningful media experiences that are associated with personal growth (Oliver, 2009; see Janicke-Bowles, Bartsch, Oliver & Raney, this volume). This notion has also been discussed in the Distancing-Embracing model of the enjoyment of negative emotions in art reception (Menninghaus et al., 2017), whereby 'art' is broadly defined and also includes media products. This model contends that negative emotions are particularly strong in moving people and evoking suspense, two states that keep people involved in media content. The fact that the negative emotions can be kept at 'a distance' allow to fully embrace them and to experience them in co-occurrence with positive states such as enjoyment and meaning-making.

Although the Mood Management Theory focuses on moods and not on discrete emotions and pays most attention to unconscious forms of affect regulation, especially through exposure to entertainment contents, the connections with emotion regulation are clear (see also: Greenwood & Long, 2009). This has urged Schramm and Wirth (2008: 27) to plea for a more integrative theoretical perspective on affect regulation through media usage which "considers both unconscious and conscious/reflected processes of affect regulation through media, supplements the hedonistic motive with other non-hedonistic, instrumental motives of affect regulation, looks at selection behavior as well as at other behavioral and cognitive strategies of affect regulation, and encompasses individual attributes (particularly those with affinity to affects)". Moreover, the evolution in media platforms makes the study of (discrete) emotions and emotion regulation particularly relevant. Emotions are instantaneous and relatively short-

lived reactions to a situation, and (response-focused) regulation happens directly after their manifestation. When media are readily available they provide an excellent source to do so. It is not surprising that 'older' literature, describing media environments that were less pervasive than the current one, was more concerned with the opportunities for mood regulation, because moods are more long lasting and are less specific in their cause.

Current literature on entertainment media and affect/emotion regulation has devoted less attention to the selection of aggressive media contents and their links with emotion and emotion regulation. We build on recent literature calling for more efforts to study discrete emotions in media and communication research (Nabi, 2010) and recent insights in the motives behind aggression, which can be aversive/reactive or appetitive (Runions et al., 2017). Selection of and exposure to aggressive entertainment media can be a function of the regulation of two negative discrete emotions: anger and boredom.

Regulation of anger through exposure to violent contents and through mediated aggression

Research that investigates why people expose themselves to violent contents (e.g. movies, television programmes, news, music) or actively engage in mediated aggression (e.g. in games, on social media sites), points to anger as a potential driving force. Anger is a basic emotion, that is often experienced by people in everyday life (Trampe, Quoidbach & Taquet, 2015). While research shows no difference between the reported frequency of angry feelings amongst men and women, younger adults do report significantly more angry feelings than older adults (Simon & Nath, 2004). Anger is commonly described as a subjective emotional state, entailing the presence of physiological arousal and cognitions of antagonism (Novaco, 1994). As anger is tied to appraised wrongdoing, it is coupled with action tendencies to counter or redress the wrongdoing by engaging with the source of the offense (Wranik & Scherer, 2010;

Arpan & Nabi, 2011). Although anger may have beneficial effects (e.g. because it mobilizes psychological resources, energizes behavior, and protects self-esteem), it is typically regarded as a negatively valenced emotion with potentially harmful consequences (Fernandez, Day & Boyle, 2015). Anger is, for instance, considered an important cause of aggressive behavior (Runions, Bak & Shaw, 2017), and the frequent and prolonged experience of this emotion has been linked with negative health outcomes (e.g. an increased risk for cardiovascular disease) (Chida and Steptoe, 2009). Therefore, the adaptive regulation of anger is deemed important. In what follows, we will present an overview of the studies that have investigated how anger influences people's exposure to violent media contents and active engagement in mediated aggression, and what the (potential) positive or negative outcomes of these behaviors might be.

The selection of violent contents, following the experience anger, is evident from the research of Rubin, Haridakis and Eyal (2000). This study showed that people with higher levels of trait anger more often turned to confrontational TV talk show programmes (such as "Jerry Springer"). Plaisier and Konijn's study (2013) demonstrated that adolescents (but not young adults) who had experienced rejection by their peers consequently displayed higher levels of state anger and were more attracted by anti-social contents (i.e. YouTube clips with headings such as "Youngsters scolding at a police officer and pushing him off his motorbike"; "Two boys sexually harass a girl in the schoolyard"). Finally, Bushman and Whitaker's study (2010) provided evidence that angry individuals were more attracted to violent video games if they believed this would lead to a cathartic effect.

Anger also appears to drive people to watch (as a bystander) or even participate in (as a perpetrator) online aggression aimed at "real" persons. Research demonstrates, for instance, that angry people are more likely to read or post on rant sites (Martin et al., 2013), to engage in cyberbullying (Erreygers et al., 2019) or Twitter wars (Gregory & Singh, 2018) and to leave negative comments on online news sites (Arpan & Nabi, 2011).

Several studies suggest that people might actually turn to violent media contents to downregulate their anger. While the aim to downregulate is in line with the predictions of Mood Management Theory, the exposure to contents that show semantic affinity and are considered to have a (more) negative hedonic valence (compared to, for instance, humorous contents) runs against the idea that (all) people experiencing negative emotions would prefer more distracting and positive contents. While the selection of the latter might be more common amongst those that rely on an avoidance coping strategy (including emotion regulations strategies that aim at the suppression of anger), the selection of violent contents might be more common amongst those that adhere an approach coping strategy (including emotion regulation strategies that aim at the expression or the cognitive re-appraisal of the negative emotion) (see also Schramm & Cohen, 2017).

