

## Review of Emotion Regulation , Videogames for Emotion Regulation

**Saeed Samadzadeh Baghbani<sup>1</sup>**

1- Master's student in Educational Psychology, Islamic  
Azad University, Tehran Medical Sciences Branch,  
Iran

PhD in Mechanical Engineering, Islamic Azad  
University, South Tehran Branch, University Lecturer,  
Tehran, Iran

[Samadzadeh65@gmail.com](mailto:Samadzadeh65@gmail.com)

**Abstract :** Emotion regulation is the ability to exert control over one's own emotional state. It may involve behaviors such as rethinking a challenging situation to reduce anger or anxiety, hiding visible signs of sadness or fear, or focusing on reasons to feel happy or calm. Emotional regulation is about managing emotions, not about getting rid of them or suppressing them, but about adjusting how we feel them. This involves the capacity to adjust the strength or length of a feeling without completely transforming it. Having the ability to control emotions is crucial as our emotions are strongly linked to our thoughts and feelings. Our thoughts and emotions guide us in determining the most appropriate response to a situation and the actions we need to take. It is essential to comprehend the variances in brain function when it comes to regulating emotions in order to create personalized treatments for managing affective disorders. Reflecting on over twenty years of emotion regulation imaging research, the consistency in findings linking successful self-reported regulation to increased lateral PFC activity and decreased amygdala activity indicates consistent individual differences. Since the beginning of the 1990s, there has been a rapid increase in studies on emotion regulation (ER) in the psychology field. ER involves monitoring, assessing, and adjusting emotional responses, both internal and external, to achieve desired outcomes. Video games can shape your child. A study conducted by the Michigan State University Child Project found that there is a link between video games and creativity, regardless of gender, race or type of video game. Video games can improve your child's decision making. Effects of Video Games on Children Most people think that the bad effects of video games are due to the violence they contain. According to a scientific study, children who play more violent video

games are more likely to have aggressive thoughts, feelings, and behaviors. The effect of video game violence on children is worsened by the interactive nature of the games. In many games, children are rewarded for being more violent. The act of violence is repeated over and over again.

**Keywords :** Emotion, regulation , Videogames , mental health

### INTRODUCTION

GOOD EMOTION REGULATION IS CONNECTED TO VARIOUS POSITIVE RESULTS SUCH AS INCREASED WELL-BEING, STRONGER INTERPERSONAL CONNECTIONS, AND IMPROVED ABILITY TO HANDLE STRESS AND CHALLENGES.

HAVING THE ABILITY TO CONTROL EMOTIONS IS A LEARNED SKILL, INDICATING THAT INDIVIDUALS TYPICALLY DEVELOP EMOTIONAL REGULATION AS THEY MATURE. REGULATING EMOTIONS MAY COME MORE NATURALLY TO SOME INDIVIDUALS THAN TO OTHERS.

Emotional regulation encompasses a series of mechanisms that impact:

- ✚ What emotions an individual possesses
- ✚ When they experience these feelings.
- ✚ The way in which they feel and show these emotions.

Emotional regulation is about managing emotions, not about getting rid of them or suppressing them, but about adjusting

how we feel them. This involves the capacity to adjust the strength or length of a feeling without completely transforming it. Having the ability to regulate the strength of the emotion can assist in managing behavior and emotional responses. When a person experiences an emotion such as anger, it may arise from feeling threatened or powerless.

#### **What is the significance of emotional regulation?**

Having the ability to control emotions is crucial as our emotions are strongly linked to our thoughts and feelings. Our thoughts and emotions guide us in determining the most appropriate response to a situation and the actions we need to take. In essence, behavior can be affected by emotional regulation. Acquiring techniques to manage our emotions enables us to make intentional decisions rather than reacting impulsively and potentially feeling remorse afterward. This implies that we can develop skills to handle relationships, address issues, and enhance our mental well-being. If we suppress or ignore our emotions, we might face feelings of powerlessness, negative thoughts, overthinking, bitterness, and heightened irritation. This could lead to the emergence of anxiety, depression, or physical problems.

The following outlines prevalent healthy and unhealthy strategies individuals employ for emotion regulation:

#### **Healthy Strategies**

These may encompass:

- ✚ Practicing meditation or mindfulness techniques
- ✚ Participating in therapeutic sessions
- ✚ Discussing emotions with friends
- ✚ Developing skills in emotional intelligence
- ✚ Maintaining a journal
- ✚ Recognizing the need for breaks and creating personal space
- ✚ Ensuring proper sleep hygiene

#### **Unhealthy Strategies**

These may include:

- ✚ Engaging in self-harm
- ✚ Abusing alcohol or substances
- ✚ Resorting to emotional eating
- ✚ Avoiding or withdrawing from challenging situations

