

THE GREAT DANGER IN DIGITAL GAMES: SEXUAL ABUSE AND SYMPATHETIC VIOLENCE

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Received: 9 May 2023; **Accepted:** 18 March 2024; **Published:** 03 April 2024

To cite this article (APA) : ATABEY, D. (2024). The Great Danger in Digital Games: Sexual Abuse and Sympathetic Violence. *Southeast Asia Early Childhood Journal*, 13(1), 1–17. <https://doi.org/10.37134/saecj.vol13.1.1.2024>

To link to this article : <https://doi.org/10.37134/saecj.vol13.1.1.2024>

ABSTRACT

This research sets out to examine digital games containing sexuality and sympathetic violence. The study group of the research consists of 5 digital games; 3 digital games with sexuality and 2 digital games with sympathetic violence. A checklist developed by the researcher is used as a data collection tool in the study. The research has been carried out with the document review method, which is one of the qualitative research methods, and the digital games that constitute the study group of the research have been analyzed with the content analysis technique. As a result of the research, it has been determined that the digital games involving sexuality include explicit body lines, touching (sexually), flirting, kissing (sexually), hugging (sexually), wrong attitude (Begrudge, get angry, cry, sorrow, ridicule), body care (like adult) not suitable for their age and wearing clothes that are not suitable for their age. Punching, shooting, killing-dying, grappling-fighting, destroying-breaking-smashing-damaging, chasing-scaring, crashing, locking – imprisoning, hurt-pain have been determined in digital games containing sympathetic violence. Various recommendations have been presented in line with the results of the research. Being aware of the great danger in digital games and taking the necessary precautions will positively support children's development and guide families and educators.

Keywords: digital game, child, sexual abuse, sympathetic violence, media

INTRODUCTION

Preschool period is the most important period of life in which physical, cognitive, social-emotional, moral and personality development takes place rapidly. The role of environmental factors as well as parents and teachers have a quite big place in the development of the child. Media is the leading one of these environmental factors. Media has the power and influence, directly or indirectly, through which a child can learn the values of love, respect, tolerance, cooperation, sharing, kindness, hard work, honesty and responsibility, or internalising problem behaviors such as anxiety, fear, introversion, uneasiness and externalising problem behaviors such as aggression, anger, stubbornness, lying, jealousy.

Children become acquainted with technological devices such as computers, tablets, smart phones, and televisions during their preschool years and acquire many of these technological devices (Aral & Doğan Keskin, 2018; Bay, 2022; Güngör et al., 2020; Haşıl

Korkmaz et al., 2018; Özyürek, 2018; Yadav & Chakraborty, 2021). Children spend a significant part of their time using technological devices (Ab Razak & Abd Rahman, 2023; Ergüney, 2017; Gündoğdu et al., 2016; Lieberman et al., 2009; Özyürek, 2018; Seo & Lee, 2017). They access the internet via tablets, computers or their parents' mobile phones (Ergüney 2017). The majority of parents allow their children to use portable computers, tablets and smart phones, and preschool children use these tools alone (Güngör et al., 2020).

Parents award children with technological tools (Zehir et al., 2019). They tend to direct children to digital technologies for reasons such as distracting them, controlling their negative behavior and rewarding their positive behavior (Ateş & Durmuşoğlu Saltalı, 2019). Mothers easily use digital games as a game tool to spare time for themselves or housework (Toran et al., 2016).

When the research in the literature are examined, it is seen that touch-screen media has more negative effects on children than positive, parents restrict their children's media use, but they cannot effectively manage their children's media use (Seo & Lee, 2017), they cannot control time and content while using digital technology (Ateş & Durmuşoğlu Saltalı, 2019), some of the parents do not control their children at all while they use the internet, they do not take any precautions against harmful content, and some of them take precautions with filter programs or by observing their children (Ergüney, 2017), 11.6% of mothers do not set a certain limit for their children's use of computer technologies and do not try to prevent their use while others try to prevent their children by distracting them or by taking it away from them and talking (Ateş & Durmuşoğlu Saltalı, 2019), fathers use punishment and distraction to restrict technology use (Haşıl Korkmaz et al., 2018), when children react against the restriction in the use of technological tools, their families resort to methods such as talking to them and explaining their harm, punishing them and getting angry at them (Zehir et al., 2019), most of the parents are not conscious enough about the use of the internet (Ergüney, 2017), they have a high level of concern about the impact of technology (Cengiz Saltuk & Erciyes, 2020), they find digital games harmful (Haşıl Korkmaz et al., 2018), they need training on them (Özyürek, 2018).

Preschool children mostly use technological devices to watch cartoons and play digital games (Aral & Doğan Keskin, 2018; Ergüney, 2017; Özyürek, 2018). They spend most of their time out of school watching television and playing digital games (Haşıl Korkmaz et al., 2018). Their duration of playing computer games is quite long (Akçay & Özcebe, 2012). When the researches on the subject are examined, it is seen that preschool children mostly prefer playing racing, war/fight computer games and racing, war/fight internet games (Cömert & Güven, 2017), painting, games with animal characters, car games and games with cartoon heroes preferred (Üstündağ, 2019).

Preschool children are extremely curious about many topics such as their own bodies and adults' bodies, how they or their siblings were born, gender differences, love and marriage, and they constantly ask questions. They can play sexually explicit games, engage in sexually explicit conversations, and masturbate. It is very important to satisfy their curiosities in a healthy way and to provide an adequate sexual education. Sex education is a life-long process that addresses the socio-cultural, biological, psychological and spiritual dimensions of sexuality, including emotions, values, attitudes and beliefs, enabling communication, decision making, critical thinking, and learning about important issues such as identity, relationships and intimacy (SIECUS, 2004). In this context, with sexual education, children learn the parts of their bodies that can or cannot be touched by others, who can kiss their cheek, what abuse

is and abusive behaviors are, how to reject harassment and how to report it (Reza et al., 2020). In the study carried out by İşler and Gürşimşek (2018) to examine the views of parents on the necessity of sexual education for children aged 3-6, it was found that parents consider sexual education necessary for children to be properly informed and protected from abuse, but they do not talk enough about sexual matters with their children, and parents who talk about it with their children generally feel uneasy and inadequate. In the study conducted by Ünlüer (2018), it was determined that preschool teachers do not find their knowledge about sexuality education sufficient and therefore, they avoid planning activities related to sexuality education. It has been determined that teachers resort to solutions such as condoning, distracting, participating in games, warning and consulting services in the face of children's sexual behaviors such as inappropriate touching, sexual play, masturbation, verbal sexuality, and sexual identity. In a study with preschool teachers by Cascais et al (2020), the results showed that teachers have several difficulties and limited training in child sexual abuse prevention. Based on these results, it can be said that preschool children are not given enough sexual education both at home and at school, and preschool children who cannot find answers to their questions can satisfy their curiosity through the media.

