

# UNDERSTANDING AND MANAGING GAME ADDICTION



# Preface

**This booklet was prepared in December 2024 by GÜNGÖR Sena Bal, Selim Karakuş, Eren Barış Başdemir under the guidance of Prof. Dr. Saniye Tuğba Tokel, within the scope of the course "Design and Use of Instructional Materials" at the Middle East Technical University, Department of Computer Education and Instructional Technology.**



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# Abstract

**This workbook provides an in-depth exploration of game addiction, tailored specifically for middle school students. It is designed to educate learners on identifying, understanding, and addressing the challenges of excessive gaming through interactive and practical approaches.**

**With activities, clear explanations, and real-world examples, the workbook helps students uncover the psychological and social factors driving game addiction. They will also learn about its consequences on mental health, physical well-being, academics, and relationships.**

**Students are encouraged to think critically about their own gaming habits and engage in self-reflection. Collaborative tasks promote teamwork, while practical strategies for balanced gaming habits ensure learners can apply what they learn to their daily lives.**

**By focusing on empowerment and awareness, this workbook equips students with the knowledge and tools to make healthier choices in a digital world.**

# Glossary

**Addiction:** an inability to stop doing or using something, especially something harmful

**Compulsive:** doing something a lot and unable to stop doing it

**Digital Detox:** a period of time during which you do not use mobile phones, computers, etc., because you usually use these devices too much

**Escapism:** a way of avoiding an unpleasant or boring life, especially by thinking, reading, etc. about more exciting but impossible activities

**Disorder:** a state of untidiness or lack of organization

**Mental Health:** the condition of someone's mind and whether or not they are suffering from any mental illness

**Neuroplasticity:** the ability of the brain to form new connections and reorganize itself as a reaction to new experiences or information

**Reward Systems:** the ability of the brain to form new connections and reorganize itself as a reaction to new experiences or information

**Self-Regulation:** the act of making certain yourself that you or your employees act according to the rules, rather than having this done by other people

**Isolation:** to separate something from other things with which it is connected or mixed

**Time Management:** the practice of using the time that you have available in a useful and effective way, especially in your work

**Withdrawal Symptoms:** the unpleasant physical and mental effects that result when you stop doing or taking something, especially a drug, that has become a habit

**Video Game:** a game in which the player controls moving pictures on a screen by pressing buttons

**Virtual Community(Online Community):** a group of people who use the internet to talk about interests that they share or to try to achieve something together



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# Objectives

## **Understanding Game Addiction**

Define gaming addiction and identify its main causes through a group discussion and engaging in short reading activities. Middle school students will demonstrate 80% accuracy in their responses.