As suggested earlier, a popular belief is that exposure to violent media content indeed leads to a cathartic effect. By watching the violent acts of a drama hero or by playing an aggressive game, one's own aggressive feelings (related to a non-media-related event) are supposed to dissipate. The cathartic hypothesis, in other words, suggests that media may provide a way to (down)regulate one's feeling by acting it out "vicariously" or "symbolically" (cfr. emotion expression) (Weber, Ritterfeld, & Kostygina, 2006). In addition, people may derive positive feelings from negatively valenced (i.e. violent) content with a positive ending, for instance the pleasure from seeing that heroic figures receive rewards and villainous characters receive punishment (cfr. the affective disposition theory of Raney and Bryant, 2002; Tamborini, this volume), as well as relief from witnessing the restoration of justice (Wakshlag, Vial & Tamborini, 1983). Finally, the selective exposure to media violence, might also support more cognitive emotion regulation strategies. For instance, it might help media users to put their situation into perspective (e.g. by downwards social comparison) or teach them how to deal with their emotion by showing role models.

The research findings on the potential anger-reducing effects of exposure to violent contents, are, however inconclusive. While meta-analyses on the effects of violent media (Bushman and Huesmann, 2006) suggest that exposure to these contents is more likely to increase anger, individual studies seem to suggest that the effects can be positive, negative or absent, depending on the specific groups under consideration. For instance, Unsworth, Devilly and Ward (2007) found that when respondents with an aggressive and labile temperament experienced high levels of state anger, playing a violent game led to a decrease in state anger (while other groups scored higher, or the same). A study on the use of "extreme" music by Sharman and Dingle (2015) showed that the majority of their respondents reported to listen to this type of music to "fully experience anger" (79%) and to "calm themselves down when feeling angry" (69%). The experimental part of this study confirmed that participants chose "extreme" (e.g. heavy metal) music when anger was inducted, and that this led to a decrease in subjective hostility and irritability (but not to a decrease in arousal) that was equivalent to those who sat in silence. In addition, they experienced an increase in positive emotions (i.e. feeling active and inspired). Finally, the study of Martin et al. (2013) investigated the perceived benefits of reading other's rants on rant websites. Responses included simple curiosity, entertainment, a sense of community, making them feel better about their own lives by comparison, enjoying other people's misery, better understanding their own problems, and looking to help others. However, in their experimental study, exposure to rant sites only led to more negative feelings (i.e. a decrease in happiness and an increase in sadness). There was no significant effect on anger.

In an online context, anger might not only be expressed "vicariously" or "symbolically" via exposure to violent contents, but also through direct or indirect aggression towards the target of the anger (i.e. online "revenge" towards co-players in an online game, which might actually follow directly from the action tendencies related to anger, and thus constitute "emotion

dysregulation"), displaced aggression towards others (Tangney, Wagner, Marschall, & Gramzow,1991), or even aggression towards the self (e.g. self-cyberbullying) (Patchin & Hinduja,2017). Here too, the negative emotion of anger is supposed to decrease, and even to be replaced by positive emotions (such as the "sweet feeling of revenge"). Again, the empirical research findings are not univocal. While people often report to engage in online aggressive behavior to vent their anger and to evoke more positive feelings (e.g. of power, entertainment, revenge), it is not clear whether they actually succeed in this. In the experimental study of Martin et al. (2013), for instance, angry people who wrote on rant sites actually felt more angry and less happy right afterwards. More in general, aggressive expressions are also considered maladaptive in the long run, even when they could have some short-term benefits: "As such, aggression appears to be an effective means of emotion-regulation, albeit temporarily. Indeed, aggressive acts tend to backfire, resulting in greater negative affect in the longer term (Chester, 2017, p. 368).

Furthermore, online interactive platforms allow people to communicate their feelings of anger with others (cfr. emotion sharing) or to discuss the anger eliciting situation with the target. While emotion sharing might lead to positive outcomes (e.g. because it elicits social support from others) (Vermeulen, Vandebosch & Heirman, 2018), it may also encourage co-rumination (Spendelow et al., 2017) and (negative) emotional contagion (Fan et al, 2014), and through these processes increase the negative feelings.

The use of violent media contents (or the engagement in online violence), might not only fit attempts to downregulate anger, but also attempts to "upregulate" this emotion. The goal to prolong or even intensify anger by exposure to emotion-congruent offerings with a semantic affinity, has been linked with (a combination of) situational factors (e.g. the need to maintain alert and prepared in a situation), preferred coping styles (i.e. approach coping), and gender. Hoffner et al. (2009), for instance, found that in the wake of the September 11 attacks,

anger predicted the exposure to news related to the attacks. The authors suggested that this media use could fulfill the need to extend the negative emotional state to maintain vigilant. In an experimental study by Knobloch-Westerwick and Alter (2006), males expecting a retaliation opportunity spent more time on negative news to sustain their anger, while females spent more time reading positive news to dissipate their anger. Similarly, Tamir, Mitchell and Gross (2008) found that individuals preferred music that would increase their level of anger (but not their level of excitement) when they were anticipating confrontational tasks (i.e. playing a first-person shooter game, Soldier of Fortune) and that (b) anger indeed improved their performance in these tasks.