According to the social learning theory in the preschool period, children who learn many things learn behaviors related to violence through observation and imitation. The more children are exposed to violence, the more they normalize violence and become insensitive to violence. Children imitate the heroes of the games. They reflect the violence they see on the screen in their games and conversations. Particularly, since the condition of passing to the next level in digital games is to apply the necessary violence, children repeatedly apply virtual violence and are successful when they apply the necessary violence. Therefore, it can be said that the violence in digital games is more effective than the violence in television. In the study conducted by Dill and Dill (1998), it was emphasized that identification is stronger than identification with television or movie characters because the players choose a character and play the role of that character in the video game scenario, so the effects of violence in video games are stronger than the effects of violence in movies or television. Violence is, unfortunately, internalized by children due to the rapid progress of technology, the rapid change in the understanding of business, communication, shopping, entertainment, that the concept of "digital world" is used more with the widespread use of the internet, the rapid change in the lifestyles of children and young people, the street and neighborhood culture, traditional games and entertainment have been replaced by the virtual world and digital world. Moreover, the violence in digital games is reflected in the form of fun, funny, applicable, justifiable, sympathetic violence as a means of fighting evil and being successful, just like in cartoons.

Based on all these reasons, this research was carried out with the aim of revealing the dangers in digital games involving sexuality and sympathetic violence.

METHODOLOGY

Design of the Research

The research was carried out with the document review method which is among the qualitative research methods, which includes understanding and analyzing documents such as videos, pictures, photographs, memories, interviews, various records, journals, legal texts (Kıral, 2020). In the analysis of the digital games that constitute the study group of the research, the

content analysis technique, which includes the analysis of the data obtained by data selection (Bowen, 2009) by in-depth analysis, was used instead of data collection.

Study Group

The study group of the research consisted of 5 digital games; 3 digital games containing sexuality and 2 digital games containing sympathetic violence, which were determined purposefully and obtained from the website of the digital distribution service and a kid-vid.

Table 1

Digital Games Constituting the Study Group of The Research

| Name of the game | Published in | Age | Number of Downloads |
|---------------------------|-------------------------------|--------|---------------------|
| Girl Secret Love Story | Digital distribution service | PEGI 3 | 1 Mn+ |
| Makeover Run | Digital distribution service | PEGI 3 | 10 M+ |
| Kissing Games in Paris | Digital distribution service | PEGI 3 | 100 B+ |
| Tom and Jerry: Mouse Maze | Digital distribution service | PEGI 3 | 50 M+ |
| Ben 10 World Rescue | Website of children's channel | - | Most played game |

Data Collection Tools

Table 2

Sexuality and Violence Checklist

| | Yes | Indicators |
|-----------|-----|---|
| Sexuality | | <ul style="list-style-type: none"> Explicit body lines Kissing (Sexually) Touching (Sexually) Hugging (Sexually) Flirting Wearing clothes that are not age appropriate Age-inappropriate body care (like adult) Wrong attitude (Begrudge, get angry, cry, sorrow, ridicule) |
| Violence | | <ul style="list-style-type: none"> Punching Shooting Killing-dying Grappling-fighting Destroying-breaking-smashing-damaging Chasing-scaring Crashing Locking – imprisoning Hurt-pain |

A checklist developed by the researcher is used as a data collection tool in the study. In order to create the checklist, the relevant literature was reviewed and items representing sexuality and violence were determined. Among these items, the items that will adversely affect preschool children when exposed are included in the checklist.

Data Collection and Analysis

The digital games, which constitute the study group of the research, were played by the researcher and completed. The gameplay of the games was translated into text in detail and

evaluated according to the checklist. Sexuality-violence indicators in the game contents are shown in tables.

Findings

Table 3

Sexual Elements and Indicators in Girl Secret Love Story

| Sexuality indicators | Sexuality in the game |
|---|--|
| Explicit body lines | The physical appearance of the characters is not childish but they have the physical features of an adult. The male character has a muscular body structure, and the female characters have adult female body features. |
| Hugging (Sexually) | Male character hugging female character (Sexually) |
| Touching (Sexually) | Having the male character's hand on the female character's butt while hugging. |
| Wrong attitude (Begrudge, get angry, cry, sorrow, ridicule) | Seeing that the male and female characters are hugging, the other female character is sitting with a book in her hands and crying about this situation. |
| Flirting | The male character asks one of the two female characters, "Will you be friends with me?", the female character answering yes, the man thanking him. When clicking on the mobile phone, the text "Hey I am Kate Hello. You are new girl in our school. Yes. Let's plan some meeting tomorrow. Ok sure" appears. The male character brings his hand to his mouth and sends a kiss to the female character, the hearts go towards the female character. "Will you marry me" text appears. Lip and heart picture appearing where the text is. |
| Age-inappropriate body care (like adult) | The female character plucks her eyebrows, squeezes the pimples, does makeup. |
| Wearing clothes that are not age appropriate | Wearing high heels. |
| Kissing (Sexually) | The formation of lip marks on the faces of male and female characters when clicking the lip image. |

Game name: Girl Secret Love Story (Game 1)

The purpose of the game: Meeting her boyfriend by completing the tasks that need to be done at each level.

How to play the game: In the credits of the game, it is seen that there is a male character and a female character on the right side of the screen, hugging with the man's hand on the female character's butt. On the left side of the screen, there is a female character sitting on the stairs with her book in her hand. This character is looking at the male and female character hugging. She is upset about this situation and cries from time to time. The game consists of 10 levels. The game is completed after preparing the school bag, the boy asks one of the two female characters, "Will you be friends with me?" the female character answers "yes", the man says thank you, the trash on the floor is thrown into the trash, matching the letters with the word "friends", the pencil, eraser and ruler are put in the box, the turtle is painted with 4 different colored pencils, the letters A- B- C- D are matched, the notebook is locked with a key (This key hole is in the shape of a heart), the female character's top outfit with a skull image remains

the same but her skirt changes, a different dress with a skull image comes out on the ironing board, spraying water on the dress, ironing the dress and hanging it on the hanger in the closet, pouring the milk into the bowl, putting sugar and drinking the milk, putting paste on the toothbrush, brushing the teeth, rinsing the mouth, wearing a different outfit, clicking on the mobile phone and a female character lying on the bed with the phone in hand, popping out "Hey I am Kate Hello. You are new girl in our school. Yes. Let's plan some meeting tomorrow. Ok sure", the female character cleans her face, dries it, plucks her eyebrows, squeezes her pimples, does her hair, puts on make-up, puts on earrings, changes clothes, puts on glasses and wears a bag and puts on shoes, identifies stairs, curtains, tablecloth and flowers, cleans the house, the male character appears on the screen, the female character sings and dances, the boy takes his hand to his mouth and sends a kiss to the female character, the hearts go towards the female character, the text "Will you marry me" appears, lip and heart picture appearing where the text is, matching the words with the picture, determining the carpet, the text "Love, love, sweet and kiss" appears, writing the date of meeting and marriage in a notebook, turning this notebook into a gift, locking it, making a heart by combining the numbers, appearing lip marks on the face of the female and male character when you click on the lip picture, music playing, the rain of hearts, the bride and groom states of the characters in the form of dream bubbles.