- ✚ Excessive engagement with social media at the expense of other responsibilities
- ✚ Isolating oneself from social interactions

#### **Understanding Emotion Dysregulation**

Emotion dysregulation refers to the difficulty in employing healthy strategies to alleviate or manage negative emotions effectively. While it is not uncommon for individuals to occasionally resort to suboptimal emotional regulation methods, those who frequently encounter overwhelming and intense negative emotions are more likely to depend on unhealthy strategies. For instance, consider a situation where a friend fails to show up for a scheduled lunch. Rather than contemplating various plausible reasons for their absence, an individual with emotional dysregulation may experience feelings of hurt or abandonment. This can lead to intense anger or resentment, prompting actions driven by these emotions, such as yelling at the friend, accusing them of disloyalty, or withdrawing from the relationship altogether. In distressing circumstances, individuals lacking adequate emotion regulation skills may find themselves overwhelmed by negative emotions and a perceived loss of control. When we act on our dysregulated emotions, we risk engaging in behaviors that exacerbate our distress, potentially trapping us in a detrimental emotional cycle. Dysregulation exists on a continuum, ranging from underregulation to overregulation, both of which hinder the ability to self-soothe and return to a baseline emotional state.

Individuals experiencing dysregulated emotions may exhibit the following characteristics:

- ✚ Exhibit diminished awareness and comprehension of their emotional states
- ✚ Demonstrate an inability to control impulsive actions
- ✚ Experience intensified and fluctuating negative emotions
- ✚ Show heightened sensitivity to emotional cues within social interactions
- ✚ Dissociation
- ✚ Emotional numbing
- ✚ Episodes of rage
- ✚ Aggressive outbursts
- ✚ Impulsive and reckless actions
- ✚ Substance misuse

- ✚ Avoidance strategies
- ✚ Self-harming behaviors

In general, emotion regulation refers to the internal and external processes responsible for monitoring, evaluating, and modulating emotional responses, especially intense and transient forms. In many cases, you may lose control of a situation, however, there are people who constantly face this problem. For example, there are situations where their emotional changes cause them to make decisions that they end up regretting. In such situations, people can quickly damage their relationships or reputation. Many factors contribute to the development of this emotional disorder. For example, triggers can be related to negative experiences from the person's history. Physical changes can sometimes have a significant impact on the loss of control of these emotions.

#### **What factors contribute to the challenge of regulating emotions for individuals?**

Several factors, such as beliefs about negative emotions, play a role in influencing this issue. Some of the key factors that have a significant impact are:

- ✚ Inability to manage or regulate emotions like rage, worry, or fear of harm.
- ✚ Causing needless pain.
- ✚ Not being able to take advantage of unique chances can be extremely upsetting for individuals.

#### **Active regulation strategies**

These strategies include:

##### **✚ Self-awareness**

To control this feeling, ask yourself, "Am I feeling sad, hopeless, ashamed, or anxious?" Then take a moment to notice or discover your current state. Try to write this feeling down on a piece of paper, but be careful not to judge it at this stage.

##### **✚ Mindfulness**

The next strategy that can be effective in regulation is mindfulness. This helps you to fully explore the sensory aspects of your body.

##### **✚ Self-compassion**

Self-compassion means that when you experience experiences and unpleasant events, such as failure, you feel inadequate, and in these situations, you should feel good about yourself instead of ignoring or blaming yourself.

#### **Emotion Regulation Strategies**

Cognitive processes that are carried out to regulate emotions for an individual are called emotion regulation strategies. In general, things such as: thoughts and cognitions in the ability to manage, regulate, and control feelings and emotions play a very important role in the experience of a stressful event. To control the feeling of emotion, you can use the following strategies, which are:

- ✚ **Not blaming yourself:** The first point to pay attention to in regulating emotions is not blaming and blaming yourself for the situation that has arisen.
- ✚ **Not blaming others:** There are some people who, when faced with adverse situations, blame others for the situation that has arisen. In order to avoid harming themselves and others, it is necessary to stop blaming others.
- ✚ **Not ruminating:** In cases where adverse situations occur, you may create concerns for yourself, which can be very destructive and damaging.

**Positive thinking:** One of the most effective ways to regulate emotions is positive thinking. In times of adversity, one should try to direct one's mind and emotions to positive things.

- ✚ **Non-acceptance of circumstances:** When an unfavorable situation occurs to a person, there is no need to force oneself to accept these circumstances, but rather it is necessary to take action with a purposeful plan to change these difficult circumstances.