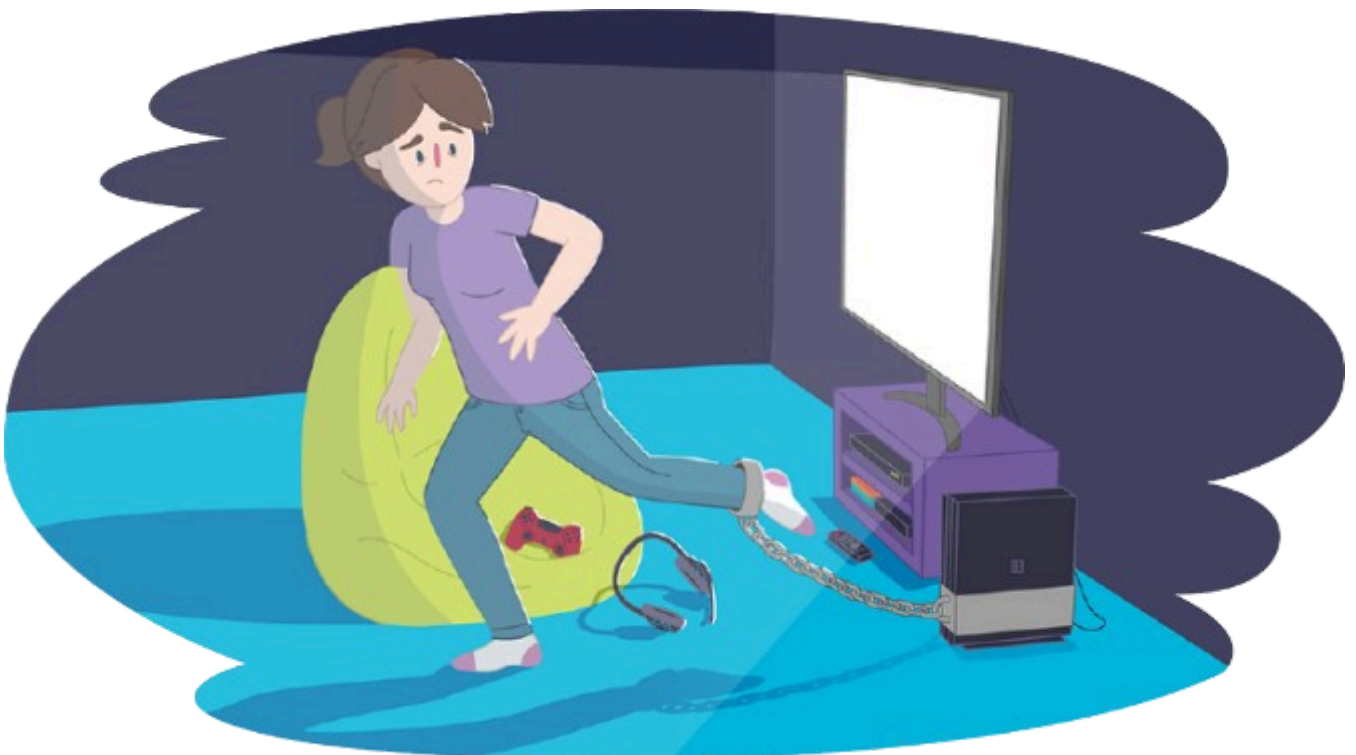
Participating in a conversation session, middle school students will compile a list of at least three negative effects of game addiction on their physical and emotional well-being.

## **Recognizing Signs of Game Addiction**

Analyze a scenario exercise to identify at least three markers of excessive gaming activity.

## **Accessing Support for Gaming Addiction**

Identify and describe at least two available resources or support options for addressing gaming addiction by reviewing relevant workbook materials.



# Introduction to Game Addiction

## What is Game Addiction?

Game addiction is when people play games too much, and it causes problems in their daily life. It is different from playing games for fun. Game addiction can hurt schoolwork, friendships, and health.



Gaming can be addictive because it feels like a way to escape real life. It gives quick rewards and makes people feel successful. But playing too much can cause problems, like choosing games over important things.



# Introduction to Game Addiction

## Causes of Game Addiction

Psychological Factors: Games usually have charts, achievements, and reward systems that activate the reward center of the brain. In order to get greater rewards, this starts a cycle of constant play. To get a rare item or award, for instance, a player can feel pushed to finish one more level.



Social Factors: Playing multiplayer online games develops a feeling of community and belonging. There is pressure to remain active in the gaming community since players frequently make connections or join teams. For instance, abandoning a team's planned game session could cause worry or guilt.



# Impacts of Game Addiction

## Mental Health Impacts

Addiction to video games can negatively affect mental health. Playing too much can lead to anxiety, depression, and an emotional need for games to relax.



Also, spending too much time on games can cause loneliness because it reduces time spent with others in person. For example, a student who skips family dinners to play video games may start to feel disconnected from their family.



# Impacts of Game Addiction

## Physical Health Impacts

Playing games too much can hurt the body. It can cause tired eyes, headaches, and bad sleep. Staying up late to play games makes people tired and less focused.