To conclude, it is clear from the overview above that the experience of anger can lead to a range of emotion regulation strategies that rely on the exposure to aggressive entertainment or the involvement in online aggression, and may be more or less effective in the short term (e.g. able to generate positive feelings or offer material for the cognitive reappraisal of one's feelings) and more or less adaptive in the long run (e.g. taking revenge in the online world, might eventually backfire). In what follows, we will focus on another negative emotion (i.e. boredom), that has been linked with the selection of "arousing" media contents in the past. We will argue that the engagement with aggressive media contents, may not only be explained by its "arousing" potential, but also fits strategies to deal with boredom by looking for "meaning".

Regulation of boredom through engagement with aggressive media contents

Boredom is a negative emotion characterized by negative valence, low arousal and understimulation (Brissett and Snow, 1993). Experiencing boredom is quite common and arises in contexts such as school and work (when uninterested in the – often repetitive - task at hand), but also leisure time (when the environment is not stimulating), both while being alone or in a social context (Hill & Perkins, 1985). Although boredom is associated with a lack of

involvement, individuals who experience boredom are typically motivated to escape this negative state and actively seek opportunities for renewed stimulation, under the form of challenge and engagement (Brissett and Snow, 1993). A range of studies showed that bored individuals are also motivated to engage in activities that allow for meaning making (Tilburg & Igou, 2012). This quest for meaningful activities seems to go in opposite directions. On the one hand, boredom promotes pro-social behavior such as donating money for a good cause (Van Tilburg & Igou, 2017). On the other hand, boredom is often associated with seeking negative situations and aggression (Rupp & Vodanovich, 1997). To explain this contradiction in action related to boredom, Van Tilburg and Igou (2017) argue that needs for meaningfulness differ according to the situation at hand: in some situations prosocial behavior may be most functional to regulate boredom and reestablish meaning, in other situations aggressive behavior may provide meaning. The latter is related to the explanation provided by Bench and Lench (2013), who posit that in some situations the functionality of boredom resides in considering the gains and information utilities of a negative situation that would be overlooked in other, more arousing, negative emotions (that call for more urgent action tendencies, such as attacking an object or person that is blocking your goal in the context of anger). These negative situations include violence and aggression, which are particularly sought by individuals who experience boredom due to a lack of external stimulation by the environment (in contrast to internal stimulation, when you can keep yourself interested or 'entertained') (Dahlen et al., 2004). As we will further argue, the selection of aggressive media content by people who are in a state of boredom could serve as a way to reestablish meaning and as such provide a means to learn and reflect.

Adolescents form an age group in which boredom is a very common emotion (Caldwell et al., 1999). Situations in which boredom typically occurs are characterised by the feeling of having low control (e.g. when attending a lecture at school) or having too much time and

nothing to do, also called 'leisure boredom' (Hill & Perkins, 1985) (e.g. when sitting home in the evening or during school holidays). Both situations are much more present in adolescents' compared to adults' lives. Furthermore, developmental issues such as the growing need for autonomy combined with restrictions posed by parents and school and the still underdeveloped impulse control combined with a high need for sensation and stimulation make boredom particularly salient in adolescence (Caldwell et al, 1999).

In the media entertainment literature, there has been quite some evidence on the link between boredom and selective exposure to different media and media contents. A cross-sectional survey by Greenwood and Long (2009) found that individuals with a propensity to ruminate were in particular looking to regulate their bored state through the use of media, and television in particular. The authors suggest that television might be a way for bored individuals to postpone the need to focus on negative events, which in that sense can be seen as an avoidance related coping strategy. Bryant and Zillmann (1984), furthermore, showed that bored individuals exposed themselves more to exciting media content compared to stressed individuals. Moreover, the exciting media content fulfilled the goal of alleviating, and thus downregulating, the negative feeling of aversion characterized by boredom. Interestingly, this alleviation did not happen in bored individuals who selected 'relaxed' media content. In the context of videogames varying in task demand, as a proxy of capturing attentional resources and providing distraction from current thoughts, Bowman and Tamborini (2015) found that for bored individuals mood repair was highest after playing a game with the highest task demand. This finding can be linked to the work of Csikszentmihalyi (1975) who already indicated that boredom stems from situations or tasks that lack of challenge and have a low taks demand. Playing a game with high taks demand can compensate and thus alter the feelings of boredom.

Thus far, there is only fragmented evidence for the link between boredom and the selective exposure to aggressive media content. Taking into account the nature of boredom as

an emotion and the quest for meaning and stimulation it entails (see supra, Van Tilburg and Igou, 2012), aggressive media may provide excellent opportunities to regulate boredom. This can also be associated with findings from the field of aggression research stating that individuals seek out aggressive activities, including media related activities, such as watching violent movies or playing violent videogames, for the sake of enjoyment and not necessarily due to previous situations that were provocative (Bushman & Withaker, 2010). This type of aggression can be seen as a form of 'appetitive aggression' (Elbert, Moran & Schauer, 2017), as it does not involve a reaction to an urgent threat (as is the case with 'reactive aggression') and is thus seen as aggressive behavior and violence characterized by positive affect. Linking this to the quest for stimulation and meaning making (Van Tilburg & Igou, 2012), and the more ultimate function of gaining from the utilities of (safely) experiencing negative situations (Bench & Lench, 2013), the consumption of aggressive media content in situations of boredom does fulfill these regulatory goals.