- ✚ **Planning:** In order to reduce the negative effects of unfavorable circumstances, a person can have a correct and accurate plan with the help of a counselor.[2]

As affective disorders like major depression become more common, it is increasingly vital to identify, address, or prevent mental illnesses promptly.[3] Detecting disorders or tendencies for disorders early can be done by identifying biological markers in the brain.[4] As emotional regulation challenges are present across various disorders, they play a significant role in the development of affective disorders.[5]



Variations in how emotions are controlled by individuals may be used as a means to detect biological signs of or susceptibility to mental disorders.[6] Individual variations in how the brain manages emotions can be seen as either increasing the risk of or protecting against stress-related mental health issues. Emotion regulation involves adjusting the intensity of emotions through various strategies, like distraction, reappraisal, or suppression, whether consciously or unconsciously.[7] Emotion regulation has been extensively researched using functional magnetic resonance imaging (fMRI) for more than twenty years. Nevertheless, the majority of prior fMRI research has focused on discovering the neural foundations of emotion regulation, which are seen as shared mechanisms among individuals. For this purpose, neural activity seen during tasks involving regulating emotions was usually combined across participants in order to enhance the signal-to-noise ratio. Several previous meta-analyses and reviews have summarized the literature on the neural basis of emotion regulation, considering the abundance of prior research.[8-9-10] Previous summaries of results from various studies have shown that there are widespread neuronal networks involved in emotion control and generation in healthy individuals. These networks include areas in the prefrontal, parietal, temporal, and insular cortex, as well as regions like the amygdala, hippocampus, and thalamus.[11] Two areas of the brain (usually more active when regulating emotions compared to not regulating them) are linked to working memory, attention, and language tasks related to controlling emotions. However, a subcortical network, which is usually more active during unregulated emotional processing than during emotion regulation, has been associated with fundamental emotional reactivity. These results indicate that managing emotions can be seen as a complex process involving different components, such as emotional response and cognitive regulation, working together in coordination with specific brain networks.[12] It is essential to comprehend the variances in brain function when it comes to regulating emotions in order to create personalized treatments for managing affective disorders. Reflecting on over twenty years of emotion regulation imaging research, the consistency in findings linking successful self-reported regulation to increased lateral PFC activity and decreased amygdala activity indicates consistent individual differences. Our comprehensive analysis of results, taking into account particular measures and effects, will contribute to the development of neurobiological models of emotion regulation that take into account individual variations and can be applied to comprehend emotion regulation as a universal aspect of mental disorders. Future research needs to focus on increasing sample sizes, incorporating advanced statistical methods, and establishing standardized procedures to improve reproducibility when studying individual variations in emotion processing.[13]



Figure 1-Emotion regulation strategies

#### **Videogames for Emotion Regulation (Types of Games)**

- ✚ Physical Games
- ✚ Imitative Games
- ✚ Pretend Games
- ✚ Symbolic Games
- ✚ Imaginative Games
- ✚ Educational Games
- ✚ Electrical Games (Videogames)

#### **Play therapy**

- ✚ Play therapy
- ✚ Active play therapy
- ✚ Passive play therapy

Since the beginning of the 1990s, there has been a rapid increase in studies on emotion regulation (ER) in the psychology field. ER involves monitoring, assessing, and adjusting emotional responses, both internal and external, to achieve desired outcomes.[14] One of the most widely used model aimed to describe ER is the so-called “process model” of ER that distinguishes among different strategies mostly classified by the time at which they intervene in the emotion generation process (namely antecedent-focused and response focused processes)[15-16]. We adopt a wide definition of ER that includes managing all emotional states, such as mood and feelings of positivity or negativity. This aligns with Koole's categorization of ER strategies which encompasses their purposes, such as individuals seeking to attain specific psychological results through the regulation of their emotions.[17] Specifically outcomes are related to the satisfaction of hedonic needs (possible ER strategies to reach this aim are thinking pleasurable or relaxing thoughts), facilitation of specific goals and tasks (e.g., effortful distraction and cognitive reappraisal), and maintenance of the integrity of their overall personality system (e.g., mindfulness training and relaxation exercises).[18] The literature indicates that successful ER results in various significant effects, including mental health, subjective and psychological wellbeing, and relationship satisfaction. However, many studies have emphasized the importance of emotion dysregulation in specific types of mental disorders and unhealthy behaviors.[19-20]

Moreover, recent studies indicate the significance of person-situation interactionist models that acknowledge personal distinctions and stress the need for adaptability in emotion regulation. By acquiring new and efficient methods of managing their emotions, individuals can improve their emotional well-being and safeguard themselves against mental disorders, leading to a rise in interventions aimed at strengthening this ability.[21] Nowadays modern strategies and instruments to assist people in overseeing their emotional states are accessible, counting virtual computer-generated settings pointed to control the emotional encounter, and to prepare particular ER techniques. Among the virtual intervened encounters, video diversions are getting to be progressively well known inside people's excitement exercises and are pulling in the intrigued of analysts almost their openings for positive person working.[22] Usually reliable with other thinks about examining the part of conventional media, which highlighted how diverse shapes of human craftsmanship and expression have connections with consumers' social and enthusiastic capacities.[23-24] Overcoming the normal "good-bad" division in videogame investigate, intrigued is developing toward a profound understanding of the impacts of videogames on the improvement of a few capacities, such as cognitive and social ones.[25-26] To look at the potential positive and negative results of gaming, it is vital to go past a "cause and effect" approach and to consider a comprehensive gamer centered approach. Inquire about has as of late investigated the positive impacts of videogames on players' prosperity, in terms of actuating positive feelings, progressing temperament and diminishing push, contributing to passionate stability, and advancing locks in, self-actualizing encounters such as mental stream. All things considered, the impacts of videogames in terms of ER are picking up consideration, but have not however gotten efficient in-depth examination in writing.[27-28]