Name of the game: Makeover Run (Game 2)

The purpose of the game: A female character walks on a path resembling a podium, collects clothes, diamonds and keys, and kisses the male character on the lips at the end of the podium, selling herself.

How to play the game: First, 4 female characters appear on the game screen and a crying sound is heard. One of the female characters is dressed worse than the others. This female character is crying and the other 3 female characters are making fun of her. The badly dressed female character starts to walk sadly on a podium-like path. The character moves left and right as she walks to get new clothes, diamonds and keys. When she buys new clothes, she is seen with the clothes. As she wears new clothes, her walking changes sexually, she starts walking sexy. At the end of the road, the female characters who made fun of the female character before and a male character appear. If the male character likes the female character, they kiss on the lips. Other female characters get angry at this situation, they get sad and start crying. Angry facial expressions appear on the screen. If the male character does not like the female character, he does not kiss, gets angry and acts as if to tell her go. When the female character is not kissed, she cries and the other female characters rejoice and laugh at this situation. At the end of each level, much more harmful game ads and updated ads appear. When passing to other levels, dirty clothes, mud, rain appear. When the dirty clothes are touched, the female character's outfit changes into that outfit, when the messy hair is touched, the character's hair turns into that hair. When he steps on mud, her clothes get muddy. Her clothes get dirty when she gets wet in the rain. In some parts of the podium, there are female characters with a water bucket in their hands and they pour water on the character walking on the podium, laughing at her. When the female character approaches the male character on the side of the road, the male character follows her and lays out a dress on the mud so that the female character does not step on the mud. He holds an umbrella in the rain or prevents the other female character that will pour water. A male follower character can be bought to help the female character, and this male character lays a dress on the mud so that the female character does not step into the mud. He holds an umbrella in the rain or prevents the other female character that will pour water. With the keys she collects, she unlocks other characters and unlocks other male characters that she kisses at the end of the road. New outfits can be bought with the collected hearts and diamonds.

Table 4
Sexuality Elements and Their Indicators in Makeover Run

| Sexuality indicators | Sexuality in the game |
|---|---|
| Explicit body lines | <p>The physical appearance of the characters is not childish but they have the physical features of an adult.</p> <p>Making fun of a female character who doesn't dress well by other female characters. The female character cries for this situation.</p> <p>Female character walks down the podium sadly when she's not dressed nicely.</p> <p>Her clothes get dirty when she gets wet in the rain.</p> <p>The female character pours water with a bucket on the female character walking on the podium by laughing at her.</p> |
| Wrong attitude (Begrudge, get angry, cry, sorrow, ridicule) | <p>When the female character walking on the podium approaches the male characters on the side of the road, the male characters following her lay a dress on the mud for her not to step into the mud, hold an umbrella in the rain and stop the female character spilling water.</p> <p>She buys a male follower character with the hearts.</p> <p>Followers lay a dress on the mud so that the female character does not step into the mud, hold an umbrella in the rain and stop the female character pouring water.</p> <p>When the male and female characters kiss on the lips, this situation causes the other female characters to get angry, sad, cry and have angry facial expressions.</p> <p>If the male character doesn't like the female character, he doesn't kiss, gets angry and acts as if to tell her go.</p> <p>The female character gets sad and cries since she is not kissed.</p> <p>When the male character does not like the female character and not kiss her, the other female characters laugh at her and are happy.</p> <p>She unlocks other characters with the keys she collects on the way and unlocks other male characters she kisses at the end of the road</p> <p>The gait of the female character changes sexually as she wears new clothes.</p> |
| Kissing (Sexually) | If the male character likes the female character, the male and female characters kiss on the lips. |

Table 5
Sexuality Items and Indicators in the "Kissing Games in Paris"

| Sexuality indicators | Sexuality in the game |
|--|---|
| Kissing (Sexually) | Kissing on the lips by a male and a female character |
| Wrong attitude (jealous, angry, crying, sad, ridicule, etc.) | <p>Getting upset when they get caught kissing by someone</p> <p>Being happy if they don't get caught kissing by someone</p> |

Name of the game: Kissing Games in Paris (Game 3)

The purpose of the game: Male and female characters kissing without getting caught by people taking photos, passing by and looking at them.

How to play the game: The game consists of three levels. In the first level, a female and male characters appear on the screen. When the male or female character is touched, they start kissing on the lips. After a while, and exclamation mark appears, and then a man taking a photo in the back. The characters get upset if the kissing characters are caught by the man taking the

photo while kissing. They are happy if they are not caught. How many lives, which are in the shape of a heart, are left appear at the bottom of the screen. If the characters are caught kissing 3 times, the game restarts. If the player completes this level in the given time before their lives are finished, they move on to the next level. In the second level, after the exclamation mark, the man taking a photo and a female character passing by appear. The characters try to kiss without getting caught and try to complete this level in the specified time. At another level, after the exclamation mark, the man taking a photo, a woman passing by and a man looking elsewhere are seen. After the exclamation mark, these characters look at the kissing characters. The characters are still trying to kiss without getting caught and they try to complete this level in the given time. When this level is completed, the game is over. A male and a female in a pink painting appear in front of the Eiffel tower and the text “you are so awesome” appears.

Table 6

Tom and Jerry: Violence and its Indicators in Mouse Maze Game

| Indicators of violence | Violence in the game |
|------------------------|--|
| Chasing-scaring | Jerry escapes and Tom tries to catch him. |
| Grappling -fighting | Tom jumping on Jerry to catch him. There is a struggle between them when Tom catches Jerry. When Tom catches Jerry and the game is over, Tom grabs Jerry and chokes him in his hand. |
| Killing-dying | When the player fails, Jerry dies (game is over and Jerry levitates as if he were dead). |
| Crashing | Tom is stunned when he hits the wall |

Game name: Tom and Jerry: Mouse Maze (Game 4)

The purpose of the game: To go to the next level by collecting all the cheese without getting caught by Tom and to complete the game.