Another reason for selective exposure to aggressive media contents, particularly applied to adolescent audiences, is the forbidden fruit hypothesis (Bushman & Stack, 1996, Withaker et al, 2013). This hypothesis posits that restrictive content such as violent movies and videogames become attractive because, especially for younger audiences, it makes them curious or they want to show off to their peers that they can get access and deal with it. That is part of the explanation of why aggressive media contents, such as playing violent video games or watching a horror movie, especially in a social setting, is so appealing to adolescents (Eglof, 2017, Goldstein, 1998, Sparks & Sparks, 2000). Moreover, an emotional state involving boredom, that is often experienced throughout adolescence, might even strengthen the appeal of aggressive media content because it additionally regulates boredom through its stimulating nature. It yet has to be discovered whether the forbidden fruit effect and the social affordances of enjoying violent media content are augmented in a state of boredom.

In the context of interactive media, boredom has been documented as an important trigger of social media use, and particularly the individual characteristic of 'boredom proneness' is found to be a strong predictor of excessive, even problematic smartphone use (Wegmann, Ostendorf & Brand, 2018) and internet use disorders (Lin, Lin & Wu, 2009). Interactive media also allow to regulate boredom through engagement with aggressive user-generated contents both passively, for example, reading threads of celebrity bashing on social media platforms, or actively, for example, trolling and cyberbullying. Regan and Sweet (2015) argue that passively watching instances of online drama, which can be instances of bashing or bullying, serves the same purposes as gossip, which is, apart from exciting in itself, also a means to exchange social and normative information and learn from the 'mistakes' of others. This could be easily linked to the regulation of boredom through looking for meaningful content. Although not yet empirically tested, we could thus assume that boredom could be an important trigger for engagement with online bashing as a bystander, or mere lurking.

However, the omnipresence of media and their growing interactive nature has also created additional possibilities to find gratifications in aggressive contents or even acts that are undesirable, for example bashing, trolling, and cyberbullying. For instance, research indicating a link between sensation seeking and cyberbullying perpetration (Slonje et al., 2012), suggests that experiencing boredom might also play a role, and an exploratory study mentioned boredom as a motive to engage in cyberbullying (Varjas et al., 2010). It has yet to be studied more systematically whether and how boredom can trigger these types of antisocial and aggressive online behaviors, for entertainment and beyond.

In sum, boredom is a commonly experienced negative emotion, characterized by a lack of involvement and (down)regulated through engagement with (more) stimulating and/or meaningful activities. Aggressive media contents 'par excellence' can fulfill the need for stimulation on the one hand due to their direct arousing nature (e.g., the thrill of an action movie

or a wrestling show, the sensory experiences of a horror movie) but could additionally create opportunities to engage in meaning making and learning as well. This enjoyment may be related to contents that co-occur with the aggression such as social justice (e.g. the bad guys are punished) or a social gratification of being able to deal with harsh and violent contents, which also creates opportunities to reflect and learn in the context of 'real life' challenges (Goldstein, 1999, Sparks & Sparks, 2000). We further argued interactive media might also serve the regulation of boredom through engagement with aggressive contents. The (excessive) use of interactive media is already linked to boredom proneness as a trait and aggressive content is omnipresent in interactive media applications and can be consumed both passively and actively for stimulation and meaning making. Further empirical studies are needed.

Discussion and conclusion

This chapter aimed to provide insights in how the selection of, and engagement with, aggressive entertainment contents can be an emotion regulation strategy, or a way of influencing the nature, expression and intensity of an experienced emotion. Inspired by Nabi's (2010) call to study discrete emotions in communication and media research and Schramm & Wirth's (2008) broad view on affect regulation and the selection for both hedonic and non-hedonic media contents, we outlined how two specific negative emotions, anger and boredom, can be regulated through the engagement with aggressive media contents.

As is clear from the overview above, anger is associated with negative (health) outcomes, suggesting that downregulating this is emotion is (generally) more adaptive. This does not exclude, however, that in some instances anger (and thus the upregulation of this emotion) may be functional. Research further suggests that some emotion regulation strategies are – generally speaking – more effective when trying to downregulate (or upregulate)

emotions, and that people select emotion regulation strategies they perceive as adequate to reach their emotion regulation goals (Millgram, Sheppes, Kalokerinos, Kuppens and Tamir, 2018). Research on the regulation of anger via media suggests that media may support suppressive or escapist-diffusive strategies (e.g. when their entertaining or calming contents provide distraction), which can either be adaptive and maladaptive. When people reach out to violent contents or behave violently online, it is more likely they are actually trying to express their emotion (with non-aggressive expressions being adaptive, and aggressive expressions being maladaptive), trying to cognitively reappraise their experience, are just following their (malicious) action tendencies (i.e. because they are impulsive and unable to control their actions). The existing research suggests that there might be a discrepancy between people's expectations about the usefulness of media as regulation tools and the actual outcomes of their regulation attempts. Future research should further explore for whom, and under which conditions, media use represents an adaptive anger regulation strategy, and how this strategy fits into the range of regulation strategies that individuals use.