Indeed in case videogames may not address the complexity of the human enthusiastic involvement, a few angles of videogames are curiously for the advancement of ER. Taking after the mental scientific classification of videogames' characteristics proposed by Lord et al. it is conceivable to recognize at slightest three fundamental openings. The primary is related to control and control highlights, counting different capacities in a videogame that straightforwardly relate to the player's sense of dominance and control over the amusement, such as being able to spare advance to rectify botches, and the capacity to at the same time oversee various assets. The controlled introduction to negative enthusiastic jolts may trigger and train reappraisal abilities, which may be a key viewpoint to develop ER. Such property is certainly commonplace of videogames in which passionate jolts are rehashed and controlled by the player's movement.[29] Besides, particular positive impacts can develop too by negative feelings experienced whereas playing diversions,

such as disappointment related to gameplay difficulty or sadness and fear related to appalling or frightfulness substance. This can be related to the interactivity of videogames, which has been labeled as the "art of failure" since it moves the player to continually oversee to overcome impediments inside the diversion instances.[30-31] Much obliged to their intelligently nature, videogames permit the player to bargain ceaselessly and straightforwardly with what produces the passionate reaction and to recuperate from disappointment.[30-31]

Nowadays, almost everyone has heard and knows about games, the psychology of games, their role, benefits, importance and impact on the all-round development of people and has somehow understood them. Also, many books and articles have been written about the importance and role of games in development, their benefits and ... The basic concepts of children's games go far beyond the concept of words such as entertainment and fun. Games may teach and educate children basic concepts. Games can save children from suffering and many things can be mentioned about the impact and impact of games. For this reason, games can be used as a therapeutic method.[32]

**Physical games** Physical games, which are considered to be one of the oldest types of games, are games whose basis is to strengthen the body and muscles.

The child devotes time to physical games to eliminate excess body strength or eliminate fatigue or tiredness. These types of games are played both individually and in groups and do not require special places and equipment. In addition to strengthening physical strength, these types of games may aim to strengthen the senses or organs, and may also use thought and memory.

Physical games are divided into two types:

The first type is games that involve large muscles and the second type is games that involve small muscles. The possibility of strengthening thought in games that involve small muscles is greater than when large muscles are used. Games such as playing with a ball, jumping, climbing, chasing, skating, throwing, etc. are games that are mainly physical.[33-34]

### **Imitative games**

As the child grows, he realizes that he cannot always "internalize" by changing the environment, but rather that the environmental limitations are such that the person is forced to adapt to them and "externalize" himself, that is, change. The games in which the child changes his behavioral characteristics and makes himself look like others are called imitative games. In such games, the child imitates the roles of people he likes. For example, he imitates the roles of father, mother, sister, etc. or in elementary school, he imitates the



role of a coach and teacher, and finally, in adulthood and adolescence, he prefers the role of peers over other roles and engages in activities in which he "imitates" his friends.[35]

#### **Positive effects of video games on mental health**

A review of studies shows that gamers are able to make decisions six times per second and act on them. In other words, they are four times faster than ordinary people. Daphne Bavelier, a neuroscientist from the University of Geneva in Switzerland and the University of Rochester in New York, believes that action and violent games, which most parents worry about, have the most beneficial effect on children's brains. Here are some of the most important effects of emergent gameplay in video games.

##### **Mental stimulation**

Video games force gamers to think about issues and make decisions about them. When playing video games, all parts of the brain are activated to focus at a higher level.

##### **Strengthen the sense of doing the work and finishing it**

Playing video games has certain purposes and goals. In this way, when gamers achieve that victory, they experience great satisfaction and a pleasant feeling is created in them. When this sense of success is increased when the player is awarded a special trophy or badge in the game. In this case, gamers will spend more attention and effort on the game to earn more trophies and badges

##### **The impact of video games on students' mental health**

Playing video games improves the mental and even physical injuries of gamers. The reason is that video games act as a distraction from pain and mental injury. Playing them is very effective for people who suffer from mental disorders such as anxiety, depression, attention deficit hyperactivity disorder (ADHD), and post-traumatic stress disorder (PTSD).