How to play the game: The game consists of 112 levels. The game takes place in a labyrinth-like place and in a different area at each level. The player draws a path that leads Jerry to the cheese on the screen. Jerry follows this path, trying to collect all the big slices of cheese. As he collects small slices of cheese, he earns points. He has to collect all the big slices of cheese in a certain time and go through the hole. When the mouse falls into the trap and holes, he fails and the game starts again. Once the level is successfully completed, Tom appears sadly on the screen and Jerry walks past. From the 6th level, Tom appears on the screen and he tries to catch Jerry while he is trying to collect the cheese. When Tom catches Jerry, a struggle ensues, Jerry dies and the game is over. Every time the player loses the game, Tom appears to strangle Jerry. From the 9th level, Tom's friend helps him. Two cats appear on the screen and the number of Tom's friends increases in the following levels. Jerry can hide inside certain items. Tom is stunned when he hits the wall. When Jerry wants to go to a different level to reach the cheese, he can go through a certain hole and come out from a certain hole. In some levels, Tom chases Jerry down an obstacle course. Jerry tries to collect cheese by overcoming these obstacles without being caught by Tom. If he has enough apples when he fails, he can be saved. Diamonds can be bought with a fee (credit card). You can also earn points by playing the color matching game. As the level progresses, the game becomes more difficult as the number of cheese to collect, the number of friends helping Tom and the obstacles increase.

Table 7
Violence and Its Indicators in Ben 10 World Rescue

| Indicators of violence | Violence in the game |
|---------------------------------------|---|
| Punching | Punching with the Z key The characters punch the enemies they encounter |
| Shooting | Making an attack with a special beam via the X key |
| Chasing-scaring | Ben 10 and his enemy showing fists at each other and looking rather angrily When the game is over, Ben 10 makes a fist with his clock on his arm. At each level of Ben 10, Ben 10 turns into different characters with frightening features such as having four arms, four eyes, red skin, black-striped face, black-balled feet, black lips, swelling eyes, black-striped eyelids, claw-shaped hands, three toes and fingers on hands and feet, four claws on both hands, tongue is made of fire, etc. |
| Destroying-breaking-smashing-damaging | The characters walk by stepping onto cars and buses. The characters move by breaking down walls. |
| Locking-imprisoning | Ben 10 appears to save his grandfather and his cousin appears inside the bars. |
| Hurt-pain | Picture of Ben 10's enemy holding his head and in pain appears. |

Game name: Ben 10 World Rescue (Game 5)

The purpose of the game: The aim of the game is to kill the enemies by overcoming the obstacles in front of Ben 10 in mission 1 and mission 2 and save his grandfather and cousin at the end of the game.

How to play the game : The game is played with the arrow keys (up -right - left) and x -z keys. The character moves forward (right), backward (left) with the arrow keys, jumps with the up-arrow key, punches with the z key and performs his special attack with the x key. The game consists of mission 1 and mission 2. Before starting mission 1 and mission 2, there is an enemy on the screen opposite Ben 10. Ben 10 and his enemy are punching each other and looking very angry. Ben 10 has the characters he transforms into, and next to his enemy, there are characters that help him. They also look at each other angrily and show each other fists. When the game starts, on the left side of the screen are the pictures of the characters that Ben 10 turns into, and the shadow-shaped pictures of these characters on the opposite side. In shadow-shaped images, there is a key. As you touch (move your mouse over) the characters on the left, different city names appear. The game starts by clicking on the character. Ben 10 turns into different characters with frightening features such as having four arms, four eyes, red skin, black-striped face, black-balled feet, black lips, swelling eyes, black-striped eyelids, claw-shaped hands, three toes and fingers on hands and feet, four claws on both hands, tongue is made of fire, etc. This character walks by stepping on cars and buses, breaking down walls by punching, jumping over obstacles. He climbs something like a step on the wall. He tries to pass without touching the cogwheel-like obstacles. He tries to pass without touching obstacles that look like fiery wires. He goes up and down various steps. He tries to gather strength. He tries not to touch the incoming fires. He gets into a flying saucer-like vehicle. While doing all this, he kills the enemies he encounters by punching repeatedly and with his special attack. When his power is drained, the level starts again. When each level is completed, the character puts his hands on his waist and transforms into Ben 10. Ben 10 clenches his hand with his watch

into a fist and a text appears saying the level is complete. When mission 1 is completed, a picture of Ben 10 rescuing his grandfather and his cousin inside the iron fence appears. When the mission 2 is completed, the picture of Ben 10 hugging his cousin and grandfather and the enemy holding his head - in pain - appears and the game is over.

DISCUSSION

As a result of the research, it was determined that there was indirectly sexual content in game 1 and directly in game 2 and game 3. It has been determined that the sexual content in Game 1 is presented less harmless and innocent by combining it with preschool activities such as throwing the garbage on the floor into the trash, painting the turtle, matching letters. It has been found out that game 2 is not suitable even for adults in terms of morality, and game 3 is not suitable for children. Unfortunately, there are images and contents that preschool children cannot make sense of when they see them such as explicit body lines, touching (sexually), flirting, kissing (sexually), hugging (sexually), wrong attitude (Begrudge, get angry, cry, sorrow, ridicule), body care (like adult) not suitable for their age and wearing clothes that are not suitable for their age in the games examined. Children's encounters with images and content that they cannot make sense of when they see may cause them to acquire false information, to develop different attitudes that are not suitable for the values of the society they belong to, especially through cartoons and digital games, and to display and be exposed to inappropriate sexual behaviors in the later years of their lives. Therefore, it can be said that children face a serious danger. In the research conducted by Sağlam and Kayaduman (2018), it was determined that all of the game sites that children can access easily contain elements with sexual content. In the research conducted by İşliyen (2020), it has been determined that one of the most important themes with sexuality in cartoons is "kissing" of cartoon characters. In addition, it can be said that especially in game 2, female characters are presented as a sexual object and as misogyny created by popular culture and presented to society (Baydar, 2013). In a study conducted by Behm-Morawitz and Mastro (2009) with 328 undergraduate students, it was found out that female self-efficacy was negatively affected by the games played with sexualized female characters. The obtained results show that playing a sexualized video game hero negatively impacted people's beliefs about women in the real world. In the research conducted by Yiğit Açıkgöz and Yalman (2018), it was found that the normalization of negative elements such as violence, racism, sexuality and gender in digital games made wrong coding in children's subconscious, children playing games had difficulty in distinguishing between fiction and real life, some negative elements imposed on them, and they carry these behaviors into their daily lives as well.