For boredom, aggressive media contents can deliver quick stimulation (getting aroused by pure aggression) or meaning (learning from negative events), which both are sought for in a state of boredom. It could be questioned whether quick stimulation is the most functional means of regulating one's boredom. Although it will quickly remove the state of boredom, it will also trigger mental and physiological processes that could ultimately lead to aggressive behavior or if frequently adopted as a regulation strategy, even to desensitization. In the current media environment in which aggressive content is easily and promptly available, this deserves attention, especially for younger age groups. Based on insights on adolescent development (low impulse control, high sensation seeking, high need for social validation among peers), the characteristics of boredom (searching for meaning, appetitive aggression) and the characteristics of social media (omnipresence, unlimited media selection, parasocial relations,

online disinhibition), we assume that boredom can in some cases be a trigger to engage in active antisocial online media consumption, through dysfunctional emotion regulation. Just as Wegmann, Ostendorf and Brand (2018) argue that individuals who are susceptible to boredom should be trained to regulate the understimulation evoked by boredom through other activities than internet and smartphone usage, it could also be the case that finding ways to regulate boredom through more meaningful media consumption can be a way to reduce active engagement with aggressive media content. Evidently, this first requires some additional empirical insights in the role of boredom and emotion regulation in the selection of aggressive entertainment contents.

As we have linked the selection of aggressive media in states of boredom to the quest for meaning making and safely experiencing negative situations, it could be interesting to elaborate on media selection and aggressive entertainment as "playful actions" (Vorderer, 2000, Klimmt & Vorderer, 2009). Some media enviroments offer safe environments to play, experiment and learn from harsh and aversive conditions (that often involve aggression and violence). Especially for younger audiences, future research could investigate how and for whom the enjoyment of aggressive media contents might be functional for their emotional and moral development, similar to rough-and-tumble play in the physical world (Pellegrini, 2002).

For both anger and boredom (as well as for other discrete emotions), communication scholars could rely on psychological insights regarding emotions and emotion regulation, to further develop their research agenda. First of all, it is clear that most research on affect (i.e. moods, emotions, …) and media selection, has actually focused on: a) media use as a *response-focused* regulation strategy (i.e. taking place after the emotion has already been experienced), b) employed to regulate emotions generated by media-external stimuli, by c) people who have certain expectations about how media use might help them with this. However, media use might also be part of *antecedent-focused* regulation strategies that focus on situation selection,

situation modification, attentional deployment or cognitive change for emotions that are generated by external but also by media-related stimuli. For, instance, people might choose to avoid a boring conversation by scrolling on their mobile phone, downloading Netflix series before a long-haul flight, or start following people on Twitter or Facebook because they are looking forward to the drama they will create. An experimental study of Livingstone and Isaacowitz (2015), already demonstrated that (especially older) people who were instructed to try to minimize their negative emotions or feelings, spend most time engaging with positively instead of negatively valenced contents. The authors considered this to be a "situation selection strategy", although the instructions did not clarify whether the aim was to actually prevent negative emotions arising from the media contents or to solve pre-existing negative emotions. With regard to people's expectations regarding the emotion-regulation benefits of certain types of media, it would be interesting to further investigate where these actually come from: do they rely on their personal experiences, or on acclaimed benefits reported by others, …. Secondly, communication researchers should pay more attention to individual differences in emotion regulation styles and emotion regulation capacities or deficits, as these could explain why people who experience the same discrete emotion might select different types of media contents, gain different gratifications from the same type of content, or experience different types of outcomes in the short- or long-run. Another line of research could be focused on *regulation of other people's emotions* through media. For example, parents might let their children use a tablet or their mobile phone to avoid them getting bored or expressing their boredom in a restaurant.

Finally, the potential of information and communication technologies (ICT) should be further explored in terms of the measurement and monitoring of emotions, and on the applied side for 'affective computing' and recommendation systems. Not only do ICT create a 24/7, "mobile" and interactive media environment, allowing people to instantly (try to) regulate their

emotions via exposure to content or more active forms of engagement. These technologies increasingly also provide means to unobtrusively and continuously track emotions (e.g. via smartphones or smart watches). Measuring and monitoring these emotions in a continuous way will allow media scholars to test whether and which media contents are most effective in emotion regulation. On the applied side, tracking of emotions (in combination with other user data) could be used to consequently recommend certain types of contents (i.e. stressed people might be shown advertisements for relaxation therapies, or be exposed to relaxing media contents through their Netflix recommendations).

References

Anderson, C. A., & Bushman, B.J. (2001). Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: a meta-analytic review of the scientific literature. *Psychological Science*, 12(5), 353–59.

Arpan, L. M., & Nabi, R.L. (2011). Exploring anger in the hostile media process: effects on news preferences and source evaluation. *Journalism & Mass Communication Quarterly*, 88(1), 5–22.

Bench, S., & Lench, H. (2013). On the function of boredom. *Behavioral Sciences*, 3(3), 459-472.

Brissett, D., & Snow, R. P. (1993). Boredom: Where the future isn't. *Symbolic Interaction*, 16(3), 237-256.