Many people believe that video games have a negative impact on their children. Studies have shown that children who play violent video games are more likely to show aggressive feelings and behaviors. Some studies suggest that the effects of violence may be greater after playing video games. In most of these games, the violence is caused by the game and thus this is done repeatedly by the child in the game. In other words, this result will cause violent behavior by children. However, this claim has not yet been proven, some cases including Henry Jenkins from the Massachusetts Institute of Technology have stated that popular games such as Death Match, Mortal Kombat, Doom and Grand Theft Auto, reduce the rate of crime by teenagers. In other words, he stated the following about the impact of video games on children and teenagers. Teenagers are always asked to spend a lot of time playing video games and they commit violent crimes. In this way, there are many violent people who enjoy playing violent video games. Some of these games use gamers to make them do violent behavior and make this behavior look natural. On the other hand, another study at the University at Buffalo showed that engaging in violence in the virtual world leads to better behavior in the real world. And

players who play violent games may feel guilty about their behavior in the virtual world.

#### **Important tips for improving the impact of games on the mental health of children and adolescents**

If the impact of video games on children and adolescents causes negative behavior and effects on the mental health of children and adolescents, it is better for parents to follow important points in this regard. Some important points are as follows. In general, playing violent video games such as shooting and war games is not recommended for children's mental health. Of course, it is necessary to point out that these same violent games enhance the speed of action, the sense of war and survival of individuals. But in general, it is better to encourage your child to play puzzle, research, construction and strategic games. Playing strategic games is one of the best games for children that strengthens their problem-solving skills. Some studies show that violent video games are harmful to mental health. But in fact, games that encourage decision-making and critical thinking have a positive effect on mental health. We recommend that you set the necessary limits for your child and teenager, because playing video games alone does not harm people's mental health, and it is addiction to video games that leads to complications and personality disorders in people. It is better to consider specific hours for children to play games. Because playing video games for a long time leads to people becoming isolated and withdrawn. In some cases, it is seen that gamers prevent them from communicating with their close people and friends and are not willing to spend time with them. Therefore, to prevent these problems, it is better to set a specific time for your child to play. In general, playing video games by children has positive effects on their mental health. Many children can help these games to relieve their stress and to exercise themselves. Most parents, when they see their child playing on a mobile phone or PlayStation, think more about the possible harm and dangers of these games than about what these games can be. But the important thing is that in the modern world, video games help a lot in developing children's skills in life. We hope you liked this article.[36]

It almost seemed like we were all entertained for a while, and one of the most popular computer games was video games. In fact, apartment living and the current social conditions have deprived children of the opportunity to play in the yard and alley. There are many parents who let their children play for hours on their mobile phones, PlayStations, Xboxes, etc., but never go outside. Of course, with the very bad news we hear about theft and rape, we can completely justify them. Some parents are also upset about their children's games because

they are so wasteful when they think of them as computer games, and worse, some educational studies think that these games cause problems for the brain. But many scientists and psychologists have found that video games can actually have many benefits. The main one is to make children smarter. Video games can teach them the intellectual skills that children will need in the future. According to psychologist C. Shawn Green of the University of Wisconsin, "Video games change your brain." Playing video games changes the structure of the brain in the same way that reading or playing the piano changes it. Just like exercise, it can build muscle and shape the brain. There are differing opinions from psychologists, sociologists, and parents about computer games. Considering that the latest statistics published by the National Computer Games Foundation by the end of 2019 indicate that there were 32 million gamers, and that this number may reach half of the Iranian population by the end of 2020, given the current conditions in Iran and all reports, it is important to address the positive and negative effects of these games on children. In this report, I have tried to present the views and opinions of some experts and the results of research from reputable institutions and universities so that we can look at the world of games with a better perspective.

### **The Positive Effects of Video Games**

Video games can shape your child. A study conducted by the Michigan State University Child Project found that there is a link between video games and creativity, regardless of gender, race or type of video game. Video games can improve your child's decision-making. According to a study by the University of Rochester, children who played action video games and computer games were 25 percent faster than others without thinking twice.

Other studies show that more skilled people can make and act on decisions six times faster (four times faster than most people), and can pay attention to more than six things at a time without thinking twice. Daphne Bavelier, a neuroscientist who studies the effects of action games at the University of Geneva in Switzerland and the University of Rochester in New York, says that violent action games, which are more stressful, have a beneficial effect on the brain.