Long gaming sessions often replace physical activities

Also, playing games instead of moving can make people gain weight and become less healthy.



# Impacts of Game Addiction

## Addiction

### Academic and Social Impacts

Playing games too much can hurt school and friendships. When people play games instead of studying, they might get bad grades.

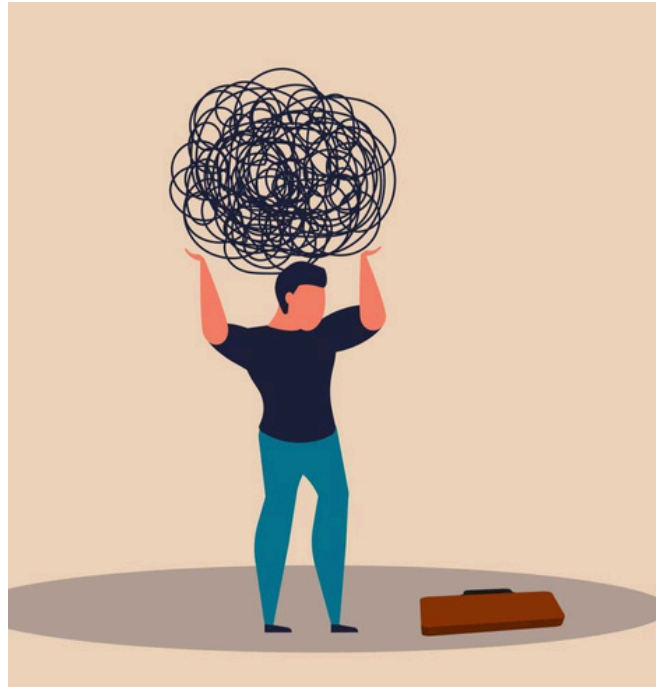


Friends and family can feel sad if gaming is more important. For example, a person might skip plans with friends to play games, and this can upset others.

# Recognizing the Signs of Game Addiction

Recognizing the signs of game addiction is important for addressing the issue early:

- Behavioral Signs: Excessive gaming time, neglecting responsibilities, and avoiding social interactions.
- Emotional Signs: Irritability, frustration, or anxiety when unable to play games.



- Physical Signs: Fatigue, headaches, and reduced physical health due to prolonged gaming.



# Activity

Read the scenarios as a group. Identify at least three signs of game addiction from each scenario. Discuss how these signs impact the individual's daily life and share your findings with the class.

## Scenario 1: Late-Night Gamer

Ali is a 13-year-old student who recently got a new gaming console. He spends most of his evenings playing online games, often staying up until 2 or 3 a.m. Despite feeling tired during the day, he continues to prioritize gaming over getting enough sleep. His teachers have noticed he frequently falls asleep in class, and his parents are concerned because his grades have started to drop. When his friends invite him to play basketball after school, he declines, saying he needs to "level up" in his game.

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## Scenario 2: The Social Media Streamer

Elif is passionate about gaming and has even started streaming her gameplay on social media. She spends hours perfecting her performance in the game to attract more followers and likes. Recently, she started skipping family dinners to stream during peak hours. Her parents noticed she often gets upset or irritable when the internet connection is slow, or she doesn't win a game. Elif has also stopped attending her weekly piano classes, saying she doesn't have time for them anymore.

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# Healthy Gaming Habits and Prevention

Developing healthy gaming habits can prevent addiction and promote balance:

- **Time Management:** Set daily time limits for gaming and schedule regular breaks. Use timers or parental controls to manage playtime effectively.



- **Alternative Activities:** Engage in hobbies like sports, music, art, or reading to diversify interests and reduce dependency on gaming.
- **Self-Reflection:** Regularly evaluate gaming habits to identify potential problems. Keep a journal to track gaming time and associated emotions.





## Resources and Support Options

When gaming habits become unhealthy, it is essential to seek help from available resources.