Bryant, J., & Zillmann, D. (1984). Using television to alleviate boredom and stress: Selective exposure as a function of induced excitational states. *Journal of Broadcasting & Electronic Media*, 28(1), 1-20.

Bushman, B. J., & Stack, A. D. (1996). Forbidden fruit versus tainted fruit: Effects of warning labels on attraction to television violence. *Journal of Experimental Psychology: Applied*, 2(3), 207.

Bushman, B. J., & Whitaker, J. L. (2010). Like a magnet: Catharsis beliefs attract angry people to violent video games. *Psychological Science*, 21(6), 790-792.

Bushman, B. J., & Huesmann, L.R.(2006). Short-Term and long-term effects of violent media on aggression in children and adults. *Archives of Pediatrics & Adolescent Medicine*, 160(4), 348-352.

Caldwell, L. L., Darling, N., Payne, L. L., & Dowdy, B. (1999). "Why are you bored?": An examination of psychological and social control causes of boredom among adolescents. *Journal of Leisure Research*, 31(2), 103-121.

Chester, D.S. (2017). The role of positive affect in aggression. *Current Directions in Psychological Science*, 26(4), 366–70.

Chida, Y. & Steptoe, A. (2009). The association of anger and hostility with future coronary heart disease. *Journal of the American College of Cardiology*, 53(11), 936–946.

Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion Regulation as a Scientific Construct: Methodological Challenges and Directions for Child Development Research. *Child Development*, 75(2), 317–333. https://doi.org/10.1111/j.1467-8624.2004.00673.x

Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety*. San Francisco,

CA: Jossey-Bass.

Dahlen, E. R., Martin, R. C., Ragan, K., & Kuhlman, M. M. (2004). Boredom proneness in anger and aggression: Effects of impulsiveness and sensation seeking. *Personality and Individual Differences*, 37(8), 1615-1627.

Egloff, B. (2017). You are not alone—social sharing as a necessary addition to the embracing factor. *Behavioral and Brain Sciences*, 25.

Elbert, T., Moran, J., & Schauer, M. (2017). Appetitive aggression. *Aggression and violence: A social psychological perspective*, 119-135.

Erreygers, S., Vandebosch, H., Vranjes, I., Baillien, E. & De Witte, H. (2019). The longitudinal association between poor sleep quality and cyberbullying, mediated by anger. *Health Communication*, 34(5), 560–66.

Fan R., Zhao J., Chen Y. & Xu K. (2014). Anger is more influential than joy: sentiment correlation in weibo. *PLoS ONE,* 9(10): e110184.

Fernandez, E., Day, A., & Boyle, G. J. (2015). Measures of anger and hostility in adults. In *Measures of personality and social psychological constructs* (pp. 74-100). Academic Press.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226.

Greenwood, D. N., & Long, C. R. (2009). Mood specific media use and emotion regulation: Patterns and individual differences. *Personality and Individual differences*, 46(5-6), 616-621.

Goldstein, J. (Ed.). (1998). *Why we watch: The attractions of violent entertainment.* Oxford University Press.

Goldstein, J. (1999). The attractions of violent entertainment. Media Psychology, 1(3), 271-282.

Gregory, K., & Singh, S.S. (2018). Anger in academic twitter: sharing, caring, and getting mad online". *tripleC: Communication, Capitalism & Critique*, 16(1), 176–93.

Gross, J.J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271–299.

Gross, J.J. (2015). Emotion Regulation: Current Status and Future Prospects. *Psychological Inquiry*, 26(1), 1–26.

Gullone, E., & Taffe, J. (2012). The Emotion Regulation Questionnaire for Children and Adolescents (ERQ–CA): A psychometric evaluation. *Psychological Assessment*, 24(2), 409–417.

Hill, A.B., & Perkins, R.E. (1985). Towards a model of boredom. British Journal of Psychology, 76, 235- 240.

Hoffner, C. A., Fujioka, Y., Ye, J., & Ibrahim, A. G. S. (2009). Why We Watch: Factors Affecting Exposure to Tragic Television News. *Mass Communication and Society*, 12(2), 193–216.

Hormes, J. M., Kearns, B., & Timko, C. A. (2014). Craving Facebook? Behavioral addiction to online social networking and its association with emotion regulation deficits. *Addiction*, 109(12), 2079-2088.

Johnson, B. K., & Knobloch-Westerwick, S. (2014). Glancing up or down: Mood management and selective social comparisons on social networking sites. *Computers in Human Behavior*, 41, 33–39.

Klimmt, C. & Vorderer, P. (2009). Media entertainment. In C. Berger, M. Roloff, & D. Roskos-Ewoldsen (Eds.), *Handbook of Communication Science* (2nd edition) (pp. 345-361). Los Angeles: Sage.

Knobloch, S., & Zillmann, D. (2002). Mood management via the digital jukebox. *Journal of Communication*, 52 (2), 351-366.

Knobloch-Westerwick, S., & Alter, S. (2006). Mood adjustment to social situations through mass media use: how men ruminate and women dissipate angry moods. *Human Communication Research*, 32(1), 58–73.

Krohne, H. W., Pieper, M., Knoll, N., & Breimer, N. (2002). The cognitive regulation of emotions: The role of success versus failure experience and coping dispositions. *Cognition and Emotion*, 16(2), 217–243.