Mastering video games boosts your child's self-confidence and self-esteem. Many games have adjustable levels. Your child starts out as a beginner on an easy level and with consistent practice and skill, becomes adept at handling challenges. Since failure is less likely, if not more, they will make mistakes. Your child can transfer this attitude to real life. Games that involve players encourage your child to collaborate to achieve their goals. Your child learns to listen to others' opinions, plan with other children, and adjust their skills accordingly. Some online games are even played internationally, which can introduce your child to players

from different nationalities and cultures. This helps build friendships among different people. When your child vents their frustrations and anger in violent video games, it reduces stress. Games can use football and other violent sports. In fact, video games are safer for teens than drugs, alcohol, and street racing in the real world. A 2013 study by the Max Planck Institute for Human Development and St. 64 Hospital found that playing games is a way to get more involved in the brain. These areas of the brain are important for spatial navigation, strategic planning, working memory, and motor function.[37]

### **Negative Effects of Video Games**

**Effects of Video Games on Children** Most people think that the bad effects of video games are due to the violence they contain. According to a scientific study, children who play more violent video games are more likely to have aggressive thoughts, feelings, and behaviors. [38] The effect of video game violence on children is worsened by the interactive nature of the games. In many games, children are rewarded for being more violent. The act of violence is repeated over and over again. The child controls the violence and experiences the violence from his or her own perspective (killing, kicking, stabbing, and shooting). This active participation, repetition, and reward are effective tools for learning behavior. The effects of video game violence on children are exacerbated by the interactive nature of the games. In many games, children are rewarded for being more violent. The act of violence is repeated over and over again. The child controls the violence and experiences the violence from their own perspective (killing, kicking, stabbing, and shooting). This active participation, repetition, and reward are effective tools for learning behavior. Many studies suggest that violent video games may be related to aggressive behavior. However, the evidence is not entirely consistent, and the issue is still unresolved. Many experts, including Henry Jenkins of the Massachusetts Institute of Technology, have noted that juvenile crime rates have declined as games such as Deathmatch, Mortal Kombat, Doom, and Grand Theft Auto have become more popular. He concluded that juvenile players can overcome the emotional effects of the game once they finish playing. In fact, there will always be a number of teens who commit violent crimes and also spend a lot of time playing video games. It seems that there will always be violent people, and many of them also enjoy playing violent video games.

Another downside is that playing too much video games can make your child socially isolated. He or she may also spend less time on other activities, such as homework, studying, exercising, and interacting with family and friends. On the other hand, a study by researchers at North Carolina State

University, New York, and the University of Ontario Institute of Technology found that gamers don't typically replace their offline social lives with online gaming (in other words, they're not willing to sacrifice their real lives for gaming), and that loneliness is not uncommon among gamers. Some video games teach children the wrong kind of content. Children are rewarded for their violent, vengeful, and aggressive behavior in the game. Negotiation and other nonviolent solutions are often not an option for children. Women are often portrayed as weaker characters who are helpless or sexually provocative. On the other hand, a study at the University at Buffalo suggests that violence and bad behavior in the virtual world may contribute to better behavior in the real world. Gamers who play violent games may feel guilty about their behavior in the virtual world, which makes them more sensitive to the moral issues they have violated while playing.

Academic achievement may be negatively related to the time spent playing video games. Studies have shown that the more a child plays video games, the poorer their school performance. [38]. A study conducted by the School of Professional Psychology at Argosy University in Minnesota found that video game addicts argued more with their teachers, fought more with their friends, and got lower grades than their peers who played less. Many students admitted that their video game habit was often responsible for their poor grades in school. Video games may also have adverse effects on some children's health, including obesity, postural and musculoskeletal disorders such as tendonitis, nerve compression, and more. A study by the Minneapolis-based National Institute on Media and Families found that video games can be addictive for children, increasing their levels of depression and anxiety. It's no surprise that kids addicted to video games suffer from poor school performance.

Children who spend too much time playing video games may exhibit impulsive behavior and have trouble paying attention, according to a new study published in the February 2012 issue of the Journal of Psychology and Popular Media Culture. Video recreations have gotten to be one of the favorite exercises of American children. A developing body of investigate is connecting rough video amusement play to forceful cognitions, demeanors, and behaviors. The primary objective of this ponder was to record the video diversions propensities of youths and the level of parental checking of juvenile video diversion utilize. The moment objective was to look at affiliations among savage video amusement presentation, threatening vibe, contentions with instructors, school grades, and physical battles. In expansion, way investigations were conducted to test mediational pathways from video amusement propensities to results. Six hundred and seven 8th- and 9th-grade understudies from four schools taken part. Youths who uncover themselves to more prominent sums of video diversion viciousness were more threatening, detailed getting into contentions with instructors

more regularly, were more likely to be included in physical battles, and performed more ineffectively in school. Mediational pathways were found such that threatening vibe intervened the relationship between savage video diversion presentation and results. Comes about are translated inside and bolster the system of the Common Hostility Demonstrate. Video games may also have adverse effects on some children's health, including obesity, postural and musculoskeletal disorders such as tendonitis, nerve compression, and more.[39]