The most obvious form of sympathetic violence in game 4 and a different dimension of sympathetic violence in game 5 were identified. Game 4 and game 5 are cartoon games. It can be said that children prefer more the games of the cartoons of the heroes that they see on the screen, watch fondly, recognize and want to be in their place. In the study conducted by Üstündağ (2019), it was determined that children generally prefer the games of the cartoons they watch. In the research conducted by Zhang (2015), it was stated that "Ben 10 games" is among the most popular search terms. In the digital games examined, punching, shooting, killing-dying, grappling-fighting, destroying-breaking-smashing-damaging, chasing-scaring, crashing, locking – imprisoning, hurt-pain were determined.

The most obvious form of sympathetic violence is seen in Game 4. In this dimension of sympathetic violence, especially seen in cartoons and cartoon games, violence is shown as extremely entertaining, funny, innocent and cute. Fast transitions and colors attract the attention

of children. Children laugh at and have fun with the violence that is hidden in the fun and reflected funny. For all these reasons, it can be said that they are not aware that the violence they watch, play and try to achieve is violence. In the research conducted by Atik and Ebrin (2015), in the cartoon Tom and Jerry, it was stated that the fact that the characters are constantly fighting and there is always a winner and a loser, Tom chases Jerry with the household items in his hands, Jerry's cunning ideas try to defeat Tom, causing the children to be exposed to sympathetic elements of violence as well as entertaining and making them laugh, and so that violence is normalized. In the study conducted by Ghilzai et al. (2017), it was emphasized that children imitate the Tom and Jerry relationship in their relationships with their peers and siblings. In the research conducted by Atu and Anshi (2020), it was stated that the contents of the "Tom and Jerry" cartoons negatively affect the behavior of children, but the contents of the "Tom and Jerry" cartoons also provide educational benefits. Islam et al. (2021) emphasized in their research how "Tom and Jerry" reflects violence within the scope of slapstick comedy.

Although the elements of sympathetic violence such as humor and fun are not included in Game 5, Ben 10's use of violence to fight villains is another dimension of sympathetic violence. Ben 10 uses violence to save his grandfather and cousin. In this dimension of sympathetic violence, which is very common in digital games, cartoons, and TV series, violence is used to fight villains and evil and to help others, the violent person is shown as right, a good character, correct and strong, therefore, it arouses a feeling of closeness and a desire to resemble the perpetrator of violence. This desire for resemblance makes the games of these cartoons more attractive due to such cartoons. The trade of bags, clothes, etc. belonging to such cartoon games further increases the interest in such games. In the research carried out by Nwabueze and Okonkwo (2015) with mothers, it was found that the majority of children watched the Ben 10 cartoon series regularly, the Ben 10 cartoon series affected children's behavior, it was not a good cartoon for children and it contained a lot of violence, children imitate the bad behavior of the characters in the cartoon (such as Ben 10 and the fight of their enemies), dress like Ben 10, talk like Ben 10, and try to imitate the violent behavior of Ben 10 and his team. In addition, among the negative effects of the cartoon, the fights of children to defend the weak were emphasized. In the research conducted by Doğan and Göker (2012), it was determined that the most popular program among children is the cartoon called Ben 10, and the hero that children most wanted to be in his place is Ben 10. It has been emphasized that Ben 10 uses violence to fight evil. In the research conducted by Ergeç and Doğan (2016), it was determined that violence was encountered in the dimensions of self-attack, attacking others, and attacking the environment in the cartoon Ben 10: Omniverse/Ultimate. Yıldız (2016) stated in their research that the Ben 10 cartoons had the most violent content. It was also determined that verbal violence such as intimidation, humiliation, shouting, insult, threat, nicknaming, etc., physical violence such as punching, wounding, killing, psychological violence such as belittling, defamation, exclude, mocking, and punishment of bad and unjust heroes through violence, firearms and guns were used as a means of violence.

In a study conducted by Zhang et al. (2021) with 300 children who went to kindergarden, it was found that violent games increased aggressive cognition and aggressive behavior. In another study conducted by Zhang et al. (2021) with 480 children who went to kindergarden, it was determined that the aggressive behaviors of the children exposed to violent video games increased. It is seen that it was emphasized in the research examined that preschool children who are not yet ready to use the internet correctly are faced with many dangers, they are vulnerable to content that encourages violence, pornography and bad habits, their family communication, socialization and consumption habits are affected negatively (Ergüney, 2017), as their duration of playing digital games increases, their tendency to and

concentration of playing games decreases (Gözüm & Kandır, 2020), and video games negatively affect their health (Rechichi et al., 2017). It can be said that children who play such dangerous digital games in the preschool period will be more at risk in the coming years depending on their digital game playing habits.

It has been determined that the digital games that primary school students play the most are not educational games, they mostly prefer entertainment games such as car racing, dressing up, Minecraft, war-gun, Tom, football, Subway Surfers (Özer, 2020), among the 2nd grade female students, dress up games are mostly preferred, Subway Surf is the most preferred game among 3rd grade female students, fighting games are preferred among 2nd grade male students, war games are the most preferred among 3rd grade male students (Öztabak, 2017), action-adventure, war and racing games are mostly preferred among secondary school students (Korkmaz & Korkmaz, 2019).

When the studies on digital games related to different age groups are examined, it was determined that contrary to what the students stated, they were not aware of whether the computer games they played were violent or not (Burak & Ahmetoğlu, 2015), violent games cause some behavioral and academic problems (Hastings et al., 2009), aggression (Milani et al., 2015), aggressive feelings, thoughts and behaviors, physiological arousal and depersonalization (Barlett et al., 2009). It was also determined that as students' addiction to digital games increases, their subjective well-being levels at school decrease (Baysan et al., 2019), since online game sites contain sexual content and encourage negative behaviors, it poses a risk to children (Sağlam & Kayaduman, 2018), they desensitize children to violence and may cause violent behavior, leading to social isolation, obesity and distraction (Allazzam, 2015), they cause mental problems such as anxiety, aggressive attitude and depression, and health problems such as musculoskeletal system problems, dry eyes, pain and deterioration in sleep quality (Mustafaoğlu & Yasacı, 2018), they pose a risk for dangerous behavior related to firearms (Chang and Bushman, 2019), and due to the widespread presence of advertisements on unhealthy food products in the games, they cause children to make inappropriate demands (Akcan & Kazaz, 2020). In the research carried out by Vatandaş (2020), it was emphasized that the concepts of brother, close friend, friend, neighborhood disappeared, the concept of rivals that were scored by damaging-destroying increased due to a life spent in front of the screen, and that violence is one of the most common themes of digital games. In the study conducted by Ceylaner and Yanpar Yelken (2017), it was determined that especially female students were disturbed by the slang content in the games. In the study conducted by Tutkun et al. (2017) to determine the effect of television and digital games on secondary school students' tendency to violence, it was determined that the characters that the students liked the most and took as an example were superheroes, one of the behaviors they want to do the most is to catch/kill the bad guys, the main features they like in the characters they take as examples are that they fight well and are strong and the main features they do not like is losing the fight / being beaten, and the behavior they wanted to display the most as a solution was the desire to beat their friend in the case of a problem with their classmates.