**School Counselors** are often the first line of support for students. They are trusted adults who can provide personalized guidance to help students identify the impact of their gaming habits and find ways to manage them effectively.



These counselors may offer one-on-one sessions to discuss concerns and help set realistic goals for healthier gaming practices.

# Resources and Support Options

**Online Resources** are readily available for students seeking advice and strategies on managing their gaming time. Websites, forums, and apps dedicated to gaming addiction provide useful tools, self-assessment quizzes, and tips for maintaining a balance between gaming and other important activities.



These online platforms often feature advice from experts, as well as success stories from individuals who have overcome gaming addiction, offering inspiration and guidance.



# Resources and Support Options

**Support Groups** provide another valuable resource for those struggling with gaming addiction. These groups, either in-person or online, offer a sense of community where individuals can share their experiences, discuss challenges, and find solutions to reduce excessive gaming.



Support groups provide emotional support and accountability, making it easier for individuals to stay committed to managing their gaming habits. Additionally, students can seek guidance from family members, friends, or online communities that focus on healthy gaming practices.



# Activity

Imagine you are talking to a trusted adult or counselor about managing your gaming habits. Write a short dialogue (at least 5–6 lines) where you explain your concerns about gaming and ask for advice. Include at least two suggestions from the adult or counselor and explain how you plan to follow their advice.

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# ASSESSMENT

## Multiple Choice Questions

1. What is game addiction?

- A. Playing games for fun with friends
- B. Playing games in a way that harms daily life and responsibilities
- C. Playing games to learn new skills
- D. Playing games for less than an hour a day

2. Which is a common physical problem caused by gaming too much?

- A. Better eyesight
- B. Stronger muscles
- C. Eye strain and headaches
- D. Improved sleep

3. Why might someone develop a game addiction?

- A. Games help people stay active
- B. Games give rewards and a sense of success
- C. Games make people sleep better
- D. Games replace important tasks

4. Which of the following is a sign of game addiction?

- A. Playing for 30 minutes a day
- B. Feeling anxious when not gaming
- C. Enjoying gaming as a hobby
- D. Playing with friends occasionally

- 5.**How can excessive gaming affect relationships?
- A. Strengthens friendships
  - B. Causes neglect of friends and family
  - C. Leads to more family activities
  - D. Has no impact
- 6.**Which strategy can help reduce gaming time?
- A. Ignoring time limits
  - B. Setting playtime boundaries
  - C. Playing without breaks
  - D. Avoiding other activities
- 7.**What is one emotional sign of game addiction?
- A. Increased happiness
  - B. Frustration when not gaming
  - C. Calm behavior
  - D. Lack of interest in games
- 8.**Game addiction can impact academic performance by:
- A. Improving focus
  - B. Leading to unfinished assignments
  - C. Helping with time management
  - D. Increasing study hours
- 9.**Which is NOT a way to manage gaming time?
- A. Creating a schedule
  - B. Taking regular breaks
  - C. Gaming for 10 hours non-stop
  - D. Prioritizing responsibilities

**10.**What is a psychological reason for game addiction?

- A. Reward systems in games
- B. Lack of internet
- C. Short gaming sessions
- D. Boring game design

**11.**How can schools help prevent game addiction?

- A. By banning all games
- B. Teaching time management skills
- C. Encouraging only gaming activities
- D. Ignoring the issue