Lin, C. H., Lin, S. L., & Wu, C. P. (2009). The effects of parental monitoring and leisure boredom on adolescents' internet addiction. *Adolescence*, 44(176), 994-1004.

Livingstone, Kimberly M., and Derek M. Isaacowitz. "Situation Selection and Modification for Emotion Regulation in Younger and Older Adults." *Social Psychological and Personality Science* 6, no. 8 (November 2015): 904–10. https://doi.org/10.1177/1948550615593148.

Lougheed, J. P., & Hollenstein, T. (2012). A limited repertoire of emotion regulation strategies is associated with internalizing problems in adolescence: adolescent emotion regulation patterns. *Social Development*, 21(4), 704–721.

Mares, M.-L., & Cantor, J. (1992). Elderly Viewers' Responses to Televised Portrayals of Old Age: Empathy and Mood Management Versus Social Comparison. *Communication Research*, *19*(4), 459- 478. https://doi.org/10.1177/009365092019004004

Martin, R.C., Ryan Coyier, K., VanSistine, L.M., & Schroeder, K.L. (2013). Anger on the internet: the perceived value of rant-sites. *Cyberpsychology, Behavior, and Social Networking*, 16(2), 119–22.

Millgram, Y., Sheppes, G., Kalokerinos, E. K., Kuppens, P., & Tamir, M. (2019). Do the ends dictate the means in emotion regulation? *Journal of Experimental Psychology: General*, 148(1), 80-96.

Minnebo, J., & Eggermont, S. (2012). Trauma recovery in victims of crime: the role of television viewing motives and television exposure. *Journal of Loss and Trauma*, 17(1), 73–97.

Menninghaus, W., Wagner, V., Hanich, J., Wassiliwizky, E., Jacobsen, T., & Koelsch, S. (2017). The distancing-embracing model of the enjoyment of negative emotions in art reception. *Behavioral and Brain Sciences*, 40, 1-15.

Nabi, R.L. (2010). The case for emphasizing discrete emotions in communication research. *Communication Monographs*, 77(2), 153-159.

Nabi, R.L., Finnerty, K., Domschke, T., & Hull, S. (2006). Does misery love company? exploring the therapeutic effects of tv viewing on regretted experiences. *Journal of Communication*, 56(4), 689–706.

Novaco, R. W. (1994). Anger as a risk factor for violence among the mentally disordered. In J. Monahan & H. J. Steadman (Eds.), *Violence and mental disorder* (pp. 21–59). Chicago, IL: The University of Chicago Press.

Oliver, M. B. (2009). Affect as a predictor of entertainment choice: The utility of looking beyond pleasure. In T. Hartmann (Ed.), *Media Choice* (pp. 181-198). New York: Routledge.

Patchin, J.W., & Hinduja, S. (2017). Digital self-harm among adolescents. *Journal of Adolescent Health*, 61(6), 761–66.

Pellegrini, A. D. (2002). Rough-and-tumble play from childhood through adolescence: Development and possible functions. In P. K. Smith & C. H. Hart (Eds.), *Blackwell handbooks of developmental psychology. Blackwell handbook of childhood social development* (pp. 437-453). Malden, : Blackwell Publishing.

Plaisier, X.S., & Konijn, E.A. (2013). Rejected by peers—attracted to antisocial media content: rejection-based anger impairs moral judgment among adolescents. *Developmental Psychology*, 49(6), 1165–1173.

Raney, A.A., & Bryant, J. (2002). Moral judgment and crime drama: an integrated theory of enjoyment. *Journal of Communication*, 52(2), 402–415.

Regan, P. M., & Sweet, D. L. (2015). Girls and Online Drama: Aggression, Surveillance, or Entertainment?. In Bailey, J. & Steeves, V. (Eds.) *eGirls, eCitizens: Putting*

Technology, Theory and Policy into Dialogue with Girls' and Young Women's Voices. Ottawa: University of Ottawa Press/Les Presses de l'Université d'Ottawa, 179-98.

Reinecke, L. (2017). Mood management. In P. Rössler (Ed.), *The International Encyclopedia of Media Effects* (pp. 1271-1284). Wiley-Blackwell.

Rubin, A.M., Haridakis, P.M., & Eyal, K. (2001). Viewer aggression and attraction to television talk shows. *Media Psychology*, 5(4), 331–362.

Runions, K.C., Bak, M., & Shaw, T. (2017). Disentangling functions of online aggression: the cyber-aggression typology questionnaire (catq): cyber-aggression typology questionnaire. *Aggressive Behavior*, 43(1), 74–84.

Ruggiero, T. E. (2000). Uses and Gratifications Theory in the 21st Century. *Mass Communication and Society*, 3(1), 3–37.

Rupp, D. E., & Vodanovich, S. J. (1997). The role of boredom proneness in self-reported anger and aggression. *Journal of Social Behavior and Personality*, 12(4), 925-936.

Schramm, H., & Cohen, E.L. (2017). Emotion regulation and coping via media use. In P. Rössler, C. A. Hoffner, & L. van Zoonen (Eds.), *The International Encyclopedia of Media Effects* (pp. 1–9). Hoboken, NJ, USA: John Wiley & Sons, Inc.