Game 1, game 2, game 3 and game 4 are classified as PEGI 3 and have been downloaded in large numbers. Game 5 is among the most played games on the website of children's channel. Although it is designated as PEGI 3, unfortunately, there are many examples of similar and much more harmful games that are very harmful for preschool children, both with the messages they give and the images they contain.

CONCLUSION AND RECOMMENDATIONS

As a result of the research, it has been determined that the digital games involving sexuality include; explicit body lines, kissing (sexually), touching (sexually), hugging (sexually), flirting, wearing clothes that are not age appropriate, age-inappropriate body care (like adult), wrong attitude (begrudge, get angry, cry, sorrow, ridicule). In digital games containing sympathetic violence; punching, shooting, killing-dying, grappling-fighting, destroying-breaking-smashing-damaging, chasing-scaring, crashing, locking – imprisoning, hurt-pain were determined.

It is extremely important for parents and educators to fulfill their responsibilities, complain to the relevant authorities and fight against them. It can be recommended that parents should prefer safe internet such as family profile and child profile, and not give pre-school children a phone, tablet or laptop to use alone, they should keep these devices in a common area of the house such as the living room and kitchen, they should identify educational and non-negative digital games for their children, they should play the games themselves first then play with their children, they should talk to their children about the digital game they play, they should be in cooperation with educators and other families, spend quality time with their children and so reduce their children's desire for digital games.

In solving the problem, the very first step is for educators to be very good observers, to investigate the causes of children's undesirable behaviors, and to research the games that children play, talk about in their conversations, and imitate the heroes. It may be suggested to organize informative activities, seminars, panels, conferences and meetings about the positive and negative effects of digital games on children, the reasons for the negative effects of digital games on children, examples of negative digital games, how negative digital games affect children negatively, positive digital game suggestions, how positive digital games affect children positively, what to do as parents. It may be suggested to share posters, brochures, cartoons, videos, etc. about these topics.

Within the scope of preventing sexual abuse and violence, it can be recommended to prepare educational programs and public service announcements for both parents and children. Since the cultural and moral structures of societies are different from each other, it can be suggested that each country has its own evaluation mechanism and age classifications of games should be made accordingly.

REFERENCES

- Ab Razak, N. H., & Abd Rahman, N. (2023). The Influence of Parent-Child Relationship on Internet Addiction of Children and Adolescents. *Southeast Asia Early Childhood Journal*, 12(2), 91–99. <https://doi.org/10.37134/saecj.vol12.2.5.2023>
- Akcan, B., & Kazaz, A. (2020). Advertising in digital games. A review from the perspective of children and parents. *Journal of Erciyes Communication*, 7(2), 1241-1261. <https://doi.org/10.17680/erciyesiletisim.706046>
- Akçay, D., & Özcebe, H. (2012). Okul öncesi eğitim alan çocukların ve ailelerinin bilgisayar oyunu oynama alışkanlıklarının değerlendirilmesi [Evaluation of computer game playing habits of children at pre-school education levels and their families]. *Journal of Child*, 12(2), 66-71. <http://dx.doi.org/10.5222/j.child.2012.066>
- Allazzam, M. (2015). The impact on children playing computer games. *International Journal of Advancements in Research & Technology*, 4 (8), 15-27.
- Aral, N., & Doğan Keskin, A. (2018). Ebeveyn bakış açısıyla 0-6 yaş döneminde teknolojik alet kullanımının incelenmesi [Examining 0-6 year olds' use of technological devices from parents' points of view].