## True/False Questions

**1.**Gaming is only harmful if played for more than 8 hours a day.

True/False

**2.**Game addiction can affect sleep patterns.

True/False

**3.**Playing games always improves social skills.

True/False

**4.**Taking breaks while gaming helps reduce addiction risks.

True/False

**5.**Only children can develop game addiction.

True/False

**6.**Reward systems in games can contribute to addiction.

True/False

**7.**Physical activity can help reduce the effects of game addiction.

True/False

**8.**Game addiction has no impact on academic performance.

True/False

**9.**Setting time limits for gaming can be an effective strategy.

True/False

**10.**Excessive gaming improves sleep quality.

True/False

## Fill-in-the-Blank Questions

**reward physical sleep eye strain academic  
frustration social breaks boundaries schedule**

**1.**A common physical sign of game addiction is \_\_\_\_\_.

**2.**One strategy to manage gaming time is to set \_\_\_\_\_ for playtime.

**3.**Excessive gaming can lead to poor \_\_\_\_\_ performance.

**4.**A psychological factor contributing to game addiction is \_\_\_\_\_  
systems in games.

**5.**A lack of \_\_\_\_\_ activity is a common effect of excessive gaming.

**6.**Game addiction can cause \_\_\_\_\_ deprivation due to late-night  
gaming.

**7.**One way to balance gaming and studying is to create a \_\_\_\_\_.

**8.**Gaming addiction can negatively impact \_\_\_\_\_ relationships.

**9.**A common emotional sign of game addiction is \_\_\_\_\_ when not gaming.

**10.**Taking regular \_\_\_\_\_ while gaming can reduce addiction risks.

## **Open-Ended Questions**

**1.**Describe three effects of game addiction on physical and mental health.

**2.**How can you balance gaming and studying effectively?

**3.**What role do reward systems play in game addiction?

**4.**Why is physical activity important for gamers?

**5.**How can families support someone struggling with game addiction?

**6.**What are some ways schools can educate students about game addiction?

**7.**How do late-night gaming sessions affect overall health?

**8.**Why do some people become addicted to games while others do not?

**9.**If you were designing a game, how would you ensure it does not encourage addictive behaviors?

**10.**What can communities do to address game addiction?

# Inquiry-Oriented Questions

1. Why do you think some games are more addictive than others?

2. How can parents effectively monitor their children's gaming habits?

3. What are the long-term effects of untreated game addiction?

4. How can gaming companies promote responsible gaming?

**5.**What makes gaming so appealing to teenagers?

**6.**How does game addiction differ from other types of addiction?

**7.**What can schools do to help students who are addicted to games?

**8.**Why is it important to recognize the signs of game addiction early?

**9.**How can someone transition from excessive gaming to healthier habits?

## Additional Questions

**1.**Create a physical exercise routine that can be done between gaming sessions to reduce the risk of health issues like obesity or eye strain.

**2.**Practice turning off your gaming device when the set gaming time is over. Write a reflection on how it feels to control your gaming habits.

**3.**Draw a diagram of a healthy daily routine, including time for gaming, studying, exercising, and sleeping.

# ANSWER KEY

## Multiple Choice Answers

- 1. B.** Game addiction is when gaming negatively affects daily life and responsibilities, not casual or recreational gaming.
- 2. C.** Gaming for long periods can cause physical issues like eye strain, headaches, and poor posture.
- 3. B.** Many people develop game addiction because of the reward systems in games, which make them feel successful and encourage them to keep playing.
- 4. B.** Anxiety or irritability when not gaming is a common emotional sign of addiction.
- 5. B.** Excessive gaming can cause players to prioritize games over their loved ones.
- 6. B.** Boundaries ensure a healthy balance between gaming and other responsibilities.
- 7. B.** Emotional dependency on games can lead to frustration or anxiety when not playing.
- 8. B.** Poor time management caused by gaming can result in neglected schoolwork.
- 9. C.** Extended gaming sessions can harm health and disrupt daily life.
- 10. A.** Reward systems stimulate the brain, encouraging prolonged play.
- 11. B.** Schools can play a role by educating students about healthy habits.