### **Conclusion**

In general, emotion regulation refers to the internal and external processes responsible for monitoring, evaluating, and modulating emotional responses, especially intense and transient forms. In many cases, you may lose control of a situation, however, there are people who constantly face this problem. For example, there are situations where their emotional changes cause them to make decisions that they end up regretting. In such situations, people can quickly damage their relationships or reputation. Many factors contribute to the development of this emotional disorder. For example, triggers can be related to negative experiences from the person's history. Our comprehensive analysis of results, taking into account particular measures and effects, will contribute to the development of neurobiological models of emotion regulation that take into account individual variations and can be applied to comprehend emotion regulation as a universal aspect of mental disorders. Future research needs to focus on increasing sample sizes, incorporating advanced statistical methods, and establishing standardized procedures to improve reproducibility when studying individual variations in emotion processing. Emotion regulation (ER) supports multiple individual functions and promotes mental health and wellbeing. Among the tools that may be used to help people in managing their affective states, videogames are reaching attention and are showing positive effects. Yet, little is known about their effectiveness. Academic achievement may be negatively related to the time spent playing video games. Studies have shown that the more a child plays video games, the poorer their school performance. A study conducted by the School of Professional Psychology at Argosy University in Minnesota found that video game addicts argued more with their teachers, fought more with their friends, and got lower grades than their peers who played less. Many students admitted that their video game habit was often responsible for their poor grades in school. Video games may also have adverse effects on some children's health, including obesity, postural and musculoskeletal disorders such as tendonitis, nerve compression, and more. A study by the Minneapolis-based National Institute on Media and Families found that video games can be addictive for children, increasing their levels of



depression and anxiety. It's no surprise that kids addicted to video games suffer from poor school performance.

### Abbreviations

Functional magnetic resonance imaging : (fMRI)  
Emotion regulation : (ER)  
Attention deficit hyperactivity disorder : (ADHD)  
Post traumatic stress disorder (PTSD).  
Attention deficit hyperactivity disorder (ADHD)