- Addicta: The Turkish Journal on Addiction, 5, 317–348.
<http://dx.doi.org/10.15805/addicta.2018.5.2.0054>
- Ateş, M. A., & Durmuşoğlu Saltalı, N. (2019). KKTC’de yaşayan 5-6 yaş çocukların tablet ve cep telefonu kullanımına ilişkin ebeveyn görüşlerinin incelenmesi [Investigation of parents' views on the use of tablets and mobile phones in 5-6 years old children living in TRNC]. *Gazi Journal of Education Sciences*, 5(1), 62-90. <https://dx.doi.org/10.30855/gjes.2019.05.01.004>
- Atik, A., & Ebrin, Ö. (2015). Çizgi filmlerde sempatik şiddet olgusu TRT Çocuk televizyonu örneği [The phenomenon of sympathetic violence in cartoons: The study of “TRT Çocuk” television channel]. *Journal of Atatürk Communication*, 8, 99-114.
- Atu, P. A., & Anshi, N. E. (2020). The influence of violent cartoon contents on children's behaviour: A study of Tom And Jerry. *NTAtvc Journal of Communication*, 4(2), 233-241.
- Barlett, C. P., Anderson, C. A., & Swing, E. L. (2009). Video game effects- confirmed, suspected, and speculative: A review of the evidence. *Simulation & Gaming*, 40(3), 377–403.
- Bay, D. N. (2022). The perspective of preschool teachers on the use of digital technology. *Southeast Asia Early Childhood Journal*, 11(2), 87-111. <https://doi.org/10.37134/saecj.vol11.2.6.2022>
- Baydar, V. (2013). Popüler kültürde mizojini. *Turkish Studies: International Periodical For the Languages, Literature and History of Turkish or Turkic Academic Journal*, 8 (12), 151-165.
- Baysan, Ç., Çakıcı, A., & Tezer, M. (2019). Ergenlerin dijital oyun bağımlılığının okulda öznel iyi oluş açısından incelenmesi [Investigation of digital game addiction of adolescents in terms of subjective well-being in school]. *Anatolian Journal of Psychiatry*, 20(1), 17-20.
- Behm-Morawitz, E., & Mastro, D. (2009). The effects of the sexualization of female video game characters of gender stereotyping and female selfconcept. *Sex Roles*, 61, 808 – 823. <https://doi.org/10.1007/s11199-009-9683-8>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Burak, Y. & Ahmetoğlu, E. (2015). Bilgisayar oyunlarının çocukların saldırganlık düzeylerine etkisinin incelenmesi [Study of effects of computer games on aggression level of children]. *Electronic Turkish Studies*, 10(11), 363-382 <http://dx.doi.org/10.7827/TurkishStudies.8430>
- Cascais, M., Passadouro, R., Mendes, O., & Zarcos, M. (2020). Prevention of sexual abuse in preschoolers– Teachers’ Knowledge and Attitudes. *Nascer e Crescer-Birth and Growth Medical Journal*, 29(2), 86-91. <https://doi.org/10.25753/BirthGrowthMJ.v29.i2.16660>
- Cengiz Saltuk, M., & Erciyes, C. (2020). Okul öncesi çocuklarda teknoloji kullanımına ilişkin ebeveyn tutumlarına dair bir çalışma [Investigation and attitude of parents about the use of technology in preschool children]. *E-Journal of New Media*, 4(2), 106–120. <http://dx.doi.org/10.17932/IAU.EJNM.25480200.2020.4/2.106-120>
- Ceylaner, S., & Yanpar Yelken, T. (2017). Ortaöğretim öğrencilerinin, dijital oyunların İngilizce kelime öğrenimine katkısına yönelik görüşleri [Views of secondary school students on the contributions of digital games to their vocabulary knowledge in English]. *Bartın University Journal of Faculty of Education*, 6(1), 346 -364. <https://doi.org/10.14686/buefad.294983>
- Chang, J. H., & Bushman, B. J. (2019). Effect of exposure to gun violence in video games on children’s dangerous behavior with real guns: A randomized clinical trial. *JAMA Network Open*, 2(5), e194319. <https://doi.org/10.1001/jamanetworkopen.2019.4319>
- Cömert, S., & Güven, G. (2017). Examining the games that children play most on the computer and internet. *Journal of International Management Educational and Economics Perspectives*, 5 (1) , 1-8.
- Dill, K., & Dill, J. (1998). Video game violence: A review of the empirical literature. *Aggressive and Violent Behavior*, 3(4), 407-428.
- Doğan, A., Göker, G.(2012). Tematik televizyon ve çocuk: İlköğretim öğrencilerinin televizyon izleme alışkanlıkları [Thematic television and child: Television viewing habits of primary school students]. *Journal of Milli Eğitim*, 194, 5-30.
- Elpeze Ergeç, N., & Doğan, M. E. (2016). Medyada şiddet; Televizyon çizgi diziler üzerine bir inceleme [Violence in the media; Review on the television cartoon series]. *Journal of Çukurova University Institute of Social Sciences*, 25(1), 43-58.
- Ergüney, M. (2017). İnternetin okul öncesi dönemdeki çocuklar üzerindeki etkileri hakkında bir araştırma [A research on the effects of internet on preschool children]. *Ulakbilge*, 5(17), 1917- 1938 <http://dx.doi.org/10.7816/ulakbilge-05-17-10>
- Ghilzai, S. A., Alam, R., Ahmad, Z., Shaukat, A., & Noor, S. S. (2017). Impact of cartoon programs on children’s language and behavior. *Insights in Language Society Culture* ,2, 104-126.
- Gözüm, A.İ.C., & Kandır, A. (2020). Okul öncesi çocukların dijital oyun oynama sürelerine göre oyun eğilimi ile konsantrasyon düzeylerinin incelenmesi [Examination of the playfulness tendency and concentration