# True/False Answers

**1.(False)** Even shorter gaming durations can be harmful if they disrupt daily life.

**2. (True)** Late-night gaming often leads to sleep deprivation and fatigue.

**3. (False)** Excessive gaming can isolate players from real-life social interactions.

**4. (True)** Regular breaks can prevent dependency and maintain a healthy balance.

**5. (False)** Game addiction can affect individuals of all ages.

**6. (True)** Rewards stimulate the brain's reward center, encouraging continuous play.

**7. (True)** Exercise promotes overall health and reduces the time spent gaming.

**8. (False)** Excessive gaming often leads to neglected schoolwork and lower grades.

**9. (True)** Time limits help maintain a balance between gaming and other responsibilities.

**10. (False)** Late-night gaming disrupts sleep cycles, leading to fatigue.

# Fill-in-the-Blanks Answers

- 1. eye strain.** Eye strain often results from prolonged screen time.
- 2. boundaries.** Setting limits helps maintain a balance between gaming and other activities.
- 3. academic.** Neglecting studies due to gaming often results in lower grades.
- 4. reward.** Reward systems encourage prolonged play by stimulating the brain.
- 5. physical.** Gaming often replaces activities like sports, leading to health issues.
- 6. sleep.** Disrupted sleep cycles lead to fatigue and poor focus.
- 7. schedule.** Scheduling helps prioritize responsibilities over gaming.
- 8. social.** Neglecting friends and family for gaming often strains relationships.
- 9. frustration.** Emotional dependency on gaming leads to feelings like frustration or anxiety.
- 10. breaks.** Breaks help prevent continuous play and promote healthy habits.

# Open-Ended Answers

**1. Sample Answer:** Game addiction can lead to eye strain, sleep deprivation, and anxiety. (Ensure you discuss both physical and mental health impacts.)

**2. Sample Answer:** By creating a schedule that limits gaming time and prioritizes schoolwork. (Focus on practical time management strategies.)

**3. Sample Answer:** Reward systems encourage players to keep playing by offering incentives. (Mention how these systems stimulate the brain's reward center.)

**4. Sample Answer:** Physical activity keeps the body healthy and reduces the time spent gaming. (Highlight the importance of balance between gaming and other activities.)

**5. Sample Answer:** Families can set boundaries, encourage other activities, and offer emotional support. (Include examples of supportive actions families can take.)

**6. Sample Answer:** Schools can teach time management and offer workshops on healthy gaming habits. (Provide specific educational strategies for schools.)

**7. Sample Answer:** They disrupt sleep cycles, causing fatigue and poor focus. (Discuss both short-term and long-term health impacts.)

**8. Sample Answer:** It depends on personal factors like stress, gaming habits, and reward systems in games. (Consider psychological, social, and environmental factors in your response.)

**9. Sample Answer:** By avoiding excessive reward systems and encouraging breaks during gameplay. (Focus on design elements that promote healthy gaming habits.)

**10. Sample Answer:** Communities can create awareness programs and provide resources for affected individuals. (Suggest specific actions communities can take to support those struggling with addiction.)

## **Inquiry-Oriented Answers**

**1. Sample Answer:** Some games use advanced reward systems and immersive storylines to engage players. (Consider both game design and psychological aspects.)

**2. Sample Answer:** By setting clear rules and regularly discussing gaming behaviors with their children. (Focus on constructive and proactive parenting strategies.)

**3. Sample Answer:** It can lead to health issues, strained relationships, and career challenges. (Include examples of long-term impacts on different aspects of life.)

**4. Sample Answer:** By including features like time limits and reminders to take breaks. (Discuss specific design strategies for companies.)

**5. Sample Answer:** Games provide a sense of achievement, social interaction, and entertainment. (Mention both psychological and social reasons for gaming's appeal.)

**6. Sample Answer:** Game addiction involves behaviors rather than substances but can have similar impacts. (Highlight both similarities and differences in your answer.)

**7. Sample Answer:** Schools can offer counseling and teach time management skills. (Provide examples of school-based support systems.)

**8. Sample Answer:** Early recognition allows for timely intervention and prevention of serious consequences. (Discuss the benefits of early action.)

**9. Sample Answer:** By gradually reducing gaming time and exploring other hobbies. (Include practical steps for making this transition.)

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