### References

- 1) www.simplypsychology.org
- 2) mehrbodcenter.ir
- 3) McGrath, J.J., Al-Hamzawi, A., Alonso, J., Altwaijri, Y., Andrade, Laura H., Bromet, E.J., Bruffaerts, R., Almeida, J.M.C. de, Chardoul, S., Chiu, W.T., Degenhardt, L., Demler, 2023, [https://doi.org/10.1016/S2215-0366\(23\)00193-1](https://doi.org/10.1016/S2215-0366(23)00193-1).
- 4) Gao, S., Calhoun, V.D., Sui, J., 2018. Machine learning in major depression: from classification to treatment outcome prediction. *CNS Neurosci. Ther.* 24, 1037–1052. <https://doi.org/10.1111/cns.13048>.
- 5) Aldao, A., Gee, D.G., De Los Reyes, A., Seager, I., 2016. Emotion regulation as a transdiagnostic factor in the development of internalizing and externalizing psychopathology: current and future directions. *Dev. Psychopathol.* 28, 927–946. <https://doi.org/10.1017/S0954579416000638>.
- 6) Strawbridge, R., Young, A.H., Cleare, A.J., 2017. Biomarkers for depression: recent insights, current challenges and future prospects. *Neuropsychiatr. Dis. Treat.* 13, 1245–1262. <https://doi.org/10.2147/NDT.S114542>.
- 7) Gross, J.J., 1998. The emerging field of emotion regulation: an integrative review. *Rev. Gen. Psychol.* 2, 271–299. <https://doi.org/10.1037/1089-2680.2.3.271>.
- 8) Berboth, S., Morawetz, C., 2021. Amygdala-prefrontal connectivity during emotion regulation: a meta-analysis of psychophysiological interactions. *Neuropsychologia* 153. <https://doi.org/10.1016/j.neuropsychologia.2021.107767>
- 9) Messina, I., Grecucci, A., Viviani, R., 2021. Neurobiological models of emotion regulation: a meta-analysis of neuroimaging studies of acceptance as an emotion regulation strategy. *Soc. Cogn. Affect. Neurosci.* 16, 257–267. <https://doi.org/10.1093/scan/nsab007>.
- 10) Morawetz, C., Riedel, M., Salo, T., Berboth, S., Eickhoff, S., Laird, A., Kohn, N., 2020. Multiple large-scale neural networks underlying emotion regulation. *Neurosci. Biobehav. Rev.* 116, 382–395. <https://doi.org/10.1016/j.neubiorev.2020.07.001>.
- 11) Morawetz, C., Alexandrowicz, R.W., Heekeren, H.R., 2017. Successful emotion regulation is predicted by amygdala activity and aspects of personality: a latent variable approach. *Emotion* 17, 421–441. <https://doi.org/10.1037/emo0000215>.
- 12) Feldman Barrett, L., Satpute, A.B., 2013. Large-scale brain networks in affective and social neuroscience: towards an integrative functional architecture of the brain. *Curr. Opin. Neurobiol.* 23, 361–372. <https://doi.org/10.1016/j.conb.2012.12.012>.
- 13) Neural underpinnings of individual differences in emotion regulation: A systematic review, Carmen Morawetz, Ulrike Basten, 2024
- 14) Thompson RA. Emotion regulation: A theme in search of definition. *Monogr Soc Res Child Dev* 1994; 59:25
- 15) Gross JJ. The emerging field of emotion regulation: An integrative review. *Rev Gen Psychol* 1998; 2:271–299.
- 16) Gross JJ, Thompson RA. Emotion Regulation: Conceptual and Empirical Foundations. In: Gross JJ, ed. *Handbook of Emotion Regulation*. New York: Guilford Press; 2007:3–24.
- 17) Koole SL. The psychology of emotion regulation: An integrative review. *Cogn Emotion* 2009; 23:4–41.
- 18) Gross JJ, Munoz RF. Emotion regulation and mental health. *Clin Psychol Sci Pract* 1995; 2:151–164.
- 19) Balzarotti S, Biassoni F, Villani D, et al. Individual differences in cognitive emotion regulation: implications for subjective and psychological well-being. *J Happiness Stud* 2016; 17:125–143
- 20) Aldao A, Nolen-Hoeksema S, Schweizer S. Emotion regulation strategies across psychopathology: A meta-analytic review. *Clin Psychol Rev* 2010; 30:217–237.
- 21) Bonanno GA, Burton CL. Regulatory flexibility. *Perspect Psychol Sci* 2013; 8:591–612.
- 22) Villani D, Riva G. Does interactive media enhance the management of stress? Suggestions from a controlled study. *Cyberpsychol Behav Soc Network* 2012; 15:24–30.
- 23) Gaggioli A, Pallavicini F, Morganti L, et al. Experiential virtual scenarios with real-time monitoring (interreality) for the management of psychological stress: A block randomized controlled trial. *J Med Internet Res* 2014; 16:e167.
- 24) Cheetham M, Hänggi J, Jancke L. Identifying with fictive characters: Structural brain correlates of the personality trait “fantasy.” *Soc Cogn Affect Neurosci* 2014; 9:1836–1844.
- 25) Greitemeyer T, Osswald S, Brauer M. Playing prosocial video games increases empathy and decreases Schadenfreude. *Emotion* 2010; 10:796–802.
- 26) Gentile DA, Anderson CA, Yukawa S, et al. The effects of prosocial video games on prosocial behaviors: International evidence from correlational, longitudinal, and experimental studies. *Pers Soc Psychol Bull* 2009; 35:752–763.
- 27) Przybylski AK, Weinstein N, Murayama K, et al. The ideal self at play: The appeal of video games that let you be all you can be. *Psychol Sci* 2012; 23:69–76.

- 28) Neri de Souza F. Science education with and through ICT: Curriculum design and questioning to promote active learning. In: Fonseca D, Redondo E, eds. Handbook of Research on Applied E-Learning in Engineering and Architecture Education. Hershey: IGI Global; 2016; 1:133–158.
- 29) King D, Delfabbro P, Griffiths M. Video game structural characteristics: A new psychological taxonomy. *Int J Mental Health Addict* 2010; 8:90–106.
- 30) Gee JP. What video games have to teach us about learning and literacy. *Comput Entertainment* 2003; 1:20.
- 31) Triberti S. This drives me nuts! In: Villani D, Cipresso P, Gaggioli A, Riva G, eds. Integrating Technology in Positive Psychology Practice. Hershey: IGI Global; 2016: 266–289.
- 32) Types of games and play therapy in psychology, Farshad Rozeh, Asker Ahmadi, 2015
- 33) Mahjor, Siamak Reza, Psychology of Games, Rahgosha Publications, Shiraz, 3rd edition, 1991.
- 34) Tofigh, Zeenat, Piaget, Jean and Inhelder, Barbel, Child Psychology, Ney Publishing Center, Tehran, 7th edition, 1992.
- 35) Guy R. Lefrancois, (1991), Psychology for Teaching, Wadsworth publication USA. Virginia, A., Playtime, U.S.A.: Time Life Books, 1987.
- 36) [iranmojo.com](http://iranmojo.com)
- 37) [virgool.io](http://virgool.io)
- 38) 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, Craig A Anderson, Brad J Bushman. DOI:10.1111/1467-9280.00366
- 39) adolescent hostility, aggressive behaviors, and school performance, Douglas A Gentile, Paul J Lynch, Jennifer Ruh Linder, David A Walsh, DOI: 10.1016/j.adolescence.2003.10.002, (2004).
- 40) [www.simplypsychology.org](http://www.simplypsychology.org)