- levels of preschool children according to the time spent playing dijital games]. *Atatürk University Journal of Kazım Karabekir Education Faculty*, 41, 82-100.
- Gündoğdu, Z., Seytepe, Ö., Pelit, B. M., Dođru, H., Güner, B., Arıkız, E., Akçomak, Z., Kale, E. B., Moran, İ., Aydođdu, G., & Kaya, E. (2016). Okul öncesi çocuklarda medya kullanımı [Media use by preschool-aged children]. *Journal of Health Sciences of Kocaeli University*, 2(2), 6-10.
- Güngör, H., Gülay Ogelman, H., Erten Sarıkaya, H., & Körükçü, Ö. (2020). Çocukların gözünden evdeki teknolojik araçlar [Technological tools in the house through the views of children]. *International Journal of Eurasian Research*, 8(23), 175 – 201.
- Hastings, E.C., Karas, T. L., Winsler, A., Way, E., Madigan, A., & Tyler, S. (2009). Young children's video/computer game use: Relations with school performance and behavior, *Issues in Mental Health Nursing*, 30(10), 638-649, <http://dx.doi.org/10.1080/01612840903050414>
- Haşıl Korkmaz, N., Gökdoğan, Ç., & Taner Derman, M. (2018). Otomotiv sanayinde üretim işçisi olarak çalışan babaların 5-6 yaş çocuklarının teknolojik alet kullanımına ve dijital oyun oynama oranlarına yönelik algıları [The perceptions of fathers working as production workers in automotive industry for 5-6 age children using technological instruments and digital play ratios]. *Journal of Global Sport and Education Research*, 1(1), 9-17.
- Islam, M. M., Adnan, H. M., Omar, M. A. M., & Akter, N. (2021). Tom and Jerry projecting violence in slapstick comedy: A qualitative content analysis. *Jurnal Pengajian Media Malaysia*, 23(1), 65-82.
- İşler, S., & Gürşimşek, A. I. (2018). 3-6 yaş çocuklarının cinsel eğitiminin gerekliliđi ile ilgili ebeveyn görüşlerinin incelenmesi. *Gazi Journal of Education Sciences*, 38 (3), 845-867.
- İşliyen, M. (2020). Çocuk, televizyon ve cinsellik: Çizgi filmler üzerine bir inceleme [Children, television and sexualism: An examination on cartoons]. *Gumushane University Faculty of Communication Electronic Journal*, 8 (1), 442-477.
- Kıral, B. (2020). Nitel bir veri analizi yöntemi olarak doküman analizi [Document analysis as a qualitative data analysis method]. *Siirt University Journal of Social Sciences İnstitute*, 15, 170-189.
- Korkmaz, Ö., & Korkmaz, Ö. (2019). Ortaokul öğrencilerinin oyun bağımlılık düzeyleri, oyun alışkanlıkları ve tercihleri [Middle school students' game addictive levels, game habits and preferences]. *Inonu University Journal of Faculty of Education*, 20(3), 798-812. <https://doi.org/10.17679/inuefd.505200>
- Lieberman, D.A., Fisk, M.C., & Biely, E. (2009). Digital games for young children ages three to six: From research to design. *Computers in the Schools*, 26(4), 299–313. <http://dx.doi.org/10.1080/07380560903360178>
- Milani, L., Camisasca, E., Caravita, S. C., Ionio, C., Miragoli, S., & Di Blasio, P. (2015). Violent video games and children's aggressive behaviours. An italian study. *SAGE Open*, 5, 1-9. <https://doi.org/10.1177/2158244015599428>
- Mustafaođlu, R., & Yasacı, Z. (2018). Dijital oyun oynamanın çocukların ruhsal ve fiziksel sađlıđı üzerine olumsuz etkileri [The negative effects of digital game playing on children's mental and physical health]. *Journal of Dependence*, 19(3), 51-58.
- Nwabueze, C., & Okonkwo, E. (2015). Is Ben 10 an evil cartoon? Selected mothers' perception of the influence of Ben 10 on their children's behaviour. *The Nigerian Journal of Communication*, 12 (1): 72–100
- Özer, F. (2020). İlkokul öğrencilerinin dijital oyun tercihlerinin eğitsel bir perspektiften incelenmesi [An analysis of digital game preferences of primary school students from an educational perspective]. *Anadolu University Journal of Education Facult*, 4(4), 380-398.
- Öztabak, M.Ü. (2017). İlkokul 2. ve 3. sınıf öğrencilerinin oynadıkları oyunların incelenmesi [Examination of the games played by 2nd and 3rd grade primary school students]. *Journal of Social Sciences of Muş Alparslan University*, 5(3), 797-822.
- Özyürek, A. (2018). Okul öncesi çocukların bilgisayar teknolojileri kullanımının annelerin görüşlerine göre incelenmesi [Analysis of computer technology use of perschool children based on the views of their mothers]. *Journal of Child and Development*, 2(2), 1-12.
- Rechichi, C., De Mojà, G., & Aragona, P. (2017) Video game vision syndrome: A new clinical picture in children. *Journal of Pediatric Ophthalmology and Strabismus*, 54(6), 346–355. <http://dx.doi.org/10.3928/01913913-20170510-01>.
- Reza,M.,Ningrum,M.A., Saroinsong, W.P., Maulidiyah,E. C,& Fitri,R.(2020). Trial design of sexual education module on children. *Advances in Social Science, Education and Humanities Research*, 503, 108-110.
- Sađlam, M., & Kayaduman, H. (2018). İnternet üzerindeki oyun sitelerinin çocuklara yönelik riskleri açısından incelenmesi [Investigating the risks that online game web sites have with regard to children]. *Journal of Erciyes Communication*, 5(4), 253-262.
- Seo, H., & Lee, C. S. (2017). Emotion matters: What happens between young children and parents in a touch screen world. *International Journal of Communication*, 11,568-580.
- Sexuality Information and Education Council of the United States (SIECUS) (2004) Guidelines for Comprehensive Sexuality Education: Kindergarten-12th Grade. 3rd ed. New York: SIECUS.

- Toran, M., Ulusoy, Z., Aydın, B., Deveci, T., & Akbulut, A. (2016). Çocukların dijital oyun kullanımına ilişkin annelerin görüşlerinin değerlendirilmesi [Evaluation of mothers' views regarding children's use of digital game]. *Kastamonu Education Journal*, 24(5), 2263-2278.
- Tutkun, Ö. F., Demirtaş, Z., Açıkgöz, T., & Tekşal Demirel, S. (2017). Televizyon ve dijital oyunların ortaokul öğrencilerinin şiddete eğilimine etkisi [The effect of television and digital games on secondary school students' tendency to violence]. *PESA International Journal of Social Studies*, 3(2), 83-91.
- Ünlüer, E. (2018). Examination of preschool teachers' views on sexuality education. *Universal Journal of Educational Research*, 6(12), 2815-2821. <https://doi.org/10.13189/ujer.2018.061215>
- Üstündağ, A. (2019). 4-6 yaş arası çocuklar tarafından tercih edilen dijital oyunlar [Digital games preferred by children aged 4-6]. *Çankırı Karatekin University Journal of Institute of Social Sciences*, 10(2), 1-19.
- Vatandaş, S. (2020). Sokaktan ekrana: Oyunun mekânsal ve işlevsel değişimi [From the street to the screen: The spatial and functional change of the play]. *Intermedia International e-Journal*, 7(12), 19-32. <https://doi.org/10.21645/intermedia.2020.64>
- Yadav, S., Chakraborty, P. (2021). Child-smartphone interaction: Relevance and positive and negative implications. *Universal Access in the Information Society*. <https://doi.org/10.1007/s10209-021-00807-1>
- Yıldız, C. (2016). 3-6 yaş çocuklarının tercih ettikleri çizgi filmlerdeki şiddet içeriklerinin analizi [Analysis of violence content in 3-6 aged children's favorite cartoons]. *Abant İzzet Baysal University Journal of Faculty of Education*, 16(2), 698-716.
- Yiğit Açıkgöz, F., & Yalman, A. (2018) Dijital oyunların çocukların kişilik ve davranışları üzerinde etkisi: Gta 5 Oyunu Örneği [Impacts of digital games on behaviours and personality of children: The case of gta 5]. *The Journal of Akdeniz University's Faculty of Communication*, 30, 163-180.
- Zehir, H., Zehir, K., Yalçın, F. A., & Yalçın, M. (2019). Okul öncesi dönemde çocukların teknolojik araç kullanımı ve ailelerin bu araçların kullanımını sınırlandırmada kullandığı stratejiler [Children's technological tool use in preschool period and the strategies used by families to restrict the use of the tools]. *Current Research In Education*, 5(2), 88- 103.
- Zhang, M. (2015). Internet use that reproduces educational inequalities: Evidence from big data. *Computers & Education*, 86, 212–223. <https://doi.org/10.1016/j.compedu.2015.08.007>
- Zhang, Q., Cao, Y., & Tian, J. (2021). Effects of violent video games on aggressive cognition and aggressive behavior. *Cyberpsychology, Behavior, and Social Networking*, 24(1), 5–10. <https://doi.org/10.1089/cyber.2019.0676>
- Zhang, Q., Tian, J., & Chen, L (2021). Violent video game effects on aggressive behavior among children: The role of aggressive motivation and trait aggressiveness in China, *Journal of Aggression, Maltreatment & Trauma*, 30:2, 175-192, <https://doi.org/10.1080/10926771.2020.1866135>