Schramm, H., & Wirth, W. (2008). A case for an integrative view on affect regulation through media usage. *Communications*, 33(1), 27-46.

Sharman, L., & Dingle, G.A. (2015). Extreme metal music and anger processing. *Frontiers in Human Neuroscience*, 9, 1-11.

Simon, R. W., & Nath, L. E. (2004). Gender and emotion in the United States: Do men and women differ in self reports of feelings and expressive behavior? *American Journal of Sociology*, *109*(5), 1137–1176.

Sparks, G. G. & Sparks, C. W. (2000). Violence, mayhem, and horror. In D. Zillmann & P. Vorderer (Eds.), *Media entertainment: The psychology of its appeal* (pp. 73-92). Mahwah, NJ: Lawrence Erlbaum Associates.

Stevens, E. M., & Dillman Carpentier, F.R. (2017). Facing our feelings: how natural coping tendencies explain when hedonic motivation predicts media use. *Communication Research*, 44(1), 3–28.

Strauss, M., Raubenheimer, J. E., Campher, D., Coetzee, C., Diedericks, A., Gevers, H., … van Niekerk, S. (2016). The development of an emotional regulation scale for adolescents. *South African Journal of Occupational Therapy*, 46(3), 41-48.

Spendelow, J.S., Simonds, L.M. & Avery, R. (2017). The relationship between co-rumination and internalizing problems: a systematic review and meta-analysis: co-rumination & internalizing problems. *Clinical Psychology & Psychotherapy*, 24(2), 512–27.

Tamir, M., Mitchell, C., & Gross, J. J. (2008). Hedonic and instrumental motives in anger regulation. *Psychological Science*, 19(4), 324–328.

Tangney, J. P., Wagner, P. E., Marschall, D., & Gramzow, R. (1991).*The Anger Response Inventory (ARI)*. FairfaxVA: George Mason University.

Thompson, R. A. (1994). emotion regulation: a theme in search of definition. *Monographs of the Society for Research in Child Development*, 59(2-3), 25–52.

Trampe, Debra, Jordi Quoidbach, and Maxime Taquet. "Emotions in Everyday Life." Edited by Alessio Avenanti. *PLOS ONE* 10, no. 12 (December 23, 2015): e0145450. https://doi.org/10.1371/journal.pone.0145450.

Unsworth, G., Devilly, G.J., & Ward, T. (2007). The effect of playing violent video games on adolescents: should parents be quaking in their boots? *Psychology, Crime & Law*, 13(4), 383–94.

van Tilburg, W. A., & Igou, E. R. (2012). On boredom: Lack of challenge and meaning as distinct boredom experiences. *Motivation and Emotion*, 36(2), 181-194.

van Tilburg, W. A., & Igou, E. R. (2017). Can boredom help? Increased prosocial intentions in response to boredom. *Self and Identity*, 16(1), 82-96.

Varjas, K., Talley, J., Meyers, J., Parris, L., & Cutts, H. (2010). High school students' perceptions of motivations for cyberbullying: an exploratory study, *Western Journal of Emergency Medicine*, *11*(3), 269-273.

Vermeulen, A., Vandebosch, H., & Heirman, W. (2018). "#Smiling, #venting, or both? adolescents' social sharing of emotions on social media. *Computers in Human Behavior*, 84, 211–19.

Vorderer, P. (2001). It´s all entertainment, sure. But what exactly is entertainment? Communication research, media psychology, and the explanation of entertainment experiences. *Poetics*, 29, 247-261.

Wakshlag, J., Vial, V., & Tamborini, R. (1983). selecting crime drama and apprehension about crime. *Human Communication Research*, 10(2), 227–242.

Weber, R., Ritterfeld, U., & Kostygina, A. (2006). Aggression and Violence as Effects of Playing Violent Video Games? In P. Vorderer & J. Bryant (Eds.), *Playing video games: Motives, responses, and consequences* (pp. 347-361). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Wegmann, E., Ostendorf, S., & Brand, M. (2018). Is it beneficial to use Internet-communication for escaping from boredom? Boredom proneness interacts with cue-induced craving and avoidance expectancies in explaining symptoms of Internet-communication disorder. *PloS one*, 13(4), e0195742.

Whitaker, J. L., Melzer, A., Steffgen, G., & Bushman, B. J. (2013). The allure of the forbidden: Breaking taboos, frustration, and attraction to violent video games. *Psychological Science*, 24(4), 507-513.

Wranik, T., & Scherer, K. R. (2010). Why do I get angry? A componential appraisal approach. In M. Potegal, G. Stemmler, & C. Spielberger (Eds.), *International handbook of anger: Constituent and concomitant biological, psychological, and social processes* (pp. 243-266). New York, NY, US: Springer Science + Business Media.

Zillmann, D., & Bryant, J. (1985). Affect, mood, and emotion as determinants of selective exposure. In D. Zillmann & J. Bryant (Eds.), *Selective exposure to communication* (pp. 157–189). Hillsdale, NJ: Lawrence Erlbaum Associates.

Zillmann, D., Hezel, R. T., & Medoff, N. J. (1980). The effect of affective states on selective exposure to televised entertainment fare. Journal of Applied Social Psychology, 10 (4), 323 -339.